**IEEE 802.15**

**Wireless Specialty Networks (WSN)**

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| Project | IEEE P802.15 Working Group for Wireless Specialty Networks (WSN) |
| Title | **802.15 WG & CAC & Joint 1/15 Minutes November 2024** |
| Date Submitted | [27 November 2024] |
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| Re: | [] |
| Abstract | [IEEE 802.15 Working Group & CAC Minutes] |
| Purpose | [Official minutes of the Working Group Opening/Mid-week/Closing/Joint and CAC Sessions] |
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**153rd IEEE 802.15 WSN SESSION**

**Hyatt Regency - Vancouver, BC, Canada (all times in local)**

**November 10-14, 2024**

# 802.15 WG Opening

# Monday, 11th November 2024

**10:49AM** WG Chair, Clint Powell (PWC; LLC), calls the meeting to order and opens the WG Agenda (doc #[*15-24-0545-04*](https://mentor.ieee.org/802.15/dcn/24/15-24-0545-04-0000-nov-2024-802-15-agenda.xlsx))

## Announcements

Welcome to the 153rd session.

Do not forget to log in to IMAT to record your attendance. Do not log attendance if you do not attend.

Use the microphone when you speak, stating your name and affiliation when you speak the first time.

You must be registered to participate in any of these session meetings. If you do not, you are classified as a “dead-beat”.

* Mixed mode meeting.
* Using Direct Vote Live (DVL) for closing Plenary.
* TG and SC chairs, get motions to the WG chairs as soon as possible and immediately after your TG closing meeting. Send to Phil Beecher and copy Clint Powell and Ann Krieger.
* >= 75% Attendance = min 12 time slots (of 16)

Motions for the closing plenary shall be send to Phil Beecher and Ann Krieger as soon as possible.

The social is on Wednesday. Registration is required for the social.

WG Chair asks for new participants to speak up: Two new attendees

## Legal

WG Chair informed the group of and displayed the IEEE-SA patent policy presentation
slides 0-5 ([*http://standards.ieee.org/board/pat/pat-slideset.ppt*](http://standards.ieee.org/board/pat/pat-slideset.ppt)).

* The WG Chair asks the participants who wishes to declare a Letter of Assurance (LoA) or to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for any of the ongoing activities within the 802.15 WG.
* No essential patent claims are brought forth.

The WG Chair displays and reads the standard IEEE Anti-Trust statement and the standard IEEE Copyright Policy, including Code of Ethics.

The WG Chair reminds the TG/SG/SC chair that they must show the policies at every session, but they do not need to reread through them all.

The question for patent claims has to be done at every single session.

## WG Approvals

Motion to *approve the agenda* (doc #[*15-24-0545-04*](https://mentor.ieee.org/802.15/dcn/24/15-24-0545-04-0000-nov-2024-802-15-agenda.xlsx))

* Moved by: Ann T Krieger (U.S. DoD)
* Seconded by: Phil Beecher (Wi-SUN)
* Discussion: none
* Approved by unanimous consent.

Motion to *approve the previous meeting minutes (*doc #[*15-24-0549-00*](https://mentor.ieee.org/802.15/dcn/24/15-24-0549-00-0000-802-15-wg-cac-minutes-september-2024.docx)*)*

* Moved by: Ben Rolfe (BCA)
* Seconded by: Ann T Krieger (U.S. DoD)
* Discussion: none
* Approved by unanimous consent.

WG Chair presented the SASB dates (doc #[*15-24-0545-04*](https://mentor.ieee.org/802.15/dcn/24/15-24-0545-04-0000-nov-2024-802-15-agenda.xlsx))

* Exact dates are given on the sheet “2024 & 2025 SASB Dates”

## General and Administrative

WG Chair presents the general meeting information:

* Voters: (voters: 122, nearly: 3, aspirant: 25)
* For questions regarding voting rights contact Ann Krieger

Chair reminds everybody to reply on letter ballots, otherwise voting rights may be lost!

The November 802.15 CAC meeting minutes are included in the WG minutes
*(this document) –* Everyone is welcome, but chairs shall attend.

The Wireless Chairs Steering Committee meeting minutes for November will be posted to the EC mentor soon.

Chair shows opening report (doc #[*15-24-0546-01*](https://mentor.ieee.org/802.15/dcn/24/15-24-0546-01-0000-nov-2024-802-15-opening-report.pptx))

* WG Chair shows 802.15 Org. Chart and Standards Pipeline, WG officers, WG operations, LMSC 802 Annual Review of 802.15
* Chair gives update on closed letter ballots
* Chair explains that new version for voting rights updates will be used after the current meeting, which will especially consider the participation in letter ballots
* The graphical agenda is shown
* No individual expert was designated for the meeting
* Passing through general objectives

Discussion on required motions on draft sharing with external entities. Motion will be done on Wednesday. Additional clarification may be required.

