**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **<IEEE802.15 WG minutes>** | |
| Date Submitted | [27 January 2021] | |
| Source | [Clint Powell] [<PWC, LLC>] [Chandler, AZ] | Voice: [+1.480.586.8457] Fax: [--] E-mail: [cpowell@ieee.org] |
| Re: | [802.15 Interim Meeting held virtually] | |
| Abstract | [IEEE 802.15 Working Group & CAC Minutes] | |
| Purpose | [Official minutes of the Working Group and CAC Sessions] | |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. | |
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**129th IEEE 802.15 WSN MEETING**

**Held Virtually via Webex (all times in EDT)**

**Jan 12-21, 2021**

# Tuesday, 12 January 2021

**Opening**

**9:03 AM** WG Chair, Pat Kinney (Kinney Consulting), called the meeting to order and opened the WG Agenda (*15-20-0388-03-0000*)

**Announcements**

WG Chair announced the agenda for the week.

WG Vice-Chair reviewed attendance tool.

Don’t forget to announce your name and affiliation before you speak.

WG Chair announced the of DirectVoteLive (DVL) for all WG votes. DVL will only be used at the closing plenary meeting on Thursday, 21 January. He also noted that the motions would be loaded in advance of the meeting. This process will require that the TG chairs send the WG Chair - Pat Kinney the motions for the closing meeting by end of Wednesday.

WG Chair asked for new participants to speak up using the chat window in Webex.

Josh Senna, affiliated (Humatics) announced on the chat window that this was his first meeting.

## Legal

WG Chair displayed and read the standard IEEE Anti-Trust statement.

WG Chair informed the group of and displayed the IEEE-SA patent policy presentation slides 0-5 (<http://standards.ieee.org/board/pat/pat-slideset.ppt>).

WG Chair asked the participants who wished to declare a Letter of Assurance (LoA) or to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for any of the ongoing activities within the 802.15 WG.

## WG Approvals

Clint Chaplin (Self) moved to *approve the agenda (document 15-20-0388-03-0000-jan-2021-agenda)* with Rick Alfvin (LineSpeed) seconding the motion. Following no objection, the agenda was approved.

Clint Powell (PWC, LLC) moved *to approve the previous meeting minutes (document 15-20-0298-01-0000)* and Rick Alfvin (LineSpeed) seconded the motion. Following neither discussion nor objection the minutes were approved. There were no matters resulting from the previous minutes.

**General and Administrative**

WG Vice-Chair presented the general meeting information:

* Voters: (voters: 88, nearly: 2, aspirant: 44)
  + A question was raised about thoughts on the drop in voting members since the last meeting.
  + The drop in attendance may be due to the fact that 802.15 was recording attendance on a daily basis, where as 802.11 attendance was recorded on a daily basis, both for the Nov. Plenary. For this meeting the attendance is being collected separately.
* Webex and other tools will be used for sessions
* IMAT will be used for attendance
  + 100% Attendance is established as 1 mtg. on a different day
  + 75% Attendance = 1 mtg. on 6 different days
* All WG motions (especially those relating to PARS) need to be sent to the Chair (Pat Kinney), Vice-Chair (Rick Alfvin), and Secretary (Clint Powell) by Noon EST, Wed. 1/20 so that they may be entered into DVL (Direct Vote Live) by the EOD. If you are not able to meet this deadline please work with Pat beforehand.

Ben Rolfe gave the treasurers report *(document: ec-20-0175-00)*

* Still no income currently
* Still have some costs
* Holding at a balance of ~$350k

WG Chair announced that a decision on whether or not the May Interim will be a virtual meeting or not will be decided at the Feb. Wireless Chairs Mtg.

