IEEE P802.15
Wireless Personal Area Networks

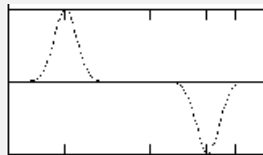|	
Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)
Title	Task Group 4z meeting minutes for July 2018
Date Submitted	16-Jul-18
Source	[Benjamin Rolfe]　　　　　　　　　　E-mail: [ben.rolfe @ ieee.org] [Blind Creek Associates] [Benjamin A. Rolfe] [BCA]
Re:	Meeting minutes
Abstract	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: July 2018 802 Plenary
San Diego, CA, USA

Task Group Recording Secretary: Benjamin A. Rolfe (Blind Creek Associates)

Task Group Chair: Tim Harrington (Pro-ID Consulting)

Task Group 4z

Enhanced Impulse Radio

Contents

Monday, July 09 2018 (AM1)

Called to Order
TG4z is called to order at 08:13 Local Time (San Diego). Chair and acting Recording secretary are present.

Opening Report and Meeting Preamble
Chair presents Meeting preamble slides, document # 15-18-0317-01 including the IEEE patent policy information. (https://mentor.ieee.org/802.15/dcn/18/15-18-0317-01-004z-tg4z-opening-slides.ppt)

Chair directs attendees to review the meeting preamble slides via the link on the 802.15 home page: http://standards.ieee.org/board/pat/pat-slideset.ppt.
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 document # 15-18-0309-02 presented. Following discussion, revision 3 posted. Motion to approve agenda document 15-18-0309-03: Moved: Billy Verso, second Frank Leong: Billy Verso. Approved by unanimous consent.
https://mentor.ieee.org/802.15/dcn/18/15-18-0309-03-004z-tg4z-july-2018-meeting-agenda.xlsx

Prior minutes

Approval of May meeting minutes, document 15-18-0240-00.
Following neither discussion nor objection, approved by unanimous consent.
https://mentor.ieee.org/802.15/dcn/18/15-18-0240-00-004z-tg4z-may-2018-minutes.pdf

Presentations and Discussion

Presentation: Document 15-18-0302-00

Change Proposal for Secure Authenticating Ranging using LRP UWB PHY (Boris Danev).
https://mentor.ieee.org/802.15/dcn/18/15-18-0302-00-004z-phy-mac-functional-description-changes-for-secure-authenticated-ranging.pptx

Discussion: Technical discussion follows. No objections to the proposal moving forward.

Presentation: Document 15-18-0290-00

Proposal to 15.4z for enhancing UWB PHYs (Huan-Bang Li).
https://mentor.ieee.org/802.15/dcn/18/15-18-0290-00-004z-proposal-to-15-4z-for-enhancing-uwb-phys.pptx

Discussion: Technical discussion follows; General consensus is that more channels is good. No objection to moving proposal forward.

Action: LRP proposers to work together on merged proposal and present to the group by close of the week.

Recess

Recess @ 009:53 local.

Monday, July 09 2018 (PM1)

Called to order 13:34 local. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct).

Presentations and Discussion

Presentation: Document 15-18-0108-0

Update on HRP UWB PHY enhancements (Verso).
https://mentor.ieee.org/802.15/dcn/18/15-18-0108-04-004z-hrp-uwb-phy-enhancements.pptx

Technical discussion follows (Q&A). No objections to moving the proposal forward.

Recess
Recess @ 14:40 local.
Note: Monday PM2 was recessed so that we could join the 802.19 opening.

Tuesday, July 10 2018 (AM1)
Meeting called to order: 08:09. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct)

Presentations and Discussion

Presentation: Document 15-18-0355-00

SRDEV PPDU for Enhanced Impulse Radio (Frank Leong),
https://mentor.ieee.org/802.15/dcn/18/15-18-0335-00-004z-srdev-ppdu-for-enhanced-impulse-radio.pptx

Technical discussion follows (Q&A). No objections to moving the proposal forward.

Presentation: Document 15-18-0356-00

SRDEV Evaluation Criteria (Frank Leong)
https://mentor.ieee.org/802.15/dcn/18/15-18-0336-00-004z-srdev-evaluation-criteria.pptx

Technical discussion follows. Leads to a general discussion on evaluation procedures.