## Future Meetings and Polls

Future Meetings:

* Next meeting will be held in Kobe, Japan
* Registration is open
* Different hotels available, no real conference hotel, no conference discount for staying at specific hotel

Running Subgroup meeting:

* Every Subgroup session requires a Chair, Vice-Chair, or other subgroup officer (in person or remote) to run each session of the subgroup.
* Every Subgroup mtg. requires a designated person in person to run the video and audio for the virtual component.
* All Subgroup Chairs must identify who will be Chairing (if not the Chair) and who will be running the video and audio portion of virtual component in person and send info to WG Chair and Vice Chairs no later than 30 days prior to the start of the mtg.

Polls:

* No polls today

## 802.15 Status Reports (Goals/Objectives for the Week)

**TG 4ab (NG-UWB)**: Ben Rolfe (BCA)

* Work will focus on comment resolution

**SC WNG**: Ben Rolfe (BCA)

* No requests for agenda time so far

**IG Access:** Ben Rolfe (BCA)

* No requests for agenda time so far
* Chair suggests to cancel the IG if there is no increasing interest

**Joint 802.11/802.15 Mtg**. Ben Rolfe (BCA)

* No presentations requests from .15 members
* People are encouraged to attend the session

**TG 4ac (Privacy Amendment):** Tero Kivinen (Wi-SUN)

* Text for the draft is almost ready

**SC IETF:** Tero Kivinen (Wi-SUN)

* Presentation will be given during mid-week

**TG 4ae Ascon Cryptographic Algorithms Amendment:** Tero Kivinen (Wi-SUN)

* Call for proposals will be sent soon

**TG 9a EDHOC KMP Amendment:** Tero Kivinen (Wi-SUN)

* Call for proposals will be sent soon

**WG15 Editors:** Tero Kivinen (Wi-SUN)

* Each technical editor shall attend the session
* Work on update of editor’s guideline

**TG 4ad**: Phil Beecher (Wi-SUN)

* Four sessions scheduled
* Completion of technical guidance document planned
* Review of PAR

**Joint 802.1/802.15 Mtg**. Phil Beecher (Wi-SUN)

* Potentially short presentation form .15
* Presentation on bridging

**SC (Maintenance& Rules)**: Phil Beecher (Wi-SUN)

* Several PARs to review
* Updates on motion templates

**TG 4me (Revision to 2020)**: Phil Beecher (Wi-SUN)

* In IEEE editorial review
* Some bugs in the document have to be fixed, will be discussed in SC Maintenance

**TG 6ma (BAN/VAN)**: Ryuji Kohno (YNU/YRP-IAI)

* First letter ballot finished
* Work will focus on comment resolution

**TG 7a (OCC)**: Yeong Min Jang (Kookmin University)

* Draft submitted to RevCom and waiting for approval

**IG NG-OCC:** Yeong Min Jang (Kookmin University)

* Two sessions and seven presentations planned

**TG 16t (802.16 Lic-NB Amendment)**: Tim Godfrey (EPRI)

* Comment resolution from first SA ballot

**SC THz:** Thomas Kürner (TU Braunschweig)

* Two sessions and 5 presentations planned

## New Business

* No new business

## AOB

* No AOB

## WG Recess

**11:58 PM** WG Chair recessed the meeting until the mid-week on Wednesday.

# 802.15 WG Mid-week (& WNG)

# Wednesday, 13th November 2024

**10:35 am** WG Chair, Clint Powell (PWC; LLC) calls the session to order. He displays the agenda (doc #[*15-24-0545-05*](https://mentor.ieee.org/802.15/dcn/24/15-24-0545-05-0000-nov-2024-802-15-agenda.xlsx)).

1. **Announcements**

Registration is required to attend this session. State your name and affiliation when you speak for the first time. IMAT is used to record attendance.

Please do not register to IMAT if you are not participating to the meeting.

Direct Vote Live will be using for the voting during Closing Plenary.

## General and Administrative

Remember the social tonight. The busses leave at 6:10pm.

The new voting right system will be in operation soon. Please do not forget to vote on Letter Ballots.

## Future Meetings and Polls

Do not forget to register for the Kobe meeting in January.

There will be a special workshop on the Saturday before the meeting.

The IEEE rate in the hotels includes breakfast. There is no discount for staying at the meeting hotels.

## Midweek Subgroup Status Updates

**TG 4ab**:

* Resolving comments. Still 400 comments left to resolve.
* **TG 4ab Motion:** Motion for Draft Sharing between 802.15 WG and Audio Engineering Society
	+ Establish a draft-sharing relationship between the IEEE 802.15 WSN Working Group and the Audio Engineering Society
	+ Move: Ben Rolfe
	+ Second: Phil Beecher
	+ Discussion: None
	+ Result: Y 25; N 0; A 2
	+ Motion passes
* **TG 4ab Motion:** Draft Sharing
	+ Motion to share draft IEEE P802.15.4ab D1 with the Audio Engineering Society (AES).
	+ Moved: Ben Rolfe
	+ Second: Phil Beecher
	+ Discussion: None
	+ Result: Y 29; N 0; A 1
	+ Motion passes

**TG 4me**: Will be published soon.

* **TG 4me Motion:** Draft Sharing
	+ Motion to share draft IEEE P802.15.4me D7 with the Audio Engineering Society (AES).
	+ Moved: Ben Rolfe
	+ Second: Phil Beecher
	+ Discussion: None
	+ Result: Y 34; N 2; A 2
	+ Motion passes

**SC WNG**:

* No contributions during this meeting. Two possible contributions for January.

