**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | TG4g January 2011Ad-hoc Meeting Minutes |
| Date Submitted | January 17, 2011 |
| Source | [Benjamin A. Rolfe][][Los Gatos, CA] | Voice: [408-395-7207]Fax: []E-mail: [ben @ blindcreek . com] |
| Re: |  |
| Abstract | Minutes from the face-to-face ad hoc meeting in LA January 13, 14 2011 |
| Purpose |  |
| 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. |

TG4g January 2011Ad-hoc Meeting Minutes

January 13, 14 2011

# Attendance

Chair: Phil Beecher

Vice Chairs: Clint Powell, Hiroshi Harada

Recoding secretary: Ben Rolfe

Attendees:

|  |  |
| --- | --- |
| **Name** | **Affiliation** |
| Phil Beecher | PG&E |
| Clint Powell | SCE / PWC LLC |
| Hiroshi Harada | NICT |
| Kuor-Hsin Chang | Elster |
| Alina Lu Liru | NICT |
| Fumihide Kojima | NICT |
| Hartman Van Wyk | Itron |
| Daniel Popa | Itron |
| Cristina Seibert | SSN |
| Matt Boytim | Sensus |
| Tim Schmidl | TI |
| Khanh Tuan Le | TI |
| Mark Wilbur | Aclara |
| Bhupender Virk | PROcubed Inc.　 |
| CheolHo SHIN | ETRI |
| Ed Callaway | Sunrise Micro |
| Ryoichi Higashi | Fuji Electric |
| Emmanuel Riou | ACCENT  |
| Emmanuel Monnerie | Landis+Gyr |
| Bob Mason | Elster |
| Kazuyuki Yasukawa | Fuji Electric |
| Steve Shearer | SSN |
| Ben Rolfe | BCA, SSN |

# AM1 January 13th

AM1 Session commences at 08:00[[1]](#footnote-1) January 13th.

## Meeting Preamble

IEEE Policy and Procedure Notice: Chair (Phil Beecher) reminds the group that this meeting is covered by the IEEE 802 policy and procedures, and that the IEEE patent policy applies. Chair advices that anyone aware of essential IP not covered by an existing LOA should speak now, or inform the chairs otherwise, or provide/cause to be provided an LOA to IEEE. No disclosures heard.

## Review and Approve Agenda

Agenda: Chair reviews the agenda (10-953r0). No objections to the agenda heard.

## Editors and Sub-group Report

Working draft: Pre-draft is posted in the private area as of yesterday.

Kuor-Hsin Chang reviews current version of the comment resolution spreadsheet (doc #10-0852r7).

MAC related comments: Ben reports: In the November meeting and proposed changes have been prepeared for the next TG4e draft to provide the MAC mechanisms needed to resolve comments from the 4g ballot.

Alina presents doc #11-0003r0: Summary of MPM/CSM comment resolution teleconferences between November and January meetings. 5 teleconferences held; 118 comments discussed; proposed resolutions for 110 comments (documents 10-872r6, 10-954r2; The 8 remaining comments require further discussion in this ad-hoc.

## Comment Discussions

### PHY Primitives Comments

Discussion of comments affected by removal of the PHY Primitives in 15.4-2011 to identify which comments are resolved by removal of the sub-clause and which might require changes in the MCPS and MLME primitives. Specific comments:

# 351: Suggest AIP, inconsistency resolved by removing PD-Data; Ben and Hartman will examine MLME to assure no further ripple is required and report back to the group.

# 540: Suggest AIP, that inconsistency is resolved; Ben and Khahn will verify MLME definition is sufficient and report back to the group;

# 202: AIP: the proposed resolution to remove the TxChannel parameter is accepted, the parameter and references to it are removed with the PD-Data subclause in 802.15.4-2011; It is also noted that the same parameter should be removed from MCPS-Data parameters (Table 77). There is no objection to removing TxChannel parameter from table 77. Removing TxChannel from table 77 also resolves 788, 494, 281, 688.

#203: AIP: the parameter PPDUCoding was intended to specify the FEC mode selected: the parameter is removed with the sub-clause, so ambiguity is resolved;

Discussion follows about the parameters in the MCPS-Data primitive. See also following discussion section AM2. It is agreed also remove PPDUCoding from MCPS-Data (Table 77) as the FEC mode is described in Table 31 (*phyFSKFECScheme*) less ambiguously. It is noted that we need add an attribute in the PIB “*phyFSKFECenabled*” to turn on or off FEC.

