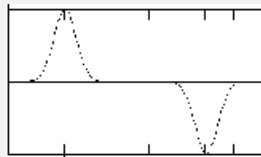

IEEE P802.15
Wireless Personal Area Networks

Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)	
Title	4z Comment Resolution Group meeting minutes	
Date Submitted	22-Aug-2019	
Source	[Benjamin Rolfe] [Blind Creek Associates]	E-mail: [ben.rolfe @ ieee.org]
Re:	Comment Resolution, 802.15.4z	
Abstract	Minutes of the Comment Resolution Group	
Purpose	Document meetings	
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, Amendment 15.4z
Meeting Minutes: Comment Resolution Group
25-July through 20-August 2019

Task Group 4z



Enhanced Impulse Radio

Task Group Chair, CRG Chair: Tim Harrington (Pro-ID Consulting, UWB Alliance)

Task Group Recording Secretary, Vice Chair: Benjamin A. Rolfe (Blind Creek Associates, UWB Alliance, NXP¹)

Task Group Lead Technical Editor: Billy Verso (Decawave)

CRG Comment Resolution Editors: Clint Chaplin (Samsung), Billy Verso, Benjamin A. Rolfe

CRG Members:

Member	Affiliation	Member	Affiliation
Aditya Padaki	Samsung	Jochen Hammerschmidt	Apple
Ayman Naguib	Apple	Benjamin Rolfe	BCA
Billy Verso	Decawave	Boris Danev	3dB-technologies
Brima Ibrahim	NXP Semiconductors	Clint Chaplin	Samsung
David Barras	3dB-technologies	Frank Leong	NXP Semiconductors
Jaroslav Niewczas	Decawave	Peter Sauer	Microchip
Seongah Jeong	Samsung	Tim Harrington	Pro-ID Consulting
Zheda Li	Samsung		

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

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Meeting Preamble

The following was presented at the start of each CRG teleconference.

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 at each teleconference 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 on any of the teleconferences.**

Thursday July 25 2019

Called to order 1500 PDT by acting chair Benjamin Rolfe

Attendees are reminded of the IEEE Patent Policy and Meeting Conduct requirements, chair presents slides 1-5. No questions or disclosures are heard.

Quorum requirement is met (8/15).

Agenda

Proposed Agenda

1. Review Editor status
2. Status on comment resolutions
3. Technical discussion
4. Contributions 367-00 (CID 411) 260-01.
5. Other technical topics

Following neither discussion nor objection, agenda approved by unanimous consent.

Editor Status

Billy Verso reports editor stats: Integrating contributions. No known roadblocks at this time other than contributions promised but not yet posted. At this time there is enough submitted to keep him busy so missing contributions are not blocking yet.

Status on comment resolutions

Review of comment resolutions status captured in Document 15-19-0196-41. CRG works on comment resolutions and assignments. Following discussion, resolutions and assignments are updated. Billy will update editor status so far and post revision 42; Clint will then add additional updates from today's call and post in revision 43.

Contributions

Brief description of updates to documents 15-19-0367-00 and 15-19-0260-01.

Actions:

1. CRG to review 367 and 260 to up/down on Tuesday
2. Ben to send email reminder of such

Recess

Recess at 1558 PDT

Tuesday July 30 2019

Called to order 0700 PDT by acting chair Benjamin Rolfe.

Attendees are reminded of the IEEE Patent Policy and Meeting Conduct requirements, chair presents slides 1-5. No questions or disclosures are heard.

Quorum requirement is met (14/15).

Agenda

Proposed Agenda:

1. Agenda Discussion and Approval
2. Comment resolutions proposals
 - a. Zheda 0367r0
 - b. Boris 0260r01
 - c. David 324r00
 - d. Peter 251r02
 - e. Aditya 368r0 350r1
3. AoB

Following neither discussion nor objection, agenda approved by unanimous consent.

Contributions

Zheda presents 15-19-0367-00. Following neither discussion nor objection, agenda approved by unanimous consent.

Boris presents 15-19-0260-01. Following discussion, the contribution is approved with no further changes.

