IEEE P802.15
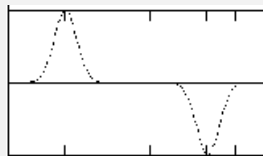## Wireless Personal Area Networks

Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)
Title	Task Group 4z meeting minutes for January 2019
Date Submitted	24-Jan-19
Source	[Benjamin Rolfe] E-mail: [ben.rolfe @ ieee.org] [Blind Creek Associates] [Benjamin A. Rolfe] [BCA]
Re:	Meeting minutes
Abstract	Task Group minutes
Purpose	Document task group meeting
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.
Release	The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15.

IEEE Project 802
Working Group 15, Task Group 4z
Meeting Minutes: January 2019 Wireless Interim
St. Louis, MO, 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, NXP[1])

Task Group 4z

Enhanced Impulse Radio

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[1] See http://www.blindcreek.com/pages/affiliations.pdf for affiliations by 802 activity

Contents

Monday, January 14 2019 (AM2)

Called to Order
TG4z is called to order at 10:31 Local Time.   Chair and Recording secretary are present.

Opening Report and Meeting Preamble
Chair presents Meeting slides Doc # 15-19-0021-00:
https://mentor.ieee.org/802.15/dcn/19/15-19-0021-01-004z-january-opening-slides.pptx

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: Review and approved the proposed agenda Document 15-19-0003-01.
https://mentor.ieee.org/802.15/dcn/19/15-19-0003-01-004z-tg4z-agenda.xlsx
Discussion: The proposed agenda is discussed. Following discussion, agenda is modified and captured in rev 02.
https://mentor.ieee.org/802.15/dcn/19/15-19-0003-02-004z-tg4z-agenda.xlsx
Following neither discussion nor objection, approved by unanimous consent.

Prior minutes

Approval of May meeting minutes, document 15-18-536-00.
https://mentor.ieee.org/802.15/dcn/18/15-18-0536-00-004z-minutes-november-2018.pdf
Following neither discussion nor objection, approved by unanimous consent.

Presentations and Discussion

Editor's report

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

Presentation: Low power considerations for 15.4z

Document 15-9-007-00 presented by Guido Dolmans (Holst Centre/Imec).
https://mentor.ieee.org/802.15/dcn/19/15-19-0007-00-004z-low-power-considerations-for-15-4z.ppt
Discussion: there was discussion on the presentation.
Actions: None

Recess

Recess @ 12:30 local.

Tuesday, January 15 2019 (AM1)

Called to order @ 08:08 Local time. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct).
Agenda change: changes to agenda to re-order presentations. Hearing no objections, agenda rev 03 as is amended by unanimous consent.
https://mentor.ieee.org/802.15/dcn/19/15-19-0003-03-004z-tg4z-agenda.xlsx

Presentations and Discussion

LRP Channel Plan Extension

Document 15-19-0035-01is presented by David Barras (3db Access).
https://mentor.ieee.org/802.15/dcn/19/15-19-0035-01-004z-lrp-band-allocation-for-srdev-interoperability.pptx
Discussion: The presentation was discussed.
Actions: Additional channels to be added to the LRP channel plan in the draft.

SSIE Details

Document 15-19-0010-00 is presented by Aditya V. Padaki (Samsung).
https://mentor.ieee.org/802.15/dcn/19/15-19-0010-00-004z-alternative-draft-text-for-inclusion-of-uwb-secure-service-information-element.docx
Discussion: The presentation was discussed
Actions: Editor to add to the draft

MAC presentation

MAC merge: Doc 15-19-0034-01 is presented by multiple presenters.
https://mentor.ieee.org/802.15/dcn/19/15-19-0034-01-004z-ieee-802-15-4z-mac.docx
Discussion: The presentation was discussed and document posted as revised r02
https://mentor.ieee.org/802.15/dcn/19/15-19-0034-02-004z-ieee-802-15-4z-mac.docx
Actions: Editor integrate into draft.

Recess

Recess @ 10:00 local time.

Tuesday, January 15 2019 (AM2)

Called to order 10:33 local. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct).

Presentations and Discussion

Hopping in Block-Based Ranging

Document 15-19-0039-03 presented by Ayman Naguib (Apple Inc).
https://mentor.ieee.org/802.15/dcn/19/15-19-0039-03-004z-hopping-in-block-based-ranging.pptx
Discussion: The presentation was discussed.
Actions: Editor to integrate into the draft as indicated.

