IEEE P802.15
Wireless Personal Area Networks

Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)
Title	IG NG-UWB Telecon Minutes Jan 2021
Date Submitted	09-March-2021
Source	[Benjamin Rolfe] E-mail: [ben.rolfe @ ieee.org] [Blind Creek Associates] [Benjamin A. Rolfe] [BCA]
Re:	Meeting minutes
Abstract	Minutes from Interest Groups telecons January 26th and January 28th
Purpose	Document IG meeting
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IEEE Project 802
Working Group 15,
Interest Groups: Next Generation UWB
Meeting Minutes: January 26 2021 Through March 2 2021
Virtual Meetings

Acting IG Chair: Benjamin A. Rolfe (Blind Creek Associates)

Note: All times in Eastern Time zone USA

Contents

1. **Tuesday 26-Jan-2021 09:30 AM**

Call to Order

Called to order at 09:32 ET. IG char present and acting as recording secretary. Reference document number 15-21-0078r00 for the meeting slides.

Meeting Reminder

Chair presents the IEEE policy slides and reminds attendees that for the meeting the referenced policies apply including patent policy, copyright policy, and rules of conduct. See document number 15-21-0078 for links.

An opportunity is provided for patent disclosures. None heard.

Logistics

Each presenter will take control of WebEx to share. Each presenter will state if they prefer questions in-line or at the end of the presentation. Attendees are reminded to mute when not speaking and turn video cameras off.   Use the chat window to queue.

Agenda

Agenda: Proposed Agenda:

1. Meeting preamble
2. Review
3. Technical presentation
4. PAR Discussion and work
5. Next Steps
6. Any Other Business

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

Review

Chair reminds the group of the IG process so far: As recommended by the WG chair, during the January wireless interim session, the IG begin consideration of the Criteria for Standards Development and the Project Authorization Request content based on the technical presentations for use cases and use case requirements. Initial discussion during the January interim resulted in a collection of bullet points. The chair has assembled thee bullet points into very prelimary draft of the CSD and a document to work on PAR content.

- https://mentor.ieee.org/802.15/dcn/21/15-21-0047-01-nuwb-draft-csd-ng-uwb.docx
- https://mentor.ieee.org/802.15/dcn/21/15-21-0082-00-nuwb-par-drafting-notes.docx

Technical Presentation and Discussion

Document 15-21-0079-00 is presented (Senna)
https://mentor.ieee.org/802.15/dcn/21/15-21-0079-00-nuwb-uwb-in-rail-transit-use-case.ppt

Discussion follows. Key characteristics:
- High accuracy localization
- Low duty cycle per device
- 30 Hz ranging update rate per train

Following discussion chair asks if there are any objections to considering the use case characteristics further. No objections heard.

PAR Discussion

Continue discussion from interim meeting from the collated bullet list of characteristics from the technical use case presentations. Several common parts:
- Low energy consumption
- Higher and lower data rates than current standard (802.15.4z)
- Adaptable link distance
  - Expanded trade-off space between speed, distance, etc
- Compatibility with 802.15.4z ERDEV

- Coexistence with legacy UWB

Four core areas are identified:

Chair reminds everyone that if there are additional requests for agenda time to please submit those to the chair as soon as practical.

Adjourn
Adjourned at 11:01 ET.

2. Friday 29-January-2021 10:00 AM

Call to order
Called to order at 10:04 ET. IG char present and acting as recording secretary.

Meeting Reminder:
The usual meeting reminders are given. An opportunity is provided for essential patent identification: none heard.
See https://mentor.ieee.org/802.15/dcn/21/15-21-0078-01-nuwb-ig-uwb-ng-meeting-slides-mar2021.ppt

Agenda
Presented in 15-21-0078r01.
1. Meeting preamble
2. Recap
3. CSD and PAR Discussion
4. Process discussion
5. Next steps
6. AoB

Following neither discussion nor objection agenda approved by unanimous consent.

CSD Discussion and Work
Draft CSD as worked in the January interim is presented (document 15-21-0047-01). Discussion and work follow. Result captured in Revision 2 (15-21-0047-02).