WG Chair gave notice of the Jan. 802.15 CAC meeting, the mins which will be included in these WG minutes *(minutes: 15-21-0011-00-0000)*

WG Chair gave notice of the Wireless Chairs Steering Committee meeting mins  
*(minutes: ec-21-0006-00-WCSG-minutes-january-06-2021)*

## Officer Election Status

WG Chair reviewed the following election timeline developed by WG Chair and Vice-Chair and discussed at the Jan. 802.15 CAC:

|  |  |  |
| --- | --- | --- |
| 1 | January CAC mtg | Discuss the election and process |
| 2 | January session closing mtg | Discuss the election and process. |
| 3 | January session closing mtg | Motion made for WG approval of election process |
| 4 | During January session | Email a Call for Nominees: nominees need to accept the nomination |
| 5 | 4 weeks before March plenary | Close the call, announce nominees |
| 6 | 2 weeks before March plenary | Start a 10-day electronic ballot |
| 7 | 4 days before the March plenary | Close the ballot |
| 8 | March Plenary Opening Meeting | Announce the electees |

**Status Reports (Goals and objectives for the week)**

802.15 Status and Activities for the Week

* Task Group 15.4 Cor2 (2 sessions)
  + Plan to hear several different proposals
* Task Group 15.4y – SECN (2 sessions)
  + SA Ballot will close this week
  + Comment review will begin
* Task Group 15.4aa – JRE (3 sessions)
  + Will review proposals
* Task Group 15.7a – VAT (3 sessions)
  + Will hear presentations
* Task Group 15.9ma – KMP (3 sessions)
  + SA Ballot is still out
  + Will conduct comment resolution and prepare for SA Ballot Recirc.
* Task Group 12 – ULI (0 sessions)
  + Not meeting during Plenary
* Task Group 13 – Multi Gigabit/sec OWC (3 sessions)
  + SA Ballot is still out, and closes on Wed. 1/13
  + Will start comment resolution
* Task Group 16t – 802.16 Amendment (2 sessions)
  + Will continue work on system requirements document
* Interest Group – DEP (3 sessions)
  + Will continue to focus on discussion of amendment to 802.15.6 (Body Area Networks)
* Interest Group – NG-UWB + .4org (4 sessions)
  + Will hear several presentations
  + Will also work on drafting of PAR and CSD
* Standing Committee – THz (1 session)
  + Continue working on future THz standards/amendments
* Standing Committee – IETF (1 session)
  + Will discuss IETF activities
* Standing Committee – SC-M, Rules (1 session)
  + Will discuss assigning command ID’s as well as other information
  + Will review Operation Manual changes to be voted on in March Mtg.
* Standing Committee – WNG (1 session)
  + One presentation request has been made by IG-DEP

**Any Other Business**

WG Chair asked if there was any other business.

None was raised.

**WG Recess**

**10:02 AM** WG Chair recessed the meeting

# Thursday, 21 January 2021

## Opening

**9:03 AM** WG Chair, Pat Kinney (Kinney Consulting) called the meeting to order

**9:04 AM** WGVice Chair, Rick Alfvin (LineSpeed) spoke to the attendance method (IMAT) and voting method (DVL)

## Announcements

#### WG Chair presented his Lessons Learned from this week:

* Posting agendas the day before is a good practice in the unlikely case (well, more likely for Ben and others in the Bay Area it seems) the chair is having connectivity problems and someone else needs to step in and run the meeting

#### Treasurers Report

Ben Rolfe gave the treasurers report *(document: ec-20-0252-r1)*

* Still no income currently
* Still have some costs
* Still holding at a balance of ~$378k
* Cancellation of the March F2F Mtg. did not affect reserves

#### Officer Election Process

|  |  |  |
| --- | --- | --- |
| 1 | January CAC mtg | Discuss the election and process |
| 2 | January session closing mtg | Discuss the election and process. |
| 3 | January session closing mtg | Motion made for WG approval of election process |
| 4 | During January session | Email a Call for Nominees: nominees need to accept the nomination |
| 5 | 4 weeks before March plenary | Close the call, announce nominees |
| 6 | 2 weeks before March plenary | Start a 10-day electronic ballot |
| 7 | 4 days before the March plenary | Close the ballot |
| 8 | March Plenary Opening Meeting | Announce the winners |

Requirements for nominees:

Must be an IEEE-SA Member

Must declare affiliation

Must have letter of declaration

Must accept nomination

WG Chair announced that he will run for 802.15 WG Chair along with Rick Alfvin as Vice Chair and Clint Powell as Vice Chair & Secretary

Chair made following motion:

“Move to approve the IEEE 802.15 Officer Election Process cited in document 15-20-0388-05-0000"

Moved by Clint Chaplin, Second by Clint Powell

30 out of 33 on DVL voted

Upon no discussion the vote was taken with the results of 30/0/0, motion carries.

