# Task Group 4z meeting minutes for May 2019

**Project**: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

**Title**: Task Group 4z meeting minutes for May 2019

**Date Submitted**: 21-May-2019

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**Re:** Meeting minutes

**Abstract**: Task Group minutes

**Purpose**: Document task group meeting

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IEEE Project 802
Working Group 15, Task Group 4z
Meeting Minutes: May 2019 Plenary
Atlanta, GA, USA

Task Group Chair: Tim Harrington (Pro-ID Consulting, UWB Alliance)
Task Group Recording Secretary, Vice Chair: Benjamin A. Rolfe (Blind Creek Associates, UWB Alliance, NXP1)

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Task Group 4z

Enhanced Impulse Radio

1 See http://www.blindcreek.com/pages/affiliations.pdf for affiliations by 802 activity
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Monday, May 13, 2019 (AM2)

Called to Order
TG4z is called to order at 08:00 Local Time. Chair and Recording secretary are present.

Opening Report and Meeting Preamble
Chair presents Meeting slides Doc # 15-19-0205-00:
https://mentor.ieee.org/802.15/dcn/19/15-19-0205-00-004z-may-opening-slides-tg4z-eir.pptx
Intro and welcome;
Reviews project scope;
Goals, plan and expectations for the week.

IEEE Patent and Meeting Conduct Presentation
Chair presents the IEEE patent policy information.
Chair directs attendees to review the meeting preamble slides via the link on the 802.15 home page: https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf.
Chair presents slides 1-5. Attendees are informed that:

• The IEEE’s patent policy is consistent with the ANSI patent policy and is described in Clause 6 of the IEEE-SA Standards Board Bylaws;

• Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;

• There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.
The foregoing information was provided; the chair provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard: **No responses were heard.**

**Agenda**

Agenda: Chair presents proposed agenda document 15-19-0189-00.  
https://mentor.ieee.org/802.15/dcn/19/15-19-0189-00-004z-tg4z-may-interim-meeting-agenda.xlsx

Discussion: None.  
https://mentor.ieee.org/802.15/dcn/19/15-19-0097-02-004z-tg4z-march-plenary-meeting-agenda.xlsx

Motion to approve the agenda: Moved by Frank Leong, Second by Billy Verso. Following no discussion nor objection, agenda approved by unanimous consent.

**Prior Minutes**

Approval of May meeting minutes, document 15-19-0191-00.  
https://mentor.ieee.org/802.15/dcn/19/15-19-0191-00-004z-tg4z-march-meeting-minutes.pdf

Motion to approve January minutes: Moved by Billy Verso, Second by Frank Leong. Following neither discussion nor objection, approved by unanimous consent.

**Reports and Discussion**

**6 GHz NPRM Status Report and Discussion**

Tim provides a verbal status on the FCC NPRM.

**Editor's Report and Planning**

Lead technical editor provides status. Discussion on the expectations and best ways to proceed for the meeting.

**Consolidated Comments**

Consolidated Comments captured in document # 15-19-0196-04  
https://mentor.ieee.org/802.15/dcn/19/15-19-0196-04-004z-lb-consolidated-comments.xlsx

Chair summarizes the content and process for resolving comments. Chair begins review of the comments. Will divide and work in subgroups. First step to assign to sub-groups by clauses.

**Recess**

Recess @ 10:00 local until PM1.
Monday, May 13, 2019 (PM1)
Called to order @ 13:45 Local time. Chair and acting recording secretary are present. Meeting reminder given (review scope and conduct).

**Comment Resolution of Review Comments**
Chair leads dispatch of comments to assignment. Some discussion on how to identify editorial issues to be referred to the TG technical editor.

**Recess**
Recess @ 15:30 local until AM1 Tuesday.

Tuesday, May 14, 2019 (AM1)
Called to order @ 08:05 Local time. Chair and recording secretary are present. Meeting reminder given (review scope and conduct).

