IEEE P802.11  
Wireless LANs

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| TGbi Minutes Mixed Mode July plenary Sessions 2024  15-19 July 2024 | | | | |
| Date: 2024-07-26 | | | | |
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Abstract

This document contains the minutes for the IEEE 802.11bi task group meetings that took place during the IEEE 802.11 Mixed Mode July session 15-19 July 2024. The on-site location for the meeting was Montreal (Canada).

Note: Highlighted text are action items.

Q – proceeds a question

A - proceeds an answer

C - proceeds a comment

Yellow highlight - action point

**Revision:**

R0: initial revision

**1rst slot : Monday July 15th 2024, 08:00 local time. (ad-hoc session)**

**Chair: Carol Ansley, Cox Communications**

**Secretary: Stéphane Baron**

**Vice-chairs: Jerome Henry, Cisco; Antonio DeLaOlivaDelgado, InterDigital, Inc**

**Technical editor: Po-Kai Huang, Intel**

Chair calls meeting to order at 08:07 Local time.

Agenda slide deck: [11-24-1014r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1014-00-00bi-july-tgbi-plenary-agenda.pptx):

1. Reminder to do attendance

Reminder to register for the session and to not attend the virtual meeting without paying appropriate meeting fees.

1. The chair mentioned the call for essential patents
   1. No one responded to the call for essential patents
2. Review of policies and procedures.
   1. IEEE individual process slides were presented.
3. The chair covered the IEEE copyright policy and participation rules.
   1. No questions
4. Quick review of the hybrid meeting protocols

1. **Discussion of agenda 11-24-1014r0 (slide #16)**
   1. Discussion on agenda

Chair reminds this is an ad-hoc session so no vote will be conducted during this session.

Chair indicates that on Thursday we will discuss on timeline update.

Chair asks if anybody has a preferred timeslot for presentations.

Ugo and Okan indicated they will have a presentation ready for Tuesday AM2.

Antonio, Stéphane and Phil indicated they will have a presentation ready for Tuesday PM2.

Jouni indicated he will have a document ready for Thursday AM1

Chair indicates that for now, the voting tool is not available and SP or Motions will take a lot of time, so chair will try to reduce as much as possible the number of votes.

* 1. Adoption of agenda by unanimous consent (17 participants online, 10 in the room).

1. **Administrative**
   1. Remaining Meetings:

* Tuesday AM2
* Tuesday PM2
* Wednesday PM2
* Thursday AM1

1. **Technical Submissions**
   1. [11-24/1176r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1176-00-00bi-cr-for-general-editorial-cids.docx): CR for General Editorial CIDs: Po-Kai Huang

General editorial CIDs presented by Po-kai.

* + 1. Discussion

Few editorial enhancements proposed online.

Editor will post r1 accordingly. Associated SP will be run tomorrow wing today’s session is an ad-hoc session.

* 1. [11-24/1181r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1181-00-00bi-cr-for-12-14-6.docx): CR for 12.14.6: Po-Kai Huang

Mainly editorial comment resolution related to chapter 12.14.6 presented by Po-Kai

* + 1. Discussion

On CID1496:

C: I agree this is in baseline, but maybe the commenter found another place not from baseline.

C: For the moment I think this is fine to reject and commenter can bring this issue back to the revision.

CID1392:

C: I don’t like the latest derive terms. I think we should indicate why we recompute it. Typically, that for privacy reason we need to recompute, so that we can understand the latest derive terms.

C: We could explain the latest derive in a note. This is also an alternative way.

CID 1392 is deferred and author will work on another resolution

No more questions.

* 1. [11-24/1112r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1112-00-00bi-cr-for-12-14-1-12-14-2-12-14-3.docx): CR for 12.14.1, 12.14.2, 12.14.3: Po-Kai Huang
     1. Discussion

CID 1162:

C: Capabilities and operation is very general and we do not clearly indicate the usage.

A: this is the name of the frame but in clause 14 we do have a clear technical description of the frame.

C: I think this is valid question since we do not indicate what to do with this frame.

C: from the commenter: this is a more general comment. We need to define momre action frames on EDP epoch and I have other comment for that.

A: OK so, we can reject this comment and work on other action frames redefinition.

A: there are EHT, HT, VHT, action frames, here we add action frames dedicated to EDP but for existing ones that are not robust, we add it to the EHT, VHT, category.

CID1415:

C: There are other cases you can set to this bit to 0, it is better saying a Station do not indicate support for EDP Epoch robust management frames.

A: OK.

Author modify text online accordingly.

Q: What does yellow highlighting?

A: This is to indicate I will skip this comment when requesting Straw Poll, to run it separately later.

Q: General question: will we use the tool to generate the spreadsheet?

A: (Tech Editor) Yes, as soon as we have approved resolutions, I will populate the tool and use it to generate spreadsheet.

Q: For CID1423, is it accepted or revised?

A: Since there is only one instance of the issue mentioned, it should be accepted, I agree.