## Closing Reports

**9:29 AM 802.15 WG** Closing Agenda by Pat Kinney (Kinney Consulting) (15-20-0388-05)

**9:30 AM TG Cor1** closing report by Kunal Shah (Itron) (15-21-0048-00)

Plan is to wrap up work by EOY.

**9:32 AM TG 4y** closing report by Don Sturek (Itron) (15-21-0062-02)

*MOTION: "Move that TG4y requests 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the SA balloting of the P802.15.4y-D3 with the following membership: Don Sturek (As Chair), Tero Kivinen, Peter Yee, Ruben Salazar. The 802.15.4y CRG is authorized to approve comment resolutions and to approve the start of recirculation ballots of the revised draft on behalf of 802.15 WG. Comment resolution on ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P."*

Moved by Don Sturek, Seconded by Anne Krieger

31 out of 33 on DVL voted

Upon no discussion the vote was taken with the results of 31/0/0, motion carries.

**9:55 AM TG4aa** closing report by Takashi Kuramochi (Lapis) (15-21-0073-01)

**9:43 AM TG7a** closing report by Yeong Min Jang (Kookmin University) (15-21-0075-00)

Looking to finalize TCD at March mtg.

**9:50 AM TG9ma** closing report by Tero Kivinen (Self) (15-21-0017-02)

*MOTION: "Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the Standards Association balloting of the P802.15.9ma-D04 with the following membership: Tero Kivinen(Chair), Ben Rolfe, Don Sturek, Pat Kinney, and Peter Yee. The 802.15.9ma CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.”*

Moved by Tero Kivinen, Seconded by Anne Krieger

32 out of 36 on DVL voted

Upon no discussion the vote was taken with the results of 32/0/0, motion carries.

**10:00 AM TG13** closing report by Volker Jungnickel (Fraunhofer HHI) (15-21-0074-00)

*MOTION: "Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the Standards Association balloting of the P802.15.13\_D4 with the following membership: Volker Jungnickel as Chair, Nikola Serafimovski, Tuncer Baykas, Sang-Kyu Lim, Jörg Robert, Tero Kivinen. The 802.15.13 CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.”*

Moved by Volker Jungnickel, Seconded by Rick Alfvin

33 out of 36 on DVL voted

Upon no discussion the vote was taken with the results of 32/0/1, motion carries.

**10:05 AM TG16t** closing report by Tim Godfrey (EPRI) (15-21-0076-0)

TG continues work on SRD

**10:12 AM IG DEP** closing report by Ryuji Kohno (YNU/CWC U of Oulu) (15-21-0054-01)

**10:08 AM IG NG-UWB** closing report by Ben Rolfe (BCA/UWBA/et al) (15-21-0070-00)

Worked on PAR and CSD

(Stretch) Goal is to Submit PAR and CSD to EC at March Mtg.

**10:18 AM SC WNG** closing report by Ben Rolfe (BCA/UWBA) (15-21-0071-00)

**10:20 AM SC THz** closing report by Thomas Kurner (TU Braunschweig) (15-21-0045-00)

Heard 5 contributions this meeting

**10:22 AM SC IETF** verbal closing report by Tero Kivinen (Self)

Next IETF mtg. is 3/8 - 3/12 (overlapping with March 802 Mtg.)