David presents 15-19-0324-00. He notes it is not complete, and needs another week to finish. Need to address the fixed reply time correctly. Errors found: Figure 82 typo PDU s/b PSDU; David to correct and provide Visio file to the technical editor. David will make identified changes and corrections, complete as described, and post as revision 01 for review on the next call.

Peter presents 15-19-0251-02: he is still working on it; Tero to review and provide feedback; Peter to revise based on discussion and Tero's feedback and post as revision 03. He or Boris will present Thursday. **Note: put discussion in the 2nd hour on Thursday so Tero can attend.**

Aditya presents 15-19-0368-00. Discussion: Looks good, a few minor revisions identified. Aditya to apply and post as revision 01. Agenda time will be given on the next call to review changes.

Document 15-19-350-01: Ran out of time, will be put on the agenda for Thursday to finish.

AoB

Status on MLME related to Sounding, DPS, and Calibrate: Billy, Tero and Ben collaborated on and agreed upon resolutions; Ben to write up and post for review.

Editor status: Billy reports that 54% of approved resolutions have been applied.

Action: Clint to update comment DB with today's contribution.

Recess

Recess at 0904 PDT

Thursday, August 1, 2019

Called to order 15:32 by acting chair Benjamin Rolfe.

Attendees are reminded of the IEEE Patent Policy and Meeting Conduct requirements, chair presents slides 1-5. No questions or disclosures are heard.

Quorum requirement is met (9/15).

Agenda

Proposed Agenda:

1. Aditya - continue from Tuesday with 350r01
2. Boris – present and discuss contribution 0251
3. David – present completed contribution 0324
4. AoB

Contributions

Aditya presents doc # 15-19-0350-01 on Beacon enabled ranging. Discussion: Billy cautions the group to remember the schedule when considering new material. Following discussion, with no objections contribution is approved by unanimous consent.

Aditya presents doc # 15-19-0368-01 explaining revisions from Tuesday's comments. No further changes identified. Following no further discussion not objection, contribution is approved by unanimous consent.

David, Boris or Peter are absent on the call. Tero gives an overview of the feedback he provided and off-line discussions which are ongoing.

AoB

Editor: no road blocks yet though is getting concerned about LRP contributions. Total comments: 55% done or NA, with the expectation a few more checked off when document 15-19-0262 (Approved in July) is integrated.

Comment DB: Ben/Clint/Billy will coordinate updates to DB.

MLME changes related to Sounding, DPS and Calibrate: Ben to update status in DB.

Regarding comment i-0521: Billy has received input, will update in comment DB.

Recess

Recessed until Tuesday 7am PDT

Tuesday, August 6, 2019

Called to order at 0706 PDT by acting chair Benjamin Rolfe.

Attendees are reminded of the IEEE Patent Policy and Meeting Conduct requirements, chair presents slides 1-5. No questions or disclosures are heard.

Quorum requirement is met (9/15).

Proposed Agenda

1. Doc # 0372-00
2. Comments 0885, 1522, 2264
3. LRP Contributions discussion (Tero)
4. Comment status review
5. Schedule discussion
6. AoB

Following neither discussion nor objection, agenda approved by unanimous consent.

Contributions

Doc # 0372-00 – Moves general description from Clause 16 to clause 5 with modification.

<https://mentor.ieee.org/802.15/dcn/19/15-19-0372-00-004z-resolution-to-cid-i-0521.docx>

Editing question: when removing an entire sub-clause can we just say “remove” or do we need to show the entire clause as strike-through. Ben to confer with WG Technical Editor for guidance and report to Billy.

Frank walks through the changes.

Zheda notes we discussed changing size of ranging counter to 5 octets in SAP.

Frank edits real-time during discussion, captures result as revision 01. With agreed changes, following no further discussion nor objection contribution is accepted.

Comments i-0885, i-1522, i-2264: Zheda to revise Ayman’s text and broadcast via the reflector for discussion.

