**Meeting Minutes**

Meeting: IWG-2 (Meeting 27)

Date/Time: Tuesday, February 12, 2019 1:00 p.m.-3:00 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, DFO for WAC-19, Dante Ibarra, and Allen Yang confirmed their presence on the call.

Meeting Summary:

1. Approval of Agenda:

Jayne Stancavage introduced the agenda in **Document IWG-2/097 (12.02.19)**.

The agenda was approved.

1. FCC Reps, Opening Remarks and Introductions:

Michael Mullinix, FCC DFO, confirmed his presence on the call.

Following roll call, participants were asked to email the chair confirming their presence on the call.

The Chair requested that participants follow the guidance recently provided by the FCC to WAC members with respect to ongoing FCC spectrum auctions, 101 & 102. Michael Mullinix, noted that there was a delay in processing some member requests due to the shutdown but that they are working on processing these requests.

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

The minutes of the previous meeting contained in **IWG-2/096 (12.02.19)** were approved.

In the absence of any volunteers, the Chair agreed to take the minutes.

1. Discussion of Draft IWG-2 Preliminary Proposals:

a) AI 1.13 IMT 24.25-27.5 GHz Document **IWG-2/098 (12.02.19)**

NTIA (Document **IWG-2/094)**

Reza Arefi, Intel, introduced document IWG-2/098 which is shown in track changes against the version provided by NTIA in document IWG-2/098. Concerns raised included the addition of a new allocation without restrictions in the footnote on what applications of the Mobile Service the allocation can be used for, the lack of constraints on the use of IMT such as a Resolution, and no studies with the short-term interference protection criteria. Contact the chair if you would like to participate in an offline discussion. Any alternate views, if needed, should be provided as soon as possible.

b) AI 1.13 IMT 45.5-47.2 GHZ- Document **IWG-2/099 (12.02.19)**

NTIA (IWG-2/084)

Veena Rawat, GSMA, introduced document IWG-2/099. Concerns were raised regarding the need for No Change due to the amateur allocation in the 47-47.2 GHz band, the need for a Resolution to protect other services, and the principle regarding lack of sharing studies. Dr. Rawat responded, noting the attractiveness of contiguous spectrum and that studies have been provided to CPM 19-2 for services in which characteristics have been provided. Contact the chair if you would like to participate in an offline discussion. Any alternate views, if needed, should be provided as soon as possible.

c) AI 1.13 IMT 51.2-52.4 GHz Document **IWG-2/100 (12.02.19)**

Mr. Arefi introduced document IWG-2/100, which is shown in revision marks against the NTIA proposal in document IWG-2/094. Concerns raised included the need for a Resolution to protect other services. There was also a question regarding whether the identification to IMT of a passive band was a typo; Mr. Arefi confirmed that it was a typo and will be corrected and that he will also delete the first paragraph of background. It was also noted that this same frequency is under consideration in IWG-3 for Issue 9.1.9 but no constraints. Contact the chair if you would like to participate in an offline discussion. Any alternate views, if needed, should be provided as soon as possible.

d) AI 1.13 IMT 71-76/81-86 GHz- Document **IWG-2/101 (12.02.19)**

Mark Racek, Ericsson, introduced document IWG-2/101 which is shown in revision marks against the NTIA proposal in IWG-2/094 regarding 81-86 GHz. Alex Roytblat, Wi-Fi Alliance, noted that the text might need to include information about unlicensed use and he will discuss offline with Mr. Racek.

e) AI 10 ENG- Document **IWG-2/095r1 (20.12.18)**

Joe Ciaudelli, Sennheiser, introduced document IWG-2/095r1, noting that the revisions included defining tuning ranges, reformatting into tuning ranges, and more narrow scope. Concerns raised included consideration of AMT, defining which bands will be in scope, and some confusion over the actual proposal. Bob Weller, NAB, noted his support for the document and would encourage the specific ranges included in the submission to Study Group 6 as a starting point.