PAR Discussion and Work
PAR Drafting Notes (15-21-0082-00) is presented and discussed. Work follows. Results captured in revision 1 (15-21-0082-01).

Process Discussion

Discussion on the process to follow for CSD and PAR development continues. The WG Chair suggestion to focus on CSD first is being followed. It is noted that this leads to a discussion of PAR scope, and it is somewhat of a "back and forth" process. The timeline for moving the project definition forward is discussed.

It is noted that there is some uncertainty as to the 802 EC process for approving PARs in 2021. The 802 chair suggests that there will be an opportunity to review and approve PARs on EC interim telecons but this process is not yet clearly defined. EC action to allow for this is expected in the March plenary. It is suggested to proceed as though this will be possible (i.e. not rush to meet the deadlines for PAR review in the March plenary). It is also noted that while PAR and CSD are under review, the group can continue to move forward.

Next Steps

Continue telecon schedule as previously agreed.

Adjourn

Adjourned at 11:31 ET.

3. **Tuesday 2-February-2021 09:30 ET**

Call to order

Called to order at 09:33 ET. IG char present and acting as recording secretary.

Meeting Reminder:

The usual meeting reminders are given. An opportunity is provided for essential patent identification: none heard.
See https://mentor.ieee.org/802.15/dcn/21/15-21-0078-01-nuwb-ig-uwb-ng-meeting-slides-mar2021.ppt

Agenda

Presented in 15-21-0078r01.
   7. Meeting preamble
   8. CSD Discussion
   9. Next steps
   10. AoB

Following neither discussion nor objection agenda approved by unanimous consent.

CSD Discussion

Document 15-21-0089-00 is presented and discussed. Presents collected discussion in a table format and is offered to facilitate discussion.

Next Steps

Continue telecons one day per week on Tuesday at the previously agreed time 09:30 time.

Any Other Business

None

Adjourn

Adjourned at 11:06 ET.

4. Tuesday 9-February-2021 09:30 ET

Call to order

Called to order at 09:33 ET. IG char present and acting as recording secretary.

Meeting Reminder:

The usual meeting reminders are given. An opportunity is provided for essential patent identification: none heard.
See https://mentor.ieee.org/802.15/dcn/21/15-21-0078-01-nuwb-ig-uwb-ng-meeting-slides-mar2021.ppt

Agenda

Presented in 15-21-0078r02.
1. Meeting preamble
2. Project Planning
3. CSD Discussion
4. AoB

Following neither discussion nor objection agenda approved by unanimous consent.

Project Planning

Recommendations from 802 and WG 15 leadership, define two study projects:
- UWB-NG as amendment to 802.15.4 (4z++)
- New Standards focused on UWB

Following discussion, consensus is reached via straw polls to focus this IG on developing a PAR and CSD for amendment to 802.15.4 with the focus in Straw Poll 1.

STRAW POLL 1

Should we continue focusing on developing the PAR and CSD around the 4 major areas shown in 15-21-0089?
  • Ranging (no infrastructure)
  • Localization (infrastructure)
  • Sensing
  • Data streaming
Yes/no/abstain: 39/0/0.

STRAW POLL 2

Should we proceed for now with opening up just one project?
Yes/no/abstain: 38/0/1.

STRAW POLL 3

If just one project, amendment to 15.4 for now
Yes/no/abstain: 27/0/0.
New standard now
Yes/no/abstain: See 3a.
If two projects, would you be involved just one or both: See 3a
Should we defer decision on a split until we have a better understanding what we're planning to do in NG UWB: See 3a

STRAW POLL 4

Should we continue drafting PAR and CSD aimed at an amendment project?
See 3a.

STRAW POLL 5 [Deferred]

Are we ready to submit PAR and CSD for 802.15 WG & 802 EC approval and forwarding to NesCom for approval and auth. of TG formation?

CSD Discussion and Work

The draft CSD in 15-21-0047-02 is discussed. Results of discussion captured by IG Chair to be applied to the draft CSD and presented on the next call.

Any other Business

None

Adjourn

Adjourned at 11:03 ET.