CID1400:

C: I agree with the commenter to remove this sentence if this not related to EDP.

A: OK, can we accept this comment and move it to the REVmf.

Editor amends the resolution to accept.

CID 1409 is tabled for now.

No more question.

1. Other businesses

No other business.

1. Chair adjourn (since we are in ad-hoc) the meeting at 09:56 local time

**2nd slot : Tuesday July 16th 2024, 10:00 local time.**

**Chair: Carol Ansley, Cox Communications**

**Secretary: Stéphane Baron**

**Vice-chairs: Jerome Henry, Cisco; Antonio DeLaOlivaDelgado, InterDigital, Inc**

**Technical editor: Po-Kai Huang, Intel**

Chair calls meeting to order at 10:33 Local time.

Agenda slide deck: [11-24-1014r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1014-01-00bi-july-tgbi-plenary-agenda.pptx):

1. Reminder to do attendance

Reminder to register for the session and to not attend the virtual meeting without paying appropriate meeting fees.

1. The chair mentioned the call for essential patents
   1. No one responded to the call for essential patents
2. Review of policies and procedures.
   1. IEEE individual process slides were presented.
3. The chair covered the IEEE copyright policy and participation rules.
   1. No questions
4. The Chair also covered successful hybrid protocol.
5. **Discussion of agenda 11-24-1014r1 (slide #16)**
   1. Discussion on agenda

Jerome requested to add document 11-24/1291, 1284, and 1298 addressing a set of CIDs, scheduled for Wednesday PM2.

Po-Kai indicated he has a document related to Okan’s one 11-24/1249 resolving 1 CID.

Phil also requests to be scheduled on Wednesday PM2.

* 1. Adoption of agenda by unanimous consent (29 participants online, 12 in the room).

1. **Administrative**
   1. Remaining Meetings:

* Tuesday PM2
* Wednesday PM2
* Thursday AM1
  1. Approval of accumulated minutes:

**Motion#45** text: Approve the prior session minutes and teleconference minutes: 24/925r1 (May plenary minutes), 24/1160r0 (July telecon).

Y/N/A

**Discussion on** **Motion#45**:

No discussion.

**Motion #45** moved by Jerome Henry and seconded by Po-Kai Huang

**Motion#45 result**: approved by unanimous consent.

1. Deferred Straw Polls
   1. [11-24/1176r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1176-01-00bi-cr-for-general-editorial-cids.docx): CR for General Editorial CIDs: Po-Kai Huang

Since first TGbi session was an ad-hoc session, no vote occurred, and Po-Kai now presents a straw poll for acceptance of document 11-24/1176r1, presented yesterday.

* + 1. Discussion

Chair indicates we do straw polls for now and make motion on Thursday.

**StrawPoll#1 text**:

Approve the proposed CID resolution in document 11-24/1176r1: 1043, 1189, 1192, 1230, 1231, 1233, 1242, 1307, 1331, 1401, 1471, 1487, 1499, 1507

Y: / N: / A:

**Discussion on** **SP**#1:

No Discussion

**SP#1 raw results:** Y:85% / N:0% / A: 15% 26 voters

**SP#1 final results:** Y:22 / N:0 / A: 4

* 1. [11-24/1181r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1181-00-00bi-cr-for-12-14-6.docx): CR for 12.14.6: Po-Kai Huang

Since first TGbi session was an ad-hoc session, no vote occurred, and Po-Kai now presents a straw poll for acceptance of document 11-24/1181r1, presented yesterday.

* + 1. Discussion

Chair indicates we do straw polls for now and make motion on Thursday.

**StrawPoll#2 text**:

Approve the proposed CID resolution in document 11-24/1181r1: 1465, 1466, 1467, 1468, 1469, 1470, 1472, 1473, 1496,

Y / N / A

**Discussion on SP#2:**

No Discussion

**SP#2 raw results:** Y:77% / N:0% / A:23% with 26 voters

**SP#2 final results**: Y: 20/ N:0 / A:6

* 1. [11-24/1112r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1112-00-00bi-cr-for-12-14-1-12-14-2-12-14-3.docx): CR for 12.14.1, 12.14.2, 12.14.3: Po-Kai Huang

Since first TGbi session was an ad-hoc session, no vote occurred, and Po-Kai now presents a straw poll for acceptance of document 11-24/1112r1 , presented yesterday.

Po kai present the only 2 CIDs that was discussed and skipped during previous presentation: CID 1409, and 1412 with an updated resolution.

* + 1. Discussion

C: An antonym of "robust" would be frail, or weak.

A: I use baseline wording.

**StrawPoll#3 text**:

Approve the proposed CID resolution in document 11-24/1112r1: 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1162, 1310, 1311, 1061, 1308, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418,

1419, 1309, 1420, 1421, 1422, 1423, 1424, 1425, 1391, 1400, 1306

Y / N / A

**Discussion on SP #3:**

No Discussion

**SP#3 raw result:** Y:77% / N:0% / A:23%, 26 voters

**SP#3 final results**: Y:20 / N:0 / A:6

1. **Technical Submissions**
   1. [11-24/1105r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1105-00-00bi-aid-anonymization.pptx): AID anonymization: Domenico Ficara

Domenico presents the document that describes algorithm to determine randomized AID with two solutions: solution **A:** without collision, and solution **B:** with Collision.