**IG Access**:

* 20 people attended the meeting. Interest in continuing the work.

**Joint .15/.11 Mtg.:**

* Lively meeting with 802.11 Coex SC.

**TG 4ac:**

* Everything required for the draft is ready. Drafting the standard will start soon.

**TG9a:**

* Tero Kivinen (Wi-SUN) presents the closing report (doc. #[15-24-0601-01](https://mentor.ieee.org/802.15/dcn/24/15-24-0601-01-009a-november-opening-and-closing.pptx))

**TG4ae:**

* Tero Kivinen (Wi-SUN) presents the closing report (doc. #[15-24-0602-00](https://mentor.ieee.org/802.15/dcn/24/15-24-0600-02-04ae-november-opening-and-closing.pptx))
* Comments from the group to NIST (doc. #[15-24-0617-02](https://mentor.ieee.org/802.15/dcn/24/15-24-0617-02-04ae-comments-to-nist-sp-800-232-ipd.docx))
* Current proposal does not allow for 32-bit tag lengths
* C: Change the document to reflect that the document is the opinion of the WG, not the opinion of a specific person.
* **TG4ae motion:** TG4ae Comments to NIST
	+ IEEE 802.15 WG has reviewed and approved document #15-24-0617-02 containing comments to NIST SP 800-232 Initial Public Draft, and request approval from the LMSC to send the comments to NIST. WG Chair and Technical editor are authorized to make changes as required by the LMSC.
	+ Moved: Tero Kivinen
	+ Second: Phil Beecher
	+ Discussion: None
	+ Result: Y 28; N 0; A 2
	+ Motion passes
* First draft for WG pre-ballot expected in March 2025
* Two meetings planned for January

**SC IETF:**

* Tero Kivinen (Wi-SUN) presents the IETF report (doc. #[15-24-0638-00](https://mentor.ieee.org/802.15/dcn/24/15-24-0638-00-IETF-sc-ietf-november-slides.pptx))
* IETF 122 will be held in Bangkok in March 2025

**TG 4ad:**

* Work on technical guidance document.
* Discussions on gap analyses of current PAR this afternoon. Call for initial proposals.

**Joint 802.1/802.15 Mtg**.:

* Presentation on bridging of 802.15 networks

**SC MAINTANCE/RULES:**

* Two PARs reviewed and ne comment submitted
* Review of comments received from IEEE editors on 802.15.4me

**TG 6ma**:

* Working on comment resolution
* CRG motion required during the closing

**TG 7a OCC**:

* Waiting for approval from RevCom
* Review of ISO comments

**IG NG-OWC**:

* Two sessions with 7 contributions

**TG 16t**:

* Working on comment resolution of first SA ballot
* Recirculation and CRG motion during closing.

**SC THz:**

* One session with 4 presentations
* One presentation and discussion of plans for Kobe left for the remaining meeting

## Any Other Business

**Treasurer’s report:**

* Still problems with the banking system.
* Document posted on Mentor. (doc. #[ec-24-0007-08](https://mentor.ieee.org/802-ec/dcn/24/ec-24-0007-08-WCSG-wireless-treasurer-report-2024.pptx))

**WNG:**

* No request for agenda time
* Plan to show THz demonstrations in January

## WG Recess

**11:45am** 802.15 Midweek recessed by WG Chair until Thursday 4:00pm.

# 802.15 WG Closing

# Thursday, 14th September 2024

**4:00 PM** WG Chair, Clint Powell (PWC; LLC) calls the session to order and displays the closing agenda document (doc #[*15-24-0545-05*](https://mentor.ieee.org/802.15/dcn/24/15-24-0545-05-0000-nov-2024-802-15-agenda.xlsx))

## Announcements

Registration is required to attend this meeting.

Check the attendance for the meeting, as 75% is required for the voting rights.

Please log into DVL now. If you have not received an email, please contact the vice chair.

## General and Administrative

No topics are discussed.

## Future Meetings and Polls

Registration for the Kobe meeting in January is available.