**Comment Resolution**
It is decided to assign all comments categorized as Editorial to the Editor. Comment resolution continues breaking into subgroups and working in parallel.

**Recess**
Recess @ 10:00 local time until PM1.

Tuesday, May 14, 2019 (AM2)
Called to order 10:33 local. Chair and recording secretary are present. Meeting reminder given (review scope and conduct).

**Coexistence Discussion**
Review comments on CAD. CAD ballot in 802.19 passed. Most comments editorial and accepted. A few request additional simulation scenarios be conducted by authors of referenced studies. CAD editor forwarded request to those authors, will report response when received via the reflector.

**Comment Resolution**
Comment resolution continues in subgroups.
Tuesday, May 14, 2019 (AM2)
Ad-hoc meeting to resolve comments

Comment Resolution
Comment resolution continues.

Recess
Recess @ 20:00 local.

Recess
Recess @ 15:26 local.

Tuesday, May 14, 2019 (PM1)
Called to order @ 13:30.

Comment Resolution
Each sub-group lead provides status snapshot.
Comment resolution continues.

Recess
Recess @ 13:50 local to continue comment resolution ad-hoc.

Wednesday, May 15, 2019 (AM1)
Called to order at 08:34 local time. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct).

Coexistence Discussion
Review comments on CAD. CAD ballot in 802.19 passed. Most comments editorial and accepted. A few request additional simulation scenarios be conducted by authors of referenced studies. CAD editor forwarded request to those authors, will report response when received via the reflector.

Comment Resolution
Comment resolution continues in subgroups

Comment Resolution
Subgroup status given.
Comment resolution continues.

**Recess**
Recess @ 10:15

**Wednesday, May 15, 2019 (PM1)**
 Called to order at 13:38 local time. Chair and recording secretary are present. Meeting reminder given (review scope and conduct).

**Coexistence Assurance Document**
Work on CAD continues with review of work in progress and live editing. A number of suggestions noted with some additional work to do off-line. Results will be posted when editing completed. To be presented Thursday AM1.

**Comment Resolution**
Comment resolution continues.

**Recess**
Recess @ 15:40

**Thursday, May 16, 2019 (AM1)**
 Called to order at 08:05. Chair and recording secretary present. Meeting reminder given.

**Comment Resolution**
Comment resolution continues

**Recess**
Recess @ 10:00 local

**Thursday, May 16, 2019 (PM1)**
 Called to order at 13:30. Chair and recording secretary present. Meeting reminder given.

**Comment Resolution**
Status given by sub-group leads. Discussion on guarantees, assurances and security.
Motion: to remove all references to "Security" and "Integrity" in text added by the amendment, replaced with "Enhanced", and the terms "SRDEV" is replaced with "ERDEV" and anywhere else "S" may be used to indicate the word security replace with E to indicate enhanced.
Moved by: Borris, Second by: Billy
Following no objections, approved by unanimous consent.

Motion: Empower the editor to apply the approved motion to remove all references to "Security" and "Integrity" in text added by TG4z draft, on variations of 'secure' related to ranging, and make related editorial decisions.
Moved by: Ben, Second by: Ayman
Following no objections, Approved by unanimous consent

Recess @ 15:30 local

Thursday, May 16, 2019 (PM2)
Called to order at 16:00 local. Chair and recording secretary present. Meeting reminder given.

Next Steps
Review work plan and schedule.