* + 1. Discussion

Q: Is there any reason why sending AIDs in message 3?

A: This is because this is the last message.

Q: I mean why different between Assoc response and 4-way handshake since now Assoc response in encrypted?

A: OK, this is a good proposal.

Q: Why do we need 4-ways now then, since Assoc response is encrypted?

A: Because we need to derive the PTKSA. Same reasoning than for FT.

Q: Why not addressing the MAC addresses also?

A: I don’t have strong opinion

A: Decision to generate MAC Address was partly to ensure assignment is genuinely random.

Q: What if we face a lazy AP providing AIDs that can be easily identify, for instance just increment AID value? Can we mandate an AP to have a good level of randomness?

A: well, do we have a way to mandate AP doing it in a given way?

A: I don’t think so, this is the problem.

C: I think BF mechanism is a different approach since it obfuscate TIM, not AID itself.

Q: I think using the 4way handshake is not a good design.

A: I don’t see why using 4 way is a problem, again FT use it without any issue.

Q: Today AP generate AID, so my opinion is do not touch association and provide AIDs in dedicated protected frames after association.

A: Ok.

C: Regarding the AID generation without collision by increasing the AID space I think we can find bits we can use to do that. This is the case in other amendments.

Q: Is the idea to generate several AIDs at once for a sequence of Epoch is to reduce the signaling?

A; Yes.

Q; What if the Stations run out of AID?

A: This is why the AP has to make sure this do not happen by allocating enough AID in advance.

C: One way is to reuse signaling used for roaming to provides AID and other parameters.

C:4-way handshake is not only having a PTKEY.

Q: How can an AP select AIDs long time in advance considering that EDP groups may change and some may appear or disappear?

A: good point. We have to consider how AP can change what he already sent.

C: I think you need to maintain the range of randomized Aid in a range different from legacies.

A: Right.

Q: Can it be with a single signaling, where the AP send next M AID for M next epochs?

A: yes.

C: I think we can let the STA select its MAC address but not the AID because MAC address collision probability is much smaller.

Presenter request a Straw Poll.

**Initial StrawPoll#4 text**:

Do you support a mechanism where AIDs for next epochs are assigned by APs to STAs hence preventing any collision?

Y / N / A

**Discussion on SP#4 text**:

Q: Does the AP can send AID to all the STA in a broadcast frame?

A: No this is not the intention; we can indicate to each STA n the text.

Q: Can we indicate “securely”?

A: OK

Q: Can we indicate “in individually addressed frame”?

A: OK.

Q: Can we remove “individually addressed”, this can be done later on?

**SP#4 Final text**: Do you support the AP assigning AIDs to each STA securely for next epoch(s)?

**SP#4: raw results:** Y:76% + 1 / N:4% / A: 20%, 25+1 voters.

**SP#4: Final results**: Y:20 / N:1 / A:5

* 1. [11-24/1282r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1282-01-00bi-cr-for-some-cids-on-12-14-8.docx): CR for some CIDs on 12.14.8: Okan Mutgan

Presented by Okan. Resolution of 2 CID 1041 and 1042

About KEK derivation according to 11bh behavior.

Propose to set the MIB variables defined in the scope of 11bh to reuse KEK derivation mechanism, and removed the KEK generation mechanisms from D0.4.

* + 1. Discussion

Q: can we reduce the size of the MIB variable name to less than 50 characters?

A: I already reduced the name length by about 20%.

C: looks like the change is ok, I support this resolution

C: I think we can still reduce the size to 50 by using Capitalize and remove “and”, and “the”, words.

A: agree.

MIB variable name is change accordingly, but remains a little more than 50 characters.

Q: Do we need this variable since it exclusively depends on another variable value (dot11KEKEPASNActivate is true)? Or is there another usage of this variable?

A: I do not see another usage of this variable.

C: I think we need to discuss offline.

1. Other businesses

No other business.

1. Chair recess the meeting at 12:30 local time

**3rd slot : Tuesday July 16th 2024, 16:00 local time.**

**Chair: Carol Ansley, Cox Communications**

**Secretary: Stéphane Baron**

**Vice-chairs: Jerome Henry, Cisco; Antonio DeLaOlivaDelgado, InterDigital, Inc**

**Technical editor: Po-Kai Huang, Intel**

Chair calls meeting to order at 16:02 Local time.

Agenda slide deck: [11-24-1014r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1014-02-00bi-july-tgbi-plenary-agenda.pptx):

1. Reminder to do attendance

Reminder to register for the session and to not attend the virtual meeting without paying appropriate meeting fees.