Straw Polls:

* Do you like this venue? Y 23; N 0
* Did you go to the social? Y 23; N
* Did you like the social? Y 10; N 10
* Comments on the social:
	+ Positive:
		- Plenty to do besides socialize
		- Food was good
	+ Negative:
		- Enjoyed the socializing but not the venue
		- The hotel had better food than the social
		- Lines were too long for the food
		- Would like more drink tickets
		- Spend less money on location and more on food/beverages

## Sub-Groups and Committees Closing Reports

**TG4ac Closing Report:**

* Tero Kivinen (Wi-SUN Alliance) presents the TG4ac closing report (doc. #[*15-24-0599-01*](https://mentor.ieee.org/802.15/dcn/24/15-24-0599-01-04ac-november-opening-and-closing.pptx)*)*
* Draft sharing with IETF already exists
* Went through the primitive, MLME-primitives
* WG pre-letter ballot in November
* Two sessions planned for January
* Q: When will the draft will be available
* A: Plan is to have draft by next week

**TG4ab Closing Report**:

* Ben Rolfe (BCA) presents the TG4 ab closing report (doc. #[*15-24-0665-02*](https://mentor.ieee.org/802.15/dcn/24/15-24-0665-01-04ab-tg4ab-closing-report.pptx)*)*
* Group worked on comment resolution
* 348 comments from 864 still to address
* LB Recirculation planned for January
* **TG4ab Motion:** Motion to approve the formation of CRG
	+ Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of P802.15.4ab with the following membership: Ben Rolfe (chair), Billy Verso, Clint Chaplin, Riku Pirhonen, Mickael Maman, Rojan Chitrakar, Alex Krebs, Pooria Pakrooh, Carlos Aldana and Li-Hsiang Sun. The 802.15.4ab CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
	+ Moved By: Ben Rolfe
	+ Seconded By: Phil Beecher
	+ Discussion: None
	+ Result: Y 40; N 1; A 1
	+ Motion passes
* C: The group should consider security in their work

**TG4ad Closing Report**:

* Phil Beecher (Wi-SUN Alliance) presents the TG4ad closing report (doc. #[*15-24-0597-01*](https://mentor.ieee.org/802.15/dcn/24/15-24-0597-01-04ad-tg4ad-agenda-opening-and-closing-report-nov-2024.pptx))
* Finalized and approved Technical Guidance document
* Finalized call for proposals
* In January initial proposals presentation, final proposals in March
* Five slots for Kobe requested

**SC-Maintenance Closing Report:**

* + Phil Beecher (Wi-SUN Alliance) presents the SC-Maintenance closing report (doc. #[*15-24-0596-01*](https://mentor.ieee.org/802.15/dcn/24/15-24-0596-01-0mag-scm-agenda-opening-and-closing-report-november-2024.pptx))
	+ Reviewed PARs and CSDs
	+ Reviewed comments and questions on existing standards
	+ Prepared ISO JTC1 comment resolution submissions
	+ Updated example motions
	+ **SC-Maintenance Motion**: Motion to approve comment response to IEC/ISO JTC1/SC6
		- 802.15 WG approves the comment response in document https://mentor.ieee.org/802.15/dcn/24/15-24-0092-00-0mag-response-to-iso-802-15-9.docx and requests 802 LMSC to forward the response to IEC/ISO JTC1 under the PSDO agreement. 802.15WG authorizes the 802.15 WG Chair and Technical Editor to make edits as agreed by 802 LMSC.
		- Moved: Phil Beecher
		- Second: Ann Krieger
		- Discussion: None
		- Result: Y 35; N 0; A 2
		- Motion passes
	+ **TG7a Motion:** Motion to approve comment response to IEC/ISO JTC1/SC6
		- 802.15 WG approves the comment response in document https://mentor.ieee.org/802.15/dcn/24/15-24-0652-00-0mag-response-to-iso-802-15-7-comment.docx and requests 802 LMSC to forward the response to IEC/ISO JTC1 under the PSDO agreement. 802.15WG authorizes the 802.15 WG Chair and Technical Editor to make edits as agreed by 802 LMSC.
		- Moved: Phil Beecher
		- Second: Ann Krieger
		- Discussion: None
		- Result: Y 35; N 0; A 0
		- Motion passes

**TG6ma Closing Report**:

* Ryuji Kohno (YNU/YRP-IAI) presents the TG6ma closing report (doc. #[15-24-0653-01](https://mentor.ieee.org/802.15/dcn/24/15-24-0653-01-006a-tg15-6ma-closing-report-for-november-2024.pptx))
* Resolved comments of Draft D03
* C: Not all planned CRG members have voting rights
* **TG6ma Motion:** Motion to approve the formation of CRG
	+ Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the WG balloting of P802.15.6ma with the following membership: Ryuji Kohno (YNU/YRP-IAI), Huan-Bang Li (NICT), Takumi Kobayashi (Nitech), Seong-Soon Joo (KPST), The 802.15.6ma CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
	+ Moved: Ryuji Kohno
	+ Second: Phil Beecher
	+ Discussion: None
	+ Result: Y 29; N 1; A 3
	+ Motion passes

