**Meeting Minutes**

Meeting: IWG-3 (Meeting 19)

Date/Time: Thursday, December 13, 2018 13:00-14:00 PM EDT

Location: Conference call

Committee Members & Observers Present: See attached Appendix A.

FCC Employees Present:

Michael Mullinix, Designated Federal Official (DFO) for WAC-19 (see also Appendix A)

Meeting Summary:

1. Opening Remarks, Introductions, Identification of DFO, volunteer to take minutes

Jack Wengryniuk, Chair of IWG-3, opened the meeting by welcoming all to the 19th meeting of the group and stating the objectives for the meeting. All participants introduced themselves and attendance of a DFO was confirmed. As none of the many participants were willing to volunteer to take minutes, the Chairman again reluctantly resigned himself to this task.

1. Approval of Agenda

The agenda in DocumentIWG-3/065r1 was approved as presented

1. Approval of minutes from eighteenth IWG-3 meeting:

The minutes of the previous meeting as contained in IWG-3/064r1 were approved without comment.

1. Other meetings of interest since last meeting of IWG-3

It was noted by the Chair that a recent meeting of CITEL PCC II had just concluded and a summary of the results of that meeting was provided by Michael Mullinix of the FCC as follows:

* AI 1.2 saw a preliminary proposal submitted by MEX
* AI 1.3 saw preliminary proposals submitted by MEX and B
* AI 1.5 saw a preliminary proposal submitted by MEX
* AI 1.6 saw preliminary proposals submitted by USA and MEX. The USA proposal contained a TBD placeholder for defining updated OOBE limits for GSO in Resolution 750, whereas the MEX proposal included NOC for these limits.
* AI 1.7 saw differing preliminary proposals submitted by USA and MEX.
* AI 9.1, Issue 9.1.3 became an IAP with seven countries signing on.
* AI 9.1, Issue 9.1.7 is now a DIAP supported by USA, CAN and B.
* AI 9.1, Issue 9.1.9 is now a DIAP supported by B, CAN and MEX.

1. Current status of WRC-19 AIs under IWG-3 and discussion of draft proposals
2. Agenda Item 1.2: George John, Spire, briefly reintroduced document IWG-3/061 that proposes edits to the NTIA draft proposal to primarily postpone the in force date of the maximum e.i.r.p. transmission from earth stations in the MSS. Mr. John indicated the edits also amended the frequency range to allow for 30 kHz of spectrum for telecommand operations without the proposed e.i.r.p. limits. Although there were no comments on this document it was noted that there could be some changes needed as a result of CPM preparations, and so it was requested and agreed to hold this document in abeyance until our next meeting.
3. Agenda Item 1.3: Mr. Charles Rush, GSA, provided a detailed introduction of document IWG-3/066 that included proposed changes to the NTIA proposal on this issue to address a number of concerns with the proposal that were identified at the last meeting. The primary concern was that the studies to upgrade the meteorological-satellite and earth exploration-satellite services do not appear to have considered the impact on the current and future use and development of the fixed and mobile allocations in co-frequency and adjacent frequency bands. Mr. Rush indicated this was a fundamental component of Resolution **766 (WRC-15)**. There were other points raised as well to explain the rationale for other proposed changes. Given that the document was only made available a day earlier, it was agreed to table the document for now to allow time for participants to properly consider it.
4. Agenda item 9.1 (Issue 9.1.9): The meeting was reminded of the NTIA proposal in document IWG-3/059. Comments were made on this proposal at the last meeting but no document was submitted to this meeting. Both Boeing and Echostar indicated that we could expect to see something on this proposal at the next meeting if IWG-3.
5. Agenda item 10: Three AI 10 proposals were considered by the meeting (documents IWG-3/062, 063 and 067). The first two of these were presented by Echostar at the last meeting. Document IWG-3/062 addressed using Ka-band FSS allocations for links between NGSO to GSO satellites. It was reported that some offline discussions had taken place on this issue and that we can expect to see a revised document at the next meeting of IWG-3. Document IWG-3/063 addressed reverse band operation in the 37.5-39.5 GHz FSS allocation. Again it was reported that some offline discussions had taken place on this issue and it was hoped that a revised document could be ready for the next meeting of IWG-3 The meeting was also reminded that this issue is already on the preliminary agenda for WRC-23. Document IWG-3/067 was a new future agenda item from Intelsat addressing possible development of regulatory means and associated conditions to allow the harmonized use and operation of aircraft earth stations in the FSS in the frequency band 12.75-13.25 GHz (Earth-to-space). It was noted that some work had been done within CEPT on this issue and some interest was expressed by the membership to work with Intelsat to further develop this issue. As this was the first time that people were seeing this topic it was agreed to table the document until the next meeting.

6. Future Meetings

The Chair suggested that the next meeting be held before CPM, in mid-January or early February. The Chair noted that he would work offline with the FCC and Chair of IWG-4 to schedule an appropriate date and time for the next IWG-3 meeting.

Documents Distributed:

IWG-3/064r1 Minutes of the 18th meeting of IWG-3

IWG-3/065r1 Proposed meeting 19 Agenda

IWG-3/061 AI 1.2 draft proposal from Spire

IWG-3/066 Proposed revisions to NTIA proposal on AI 1.3

IWG-3/062 AI 10 draft proposal from EchoStar/HNS: Ka satellite-to-satellite links

IWG-3/063 AI 10 draft proposal from EchoStar/HNS: 38 GHz FSS Earth-to-space

IWG-3/063 AI 10 draft proposal from Intelsat on FSS AES in 12.75-13.25 GHz

Public Participation Statement:

Meeting IWG-3/19 (13 December 2018) was open to the public ([DA 18-979](https://docs.fcc.gov/public/attachments/DA-18-979A1.pdf)) and had 18 members, 12 observers, and 3 FCC representatives participating.

Author:

Jack Wengryniuk, Chair IWG-3, reluctantly prepared these minutes.

**Appendix A: Attendees at December 13, 2018** **meeting of IWG-3**

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| Members | |
| Name | Company |
| Don Jansky | SpaceBelt |
| Stephen Baruch | GPS Innovation Alliance |
| Fernando Carrillo | EchoStar |
| Lou Fiore | AICC |
| Alex Epshteyn | Boeing |
| Veena Rawat | GSMA |
| Damon Ladson | Iridium |
| George John | Spire |
| Kris Hutchinson | ASR |
| Scott Kotler | Lockheed Martin |
| Charles Rush | GSA |
| Stephen Blust | AT&T |
| Chris Hofer | Viasat |
| Rob Briskman | Sirius XM |
| Zach Rosenbaum | SES |
| Mariah Shuman | OneWeb |
| Jayne Stancavage | INTEL |
| Humberto Henriques | Telecomm Strategies |
|  |  |
| Observers | |
| Name | Company |
| Lauren Crean | TMG |
| Larry Reed | ARTS for NASA |
| Scott Billquist | World Radiocommunication Week |
| Alex Guerin | Thales |
| Chuck Wende | ASRC for NASA |
| Cathy Sham | NASA |
| Mike Biggs | FAA |
| Dave Pattillo | SpaceX |
| Kellen Gibson | NTIA |
| William Tranavitch | DOD |
| Giadira Leon | S3 |
| Shelli Rose Haskins | USCG |
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| FCC Representatives | |
| Michael Mullinix | |
| Larry Olson | |
| Dante Ibarra | |