1. The chair mentioned the call for essential patents
   1. No one responded to the call for essential patents
2. Review of policies and procedures.
   1. IEEE individual process slides were presented.
3. The chair covered the IEEE copyright policy and participation rules.
   1. No questions
4. The Chair covered successful hybrid protocol slides.
5. **Discussion of agenda 11-24-1014r2 (slide #16)**
   1. Discussion on agenda

Okan’s presentation continuation from previous session is added at the top tof the agenda for this session

* 1. Adoption of agenda by unanimous consent (26 participants online, 12 in the room).

1. **Administrative**
   1. Remaining Meetings:

* Wednesday PM2
* Thursday AM1

1. **Technical Submissions**
   1. [24/1282r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1282-02-00bi-cr-for-some-cids-on-12-14-8.docx): CR for some CIDs on 12.14.8: Okan Mutgan

Presented by Okan. Continuation of the presentation stopped at the end of previous sessions with new revision r2.

Okan goes thru the text modification since r1.:

* New shorter name for MIB variable.
* Removal of remaining references to KEK derivation
  + 1. Discussion

Editorial friendly amendments.

Q: In 12.14.8.1: why do we need other MIB variables if they depend on the status of the first one?

A: Conditional support requires the two other ones to be activated. In the baseline, we have some dependent features like that.

C: I agree that if other variables are always true if the first is true, I don’t see the point of defining multiple MIB variables.

A: They are cases for those additional MIBs are required.

Q: So, we can have first MIB true and another false?

A; Yes, this is possible in the case of 802.1x, for instance. Other combinations are also possible.

Q: Can we indicate the first condition set the other variable to true. So, add that other MIB variables are set to true, to indicate the cause effect relation.

A: OK.

Presenter then request a Straw Poll

**StrawPoll#1 text**: Approve the CID resolutions in 24/1248r3: 1041, 1042.

Y: / N: / A

**Discussion on SP#1 text:**

No discussion

**SP#1 raw results:** 24 votes, 67%Y, 8%N, 25%A

**SP#1 final results:** Y: 16/ N: 2/ A: 6

* 1. [24/1249r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1249-02-00bi-cr-for-mib.docx): CR for MIB: Po-Kai Huang

Po-Kai presents the document that solves CID1497 indicating that some variables are missing in the MIB. Po kai displays the MIB populated.

* + 1. Discussion

No discussion

Presenter then request a Straw Poll

**SP#2:** Chair ask if anybody object to Approve the CID resolutions in 24/1249r3: 1497?

No Objection,

**SP#2** approved by unanimous consent.

* 1. [24/1278r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1278-00-00bi-initial-group-assignment-discussion.pptx): Initial group assignment: Antonio DeLaOlivaDelgado

Antonio presents the document discussing how to assign a station to an EDP epoch group upon association.

* + 1. Discussion

Q: Do you expect any state to be preserved between association?

A: In my mind, the terminal may have a profile that is a state.

C: I am fine for the client to select something, but in original proposal the client just indicate minimum duration and may not have strong opinion for other parameters.

A: Today we have number of STA, Epoch duration and length of the sequence.

Q: if the STA ask for 10 and you have something not exactly 10 but close, what do we do?

A: This is a problem we have in any case; we have to define a mechanism.

C: Don’t over engineer, and keep thing simple.

A: My idea is to give minimum information to know if the group already exists.

Q: I think the group parameter can be a subset of the parameters. So now the question is what is this subset?

A: my idea is to wait until the format are ready and then decide.

C:I envision, a scenario where vendor indicate a range with randomized values not to be identified by the AP using this parameters.

C: We need to be carful of the number of stations that is in the Epoch. I think this should be a high-level number not the real ones.

A: I think that the Ap should not inform the STA of exact number of stations in the group.

No more questions.

Presenter request to run a Straw Poll.

**StrawPoll#3 initial text**: Do you agree to allow a STA to indicate its desired epoch parameters (TBD) to the AP upon association?

Y: / N: / A

Discussion on SP#3 text:

Q: by voting yes means that we have an association request, but nothing on the AP side?

A: you want to indicate it?

A: no just for clarification.

No text modification.

**SP#3 raw results :** Y:67% / N:4% / A:30% , 27 voters .

**SP#3 final results** : Y:18 /N:1 A/8

Presenter requested the “no” voter to send him an email.

* 1. [24/1162r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1162-00-00bi-cc49-edp-epoch-transition-period.docx): CC49 EDP Epoch Transition period: Stéphane Baron

Stéphane presents the document solving a set of 5 CIDs related to the EDP Epoch transition period. Main modification is the introduction of an RCM state to support the different phases of the EDP Epoch transition, and rules associated to each state.

* + 1. Discussion

C: I don’t understand: “In RCM Transition state, a non-AP MLD shall not transmit frames using different FA parameters in a single TXOP”

A: It is only a rule for non-AP and not for AP to avoid easy correlation of old and new MAC address.

Q: There is already a subclause dedicated to the transition, why do we need another one?

A: Existing subclause is dedicated to how to apply FA parameters, while the new subclause is dedicated to the clarify when to change those parameters and how to do that.

