

Meeting Minutes

Meeting: WAC-15, Informal Working Group 2: Terrestrial Services (IWG-2)

Date/Time: June 3, 2014/ 10:00 a.m. – 12:00 p.m. (EDT)

Location: Teleconference only

Participants: See Attachment 1.

Meeting Summary:

- 1) **Opening Remarks and Introductions:** Charles Rush, Chair of IWG-2, convened the meeting at 10:02 am. Dr. Rush asked all participants to send an email Vice-Chair Jayne Stancavage indicating their participation.
- 2) **Approval of Agenda:** The chair noted that a revision to the agenda had been sent out and that IWG-2 would consider the agenda in Document **IWG-2/045r1 (03.06.14)**. The agenda was approved.
- 3) **Minutes:**
 - a. **Appointment of minute taker for the meeting:** Dr. Rush/TMG solicited volunteers to take minutes. Jayne Stancavage/Intel agreed to take minutes for the meeting.
 - b. **Approval of Minutes from IWG-2 January 16, 2013 Meeting:** The minutes of the last meeting as contained in Document **IWG-2/043 (26.01.14)** were discussed. Ken Keane/Duane Morris noted that he had attended the meeting, which will be reflected in a revision to the minutes. The minutes were then approved with this revision.
- 4) **Consideration of Draft IWG-2 Proposals:**
 - a. **WRC-15 Agenda Item 1.1; MBB/IMT (Res. 233)**
 1. **WRC-15 Agenda Item 1.1; MBB/IMT (Res. 233)**
 1. 3400-4800 MHz
 - a) Document **WAC/076 (27.08.14)**. Dr. Rush introduced the document. In response to questions, Scott Kotler (speaking in his former role at NTIA) clarified that there is no position on mobile broadband in the document and that it addressed 3700-4200 MHz.
 - b) Document **IWG-2/046 (03.06.14)**

Kim Baum/SES introduced the document, noting that the authors wanted to provide a proposal from their perspective in light of the ongoing US proceeding and CITELE. She stated that as the US proceeding is still going on, it would be appropriate for the US to support a NOC for 3.4-4.2 GHz as it would in no way affect what the US does domestically. One participant supported this draft proposal. Several participants had the opposite view. A discussion ensued regarding the status of 3.4-3.7 GHz in the US (e.g. licensed satellite systems in the band, which portions of the band are under consideration at the FCC). One participant noted that IMT is not limited to small cells.

The Chair noted that he was willing to entertain discussion on this topic today for as long as participants wished, but that given previous discussions on the topic, we probably need to spend more time than today to try to reach an accord. Mr. Glass noted that the RCS proposal did not consider 3.4-3.7 GHz given difficulties there and the upcoming NPRM but that they would likely address 3.4-3.7 GHz in the future. Ms. Baum agreed with the Chair and agreed to set up a call before the next meeting of IWG-2 to help participants reach agreement. The Chair requested that interested parties advise Ms. Baum if they were interested in participating in the offline discussion.

Mr. Roytblat/FCC made a procedural suggestion given the possibility that IWG-2 was developing a separate proposal than that developed by NTIA. He suggested that IWG-2 members consider providing edits to document WAC/076 since that would facilitate the reconciliation process. During the ensuing discussion, Mr. Glass confirmed the RCS draft proposal only applies to 3700-4200 MHz in all 3 Regions.

One participant noted we may want to think of the band in several different segments as we consider technical and regulatory issues. There was also a brief discussion on members/observers of the WAC.

2. Above 6 GHz-

a) Document **IWG-2/044 (03.06.14)** Note this has been renumbered per agreement at 11th meeting of IWG-2: Previous Document **IWG-2/029r1 (13.01.14)**

Pascale Dumit/SES noted that this document is the version for consideration moving forward.

