**IEEE 802.15**

**Wireless Specialty Networks (WSN)**

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| Project | IEEE 802.15 Working Group for Wireless Specialty Networks (WSN) |
| Title | **IEEE 802.15 TG 4ab (NG-UWB) minutes** |
| Date Submitted | [28 Aug, 2025] |
| Source | [Panpan Li, Rojan Chitrakar][][Singapore] | Voice: []Fax: [--]E-mail: [lipanpan25@huawei.com] |
|  |  |  |
| Re: | [2025 July 802.15 Plenary Meeting held in Hybrid Mode] |
| Abstract | [IEEE 802.15 Task Group 4ab minutes] |
| Purpose | [Official minutes of IEEE 802.15 TG 4ab] |
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# Monday, 28 July, 2025 – PM1

**Opening**

**2:32 PM EST** Chair, Ben Rolfe (Blind Creek Associates), called the meeting to order and opened the TG Agenda.
(*15-25-0335-01-04ab*)

* >20 attendees joined the meeting

Chair introduced the hybrid meeting logistics.

Chair reminded the group of registration for 802 LMSC and wireless interim.

## Legal

Chair reminded the group of the following from the 802.15 opening meeting:

* IEEE-SA patent policy
* Submission of Letter(s) 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 were brought forth
* IEEE Anti-Trust statement
* IEEE Copyright Policy, including Code of Ethics

**Announcements**

Chair announced the agenda doc. *#15-25-0288-01-04ab* for the week. There were several requests on the time slots for presentations. The agenda was updated to doc. *#15-25-0288-02-04ab.* There was no further discuss on the agenda. It was passed with unanimous consent.

Chair reviewed the plans and objectives of this week.

Vice Chair reviewed the comment submission progress and summary.

Editor reviewed the editorial comments.

Chair raised the motion of minutes for May plenary *(doc. # 15-25-0313-00-04ab)* and telecons between May and July 2025 *(doc. # 15-25-0314-00-04ab)*. No discussion heard.

No one objected to approve the minutes.

**TG Meeting Activity**

Using the agenda *(doc. # 15-0288-01-04ab)* Chair proceeded with running the meeting.

Riku Pirhonen (NXP) presented “Resolutions to CIDs 19, 234, 311”

(*doc. # 15-25-0331-00-04ab*)

Riku will come back with another revision after offline discussions.

Alex Krebs (Apple) presented “LB213/D02 comment resolution -- various CIDs -- p.111 to p.201”

(*doc. # 15-25-0337-00-04ab*)

CID 555 to be reassigned to Rojan

Alex will come back with another revision after offline discussions.

Chair recessed the mtg. @ 4:27 PM EST, until Mon. PM2.

# Monday, 28 July, 2025 – PM2

**Opening**

**5:00 PM EST** Chair, Clint Chaplin (Samsung), called the meeting to order and opened the TG Agenda.
(*15-25-0335-01-04ab*)

* >20 attendees joined the meeting

Chair introduced the hybrid meeting logistics.

Chair reminded the group of registration for 802 LMSC and wireless interim.

## Legal

Chair reminded the group of the following from the 802.15 opening meeting:

* IEEE-SA patent policy
* Submission of Letter(s) 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 were brought forth
* IEEE Anti-Trust statement
* IEEE Copyright Policy, including Code of Ethics

**TG Meeting Activity**

Using the agenda (doc. # 15-2425-0190-04-04ab) Chair proceeded with running the meeting.

Rojan Chitrakar (Huawei) presented “LB213 - Proposed Resolutions for Security – Part 1”

(*doc. # 15-25-0312-00-04ab*)

Rojan will come back with another revision.

Alex Krebs (Apple) presented updates to “LB213/D02 comment resolution -- various CIDs -- p.111 to p.201”

(*doc. # 15-25-0337-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0337-01-04ab.*

Alex Krebs (Apple) presented updates to “LB213/D02 comment resolution -- CID 4”

(*doc. # 15-25-0344-00-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0334-00-04ab.*

Mikael Maman (STM) presented updates to “proposed resolution for MMS without report”

(*doc. # 15-25-0224-02-04ab*)

More offline discussion is needed.