Motions
Move that 802.15.4z TG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of the P802.15.4z_D02 with the following membership:
Ayman Naguib (Apple), Seongah Jeong (Samsung), Aditya Padaki (Samsung), Billy Verso (Decawave), Frank Leong (NXP), Tim Harrington (Pro-ID), Ben Rolfe (Blink Creek), David Barras (3dB), Boris Danev (3dB), Brima Ibrahim (NXP), Peter Sauer (Microchip), Jaroslaw Niewczas (Decawave), Zheda Li (Samsung), Clint Chaplin (Samsung), Alejandro Marquez (Apple)
The 802.15.4z 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, via teleconferences and face to face meeting(s) announced to the reflector as per the LMSC 802 WG P&P.
Moved by: Clint Chaplin
Second by: Benjamin Rolfe
Approved by unanimous consent

Move that 802.15.4z WG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of the P802.15.4z_D02 with the following membership:
Ayman Naguib (Apple), Seongah Jeong (Samsung), Aditya Padaki (Samsung), Billy Verso (Decawave), Frank Leong (NXP), Tim Harrington (Pro-ID), Ben Rolfe (Blink Creek), David Barras (3dB), Boris Danev (3dB), Brima Ibrahim (NXP), Peter Sauer (Microchip), Jaroslaw
The 802.15.4z 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, via teleconferences and face to face meeting(s) announced to the reflector as per the LMSC 802 WG P&P.

Moved by: Clint Chaplin
Second by: Benjamin Rolfe
Approved by unanimous consent

**Teleconference Schedule:**

Twice weekly commencing Tuesday, May 28th until further notice as follows

<table>
<thead>
<tr>
<th>Days</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tues</td>
<td>San Francisco (USA - California)</td>
<td>7:00 am PDT</td>
</tr>
<tr>
<td></td>
<td>Dallas (USA - Texas)</td>
<td>9:00 am CDT</td>
</tr>
<tr>
<td></td>
<td>Dublin (Ireland)</td>
<td>3:00 pm IST</td>
</tr>
<tr>
<td></td>
<td>Paris (France - Île-de-France)</td>
<td>4:00 pm CEST</td>
</tr>
<tr>
<td></td>
<td>Helsinki (Finland)</td>
<td>5:00 pm EEST</td>
</tr>
<tr>
<td></td>
<td>Seoul (South Korea)</td>
<td>11:00 pm KST</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Days</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thurs</td>
<td>San Francisco (USA - California)</td>
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</tr>
<tr>
<td></td>
<td>Dallas (USA - Texas)</td>
<td>5:00 pm CDT</td>
</tr>
<tr>
<td></td>
<td>Dublin (Ireland)</td>
<td>11:00 pm IST</td>
</tr>
<tr>
<td></td>
<td>Paris (France - Île-de-France)</td>
<td>12:00 midnight CEST</td>
</tr>
<tr>
<td></td>
<td>Helsinki (Finland)</td>
<td>1:00:00 am EEST</td>
</tr>
<tr>
<td></td>
<td>Seoul (South Korea)</td>
<td>7:00:00 am KST</td>
</tr>
</tbody>
</table>

**Face to Face Hosted Meeting**

Date: June 17th – 20th, 9am to 5pm
Location: San Francisco Bay Area (USA)
There will be a face to face meeting held in the greater or lesser San Francisco Bay Area, to be hosted jointly by Samsung, Apple Computer, and Zebra Technologies at one of the following venues:

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>Cupertino, CA</td>
</tr>
<tr>
<td>Samsung</td>
<td>Mountain View, CA</td>
</tr>
<tr>
<td>Zebra</td>
<td>San Jose, CA</td>
</tr>
</tbody>
</table>

Teleconferencing capability will be available.
Proposed Agenda (broadcast via reflectors immediately):
Monday
   1. Comment resolution
   2. More comment resolution

Tuesday
   1. More Comment resolution
   2. More comment resolution

Wednesday
   1. Even more Comment resolution
   2. More comment resolution

Thursday
   1. Yup, you guessed it … Comment resolution
   2. More comment resolution

Other details to follow.
Transportation: Bay area airports
   • San Jose (SJC)
   • San Francisco (SFO)
   • Oakland (OAK)

Accommodations:
   • On your own. Many hotels in the area.

**AOG**
None heard.

**Adjourn**
Motion to adjourn
Moved by Frank Leong, second by Billy Verso.
Non debatable, no objections heard.
Adjourned @ 18:00.