**10:24 AM SC M, Rules** verbal closing report by Pat Kinney (Kinney Consulting)

Discussed rules and including assigning command IDs

Update 802.15 operations manual to be voted on in the March Plenary

**10:25 AM 802.24** Liaison verbal report by Tim Godfrey (EPRI)

**10:26 AM 802.18** Liaison report by Jay Holcomb (Itron) (15-21-0068-00)

Ad-hoc Mtg. next Tues. (1/26) on 802 Frequency Table

**10:30 AM 802.19** Liaison report by Ben Rolfe (BCA/UWBA)

N/A

**10:31 AM 802.11** Liaison report

N/A

## Review of March Virtual Plenary meeting plans

WG Chair reviewed the March 802 Wireless Plenary Session Dates

EC from 3/5 - 3/18

802.15 Sessions 3/9 - 3/17

802.15 CAC (a.k.a. AC - Advisory Committee) on 3/3 @ 10:00 am Eastern

## WG Adjourn

**10:36** WG Chair entertained a motion to adjourn the meeting.

Moved by Clint Powell, Seconded by Clint Chaplin

Upon hearing no objections, the WG Chair adjourned the meeting.

## Summary of Motions

### Motions

WG

*MOTION:* “Move to approve the IEEE 802.15 Officer Election Process cited in document 15-20-0388-05-0000"

Moved by Clint Chaplin, Second by Clint Powell

30 out of 33 on DVL voted

Upon no discussion the vote was taken with the results of 30/0/0, motion carries.

TG4y

*MOTION: "Move that TG4y requests 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the SA balloting of the P802.15.4y-D3 with the following membership: Don Sturek (As Chair), Tero Kivinen, Peter Yee, Ruben Salazar. The 802.15.4y CRG is authorized to approve comment resolutions and to approve the start of recirculation ballots of the revised draft on behalf of 802.15 WG. Comment resolution on ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P."*

Moved by Don Sturek, Seconded by Anne Krieger

31 out of 33 on DVL voted

Upon no discussion the vote was taken with the results of 31/0/0, motion carries.

TG9ma

*MOTION: "Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the Standards Association balloting of the P802.15.9ma-D04 with the following membership: Tero Kivinen(Chair), Ben Rolfe, Don Sturek, Pat Kinney, and Peter Yee. The 802.15.9ma CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.”*

Moved by Tero Kivinen, Seconded by Anne Krieger

32 out of 36 on DVL voted

Upon no discussion the vote was taken with the results of 32/0/0, motion carries.

TG13

*MOTION: "Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the Standards Association balloting of the P802.15.13\_D4 with the following membership: Volker Jungnickel as Chair, Nikola Serafimovski, Tuncer Baykas, Sang-Kyu Lim, Jörg Robert, Tero Kivinen. The 802.15.13 CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.”*

Moved by Volker Jungnickel, Seconded by Rick Alfvin

33 out of 36 on DVL voted

Upon no discussion the vote was taken with the results of 32/0/1, motion carries.

## Action Items and Other Info

### PARS

PARs to be considered for approval by the IEEE 802 LMSC during the closing IEEE 802 LMSC shall pass through the following process:

* The proposed PAR shall be available at a publicly accessible URL and an email sent to the IEEE 802 LMSC reflector that contains the URL required for viewing the PAR and associated documentation no later than 2 February 2021, AoE.
* Working Groups, other than the proposing Working Group, shall express concerns to the proposing Working Group as soon as possible and shall submit comments to the proposing Working Group and the IEEE 802 LMSC by e-mail not later than 10 March 2021, AoE.
* The proposing Working Group shall post a response to commenting Working Group and to the IEEE 802 LMSC together with a Final PAR on a public website and circulate the relevant URL on the IEEE 802 LMSC reflector not later than 17 March 2021, AoE