Discussion on evaluation of proposals
Discussion on evaluation framework related to the amendment objectives. Leads to discussion on terminology and definitions for what we intend for ranging integrity, ranging accuracy, and secure ranging. Discussion continues in AM2.

Recess @ 10:00 local.

Tuesday, July 10 2018 (AM2)
Called to order at 10:41 local. Chair and recording secretary are present.
Meeting reminder given (review scope and conduct).

Continued Discussion
Terminology and defections:
Ranging integrity: is the time of arrival correct for the correct initiator.

Discussion on evaluation criteria: Clarified points:
- Not comparing LRP to HRP
- Objective is reach consensus on technical content: makes sense and is useful

- Not obvious creating precise criteria for evaluation will help
- Consider questions raised and defer further discussion on evaluation until we have more details on all proposals

Presentations and Discussion

Presentation: Document 15-18-0388-00
Digital Sidelobe Minimization (Jarek Niewczas).
https://mentor.ieee.org/802.15/dcn/18/15-18-0338-00-004z-digital-sidelobe-minimization.pptx

Technical discussion follows.

Presentation: Document 15-18-0323-00
HRP data mode options (Tony Fagan).
https://mentor.ieee.org/802.15/dcn/18/15-18-0323-00-004z-hrp-data-mode-options.pptx

Technical discussion follows.

Action: HRP proposers agree to work together on merging proposals, will report to the group Wednesday.

Recess @ 12:30

Wednesday, July 11 2018 (AM1)
Joint meeting with 802.19 and 802.11 TGax on 802.11ax Coexistence Assurance Document. Called to order at 08:10 by 802.11ax chair.
Chairs of 802.15 WG, TGz, 802.19 WG and 802.11 TGax present.

Discussion on CAD scope and requirements. Clarification of intent of comment submissions. There was no discussion on specific comments nor resolutions or work on the CAD.   Follow-on discussions expected.

Recessed @ 09:58

Wednesday, July 11 2018 (PM1)
Called to order at 13:40. Chair and recording secretary present. Meeting reminder given.

Presentations and Discussion
Discussion: Frank gives an update on collaborative progress: informal side sessions have been productive towards a merged HRP proposal.

Presentation: Document 15-18-0348-00
Simultaneous Ranging (Jarek Niewczas).
https://mentor.ieee.org/802.15/dcn/18/15-18-0348-00-004z-simultaneous-ranging.pptx

Technical discussion follows. Many interesting questions and answers.

Recessed @ 14:30.

Thursday, July 12 2018 (AM2)
Called to order at 10:36. Chair and recording secretary present.
Tim gave the meeting reminder.

Presentations and Discussion

Presentation: Document 15-18-0375-00
SRDEV PHY Consensus (Frank Leong).
https://mentor.ieee.org/802.15/dcn/18/15-18-0375-00-004z-srdev-phy-consensus.pptx

Consensus reached to merge HRP proposals.

Discussion and Motion: HRP Baseline
Following discussion, consensus is the merged proposal is a suitable baseline for HRP.

Motion: Propose that TG4z accept the MIM "baseline" mode consensus as specified by doc # 15-18-0375-00-004z as the HRP UWB SRDEV minimal interoperational mode for inclusion in the 802.15.4z amendment.
Moved: Billy Verso   Second: Frank Leong
Following no objection motion passed by unanimous consent.

Discussion and Motion: LRP baseline
LRP convergence; Boris reports that agreement was reached to merge to two LRP proposals.
Consensus of the group is to accept the merged proposal as the LRP baseline.

Motion: Propose that TG4z accept the LRP content in documents 15-18-290-00 (channel plan), 15-18-301-00, 15-18-0215-01 as the LRP baseline in the 802.15.4z amendment.
Moved by: David Second by: Ben
Following no objection motion passed by unanimous consent.

AOB

Telecon Schedule

Telecon: Wed Aug 15th 9am PDT. Announced with publication of these minutes; will be repeated on the email reflector.

Technical Editor

Chair calls for volunteers for Technical Editor; the following volunteers are heard:
Editor: Billy Verso
Assistant Editor: Ben Rolfe
Upon hearing no objections the chair makes it so.

Adjourn

Adjourned @ 17:15.