Q: Why are we putting all this text in a subsection of section 10?

A: [Chair]: it is not fixed; it can be changed later.

Q: The term “RCM” is confusing, since in the following we only speak about FA parameters.

A: Agree. Do you prefer “FA” instead?

A: Yes, looks better.

Q: How the AP know the state of the Client STA, I think the AP cannot know the STA state?

A: Same computation for both AP and Client based on the TSF. For boundary drift, each STA can estimate the maximum drift, for the transition, we probably need to advertise the max transition duration.

C: Too many rules and I am not certain that the introduction of states is necessary but a temporal explication could be sufficient and less complicated.

A: The states are only on Client side. I agree that the AP can’t know exactly the start of the state due to clock drift and the text could be simplified.

C: Simplifying the description could be done by considering only transmission/reception rules instead on non-AP and AP behavior.

C: TXOP could have a hard limit. We need more flexibility on the transition start time to avoid a strong constraint on station’s TXOP management.

C: The term “flushing data “is probably too restrictive, “not allowed” is sufficient.

A: ok, I will just indicate constraints on transmission of data, not on internal queue management.

Q: I think the term frame is not clear here, especially in the context of MLD. Is it MPDU or PPDU?

A: Agree. I will be more precise here.

Q: For me, it is possible to synchronize without using state.

A: some proposals have been presented in previous submissions

No more question.

Author will come back with an updated version later.

1. Other businesses

No other business.

1. Chair recess the meeting at 18:00 local time

**4th slot : Wednesday July 17th 2024, 16:00 local time.**

**Chair: Carol Ansley, Cox Communications**

**Secretary: Stéphane Baron**

**Vice-chairs: Jerome Henry, Cisco; Antonio DeLaOlivaDelgado, InterDigital, Inc**

**Technical editor: Po-Kai Huang, Intel**

Chair calls meeting to order at 16:03 Local time.

Agenda slide deck: [11-24-1014r3](https://mentor.ieee.org/802.11/dcn/24/11-24-1014-03-00bi-july-tgbi-plenary-agenda.pptx):

1. Reminder to do attendance

Reminder to register for the session and to not attend the virtual meeting without paying appropriate meeting fees.

1. The chair mentioned the call for essential patents
   1. No one responded to the call for essential patents
2. Review of policies and procedures.
   1. IEEE individual process slides were presented.
3. The chair covered the IEEE copyright policy and participation rules.
   1. No questions
4. The Chair covered successful hybrid protocol slides.
5. **Discussion of agenda 11-24-1014r3 (slide #16)**
   1. Discussion on agenda

No discussion

* 1. Adoption of agenda by unanimous consent (24 participants online, 6 in the room).

Chair reminds that we will discuss timeline updates tomorrow.

Motion will take place tomorrow. For local people will vote with tokens, for remote people, chair and secretary will record voters votes.

1. **Administrative**
   1. Remaining Meetings:

* Thursday AM1

1. **Technical Submissions**
   1. [11-24/1291r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1291-00-00bi-ota-collision-warning-fixes.docx) : OTA collision warning fixes: Jerome Henry

Document presented by Jerome.

Present CID resolution related to OTA MAC address collision.

Mainly editorial modifications, or technical clarification of the text.

* + 1. Discussion

Q: if the specific Epoch number is a time, or a number?

A: This is a number of Epoch to jump.

C: The resolution reason should be more complete and indicate instruction to the editor.

A: OK, I will add more text.

Q: If station accept the warning it changes its MAC address and if it refuses it do nothing right?

A: Yes.

Q: If the Sta refuses the collision resolution, the STA may use different parameters to compute a new MAC?

A: for now, we do not know the mechanism to generate MAC addresses.

C: In any case you cannot afford not changing the MAC address.

A: There may be case where the station cannot change the MAC

C: In any case, since MAC address collision is critical so we will have to indicate what happens if the STA doesn’t want to apply the resolution proposed by the AP.

Q: Is the MAC address of the link? In some case, this can be the address of the STA.

A: This OTA MAC collides with the Over the DS MAC collides, is it a problem? I don’t think so since this an obfuscated one, so this is not really a collision.

C: We should not overkill by considering MAC address collision between links for instance. So, we should only focus on the OTA MAC address on a link.

Q: Can we replace entity by STA?

A: Yes, makes sense.

C: I think we need to talk about OTA MAC address collision, so do not remove the OTA part.

A: Thank you.

A discussion then occurs on the definition of a collision and people agree to table this definition discussion for now.

C: We need to check if OTA is already defined in the REV. Otherwise, we define it here.

C: I think that we shouldn’t have a computation in the section 9. We should move the explanation in section 10.

C: Agree, move this computation in clause 10 and put a reference.

A: OK, I will do it.

C: You still have an “entity” remaining, change it to STA.

A: Agree.

Q: Does the structure indicate the colliding link?

A: No, because we send the message on a link and this applies to this link.

C: This depends on the way we generate the parameters. Per link or for all the links at once.