LRP Contributions discussion (Tero): Tero has provided comments to Peter. Expecting revised version of doc #251. Tero describes the changes discussed and which he expects to be reflected in revisions of the documents. Discussion: Concern is expressed on the impacts of the missing contributions on the schedule. The editor needs sufficient time to apply the resolutions and these are significant changes to the draft. It is noted that the deadline for contributions agreed in the July meeting was August 2nd which has already passed. Following discussion and concession by the editor it is agreed to extend the deadline by one week, to August 9th, on the expectation the editor will not be blocked until then.

Action: ping Peter & Boris to provide update for group review on Thursday.

Note: Tero will not be available until second hour Thursday. Setup agenda to accommodate (LRP discussion in second hour).

Schedule discussion

Expecting revision of 251 from Peter – see above. David has promised revision of doc #259 and 260 by Thursday.

Recess

Recess ag 0905 PDT.

Thursday, August 8, 2019

Attendees

Called to order 15:01 PDT by acting chair Benjamin Rolfe.

Attendees are reminded of the IEEE Patent Policy and Meeting Conduct requirements, chair presents slides 1-5. No questions or disclosures are heard.

Quorum requirement met (8/15).

Agenda

Proposed agenda:

1. Preamble
2. Agenda
3. Schedule discussion
4. Editor status
5. Document 0395,0396 (Ben)
6. Short Recess
7. LRP Discussion
8. Remaining content, finish up
9. AoB

Following neither discussion nor objection, agenda approved by unanimous consent.

Schedule and Editor status

Schedule discussion lead by Billy: Resolutions in documents 253, 260, 263, 367, and resolution to i-0574 integrated. Still waiting for LRP document revisions. Have doc from Frank ready; haven't started that. Revision from Aditya – done.

Question on Tero's comments on i-0885, i-1522, i-2264: Answer: proposed resolutions in doc # 0395, 0396 (Ben). Need to present with Tero present in 2nd hour.

Recess 1

Recess 03:55

Resumed

Called back to order at 16:02 PDT.

Comment Resolution Contributions and discussion

i-0518 – add text in clause 16 in two places and revise PIB attribute description. Billy and Frank have been working on it, have text nearly ready. Will upload prior to Tuesday for review and approval. Expected revision of 0251 not posted yet. Tero has explained what changes are expected. Approved by unanimous consent.

Accept document 0259r00 as amended by 0251r02. With editorial changes as deemed needed by the Technical Editor to merge. Editor notes conflicts between the two, use the later dated document to resolve “as best as he can”. After discussion, approved unanimous consent.

Recess

Recess at 17:16 PDT

Tuesday, August 13, 2019

Called to order at 0702 PDT by acting chair Benjamin Rolfe.

Attendees are reminded of the IEEE Patent Policy and Meeting Conduct requirements, chair presents slides 1-5. No questions or disclosures are heard.

Quorum requirement met (11/15).

Agenda

Proposed Agenda

1. Preamble
2. Finish comment resolution
3. Approve recirculation
4. Schedule
5. AoB

Following neither discussion nor objection, agenda approved by unanimous consent.

Comment Resolution

Comment status: Clint's emailed list has been addressed.

Editor Status: 2300 Done or NA. 548 Ready yet to apply. 38 to be resolved.

Presentation of doc # 0379-00: Following discussion, changes posted in revision 01. 15-19-0379-01 approved by unanimous consent.

Doc 0378r00 (Frank): Captures what was discussed on email reflector. Accepted.

LRP status: Billy his finding that 0259 is in conflict with 0251 and there are inconsistencies.

Doc 0251r03 (Peter): Discussion: New figures and text go in 6.9.9.4; during discussion some tweaks noted by Billy on terminology which he will fix. Editor is granted editorial license by unanimous consent.

Next

Thursday proposed agenda items:

1. Final comment resolution
2. Approve recirculation
3. Editor questions
4. AoB

Recess

Recessed at 09:10am PDT

Thursday, August 15, 2019

Called to order at 1500 PDT by acting chair Benjamin Rolfe.