One participant noted that she continues to believe it's better as a position rather than a proposal, especially given no one is proposing the bands.

b) Document **WAC/076 (27.08.14)** Charles Glass/NTIA introduced the document, noting that it is only difference with document IWG-2/044 is in background text. One of the authors IWG-2/044 noted he would need a day or two to review the NTIA version. Noting the discussion on redlining WAC versions where possible, Ms. Dumit will incorporate the changes from IWG-2/044 into WAC/076 for consideration at the next meeting. The Chair noted that IWG-2 members who do not agree with this document to provide inputs to the next meeting.

b. WRC-15 Agenda Item 1.4; amateur (Res. 649)

1. Draft Proposal- Document **WAC/076 (27.08.14)** Mr. Glass introduced the document noting that it proposes no change to 5 250-5 450 kHz given difficulties with sharing. A participant objected to this draft proposal, but did note that this is an improvement from the RCS Preliminary View on this Agenda Item. A brief discussion on sharing ensued. Mr. Roytblat will work with NTIA on reconciling the WAC draft proposal with the RCS draft proposal.

c. WRC-15 Agenda Item 10; future conferences

1. 460-470 MHz- Document **WAC/058 (27.01.14)** Mr. Glass introduced the document noting that the studies would also be looking at appropriate limits to sharing with current primary systems. Dr. Rush noted that the concerns he raised on the last call still remain. A discussion on PFD limits applying to the mobile service ensued. Several participants voiced support for the proposal. The proposal was approved, noting that the word meteorological is misspelled.

5. **Any Other Business:** One participant had a question regarding the US proposal on 1435-1525 MHz. An offline discussion will be held. One participant requested that the agenda for IWG-2 meetings include a status update on IWG-2 Agenda Items. One participant inquired about possible FCC action on the U.S. proposal for 470-698 MHz in light of recent Incentive Auctions NPRM. Mr. Roytblat explained that consideration of future FCC actions is not within terms of reference for this Committee and that members may provide recommendations that are within the scope of the Committee as they wish.
6. **Next meeting:** The next meeting is scheduled for Tuesday July 8th 1-3 pm Eastern.
7. **Adjournment:** The meeting was adjourned at 11:07 am.

Public Participation Statement: This meeting was open to the public as announced by Public Notice, [DA 14-694](#) (May 23, 2014).

Attachment 1: List of Attendees June 3, 2014 meeting

Mike Aloisi	Viacom Inc
Pat Amodio	EchoStar Satellite Services L.L.C.
Reza Arefi	Intel Corp.
Steve Baruch	New Wave Spectrum Partners LLC
Kim Baum	SES Americom
Bharat Bhatia	Motorola Solutions
Mike Biggs	FAA
David Choi	Mitre
Lynn Claudy	National Association of Broadcasters
Craig Cuttner	Time-Warner (HBO)
Kristine Devine	Harris Wiltshire Grannis for Google
Robert Dockemeyer	Delphi Electronics and Safety
Pascale Dumit	SES
Charles Einolf	CBS Broadcasting Inc.
Kyle Entz	Sprint Corp
Alex Epshteyn	Intelsat
Andy Feltman	Exelis for DoD
Bruce Franca	National Association of Broadcasters
Alexander Gerdenitsch	Motorola Mobility Inc
Charles Glass	NTIA
Chris Hofer	ViaSat
Dan Jablonski	John Hopkins
Don Jansky	Jansky-Barmat for SES
Ken Keane	Duane Morris for Aerospace & Flight Test Radio Coord. Council
Peter Kierans	Kierans & Associates
Kim Kolb	Boeing
Bruce Kostreski	Comcast
Scott Kotler	Lockheed Martin
Damon Ladson	Wiltshire & Grannis
Michael Mullinix	FCC
Larry Olson	FCC
Brian Patten	NTIA
Danielle Pineres	Wiltshire Grannis for Google and NCTA
Brennan Price	ARRL
Veena Rawat	GSMA
Rocky Rocksvold	DoD
Alex Roytblat	FCC
Bill Rummler	Fixed Wireless Communications Coalition
Charlie Rush	TMG
Amy Sanders	Alcatel-Lucent
Andy Scott	NCTA
Roya Shambayati	Intelsat
Juyeon Song	Samsung

Jayne Stancavage
Milan Vuckovic
Stephen Ward
Joanne Wilson

Intel Corp.
Verizon
MMI
ARTS for NASA