C: I think that considering the low probability of collision, we can recalculate for all the links.

A: Agree, this is a simpler approach.

Q: So, should we send this frame on all links or only one?

A: Maybe only on since this is at MLD level, but wait for the MAC address computation to be described.

No more questions.

Since Javier is not present, we switched to next presentation: 11-24/1298r1

* 1. [11-24/1298r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1298-01-00bi-cr-for-some-cids-in-10-71-2-5.docx) : CR for some CIDs in 10.71.2.5: Domenico Ficara

Document presented by Domenico.

* + 1. Discussion

Q: Does this document includes CID solved by Stephane yesterday?

A: No, I removed them.

Q: I think the derivation can be in the clause 10. The clause 9 is only for description of the fields.

A: Agree, I will move it there.

C: For CID 1117, the “Can” formulation is not clear, better indicate “the sta is recommended to”

A: OK.

C: The notes address 2 different problems and do not really clarify things. Can we just remove it?

A: Agree.

Q: What about group cast or broadcast frames?

A: Since we only address CPE for now, only the AP can send broadcast or multi cast. So there is no issue.

C: Regarding the CID1505, I think this should be addressed with the transition stuff. Can you please do not address it in this document?

A: Agree, I also defer CIDs related (1356)

C: CID 1358 on the correct wording probably need more work. Can you defer it?

A: ok.

Some other comments have been deferred to wait for the format to be clarified.

1. Other businesses

No other business.

1. Chair recess the meeting at 18:00 local time

**5th slot : Thursday July 18th 2024, 08:00 local time.**

**Chair: Carol Ansley, Cox Communications**

**Secretary: Stéphane Baron**

**Vice-chairs: Jerome Henry, Cisco; Antonio DeLaOlivaDelgado, InterDigital, Inc**

**Technical editor: Po-Kai Huang, Intel**

Chair calls meeting to order at 08:01 Local time.

Agenda slide deck: [11-24-1014r4](https://mentor.ieee.org/802.11/dcn/24/11-24-1014-04-00bi-july-tgbi-plenary-agenda.pptx):

1. Reminder to do attendance

Reminder to register for the session and to not attend the virtual meeting without paying appropriate meeting fees.

1. The chair mentioned the call for essential patents
   1. No one responded to the call for essential patents
2. Review of policies and procedures.
   1. IEEE individual process slides were presented.
3. The chair covered the IEEE copyright policy and participation rules.
   1. No questions
4. The Chair covered successful hybrid protocol slides.
5. **Discussion of agenda 11-24-1014r4 (slide #16)**
   1. Discussion on agenda

Tech editor requested time to run a motion on non-controversial CIDs resolution

* 1. Adoption of agenda by unanimous consent (18 participants online, 11 in the room).

1. **Administrative**
   1. Teleconference Schedule

Chair ask if the group prefers every week or every other week frequency?

Every week is selected.

Timeslot: Wednesday 10amEDT

1. **Technical Submissions**
   1. [11-24/1291r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1291-01-00bi-ota-collision-warning-fixes.docx): OTA Collision Warning fixes: Jerome Henry

Second presentation after inclusion of yesterday’s comments of the resolution of 26 CIDs.

* + 1. Discussion

Q: regarding the paragraph you moved form clause 9 to clause 10. I think there is an issue with epoch m. Is it a number or the mth epoch after the current one?

A: I see, this part requires a rewriting.

C: I propose to split the long sentence to make it simpler to read.

A: Agree.

C: Here I see some wording problem: non-AP EDP MLD. What is it?

A: Agree, we didn’t’ define it. I will fix that.

Author come back with a revised version r2 after Javier presentation.

Q: I think this is still not clear, if we may have an epoch index, it would be easier.

A; We have such index in the epoch start time computing so we can use it.

Q: I think we need to consider the case where the sequence ends and there is no more epoch after.

A: OK I need to consider it

* 1. [11-24/1298r3](https://mentor.ieee.org/802.11/dcn/24/11-24-1298-03-00bi-cr-for-some-cids-in-10-71-2-5.docx) : CR for some CIDs in 10.71.2.5: Domenico Ficara –

Domenico go thru the modification of the CIDs resolution.

* + 1. Discussion

Q: About the formula for epoch start time, you just copy past right, there is not change there?

A: this is just moving the text, no change.

Q: How can we adjust delta T?

A: By changing the RangeT value during the epoch negotiation.

**StrawPoll#1 Initial text**:

Approve the following CID resolutions as detailed in doc 24/1298r3: 1030, 1095, 1096, 1116, 1117, 1175, 1347, 1348, 1349, 1353, 1354, 1355, 1358

Y: / N: / A

**Discussion on SP#1 text:**

No discussion

**SP#1 result:** unanimous consent.

* 1. [11-24/1284r3](https://mentor.ieee.org/802.11/dcn/24/11-24-1284-03-00bi-cr-for-3-2.docx) : CR for 3.2: Javier Conteras

Javier shows the resolution for 5CIDs related to the definition part.