# 427: AIP: same resolution s #203.

Chair recesses at 10:00 for break for 30 minutes.

# AM2 January 13, 2011

Chair calls meeting to order at 10:30

## More comment Discussions

### PHY Primitives Comments

#689: Resolved by removal of the subclause.

# 690: AIP, resolved by removing parameter from Table 77.

### Extended Discussion MCPS-Paramters or PIB attribute

Further discussion on what should be MCPS-Data.request parameters and what should be controlled by PIB attributes, i.e what should be ‘per MSDU’ and what should be ‘global’ (apply until changed).

Matt has proposed that if information is carried in the SHR + PHR directly then the parameters will be specified in the MCPS-DATA. Specifically: PPDUCoding becomes FECenabled; keep FCSlength in MCPS-DATA and remove from the PIB; Mode switch parameters remain in MCPS-Data. Need to add FSKScrambling parameter to specify whitening on/off and remove corresponding attributes from PIB

It is discussed if this logic should be applied to the parameters controlling the OFDM PHY also. Khanh volunteers to define the parameters for MCPS-Data related to OFDM consistent with the same reasoning. Also note same applies to MR-OQPSK PHY parameters: Phil volunteers Michael.

Kuor-Hsin will identify the CIDs resolved by this action.

Upon following discussion the above rule may not be suitable. The suggested resolution is revert back to removing MCPS-DATA parameters EXCEPT for mode switch (per above resolution for #281): TxData, PPDUCoding and FCS length deleted from MCPS-Data (table 77 and associated text); Add PIB attribute phyFSKFECenabled;

Break for lunch at 12:35

# PM1 January 13, 2011

Resume from break at 13:38.

## More comment Discussions

### Miscellaneous “easy” comments

#665, 741: Combine the proposed resolutions by deleting the bullet item about data rates line (pre-D3 page 7, line 9).

#342: AIP, remove “WPAN for” from the title of 5.1a.

#742: AIP, change “smart grid” to “SUN”.

#766: Kuor-Hsin to provide proposed resolution on Monday.

#523: Accept.

#635: AIP subclause to be clarified to reflect that it applies to FSK PHY only.

#967, 968: Move last sentence (“The bit to symbol…”) to a new paragraph following the bullet list and replace “follows SUN PHY conventions” with reference to “bit-to-symbol mapping” subclasue (6.12a.1.2 in d2).

#421: Accept.

#209: AIP, corrections will be applied to the next draft. The next draft is based on the 15.4-2011 revision.

#431: Accept in Principle. We have verified that the fields under our control will not have long strings of zeros. No change required.

#432: AIP: Editors will use representation as used 950MHz FSK PHY in 802.15.4-2011.

#210: AIP: resolved by the roll-up.

#433: AIP: resolved by the roll-up.

#435: AIP: make consistent with 802.15.4-2011; Note commenter will submit comment in to 802.15.4-2011 sponsor ballot to improve subclasue titles.

#444: Comment withdrawn based on the chair’s influence.

PM1 recessed for 30 minute break at 13:40.

# PM2 January 13 2011

Meeting called to order at 16:21.

## Continued comment discussions: miscellaneous comments

#982: Recommend reject: in this case GFSK was called out explicitly for a specific band (950MHz) per document 10-0331r8.

#612: AIP Add new [ro] PIB attribute phyNumModeSwitchParameterEntries, range = 0 to 4, description is “number of current entries in phyModeSwitchParameterEntries”.

#239: AIP, resolution the same as CID#829.

#448: AIP, Group has evaluated “shalls” and agreed they are correct in the current draft. Editors will deal with the table/text placement.

#830: Resolved by comment 448.

#840: Accept.

#594: AIP: merge sub-clauses into 6.13.4.

#909: Accept. Editors to be consistent with 4i.

#876: AIP: editors will coordinate with 4e.

#302: Withdrawn

 #890: AIP: will be made consistent with the roll-up.

PM2 recessed at 18:01.

# AM1 January 14th 2011

Chair calls the meeting to order at 08:01. Presents revised agenda (10-953r1). Change of plan – divide into sub-groups and review comments by grouping. Report back AM2.