# Annex A Virtual attendance = 96

|  |  |  |
| --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** |
| Al Falujah | Iyad | ON Semiconductor |
| Alfvin | Richard | Linespeed Events LLC |
| Bahn | Christy | IEEE Staff |
| Barras | David | 3db Access AG |
| Baykas | Tuncer | Istanbul Medipol University |
| Beecher | Philip E | Wi-SUN Alliance |
| Bims | Harry | Bims Laboratories, Inc. |
| Bluschke | Andreas | Signify |
| Bober | Lennert | Fraunhofer Heinrich Hertz Institute |
| Calvert | Chris | Landis Gyr Group Worldwide |
| Chaplin | Clint | Self |
| Choi | Sangsung | Kookmin University |
| Clanney | Nathan | Siemens Mobility, Inc. |
| Costa | D.Nelson | Peraso Technologies Incorporated |
| Danev | Boris | 3db Access AG |
| De Ruijter | Hendricus | Silicon Laboratories |
| Dolmans | Guido | Holst Centre / IMEC-NL |
| Dotlic | Igor | Qorvo |
| Ekrem | Ersen | Apple, Inc. |
| Fukui | Kiyoshi | Oki Electric Industry Co., Ltd. |
| Godfrey | Tim | Electric Power Research Institute, Inc. (EPRI) |
| Guo | Jianlin | Mitsubishi Electric Research Labs (MERL) |
| Haasz | Jodi | IEEE Standards Association (IEEE-SA) |
| Hafuka | Takamitsu | LAPIS Technology Co., Ltd |
| Hammerschmidt | Joachim | Apple, Inc. |
| Harada | Hiroshi | National Institute of Information and Communications Tech. (NICT) |
| Henry | Jerome | Cisco Systems, Inc. |
| Hernandez | Marco | National Institute of Information and Communications Tech. (NICT) |
| Holcomb | Jay | Itron Inc. |
| Holland | Oliver | Advanced Wireless Technology Group, Ltd. |
| Hosako | Iwao | National Institute of Information and Communications Tech. (NICT) |
| Hu | Chunyu | Facebook |
| Ikegami | Tetsushi | Meiji University |
| Inoue | Yasuhiko | Nippon Telegraph and Telephone Corporation (NTT) |
| Jang | Yeong Min | Kookmin University |
| Jiang | Jeng-Shiann | Vertexcom Technologies |
| Joo | Seong-Soon | Electronics and Telecommunications Research Institute (ETRI) |
| Jornet | Josep Miquel | University at Buffalo |
| Jungnickel | Volker | Fraunhofer Heinrich Hertz Institute |
| Juntunen | Juha | Meteor Communications Corp. |
| Kashiwagi | Yoshio | Nissin Systems |
| Kim | Minsoo | Yokohama National University |
| Kinney | Patrick | Kinney Consulting LLC |
| Kitazawa | Shoichi | Muroran IT |
| Kivinen | Tero | Self Employed |
| Kobayashi | Takumi | Yokohama National University |
| Kohno | Ryuji | YNU/CWC UofOulu |
| Krieger | Ann | US Department of Defense |
| Kuerner | Thomas | TU Braunschweig |
| Kume | Hiroshi | Wi-SUN Alliance |
| Kuramochi | Takashi | LAPIS Technology Co., Ltd |
| Kuribayashi | Hideyuki | Rohm Co., Ltd |
| Li | Huan-Bang | National Institute of Information and Communications Tech. (NICT) |
| Lim | Sang-Kyu | Electronics and Telecommunications Research Institute (ETRI) |
| Luo | Xiliang | Apple, Inc. |
| Ma | Li | MediaTek Inc. |
| Mariappan | Vinayagam | SMR Automotive Modules Korea Ltd |
| Matsumura | Yuki | Rohm Co., Ltd |
| McElroy | Ciaran | Qorvo |
| Mori | Kenichi | Self |
| Mueller | Robert | Technische Universitaet Ilmenau |
| Nakanishi | Seiji | Lapis |
| Niewczas | Jaroslaw | Qorvo |
| Okumura | Ryota | Kyoto University |
| Orlik | Philip | Mitsubishi Electric Corporation |
| Palmer | Clark | Meteorcomm LLC |
| Pirhonen | Riku | NXP Semiconductors |
| Polland | Joe | Self |
| Powell | Clinton | Powell Wireless Consulting, LLC |
| Riegel | Maximilian | Nokia |
| Robert | Joerg | University of Erlangen-Nuremberg |
| Rocha | Alessandra | Wimax forum |
| Rolfe | Benjamin | Blind Creek Associates |
| Salazar Cardozo | Ruben E | Landis+Gyr AG |
| Sand | Stephan | German Aerospace Center (DLR) |
| Sasoglu | Eren | Apple, Inc. |
| Senna | Josh | Humatics |
| Serang | Daoud | CML Microcircuits (USA) Inc. |
| Shah | Kunal | Silver Spring Networks Inc. |
| Shah | Tushar | Apple, Inc. |
| Shahar | Menashe | Ondas Networks |
| Simpson | Guy | Full Spectrum |
| Stuebing | Gary | Cisco Systems, Inc. |
| Sturek | Don | Itron Inc. |
| Suzuki | Takafumi | National Institute of Information and Communications Tech. (NICT) |
| Tanaka | Hitoshi | LAPIS Semiconductor Co., Ltd |
| Toda | Hiroyuki | LAPIS Semiconductor Co., Ltd |
| Verso | Billy | DecaWave;Qorvo |
| V Padaki | Aditya | Amazon Lab126 |
| Wang | Haifei | Huawei Technologies Co., Ltd |
| Wechsler | Johannes | Fraunhofer Institute for Integrated Circuits IIS |
| Wendt | Matthias | Signify |
| Yang | Shang-Te | Apple, Inc. |
| Yee | Peter | NSA-CSD |
| Zeisberg | Sven | ZIGPOS GmbH |
| Zhou | Richard (Yujia) | Charter Communications |

