**Meeting Minutes**

Meeting: IWG-2 (Meeting 22)

Date/Time: Friday, August 17, 2018 1:00-2:31 p.m. EDT

Location: Conference call

Committee Members & Observers Present:

Chair: Jayne Stancavage (Intel Corporation)

For additional members and observers present, see attached Appendix A.

FCC Employees Present:

Michael Mullinix, Designated Federal Official (DFO) for WAC-19

Dante Ibarra and Larry Olson.

Meeting Summary:

1. Approval of Agenda:

Jayne Stancavage introduced the agenda in Document **IWG-2/075 (17.08.18)**.The agenda was approved.

1. FCC Reps, Opening Remarks and Introductions:

Michael Mullinix, DFO for WAC-19 confirmed his presence on the call. Mr. Mullinix also explained that the current membership list is available on the FCC website.

1. Approval of minutes from previous IWG-2 meeting:

The minutes of the previous meeting contained in **IWG-2/074 (10.04.18)** were approved.

1. Discussion of Draft IWG-2 Preliminary Proposals:
2. Agenda Item 1.13 re: 48.2-50.2 GHz: Document **IWG-2/072 (10.04.18)** was introduced during the last meeting of IWG-2**.** Questions and concerns raised during this meeting included the following: whether to submit a “no change” proposal worldwide for the entire band based on a national decision, the possibility of a flexible solution for all three co-primary services noting there is also a co-primary allocation to the mobile, how this proposal comports with **No.** 5.552, potentially considering the 47.2-48.2 GHz frequency band as well, the use of the word “incumbent” as the band is also under consideration for WRC-19 agenda item. 1.14, language such as “totally incompatible”, and that the background section only discusses satellite capabilities instead of information on IMT given that the proposal is on agenda item 1.13.Interested parties should contact Brennan Price and Fernando Carrillo of EchoStar.
3. Agenda Item 1.13 re: 66-71 GHz: Alex Roytblat, Wi-Fi Alliance, introduced the draft proposal in Document **IWG-2/077 (17.08.18).** Several members were supportive of the proposal given that the nascent market and that 3GPP has not yet begun working on a standard in this band. No concerns were raised on the call so members are asked to provide any comments or concerns to Mr. Roytblat of Wi-Fi Alliance as soon as possible as the document will be considered for approval at the next meeting.
4. Agenda Item 1.14: Michael Tseytlin, Facebook, introduced the draft proposal in Document **IWG-2/078**. He noted that the proposal has been updated to reflect the activities in ITU-R Working Party 5C and CITEL PCC II. The proposal cover all of the bands under study other than the 6 GHz. He noted there was a typo in the band to be protected for MS in 26 GHz. Questions and comments include the following: a request to include the uplink direction on a primary basis in 21.5-22 GHz and downlink in 25.25-27.5 GHz, reduce the background text (especially the information on WP 5C and CPM text), that the Resolution should be fully developed rather than having TBD (e.g. protection of the FSS in 27-27.5 GHz), the lack of any Resolution associated with 38-39.5 GHz, not addressing some protection cases in 47-49.2 GHz, the construction of the language in the footnote that makes it sound like HAPS would be the only application of the fixed service allowed in the bands, protection of the mobile service, how protection of passive services adjacent to 26 GHz is addressed, and why No. 5.536A in resolves 9 does not apply. Editorially, the document number should be corrected. In addition, there was a discussion about adding 6 GHz to this proposal (some parties were open to either NOC or suppression of the existing footnote while another preferred NOC.) Mr. Mullinix thanked the author for providing this proposal for discussion as it would be beneficial to have a US proposal at the next CITEL PCC II meeting so the US can be part of the discussion on the proposals being developed. There was also a discussion about whether this should be a single document or band by band, if/when that should occur, and how it would be presented to the WAC. Interested parties are asked to contact Michael Tseytlin of Facebook.
5. Agenda Item 1.16 re: 5150-5250 MHz: Mr. Roytblat introduced document **IWG-2/076 (17.08.18).** The only concerns raised on the call was that the agenda item on the cover sheet of the proposal was incorrect and minor changes in the categorization of use cases. Members are asked to provide any comments or concerns to Mr. Roytblat of Wi-Fi Alliance as soon as possible as the document will be considered for approval at the next meeting.
6. **Document IWG-2/079 (17.08.17)** was submitted by NTIA to the FCC and provides draft proposals on agenda item 1.16, agenda item 9.1/issue 9.1.5, and an agenda item 10 proposal on radar sounders in 40-50 MHz.
7. Mr. Mullinix clarified that the US proposal on Issue 9.1.5 was already reconciled so IWG-2 does not need to do anything on that portion of **Document IWG-2/079**.
8. Bruce Lamb, NTIA, introduced the portion of Document IWG-2/079 addressing agenda item 1.16, which proposes “no change” for all bands under study except 5 150- 5 250 MHz. Concerns raised during this meeting included that it might be best to not include Region 1 on 5725-5850 MHz as some countries are proposing changes for Region 1. It was also noted that Mexico had brought in a proposal for RLANs in 5725-5850 MHz at the most recent PCC II meeting. Members interested in the agenda item 1.16 draft proposal should contact Alex Roytblat.
9. Mr. Lamb also introduced the agenda item 10 proposal: Mr. Mullinix clarified that IWG-2 should note this proposal as the matter will be considered in IWG-3: Interested parties should address any concerns via IWG-3.
10. Update on Current Status:

Mr. Mullinix noted that from the documents approved by the WAC at the April meeting, US proposals for agenda items 1.1, 1.15, and 9.1.1 have been reconciled while agenda item 1.13 has not reconciled yet. Amy Sanders, NTIA, observed that proposals from the RCS on agenda item 1.13 (no change for 31.8-33.4 GHz and 45.5-47.2 GHz) should be forthcoming.

1. The next IWG-2 meetings will be held on Friday September 7th at 11-1 pm EDT and Tuesday September 18th at 2-4 pm EDT. The next WAC meeting will be held on Monday, Oct. 1st.

Documents Distributed:

IWG-2/072 AI 1.13 draft proposal on 48.2-50.2 GHz

IWG-2/074 Meeting 21 minutes

IWG-2/075 Meeting 22 agenda

IWG-2/076 AI 1.16 draft proposal on 5150-5250 MHz

IWG-2/077 AI 1.13 draft proposal on 66-71 GHz

IWG-2/078 AI 1.14 draft proposal

IWG-2/079 Draft proposals on AI 1.16, Issue 9.1.5, and AI 10 from NTIA (RCS)

Public Participation Statement:

Meeting IWG-2/22 (17.08.2018) was open to the public ([DA 18-804](https://www.fcc.gov/document/wrc-19-advisory-committee-meetings-iwg-2)) and had 22 members, 16 observers, 1 IWG-2 official and 3 FCC employees in attendance.

Author:

Jayne Stancavage, Intel Corporation, prepared these minutes.

**Appendix A: Additional Attendees at August 17, 2018** **meeting of IWG-2**

**Members**

| **Organization** | **Member Name** |
| --- | --- |
| Aerospace and Flight Test Radio Coordinating Council | Ken Keane |
| Association of American Railroads | Tim Stafford |
| AT&T | Stephen Blust |
| Boeing | Alex Epshteyn |
| Cisco | Dave Case |
| Comcast | Bruce Kostreski |
| CTIA | Jen Oberhausen |
| EchoStar Corporation | Fernando Carillo |
| Ericsson | Mark Racek |
| Facebook | Michael Tseytlin |
| GPS Innovation Alliance | Stephen Baruch |
| GSMA | Dr. Veena Rawat |
| Lockheed Martin | Scott Kotler |
| Microsoft | Micahel Daum |
| Loon, LLC | Dave Marshak |
| Samsung Electronics America | Rob Kubik |
| SES Americom, Inc. | Ryan Henry |
| Sprint Corporation | Kyle Entz |
| T-Mobile | Cody Hogan |
| Verizon | Leslie Martinkovics |
| Wi-Fi Alliance Association | Alexander Roytblat |
| Ygomi, LLC | Russ Shields |

**Observers**

1. Bob Denny, NTIA
2. Ed Ehrlich, Interdigital
3. Peter Flynn, ViaSat, Inc.
4. Shelli-Rose Haskins, ACES for U.S. Coast Guard
5. James Higgins, ASRC Federal Technical Services for NASA
6. Don Jansky, Jansky-Barmat Telecommunications
7. Christian Kuzdak, Freedom Technologies
8. Bruce Lamb, NTIA
9. Giadira Leon, S3 for AFSMO
10. Kathryn Martin, Access Partnership
11. Geraldo Neto, TMG Telecom
12. Tricia Paoletta, HWG
13. Charlie Rush
14. Vishnu Sahay, ASRC Federal Technical Services for NASA
15. Amy Sanders, NTIA
16. Tom Van Deak, ACES for NOAA