1. Update on Current Status:

Mr. Mullinix noted that the following proposals under agenda item 1.13 have been reconciled: no change for 32 GHz, no change for 48.2-50.2 GHz, no change for 66-71 GHz, identification to IMT for 37-43.5 GHz with a resolution and identification to IMT for 47.2-48.2 GHz without a resolution. He also noted that agenda item 1.14 has been reconciled except for a pfd mask for 28 GHz. These documents are available on the FCC website.

1. Next meetings:

The next IWG-2 meeting will be on Tuesday March 5th from 1-3 pm Eastern Standard Time. The next WAC meeting will be held on Monday, March 1th at 11 am at the FCC Room TW-C305.

Documents Distributed:

IWG-2/095r1 Agenda Item 10 draft proposal on ENG

IWG-2/096 Meeting 26 minutes

IWG-2/097 Meeting 27 agenda

IWG-2/098 Agenda item 1.13 draft proposal re: 24.25-27.5 GHz

IWG-2/099 Agenda item 1.13 draft proposal re: 45.5-47.2 GHz

IWG-2/100 Agenda item 1.13 draft proposal re: 50.4-52.6 GHz

IWG-2/101 Agenda item 1.13 draft proposal re: 71-76 GHz and 81-86 GHz

Public Participation Statement:

Meeting IWG-2/27 (12.02.2019) was open to the public and had 24 members, 24 observers, 1 IWG-2 official and 1 FCC employee in attendance.

Author:

Jayne Stancavage, Intel, prepared these minutes.

**Appendix A: Additional Attendees at February 12, 2019** **meeting of IWG-2**

**Members**

| **Organization** | **Member Name** |
| --- | --- |
| AFTRCC | **Ken Keane** |
| Apple | Mark Neumann |
| ARRL | Jon Siverling |
| Boeing Company | Kim Kolb |
| Cisco | Dave Case |
| CTIA | Jen Oberhausen |
| EchoStar Corporation | Brennan Price |
| Ericsson | Mark Racek |
| GPS Innovation Alliance | Stephen Baruch |
| GSMA | Veena Rawat |
| Intel Corporation | Reza Arefi |
| Jansky-Barmat | Don Jansky |
| Lockheed Martin | Scott Kotler |
| Motorola Solutions, Inc. | Mike Lewis |
| NAB | Robert Weller |
| NCTA | Andy Scott |
| Omnispace | Julie Zoller |
| OneWeb | Gerry Shewan |
| Samsung Electronics America | Rob Kubik |
| Sennheiser | Joe Ciaudelli |
| SES Americom, LLC | Philippe Secher |
| ViaSat, Inc. | Chris Hofer |
| Virginia Diodes, Inc | Dr. Gerhard S. Schoenthal |
| Wi-Fi Alliance | Alex Roytblat |

**Observers**

1. Colin Albertson, Freedom Technologies
2. Mike Biggs, FAA
3. Scott Bilquist, World Radiocommunication Week
4. Bob Denny, NTIA
5. Oscar DeGuzman, Intelsat
6. Pascale Dumit, T-Mobile
7. Nick Fetchko, Verizon
8. Shelli Rose Haskins, Sev1Tech for USCG
9. Tom Hastings, Omnispace
10. Humberto Henriques, Telecom Strategies for Inmarsat
11. Ryan Henry, SES
12. James Higgins, ASRC Federal Technical Services for NASA
13. Bruce Lamb, NTIA
14. Bob Leck, ACES
15. Eric Lee, DoD
16. Giadira Leon, S3 for USAF
17. Tricia Paoletta, Harris, Wiltshire & Grannis
18. Brian Patton, NTIA
19. Carl Povelites, AT&T
20. Vishnu Sahay, ASRC Federal Technical Services for NASA
21. Amy Sanders, NTIA
22. Tom Schaffnit, DoT
23. Brandy Sykes, Apple
24. Chip Yorkitis, Kelley, Drye, and Warren