5. Tuesday 16-February-2021 09:30 ET

Call to order
Called to order at 09:36 ET (following WebEx technical difficulties). IG char present and acting as recording secretary.

Meeting Reminder:
The usual meeting reminders are given. An opportunity is provided for essential patent identification: none heard.
See https://mentor.ieee.org/802.15/dcn/21/15-21-0078-01-nuwb-ig-uwb-ng-meeting-slides-mar2021.ppt

Agenda
Presented in 15-21-0078r03.
1. Meeting preamble
2. CSD Work
3. AoB

CSD Work
Revised CSD draft in 15-21-0047-03 presented and worked in the group.
Results captured in 15-21-0047-04.

Any other Business
None

Adjourn
Adjourned at 11:00 ET.

6. Tuesday 23-February-2021 09:30 ET
Meeting called to order at 09:35 ET. More WebEx difficulties. IG char present and acting as recording secretary.

Agenda
Proposed agenda presented in 15-21-0078-04.
1. Meeting preamble
2. PAR Discussion and Work
3. Plan and Schedule
4. AoB
Following neither discussion nor objection agenda approved by unanimous consent.

PAR Discussion and Work

Document 15-21-0115-02 with proposed PAR scope is presented and discussed; scope text modified by group work and agreed by unanimous consent. The resulting proposed Scope text is captured by IG chair to be combined with PAR drafting notes from 15-21-0082-01 and entered into the IEEE-SA MyProject PAR form. Action: IG chair to clean up the PAR draft in MyProject to present on the next call, for IG review and approval.

Plan and Schedule

Document https://mentor.ieee.org/802.15/dcn/21/15-21-0116-01-nuwb-ng-uwb-road-to-par-and-csd-approval.pptx is presented showing the possible timelines for the PAR and CSD completion and approval through

Any other Business

None

Adjourn

Adjourned at 11:03 ET.

7. Tuesday 2-March-2021 09:30 ET

Called to order at 09:37 ET. WebEx challenges continue. IG char present and acting as recording secretary.

Agenda

Proposed Agenda from 15-21-007-05:
1. Meeting preamble
2. PAR draft discussion and work
3. CSD draft discussion and work
4. Planning for plenary
5. AoB

PAR draft discussion and work

PAR work so far has been captured in the MyBallot PAR form and posted in PDF form as an amendment to 802.15.4 as follows:
Draft in MyProject:
https://development.standards.ieee.org/myproject-web/app#viewpar/12569/9081

On Mentor (PDF):
https://mentor.ieee.org/802.15/dcn/21/15-21-0126-00-nuwb-p802-14-4ab-par-draft-from-myproject.pdf
During review, revisions made and entered directly into MyBallot. Resulting PDF posted as revision 1:

https://mentor.ieee.org/802.15/dcn/21/15-21-0126-01-nuwb-p802-14-4ab-par-draft-from-myproject.pdf

CSD draft discussion and work

Changes that resulted from work on prior calls has been applied to the CSD draft and posted as https://mentor.ieee.org/802.15/dcn/21/15-21-0047-05-nuwb-draft-csd-ng-uwb.docx.

PAR and CSD Draft Approval by IG

Motion to approve PAR and CSD Drafts:

Request that the PAR and CSD contained in documents [15-21-0126-01] and [15-21-0047-05], respectively, be approved for submission to the WG for its approval and that the EC be requested to forward the PAR to NesCom

Moved: Clint Chaplin
Seconds: Ayman Naguib
Following no further discussion nor any objection heard, motion carries by unanimous consent.

Planning for plenary

Four (4) meeting slots have been allocated for the March plenary meetings. Proposed plan is Continue to review and refine use case and technical characteristics. Call for contributions is made. All requests for agenda time should be sent to the IG chair.

Plan to seek WG approval of the PAR and CSD as given above. Text for WG motion to be provided to WG chair:

WG Motion: *Request that the PAR and CSD contained in documents [15-21-0126-01] and [15-21-0047-05], respectively, be approved for submission to the WG for its approval and that the EC be requested to forward the PAR to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and CSD as needed to reflect EC discussion at its closing meeting.*

Any other Business

None

Adjourn

Adjourned at 10:48 ET.