Attendees are reminded of the IEEE Patent Policy and Meeting Conduct requirements, chair presents slides 1-5. No questions or disclosures are heard.

Quorum requirement met (9/15)

Agenda

Proposed agenda:

1. Final comment resolution
2. Approve recirculation
3. Editor questions
4. AoB

Following neither discussion nor objection, agenda approved by unanimous consent.

Comment Resolution: Report and discussion.

Everything but LRP documents. Doc 251 and 259. As previously agreed, Billy to have editorial license. He will do the best he can.

Comment about RSTU for TVWS: reject comment with TVWS is out of scope. Commenter agrees. Captured in the spreadsheet.

Status:

- Resolutions recorded for all comments.
- 90% of all comment resolutions applied (Done). Expect to finish tomorrow.

Defer recirc approval to Tuesday 20 Aug. Billy expects to have the draft ready by then.

Reviewed rogue comments: All have resolutions, Billy to update XLS

Reviewed CAD comments: All have resolutions, 1 update, all applied to CAD. Revised CAD will be posted following the call.

Recess

Recess at 16:12 PDT until Tuesday 7am PDT

Tuesday, August 20, 2019

Called to order at 0704 PDT by acting chair Benjamin Rolfe.

Attendees are reminded of the IEEE Patent Policy and Meeting Conduct requirements, chair presents slides 1-5. No questions or disclosures are heard.

Quorum requirement met (13/15)

Agenda

Proposed agenda:

1. Editor status
2. Approve Final comment resolution
3. Approve Draft and start of recirculation
4. AoB

Following neither discussion nor objection, agenda approved by unanimous consent.

Comment Resolutions Document

Comment resolutions: Doc 15-19-0196-52.

Motion: Move to approve content of Doc 0196r52.

Moved: Ayman Second by: Clint

Following neither discussion nor objection approved unanimous consent.

Motion: Move that 802.15 WG start a WG recirculation requesting approval of CA document 15-18-0523-06 and document P802.15.4z-D2 and to forward document P802.15.4z-D2, to Standards Association ballot.

Moved by Clint Chaplin Seconded by Billy Verso

Count: 12 yes, 0 no, 0 abstain

BRC Vote details:

Aditya Padaki	YES
Jochen Hammerschmidt	YES
Ayman Naguib	YES
Ben Rolfe	YES
Billy Verso	YES
Boris Danev	Not in Attendance
Brima Ibrahim	YES
Clint Chaplin	YES
David Barras	YES
Frank Leong	YES
Jaroslav Niewczas	YES
Peter Sauer	Not in Attendance

Seongah Jeong	YES
Tim Harrington	Did not vote
Zheda Li	YES

AoB

Discussion of schedule: Ballot to open today or tomorrow, close 12-Sept.
Draft available in private area as soon as Rick posts it, most likely by end of the day.

Adjourn

Motion to adjourn: moved Clint, second Ayman. Upon neither discussion nor objection motion carries by unanimous consent.
Adjourned at 0748 PDT.

BRC Attendance

CRG Roll Call	25-Jul	30-Jul	1-Aug	6-Aug	8-Aug	13-Aug	15-Aug	20-Aug
Aditya Padaki	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jochen Hammerschmidt	No	No	No	No	No	No	Yes	Yes
Ayman Naguib	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ben Rolfe	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Billy Verso	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Boris Danev	No	Yes	No	No	No	No	No	No
Brima Ibrahim	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Clint Chaplin	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
David Barras	No	Yes	No	No	No	No	No	Yes
Frank Leong	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Jaroslav Niewczas	No	Yes	No	No	No	No	No	Yes
Peter Sauer	No	Yes	No	No	No	Yes	No	No
Seongah Jeong	No	Yes	Yes	Yes	Yes	Yes	No	Yes
Tim Harrington	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Zheda Li	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Attendance	8	14	9	9	8	11	8	13
Quorum	YES	YES	YES	YES	YES	YES	YES	YES
Other attendees								
Mingyu Lee	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tero Kivinen	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kangin Yoon	Yes	No	No	Yes	Yes	Yes	Yes	Yes