 Chair recessed the meeting at 6.57pm till 29 July AM1.

# Tuesday, 29 July, 2025 – AM1

**Opening**

**9:04 PM EST** Chair, Clint Chaplin (Samsung), called the meeting to order and opened the TG Agenda.
(*15-25-0335-01-04ab*)

* >20 attendees joined the meeting

Chair introduced the hybrid meeting logistics.

Chair reminded the group of registration for 802 LMSC and wireless interim.

## Legal

Chair reminded the group of the following from the 802.15 opening meeting:

* IEEE-SA patent policy
* Submission of Letter(s) 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 were brought forth
* IEEE Anti-Trust statement
* IEEE Copyright Policy, including Code of Ethics

**TG Meeting Activity**

Using the agenda (doc. # 15-2425-0228-04-04ab) Chair proceeded with running the meeting. There were some agenda shuffling. The agenda was updated to doc. *#15-25-0228-05-04ab.* There was no further discuss on the agenda. It was passed with unanimous consent.

Huanbang Li (NICT, Japan) presented “Proposed Resolutions for D02 CID 139”

(*doc. # 15-25-0332-00-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0332-00-04ab.*

Youngwan So (SAMSUNG Elec.) presented updates to “ Comment Resolution - 165, 576, 213, 214, 215, 242, 579, 243”

(*doc. # 15-25-0329-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0329-01-04ab.*

Youngwan So (SAMSUNG Elec.) presented updates to “Comment Resolution - 8, 250, 251, 252, 623, 636, 637, 638”

(*doc. # 15-25-0330-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0330-01-04ab.*

Rojan Chitrakar (Huawei) updated “LB213 - Proposed Resolutions for Security – Part 1”

(*doc. # 15-25-0312-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0312-01-04ab.*

Billy verso (Qorvo) revisited “D02 Miscellaneous Comment Resolutions IV”

(*doc. # 15-25-0274-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0334-00-04ab.*

Billy verso (Qorvo) revisited “D02 Miscellaneous Comment Resolutions V”

(*doc. # 15-25-0281-00-04ab*)

More discussion needed.

Alex Krebs (Apple) presented “LB213/D02 comment resolution -- CID 562”

(*doc. # 15-25-0358-00-04ab*)

Need more discussion, will circle back later.

Alex Krebs (Apple) revisited “LB213/D02 comment resolution -- CID 536”

(*doc. # 15-25-0356-00-04ab*)

Will circle back later.

Alex Krebs (Apple) revisited “LB213/D02 comment resolution -- CID 545”

(*doc. # 15-25-0355-00-04ab*)

CID 545 is reassigned to Hongwon Lee (LG Electronics).

 Chair recessed the meeting at 10:55m till 30 July AM1.5.

# Wednesday, 30 July, 2025 – AM1.5

**Opening**

**10:04 PM EST** Chair, Clint Chaplin (Samsung), called the meeting to order and opened the TG Agenda.
(*15-25-0335-01-04ab*)

* >20 attendees joined the meeting

Chair introduced the hybrid meeting logistics.

Chair reminded the group of registration for 802 LMSC and wireless interim.

## Legal

Chair reminded the group of the following from the 802.15 opening meeting:

* IEEE-SA patent policy
* Submission of Letter(s) 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 were brought forth
* IEEE Anti-Trust statement
* IEEE Copyright Policy, including Code of Ethics

**TG Meeting Activity**

Using the agenda (doc. # 15-2425-0228-05-04ab) Chair proceeded with running the meeting.

Alex Krebs (Apple) presented “LB213/D02 comment resolution -- CIDs 12, 407, 115”

(*doc. # 15-25-0307-01-04ab*)

There were some discussion regarding CID 290. More offline discussion is needed.