**802.15 CAC Mtg.**

**Tuesday, 5 January 2021**

## Attendance

Pat Kinney

Rick Alfvin

Clint Powell

Jodi Haasz

Tim Godfrey

Kunal Shah

Volker Jungnickel

Don Sturek

Gary Stuebing

Jonathan Goldberg

Phil Beecher

Ryuji Kohno

Thomas Kurner

## Minutes

* Discussed Agenda for Jan. Interim
  + Attendance for 802.15 will be tracked/counted on a daily basis
  + Direct Vote Live will be used for Voting on motions again
  + Motions must be to Chair the day before they are to be removed
* Chair Election Process/Timeline was discussed

Machine generated alternative text:
January CAC meeting 
January session dosing meeting 
January session dosing meeting 
4 During January session 
5 4 weeks before March plenary 
6 2 weeks before March plenary 
7 4 days before the March plenary 
8 March Plenary Opening Meeting 
Discuss the election and process 
Discuss the election and process. Include requirements ft)r chair and vice chairs 
Motion made for WG approval Of election rocess 
Email a Call for Nominees 
Close the call. announce nominees 
Start a 10-day electronic ballot via DVL 
Close the ballot 
Announce the winners 

* + Tentative dates would be as follows: Open call for Nominations ~ 1/11-1/22
  + Close call for Nominations ~ 2/8
  + Open Vote ~ 2/22
  + Close Vote ~ 3/3
  + Chair Nominee Requirements
    - Nominee must accept if not self-nominated
    - Must be a SA Member
    - Must State Affiliation
    - Need Letter from Manager supporting Chair Role
  + Will use direct vote live so that is anonymous
    - To change a vote will require an email requesting a change in vote
    - Jodi Haasz will administer the voting
  + 802.15 March Plenary dates will be determined during Jan. Interim
  + Motion to approve electronic election process for Chair election will be made during Jan. 802.15 Interim closing

* Subgroup Status and Interim Plans
  + TG4 2020 Cor1
    - Will hear proposals
    - Start Draft development
  + TG4y
    - Sponsor ballot open, will close on 1/14
    - At least 1 comment, so a recirc will be needed
  + TG4aa
    - Will discuss draft
  + TG7a
    - Will discuss draft
  + TG9ma
    - Out for sponsor ballot, will close on 1/13
  + TG13
    - Out for sponsor ballot, will close on 1/13
  + TG16t
    - Working on spec framework
  + IG-Dep
    - Will give an update presentation in WNG, and why the need for Study Group
  + IG UWB-NG
    - TBD
  + IG.4ORG
    - TBD
  + SC THz
    - Brainstorming on future THz efforts
  + SC WNG
    - IG-Dep will give presentation
  + SC IETF
    - TBD
  + SC Main
    - Discuss operations manual changes
    - See latest posted doc
    - Will vote to approve during March Plenary