Discussion on CAD preparation

Discussion: A proposed method to develop the CAD is discussed. The method is to reference prior CADs for UWB, and the coexistence work that has been publicly documented in other forums such as SE45, with summary and conclusions.
Actions:

1. Email to TG reflector a list of references to consider (BAR).
2. Others to provide additional references via email reflector (All).
3. Remove inappropriate references to inamabilis sciurus from the draft CAD (RJS).

Recess

Recess @ 12:06 local.

Tuesday, January 15 2019 (PM1)

Meeting called to order: 13:45. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct).
Agenda: order of presentations revised; following neither discussion nor objection the agenda is amended by unanimous consent (rev 04).
https://mentor.ieee.org/802.15/dcn/19/15-19-0003-04-004z-tg4z-agenda.xlsx
Note following detection of a save error, rev 05 is posted:
https://mentor.ieee.org/802.15/dcn/19/15-19-0003-05-004z-tg4z-agenda.xlsx

Presentations and Discussion

Coexistence discussion

Draft CAD outline document 15-18-0523-00 is presented and discussed.
https://mentor.ieee.org/802.15/dcn/18/15-18-0523-00-004z-coexistence-document-15-4z.docx
Discussion: the document is discussed.

Review of LRP Draft Text

Editor leads a detailed review of LRP text.
Discussion: the content was discussed and clarifications identified.
Action: Editor to integrate with contributor's assistance.

Recess

Recess @ 15:30 local.

Wednesday, January 16, 2019 (AM1)

Called to order at 08:35 local time. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct).

Presentations and Discussion

HRP UWB PHY Change Suggestions

Document 15-19-0050-01 is presented by Robert Golsham (Apple)
https://mentor.ieee.org/802.15/dcn/19/15-19-0050-01-004z-hrp-uwb-phy-change-suggestions.pptx
Discusion: No one objects to correcting errors in the base text. Refinements from discussion are captured in rev 02 of the document.
https://mentor.ieee.org/802.15/dcn/19/15-19-0050-02-004z-hrp-uwb-phy-change-suggestions.pptx
Actions: Editor to JFDI.

Selecting Parameter Sets in the Revised HRP UWB PHY

Document 15-19-0053-00 is presented by Frank Leong (NXP Semiconductors).
https://mentor.ieee.org/802.15/dcn/19/15-19-0053-00-004z-selecting-parameter-sets-in-the-revised-hrp-uwb-phy.pptx
Discussion: The presentation was discussed. Following discussion, rev 01 is posted.
https://mentor.ieee.org/802.15/dcn/19/15-19-0053-01-004z-selecting-parameter-sets-in-the-revised-hrp-uwb-phy.pptx
Actions: None

6GHz Coexistence Discussion

Discussion on impacts of proposed rule change in the FCC 6GHz NPRM. Chair presents general question to the task group: How bad is it? Discussion of impacts by application and usage scenarios. Suggested application areas to consider:
UWB Applications expected where 802.11 systems may be present:
Key Fob/smart access
Follow me
Secure POS
Safety monitoring systems
Action: group to consider application and usage scenarios, and provide input on likelihood and the severity of potential impact of co-located 802.11 devices operating according to the proposed rules in the NPRM.
Impact levels:
(1) Severe: most likely prevents proper operation of 802.15.4 UWB and/or 802.11 systems, or degrades performance to a degree that it is unusable as perceived by system users.
(2) Moderate: Degrades performance of one or both systems to a degree that would be noticeable but may be tolerated.
(3) No big deal: Users would not be aware of any impact

Recess

Recess @ 10:15

Wednesday, January 16, 2019 (PM1)

Called to order at 13:38 local time. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct).

Presentations and Discussion

Secure Ranging Definitions and Interoperability

Document 15-19-0058-00 was presented by Borris Danev (3db Access).
https://mentor.ieee.org/802.15/dcn/19/15-19-0058-00-004z-secure-ranging-definitions-and-interoperability.pptx
Discussion The presentation was discussed, extensively.
Actions: None

Recess

Recess @ 15:40

Thursday, January 17, 2019 (AM1)

Called to order at 08:05. Chair and recording secretary present. Meeting reminder given.

Presentations and Discussion

Draft work

Editor provides a status update on the draft.   Discussion and work on the draft follows.

Draft development planning

Discussion on the draft development and planning for balloting. Working Group chair suggests that the TG use the Technical Expert Group review process with the draft, doing an informal review and comment solicitation between January and March meetings, to improve the draft and shorten the overall time spent in WG balloting. After discussion group agrees with WG chair's recommendations.
Planned schedule: Billy to complete integrating draft by week ending Feb 1 and post in draft area; the TG will hold a teleconference on Feb 4 to review. See "Teleconference Schedule" for details.