Alex Krebs (Apple) presented “B213/D02 comment resolution -- CID 536”

(*doc. # 15-25-0356-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0356-01-04ab.*

Youngwan So (SAMSUNG Elec.) presented “Comment Resolution - 176, 177, 238”

(*doc. # 15-25-0364-00-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0364-00-04ab.*

Alex Krebs (Apple) presented “LB213/D02 comment resolution -- CIDs 174, 471, 472”

(*doc. # 15-25-0308-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0308-01-04ab.*

Alex Krebs (Apple) presented “LB213/D02 comment resolution -- CID 27”

(*doc. # 15-25-0309-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0309-01-04ab.*

Alex Krebs (Apple) presented “LB213/D02 comment resolution -- CID 16 and 17”

(*doc. # 15-25-0365-00-04ab*)

Group need more time to review this document.

 Chair recessed the meeting at 2:30m till 30 July PM1.

# Wednesday, 30 July, 2025 – PM1

**Opening**

**2:30 PM EST** Chair, Clint Chaplin (Samsung), called the meeting to order and opened the TG Agenda.
(*15-25-0335-01-04ab*)

* >20 attendees joined the meeting

Chair introduced the hybrid meeting logistics.

Chair reminded the group of registration for 802 LMSC and wireless interim.

## Legal

Chair reminded the group of the following from the 802.15 opening meeting:

* IEEE-SA patent policy
* Submission of Letter(s) 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 were brought forth
* IEEE Anti-Trust statement
* IEEE Copyright Policy, including Code of Ethics

**TG Meeting Activity**

Using the agenda (doc. # 15-2425-0228-04-04ab) Chair proceeded with running the meeting. There were some agenda shuffling. The agenda was updated to doc. *#15-25-0228-05-04ab.* There was no further discuss on the agenda. It was passed with unanimous consent.

Alex Krebs (Apple) revisited “LB213/D02 comment resolution -- CID 16 and 17”

(*doc. # 15-25-0365-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0365-01-04ab.*

Alex Krebs (Apple) revisited “LB213/D02 comment resolution -- CID 562”

(*doc. # 15-25-0358-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0358-01-04ab.*

Riku Pirhonen (NXP Semiconductors) presented “Resolutions to CIDs 19, 234, 311”

(*doc. # 15-25-0331-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0331-01-04ab.*

Hongwon Lee (LG Electronics) presented “D02 Proposed Resolution for MAC data service for the Compact Frame”

(*doc. # 15-25-0336-02-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0336-02-04ab.*

Hongwon Lee (LG Electronics) presented “LB213/D02 comment resolution -- CID 545”

(*doc. # 15-25-0366-00-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0366-00-04ab.*

Rojan Chitrakar (Huawei) presented “LB213 - Proposed Resolutions for Security – Part 2”

(*doc. # 15-25-0345-00-04ab*)

There were some discussions.

Mickael Maman (STMicroelectronics) revisited “MMS ranging procedure with fixed reply time”

(*doc. # 15-25-0376-00-04ab*)

Presenter decided to give people more time to review and will circle back later.

Rojan Chitrakar (Huawei) updated “LB213 - Proposed Resolutions for Security – Part 2”

(*doc. # 15-25-0345-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0345-01-04ab.*

 Chair recessed the meeting at 10:55m till 30 July PM2.

# Wednesday, 30 July, 2025 – PM2

**Opening**

**9:04 PM EST** Chair, Clint Chaplin (Samsung), called the meeting to order and opened the TG Agenda.
(*15-25-0335-01-04ab*)

* >20 attendees joined the meeting

Chair introduced the hybrid meeting logistics.

Chair reminded the group of registration for 802 LMSC and wireless interim.

## Legal

Chair reminded the group of the following from the 802.15 opening meeting:

* IEEE-SA patent policy
* Submission of Letter(s) 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 were brought forth
* IEEE Anti-Trust statement
* IEEE Copyright Policy, including Code of Ethics

**TG Meeting Activity**

Using the agenda (doc. # 15-2425-0228-04-04ab) Chair proceeded with running the meeting. There were some agenda shuffling. The agenda was updated to doc. *#15-25-0228-05-04ab.* There was no further discuss on the agenda. It was passed with unanimous consent.

Xiliang Luo (Apple) presented “Clarification of Timing Offset Between NB and MMS”

(*doc. # 15-25-0327-00-04ab*)

There were some discussions.