**TG7a Closing Report:**

* + Yeong Min Jang (Kookmin University) presents the TG7a closing report (doc. #[15-24-0656-00](https://mentor.ieee.org/802.15/dcn/24/15-24-0656-00-007a-15-7a-higher-rate-longer-range-occ-tg-closing-report-nov-2024.pptx))
	+ Resolved comments received from ISO/IEC JTC1
	+ **TG7a Motion:** Motion to approve the formation of CRG
		- Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the SA balloting of P802.15.7a with the following membership: Yeong Min Jang (Chair), Sangsung Choi, Sang-Kyu Lim, Ryuji Kohno, and Seongsoon Joo. The 802.15.7a CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
		- Moved: Yeong Min Jang
		- Second: Phil Beecher
		- Discussion: None
		- Result: Y 31; N 0; A 5
		- Motion passes

**IG NG-OWC Closing Report:**

* + Yeong Min Jang (Kookmin Univ.) presents the IG NG-OWC closing report (doc. #[15-24-0649-00](https://mentor.ieee.org/802.15/dcn/24/15-24-0649-00-07ma-ieee-802-15-ig-ng-owc-closing-report-nov-2024.pptx))
	+ Seven contributions in two sessions
	+ No meeting planned in January

**TG16t Closing Report:**

* + Tim Godfrey (EPRI) presents the TG16t closing report (doc. #[15-24-0644-02](https://mentor.ieee.org/802.15/dcn/24/15-24-0644-02-016t-nov-2024-tg16t-meeting-closing-report.pptx))
	+ Comments on first SA ballot resolved
	+ Discussed input from MEC review
	+ New draft 4.1
	+ Plan to revise base standard as it reached its lifetime
	+ **TG16t Motion:** CRG formation
		- Move that 802.15 WG approve the formation of a Comment Resolution Group (CRG) for the SA balloting of the P802.15.16t with the following membership: Tim Godfrey (Chair), Vishal Kalkundrikar, Harry Bims, Tero Kivinen, and Joerg Robert. The 802.15.16t CRG is authorized to approve comment resolutions, edit the draft according to the comment resolutions, and to approve the start of recirculation ballots of the revised draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector as per the LMSC 802 WG P&P.
		- Moved: Tim Godfrey
		- Second: Phil Beecher
		- Discussion: None
		- Result: Y 32; N 0; A 2
		- Motion passes
	+ **TG16t Motion:** SA Ballot recirculation
		- Move that 802.15 WG start a Standards Association Recirculation Ballot of document P802.15.16t-D5.0.
		- Moved: Tim Godfrey
		- Second: Phil Beecher
		- Discussion: None
		- Result: Y 34; N 0; A 1
		- Motion passes
	+ **TG16t Motion:** Revision PAR
		- Move that the Revision PAR contained in document 802.15-24-0519-02, be approved by the IEEE 802.15 WG and that the LMSC 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 as needed to reflect LMSC discussion at its closing meeting.
		- Moved: Tim Godfrey
		- Second: Phil Beecher
		- Discussion: None
		- Result: Y 33; N 0; A 3
		- Motion passes

**SC THz Closing Report:**

* + Thomas Kürner (TU Braunschweig) presents the SC THz closing report (doc. #[15-24-0593-00](https://mentor.ieee.org/802.15/dcn/24/15-24-0593-00-0thz-sc-thz-closing-plenary-slides-meeting-november-2024.pptx))
	+ Two sessions with six contributions
	+ Three slots planned for Kobe meeting
	+ Special presentation during January WNG
	+ C: WNG session in Kobe could be non-registration required
	+ Tentative program for Kobe in doc. #[15-24-0657-01](https://mentor.ieee.org/802.15/dcn/24/15-24-0657-01-0thz-preparation-for-wng-in-kobe.pdf) is presented
	+ Q: How many minutes for each presentation
	+ A: Complete program will last 1h. Demonstrations will be available during the breaks.
	+ C: The complete mid-week could be replaced by WNG. Mid-week then in AM1 instead of AM2.

**Liaison Reports**

**802.24 Liaison Report:**

* Tim Godfrey (EPRI) gives a verbal report.
* Low latency paper is published
* Looking for contributions for other papers
* Discussions related to charging of electrical vehicles

**802.19 Coexistence TAG Liaison Report**

* Ben Rolfe (BCA) gives a verbal report
* One active task group
* No CA documents to review

**802.11 Liaison Report**

* None

**802.18 Liaison Report**

* None

## New Business

* Nothing raised

## Any Other Business

* Nothing raised

## Adjourn

**5:29 PM** The WG Chair adjourns the meeting.

# 802.1 / 802.15 Joint Mtg.

# Tuesday 12th November, 2024

802.1 and 802.15 joint activity is looking at 802.1 features/concepts that can be applied to the various 802.15 standards. This meeting is a joint mixed mode meeting between 802.1 and 802.15 as part of their respective sessions.