# AM2 January 14th 2011

Reports from AM1: The assignee for each group provides a summary status, identifies where the proposed resolution of already agreed upon comments can be applied to others, and some new proposed resolutions are discussed. Clint captures proposed resolutions in Doc 10-0852.

Ben reports for MAC group of comments;

Larry presents for “IE” group;

Mark Wilbur reports for “Easy” group;

Emmanuel Monrie reports for OFDM group.

# PM1 January 14th 2011

Called to order at 13:38.

## FEC Comments

Alina presents 11-0019r0 with proposed resolutions for FEC group of comments. [704, 462, 1092, 1093]. No objections heard to presenting these proposed resolutions to the full TG.

## Generic PHY

Kuor-Hsin reviews proposed resolutions for generic PHY comments.

## FSK comments

Kuor-Hsin leads discussion of FSK comment proposed resolutions. The proposed resolution to CID# 1025 is still under discussion.

## MR-OQPSK Comments

10-0005r1 presented by Michael Schmidt. It is noted that the proposed resolution to CID#205 in this presentation is not correct for CID 205 which is on the PD-Data which is resolved by the observation that the PD-Data primitives have been removed. The MR-OQPSK subgroup is not yet ready to present to the TG for vote. Michael expects it will be ready for TG vote by midweek.

Vice-chair recesses at 15:35 until 16:30.

# PM2 January 14th 2011

Chair calls meeting to order at 16:35.

## Mode switch comments

Kuor-Hsin presents mode switch comments.

Larry Taylor disagrees with the statement that the presentation reflects proposed resolutions generated by consensus of participants on the teleconferences. Some discussion follows.

Specific comments:

221: Suggest it is ready to present to TG

587: The commenter withdraws the comment.

593: for 593 add explanation “as the commenter points out the PHY mode of the ACK is not specified in the draft”, resolution is AP, add text to draft clarifying text, to be provided by Kuor-Hsin.

841: proposed resolved proposed resolution to 593. Disagreement on this resolution: resolution is achieved by adding text to clause 5 describing the purpose of the mode switch from document to be postd by Kuor-Hsin.

213, 190, 702 : AP, covered by resolution to 593.

211: Accept in principle: change “can” to “may” in commenter’s proposed resolution.

614: Resolution to 211 covers this.

842: Accept; editorial convention.

463: Suggested that the resolution to 593 also covers this comment also. Commenter to review and report back.

727: AP clarification to be added (see also doc 11-0022 presented in AM2).

429: AP Figure 23 moved (resolution to 790) .

191: AP resolved by resolution to CID 799 (approved in November). Discussion reveals that this proposed resolution (799) is not complete. Additional work is needed to address 191: Kuor-Hsin believes that proposed resolutions to other comments will provide the required information; he will identify the additional comments to reference.

##  Comment Roundup

Clint leads a roundup of comment resolution status.

Rev 10-0852r9 posted by Clint; Clint reviews the summary numbers. Identifies 19 outstanding comments not assigned to someone to be worked. Clint assigns volunteers to work remaining unassigned comments:

|  |  |  |  |
| --- | --- | --- | --- |
| Group | Comment IDs | Assignee | Notes |
| MPM | 972 | Sum |  |
| PIB  |  | Ben |  |
| SFD | 544  |  |  |
| MAC | 554 | Ben | The only change from Nov is change from “accept” to “accept in principle” (correct) |
| Freq Band | 456 457 |  | Jerrit Kent  |
|  | 539 547 | Khanh |  |
| Frame Format | 70 | Ben |  |
| FCS | 171 301 436 695 730 1097 | Ben |  |
| Data Rate | 453 | Jerrit Kent |  |

Every outstanding technical comment has been assigned.

# Closing Remarks

Clint will post XLS. Ready to vote we will assume they are ready to vote Monday PM1 (first session) unless Phil hears otherwise. Everyone who is assigned a comment is asked to announce via the reflector as soon as possible. Assignments will be posted in version 10.

Comment: we have 400 outstanding technical comments to resolve next week. That is > 100 per day. Suggestion is that defer what requires debate until less contentious comments done.

Phil thanks the attendees for their service.

Meeting adjourned at 18:18.

1. All times given in Pacific Standard Time. [↑](#footnote-ref-1)