Xiliang Luo (Apple) presented “Proposed Resolutions for CID 5, 6, etc”

(*doc. # 15-25-0328-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0328-01-04ab.*

Youngwan So (SAMSUNG Elec.) revisited “Comment Resolution - 8, 250, 251, 252, 623, 636, 637, 638”

(*doc. # 15-25-0330-02-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0330-02-04ab.*

Youngwan So (SAMSUNG Elec.) revisited “Comment Resolution - 250, 251, 8”

(*doc. # 15-25-0382-00-04ab*)

More offline discussions are needed.

Billy Verso (Qorvo) revisited “Resolution of comments on Dynamic Data Mode SYNC Length Negotiation”

(*doc. # 15-25-0311-00-04ab*)

There were some discussions.

Vice chair Clint reviewed the status of comments.

 Chair recessed the meeting at 10:55m till 30 July AM1.5.

# Thursday, 31 July, 2025 – AM2

**Opening**

**11:32 PM EST** Chair, Clint Chaplin (Samsung), called the meeting to order and opened the TG Agenda.
(*15-25-0335-01-04ab*)

* >20 attendees joined the meeting

Chair introduced the hybrid meeting logistics.

Chair reminded the group of registration for 802 LMSC and wireless interim.

## Legal

Chair reminded the group of the following from the 802.15 opening meeting:

* IEEE-SA patent policy
* Submission of Letter(s) 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 were brought forth
* IEEE Anti-Trust statement
* IEEE Copyright Policy, including Code of Ethics

**TG Meeting Activity**

Using the agenda (doc. # 15-2425-0228-10-04ab) Chair proceeded with running the meeting. There were some agenda shuffling. The agenda was updated to doc. *#15-25-0228-11-04ab.* There was no further discuss on the agenda. It was passed with unanimous consent.

Wenzheng Li (Calterah Semiconductor) presented “Multiple advertising NB channels for MMS initialization”

(*doc. # 15-25-0359-01-04ab*)

There were some discussions.

Wenzheng Li (Calterah Semiconductor) presented “Proposed Resolution for Multiple advertising NB channels for MMS initialization”

(*doc. # 15-25-0360-01-04ab*)

There were some discussions.

Wenzheng Li (Calterah Semiconductor) presented “Proposed resolution for Pulse shape of the NB”

(*doc. # 15-25-0361-01-04ab*)

There was no objection to the comment resolutions as in *doc. # 15-25-0361-01-04ab.*

Pooria Pakrooh (Qualcomm) presented “Proposed Comments Resolution for 15.4ab D2.0 Sensing Comments”

(*doc. # 15-25-0339-00-04ab*)

More offline discussions are needed.

Pooria Pakrooh (Qualcomm) presented “Proposed Comments Resolution for 15.4ab D2.0 Sensing Comments”

(*doc. # 15-25-03396-00-04ab*)

More offline discussions are needed.

 Chair recessed the meeting at 10:55m till 30 July AM1.5.

# Thursday, 31 July, 2025 – PM1

**Opening**

**11:32 PM EST** Chair, Clint Chaplin (Samsung), called the meeting to order and opened the TG Agenda.
(*15-25-0335-01-04ab*)

* >20 attendees joined the meeting

Chair introduced the hybrid meeting logistics.

Chair reminded the group of registration for 802 LMSC and wireless interim.

## Legal

Chair reminded the group of the following from the 802.15 opening meeting:

* IEEE-SA patent policy
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	+ No essential patent claims were brought forth
* IEEE Anti-Trust statement
* IEEE Copyright Policy, including Code of Ethics

**TG Meeting Activity**

Using the agenda (doc. # 15-2425-0228-04-04ab) Chair proceeded with running the meeting. There were some agenda shuffling. The agenda was updated to doc. *#15-25-0228-05-04ab.* There was no further discuss on the agenda. It was passed with unanimous consent.

Alex Krebs (Apple) presented “LB213/D02 comment resolution -- CID 562”

(*doc. # 15-25-0358-00-04ab*)

 Need more discussion, will review back later.

 Chair recessed the meeting at 10:55m till 30 July AM1.5.