**6:15 PM** The 802.1 WG chair Glenn Parsons (Ericsson) and the 802.15 WG chair Clint Powell (PWC; LLC) call the meeting to order. They present the [Agenda](https://1.ieee802.org/2024-11-plenary-joint-1-15-agenda/).

1. Meeting Introduction
	* The agenda is approved
	* The meeting introduction [slides](https://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf) (made available beforehand) are presented
	* The 802.1 WG chair makes the Call for Potential Essential Patents. There is no response to this call.
2. P802.1ACea
	* Discussion of doc. # [15-24-0594-00](https://mentor.ieee.org/802.15/dcn/24/15-24-0594-00-006a-mac-services-support-for-ieee-p802-1acea.pdf) that was already presented in an earlier session
	* Plan to go for WG balloting in March
	* Q: Should there a joint WG letter ballot for .1/.15.?
	* A: Should be done in .1, .15 can comment via the chair.
	* Q: What is the expected time frame for the ballots.
	* A: One ballot per session could be realistic.
3. 802.15 Bridging
* Mick Seaman (Individual) presents a [document](https://www.ieee802.org/1/files/public/docs2024/ea-seaman-ethernet-dot15-bridging-10-24-v00.pdf) on Ethernet and .15 bridging
* Q: What is the impact on complexity and performance on both sides.
* A: No impact on .3 side, re-packing on .15 side.
* Q: 802.15.4 is very slow. What happens if a high-speed network is bridged with .15?
* A: IPv6 typically knows how to handle these problems.
* Q: What about Layer 2 vs. Layer 3. Are there use cases for one of the approaches?
* A: Layer 2 may be less work in some configurations.
* C: To support many features, e.g., time sensitive networks, it is required to support bridging.
1. Next steps & next meeting
	* Next meeting will be in the usual slot in March.
2. Any other business
	* There is no AoB.

**7:08pm** The meeting is adjournment

# 802.15 CAC Mtg.

# Sunday, 10th November 2024

## Attendance (14)

Clint Powell

Phil Beecher

Ann Krieger

Ben Rolfe

Tero Kivinen

Gary Stuebing

Clint Chapman

Ryuji Kohno

Christy Bahn

Yeong Min Jang

Tim Godfrey

James Glib

Joerg Robert

Thomas Kürner

Harry Bims

## Minutes

**5:39 pm**: WG Chair, Clint Powell (PWC; LLC) calls the meeting to order and presented the WG Agenda (doc. #[*15-24-0545-03*](https://mentor.ieee.org/802.15/dcn/24/15-24-0545-03-0000-nov-2024-802-15-agenda.xlsx))

Attendance Requirements and Chair Reminders

* Chair reminds everybody of the IEEE policy. The patent slides must be shown in every session. The patent question must be asked in every session and the answer must be documented in the minutes.
* Chair reminds everybody to pay registration fees.
* Attendance of social requires social ticket.

NesCom/RevCom Meetings:

* Dates are available on the “2024 & 2025 SABS Dates” table in doc. #[*15-24-0545-03*](https://mentor.ieee.org/802.15/dcn/24/15-24-0545-03-0000-nov-2024-802-15-agenda.xlsx)

November Meetings:

* 802.15 WG Prep 2pm to 3:00pm on Sun., Nov. 10, 2024
* 802 Wireless Chairs (WCSC) meeting: 4pm to 5:30pm on Sun., Nov. 10, 2024
* Opening 802.15 WG AC meeting: 5:30pm to 6:30pm on Sun., Nov. 10, 2024
* Opening 802 LMSC: n/a
* Opening 802 Wireless: 8:00am to 10:00am on Mon., Nov. 11, 2024
* Opening 802.15 WG meeting: 10:30am to 12:30pm on Mon., Nov. 11, 2024
* Mid-Week 802.15 WG AC meeting: 9:00am to10:00am on Wed., Nov. 13, 2024
* Mid-Week 802.15 WG meeting: 10:30am to 11:30am on Wed., Nov. 13, 2024
* 802.15 WNG meeting: 11:30am to 12:30pm on Wed., Nov. 13, 2024
* Closing 802.15 WG meeting: 4:00pm to 6:00pm on Thu., Nov. 14, 2024
* Closing 802 LMSC: n/a

Subgroup Status and Objectives for September Interim:

* **TG 4ab UWB-NG Amendment** – WG Motion on Monday on draft sharing with the Audio Engineering Society (AES), work on comment resolution
* **SC WNG** – No presentation requests yet
* **IG Access** – No presentation requests yet
* **Joint .15/.11 Mtg.** – Different topics on the agenda
* **TG 4ac Privacy Amendment** – Draft almost ready, draft sharing with IETF required
* **SC IETF** – Summary in mid-week
* **TG 4ae Ascon Cryptographic Algorithms Amendment** – Start to work on draft
* **TG 9a EDHOC KMP Amendment** – Different telephone conferences with input from IETF
* **TG 4ad NG-SUN PHYs Amendment** – Work on different things
* **Joint .15/.1 Mtg.** – Most likely one presentation from Marco
* **SC MAINT/RULES** – Three PARs to review
* **TG 4me Revision to 2020** – Some editorial things still have to be fixed
* **TG 6ma BAN/VAN Revision** – Work on comment Resolution.
* **TG 7a OCC Amendment** – One session to discuss ISO and IETF comments
* **IG NG-OWC** – Two sessions with 7 scheduled presentations
* **TG 16t Lic-NB Amendment** – Resolving SA comments
* **SC THz** – Two session with 5 scheduled presentations