* + 1. Discussion

C: Put frame anonymization parameter in lower case.

A: Agree.

Author prepare a rev 4 accordingly. And will come back for the SP

* 1. [11-24/1319r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1319-00-00bi-privacy-protection-for-sae-credentials.docx): Privacy Protection for SAE Credentials: Jouni Malinen

Same document as 11-24/0046r2 but due to Mentor technical issue, needs to be reloaded under a new reference number.

No technical change. But This answers a CID so the document is now a CID resolution document.

With instruction for inclusion based on D0.4.

Author indicates that the SAE already exists and this proposal is just to add a privacy compatible version.

* + 1. Discussion

Q: What is the change of this version compared to the previous one?

A: instruction to editor have been added with regard to the latest TGbi D0.4, and REVme Draft 6.10

C: So, the content is same from technical point of view?

A; yes

Q: So, this mandate a STA to support SAE?

A: It do not force anything. If the STA wants to use it, it can but not mandated to do so.

C: So basically, you have additional requirements to protect your password.

Q: Assuming all BSS in the network to have the public key? can you guaranty it or is it left for implementation.

A: Using REVme wording, some variable needs to be maintained without indicating how to do that.

Q: What do we show to the end user?

A: This is the device that will choose.

C: I Think having public key supported in all APs in the network is good thing to have. This is much simpler to signal to the end user as security of the network.

A: I agree, but we cannot mandate it in IEEE.

Q: When was uploaded this revision?

A: Just now.

C: I need more time.

A: There is no technical change in this version.

C: People has to know there is a new revision to study.

A: There is no change.

Chair: this document was in the agenda since the beginning of the week.

C: I just arrive in the group, and had no time to see the next document.

Q: Can we differ?

A: Ok

Q: Is there a capability on/off like a MIB variable?

A: No

Q: There is a CAPWAP notion in the document, and didn’t find any reference, what is it, and what is the intention of the note?

A: it was a request to provide an example of public protocol the AP vendor uses.

Q: In EDP we define some MIB, and your proposal is quite isolated.

A: This is independent of EDP, you do not have to activate any other EDP mechanism to support it.

Chair request if anyone object to have CID resolution added to the D0.4 draft.

C: I am objecting the document because I need more time to study the document.

C: I would like to have a SP on this document.

**Corresponding SP is run.**

**StrawPoll#02 Initial text**:

Approve the text in 24/1319r0 as resolution for CID 1097.

Y: / N: / A

**Discussion on SP#02 text**:

Q: Is it document 0046r3?

A: Yes, for mentor technical reason, we had to create another reference, but this is the same document.

No more question

**SP#02 raw result:** 43% /46% /11% with 28 voters

**SP#02 final result:** Y: 12 / N: 13/ A: 3.

Q: I would like to know why people voted no. We made a recorded vote during last face to face, and the block voting of people voted no proposed no technical reasons. So, what should we do now?

A: This is a good topic to discuss what to do with this proposal, since it has been presented unsuccessfully in many groups. We should stop presenting it. We had technical discussion.

A: I requested to differ the motion, because I had no time to read it. I clearly mention I need more time to read a document just uploaded. This is a valid comment, not a block voting.

Chair: We can setup a specific session with a 10 days’ notice to discuss this topic to either remove or keep the associated requirement from our requirement document.

1. **Timeline update**

Chair: We will not have an initial LB after current meeting as initially planned.

So, I propose to move our LB initial projection date to January 2025. Is there any objection?

No objection.

We should also consider making an ad-hoc session before the end of the year.

So please consider it and especially if you can provide a meeting place.

Chair also propose to move following milestones according to this 6-month shift.

The timeline is then updated accordingly as reflected in doc [11-24/1014r5](https://mentor.ieee.org/802.11/dcn/24/11-24-1014-05-00bi-july-tgbi-plenary-agenda.pptx) (slide 21)

Then Jerome comes back with document [11-24/1291r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1291-01-00bi-ota-collision-warning-fixes.docx): OTA Collision Warning fixes.

1. [11-24/1291r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1291-02-00bi-ota-collision-warning-fixes.docx): OTA Collision Warning fixes: Jerome Henry

Continuation of the previous presentation based on a new revision r2 freshly updated according to the comments received during the previous presentation.

* + 1. Discussion

Q: Since we don’t know how to generate the MAC address, maybe it not so simple to just change MAC address using Mac address from an epoch with other PA parameters from another epoch index.

A: agree, and I am ok to revise it latter on if needed.

Author then request a straw poll on the new revision

**StrawPoll#03 Initial text**:

Approve the following CID resolutions as detailed in doc 24/1291r2: 1010, 1029, 1120, 1141, 1142, 1177, 1178, 1284, 1285, 1286, 1287, 1288, 1291, 1292, 1293, 1294, 1295, 1296, 1359, 1360, 1361

Y: / N: / A

**Discussion on SP#03 text**:

No discussion.