Recess

Recess @ 10:00 local

Thursday, January 17 2019 (PM1)

Called to order at 13:30. Chair and recording secretary present. Meeting reminder given.

Presentations and Discussion
CAD Review
The proposed references are reviewed and discussed.
Discussion: following discussion, changes captured in rev 01.
https://mentor.ieee.org/802.15/dcn/18/15-18-0523-01-004z-coexistence-document-15-4z.docx

Next steps
Review draft development process and schedule.
Teleconference time agreed.

Working Group Motions:
No WG motions required.

AOB
None heard.

Teleconference Schedule
Commencing on Feb 4th 2019 at 10:00 AM Pacific Time. Repeating weekly,
      Feb 4, 2019 10:00 AM
      Feb 11, 2019 10:00 AM
      Feb 18, 2019 10:00 AM
      Feb 25, 2019 10:00 AM
      Mar 4, 2019 10:00 AM

Adjourn
Motion to adjourn
Moved by Jochen Hammerschmidt, second by Billy Verso.
Non debatable, no objections heard.
Adjourned @ 15:15.

Other References
https://mentor.ieee.org/802.15/dcn/19/15-19-0065-00-004z-tg4z-eir-cosing-report-for-january-2019.pptx
https://mentor.ieee.org/802.15/dcn/18/15-18-0523-01-004z-coexistence-document-15-4z.docx
https://mentor.ieee.org/802.15/dcn/19/15-19-0003-05-004z-tg4z-agenda.xlsx
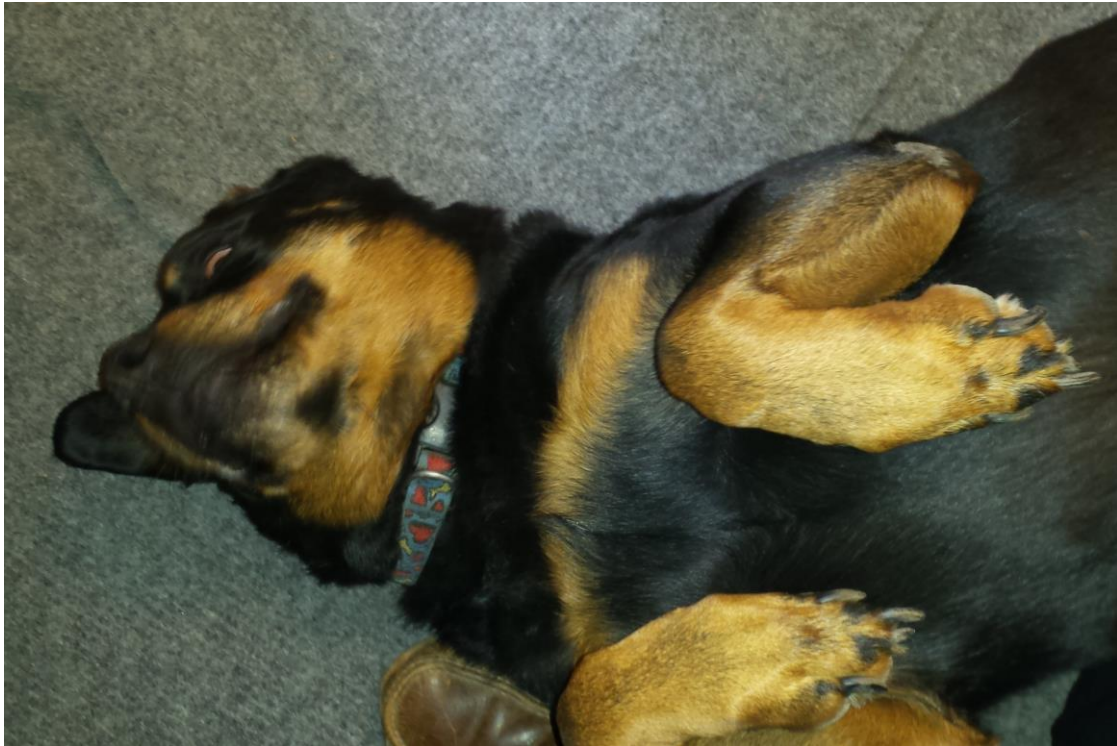https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf

Figure 1: Safe Travels Everyone