AOB:

* Discussion of ISO/JTC1 comments on 802.15.7. Comments will be addressed in SC Maintenance.
* Chair mentions last minute changes of session assignments.
* Editors’ meeting will take place this week. There is also an e-mail reflector for the editors.
* Chair will not attend the Kobe meeting.

**6:30pm** WG chair recessed until Wednesday (8:00-9:00am)

# 802.15 Mid-Week CAC Mtg.

# Wednesday, 11th September 2024

## Attendance (11)

~~Clint Powell~~

Phil Beecher

Ann Krieger

Ben Rolfe

Tero Kivinen

~~Gary Stuebing~~

Clint Chapman

Ryuji Kohno

Christy Bahn

Yeong Min Jang

Tim Godfrey

~~James Gilb~~

Joerg Robert

Thomas Kürner

## Minutes

**8:06am**: WG Vice-Chair, Phil Beecher (Wi-SUN) called the meeting to order.

Attendance Requirements and Chair Reminders:

* Please keep in mind to show the patent policy slide at the beginning of each session and call for essential patents
* Remind people that they have to register to attend the session
* If comments are shifted from LB to SA ballot, the WG will upload them if the person is not SA member
* Social tonight, ticket required

SASB Updates:

* Two PARs and one draft going to NesCom

Midweek Subgroup Status Updates

* **TG 4ab UWB-NG Amendment –** Draft sharing motion, CRG motion
* **SC WNG –** No presentations scheduled
* **Joint .15/.11 Mtg** – Many discussions on coexistence
* **TG 4ac –** Motion to comment on NIST draft
* **TG 4ae/9a –** No motions, closing report in mid-week
* **TG Editors** – Update on manual
* **TG 4ad –** No motions
* **SC Maintenance –** Starting work on Corrigendum PAR for 15.4
* **TG 4me Revision to 2020** – No motions
* **TG 6ma BAN/VAN Revision –** CRG motion
* **TG 7A OCC –** JTC/ISO motion
* **IG NG OWC** – No motions
* **TG 16t Lic-NB Amendment –** LMSC motion, SA recirculation and CRG motions
* **SC THz** – No motions

Any Other Business:

* Clint Powell will not attend the January meeting

**9:30am** WG vice-chair adjourned the CAC meeting.

# Annex A Total attendance (in-person + remote) =

|  |  |  |
| --- | --- | --- |
| Last Name | First Name | Affiliation |
| Akhavan | Koorosh | Qualcomm Incorporated |
| Aldana | Carlos | Meta Platforms Inc. |
| Almholt | Thomas | Texas Instruments Inc. |
| Amezawa | Yasuharu | Mobile Techno Corp. |
| Anzai | Daisuke | Nagoya Institute of Technology |
| Au | Kwok Shum | Huawei Technologies Co.; Ltd |
| Bahn | Christy | IEEE STAFF |
| Baik | Eugene | Qualcomm Technologies; Inc. |
| BEECHER | PHILIP E | Wi-SUN Alliance |
| Bettesh | Ido | Apple Inc |
| Bims | Harry | Bims Laboratories; Inc. |
| Canchi | Radhakrishna | Kyocera International Inc |
| Chaplin | Clint | SAMSUNG ELECTRONICS |
| Chen | Jinzhu | General Motors Company |
| Chen | Run | New Radio Technology Co.; Ltd. |
| CHERIAN | GEORGE | Qualcomm Technologies Inc |
| Chitrakar | Rojan | Huawei International Pte Ltd |
| Choi | Sangsung | A2UICT |
| Dolmans | Guido | Holst Centre / IMEC-NL |
| Gilb | James | General Atomics Aeronautical Systems; Inc. |
| Godfrey | Tim | Electric Power Research Institute; Inc. (EPRI) |
| Golshan | Robert | Apple Inc |
| Grosswindhager | Bernhard | NXP Semiconductors |
| Gruber | Josef | Infineon Technologies |
| Guo | Jianlin | Mitsubishi Electric Research Laboratories (MERL) |
| Ha | Taeyoung | Samsung Electronics Co.; Ltd. |
| Harada | Hiroshi | National Institute of Information and Communications Technology (NICT) |
| Hartman | James | Landis Gyr Group Worldwide |
| Helwa | Sherief | Qualcomm Technologies Inc. |
| Hernandez | Marco | National Institute of Information and Communications Technology (NICT) |
| Hirata | Masayuki | Osaka University Graduate School of Medicine; Dept of Neurological Diagnosis and Restoration |
| HOSAKO | IWAO | National Institute of Information and Communications Technology (NICT) |
| Huang | Lei | Huawei Technologies Co.; Ltd |
| Ikegami | Tetsushi | Meiji University |
| Ishihara | Susumu | Shizuoka Univesity; Ministry of Internal Affairs and Communications; Japan |
| Jang | Yeong Min | Kookmin University |
| Jiang | Jinjing | Apple Inc |
| Jones | Vincent Knowles IV | Qualcomm Incorporated; Qualcomm Technologies; Inc |
| JOO | SEONG-SOON | Korea Platform Service Technology (KPST) |
| Jungnickel | Volker | Fraunhofer Heinrich Hertz Institute |
| Kabbinale | Aniruddh | SAMSUNG ELECTRONICS |
| Kadampot | Ishaque Ashar | Qualcomm Technologies; Inc. |
| KAJITA | SHUGO | Space-Time Engineering Japan; Inc. |
| Kalamkar | Sanket | Qualcomm Technologies Inc. |
| Kalkundrikar | Vishal | Ondas Networks |
| Kasamatsu | Akifumi | National Institute of Information and Communications Technology (NICT) |
| Kato | Arata | Space-Time Engineering Japan; Inc. |
| Kim | Youhan | Qualcomm Technologies; Inc. |
| Kitazawa | Shoichi | Muroran IT |
| Kivinen | Tero | Wi-SUN Alliance |
| KOBAYASHI | Takumi | YRP International Alliance Institute |
| Kohno | Ryuji | YNU/YRP-IAI |
| Krebs | Alexander | Apple Inc |
| Krieger | Ann | US Department of Defense |
| kristem | vinod | Apple Inc |
| Kuerner | Thomas | TU Braunschweig |
| Lee | Hong Won | LG ELECTRONICS |
| Lee | Jaegook | SAMSUNG ELECTRONICS |
| Leong | Frank | NXP Semiconductors |
| Li | Huan-Bang | National Institute of Information and Communications Technology (NICT) |
| Li | Jialing | Qualcomm Technologies; Inc |
| Li | Panpan | Huawei Technologies Co.; Ltd |
| Li | Wenzheng | Calterah Semiconductor Technology (Shanghai) Co.; Ltd. |
| Luo | Xiliang | Apple Inc |
| Ma | Li | MediaTek Inc. |
| Maman | Mickael | STMicroelectronics |
| Mueller | Robert | DENSO AUTOMOTIVE Deutschland GmbH |
| Murali | Sriram | Texas Instruments Inc. |
| Murray | Carl | Qorvo |
| Nomura | Tetsuya | DENSO TEN |
| Ogawa | Masakatsu | Sophia University |
| Pakrooh | Pooria | Qualcomm Technologies; Inc. |
| Patel | Tushar | Teradyne; Inc. |
| Patil | Abhishek | Qualcomm Incorporated |
| Pirhonen | Riku | NXP Semiconductors |
| Portier | Fabrice | Silicon Laboratories |
| Powell | Clinton | PWC; LLC |
| Robert | Joerg | Technische Universitaet Ilmenau |
| Rolfe | Benjamin | Blind Creek Associates |
| Sand | Stephan | German Aerospace Center (DLR) |
| Sasaki | Shigenobu | Niigata University |
| Sayrafian | Kamran | National Institute of Standards and Technology |
| Schmidt | Reinhold | Infineon Technologies |
| Sekine | Norihiko | National Institute of Information and Communications Technology (NICT) |
| Selander | Goran | Ericsson AB |
| SHAHAR | MENASHE | Ondas Networks |
| So | Youngwan | Samsung Electronics Co.; Ltd. |
| Stuebing | Gary | Cisco Systems; Inc. |
| Sturek | Don | Itron Inc. |
| Sumi | Takenori | Mitsubishi Electric Corporation |
| Sun | Li-Hsiang | MediaTek Inc. |
| Suzuki | Takafumi | NICT |
| Takabayashi | Kento | Toyo University |
| Takai | Mineo | Space-Time Engineering |
| Tang | Weidong | NewRadio Techologies Co.; Ltd. |
| Verso | Billy | Qorvo |
| Wendt | Matthias | Signify |
| Wisland | Dag | University of Oslo |
| Xiao | Libra | NewRadio Technology Co.; Ltd. |
| Yang | Menghuan | State Key Laboratory of Satellite Navigation System and Equipment Technology |
| Yang | Shang-Te | Apple Inc |
| Yoon | Kangjin | SPARK Microsystems |
| Yoshitake | Hiroaki | DENSO TEN Limited |
| Yu | zhongxing | Calterah Semiconductor Technology (Shanghai) Co.; Ltd. |
| Zakaib | Larry | SPARK Microsystems |
| Zeisberg | Sven | ZIGPOS GmbH |