**SP #3 result:** unanimous consent.

1. Motion to prepare next draft D0.5

Chair propose to run a motion to integrate the non-controversial resolution of the CIDs.

All the documents that received a good support (unanimous consent, or large majority support) are then listed with associated CIDs listing.

End time of the meeting approaching, the chair request if anybody object for a 5 minutes meeting extension to run this important motion.

No objection.

**Motion#46 initial text**:

Approve directing the Editor to create a Draft 0.5 with the texts and CID resolutions that was approved by the group during this plenary.

Specifically:

11-24/1176r1 (SP results: Y:22 / N:0 / A:4), 14 CIDs : 1043, 1189, 1192, 1230, 1231, 1233, 1242, 1307, 1331, 1401, 1471, 1487, 1499, 1507   
11-24/1181r1 (SP results: Y:20 / N:0 / A:6), 9 CIDs : 1465, 1466, 1467, 1468, 1469, 1470, 1472, 1473, 1496   
11-24/1112r1 (SP results: Y:20 / N:0 / A:6), 31 CIDs : 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1162, 1310, 1311, 1061, 1308, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1309, 1420, 1421, 1422, 1423, 1424, 1425, 1391, 1400, 1306   
11-24/1282r3 (SP results: Y:16/ N:2/ A:6), 2 CIDs : 1041, 1042   
11-24/1249r3 (SP result : unanimous consent), 1 CID: 1497

11-24/1298r3 (SP result : unanimous consent), : 1030, 1095, 1096, 1116, 1117, 1175, 1347, 1348, 1349, 1353, 1354, 1355, 1358

11-24/1291r2 (SP result : unanimous consent), : 1010, 1029, 1120, 1141, 1142, 1177, 1178, 1284, 1285, 1286, 1287, 1288, 1291, 1292, 1293, 1294, 1295, 1296, 1359, 1360, 1361

Discussion on the text:

Q: Can you indicate that we reach consensus on CID resolution rather than SP was approved.

A: OK.

**Motion#46 final text**:

Approve directing the Editor to create a Draft 0.5 with the texts and CID resolutions that have reached consensus within the group during this plenary.

Specifically:

11-24/1176r1 (SP results: Y:22 / N:0 / A:4), 14 CIDs : 1043, 1189, 1192, 1230, 1231, 1233, 1242, 1307, 1331, 1401, 1471, 1487, 1499, 1507   
11-24/1181r1 (SP results: Y:20 / N:0 / A:6), 9 CIDs : 1465, 1466, 1467, 1468, 1469, 1470, 1472, 1473, 1496   
11-24/1112r1 (SP results: Y:20 / N:0 / A:6), 31 CIDs : 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1162, 1310, 1311, 1061, 1308, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1309, 1420, 1421, 1422, 1423, 1424, 1425, 1391, 1400, 1306   
11-24/1282r3 (SP results: Y:16/ N:2/ A:6), 2 CIDs : 1041, 1042   
11-24/1249r3 (SP result : unanimous consent), 1 CID: 1497

11-24/1298r3 (SP result : unanimous consent), : 1030, 1095, 1096, 1116, 1117, 1175, 1347, 1348, 1349, 1353, 1354, 1355, 1358

11-24/1291r2 (SP result : unanimous consent), : 1010, 1029, 1120, 1141, 1142, 1177, 1178, 1284, 1285, 1286, 1287, 1288, 1291, 1292, 1293, 1294, 1295, 1296, 1359, 1360, 1361

**Motion#46:** Moved by Jerome Henry and seconded by Jarkko Kneckt

**Discussion on motion text #46**:

No discussion.

Since there is not discussion, the chair asks if anyone object to pass the motion by unanimous consent.

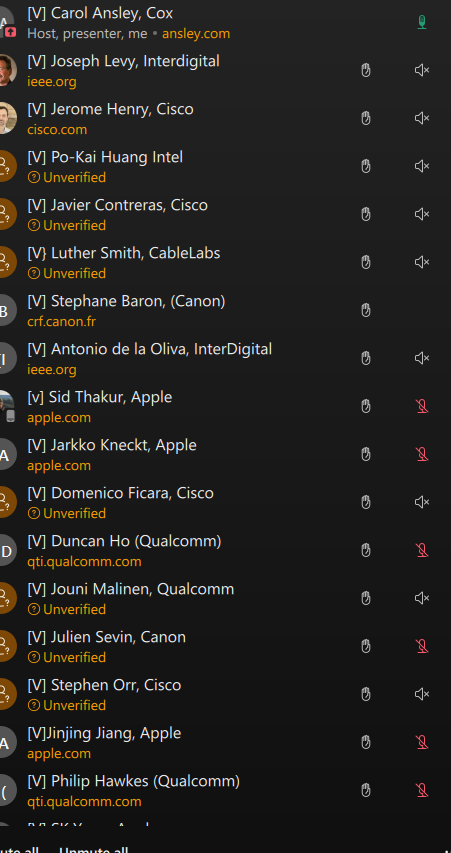
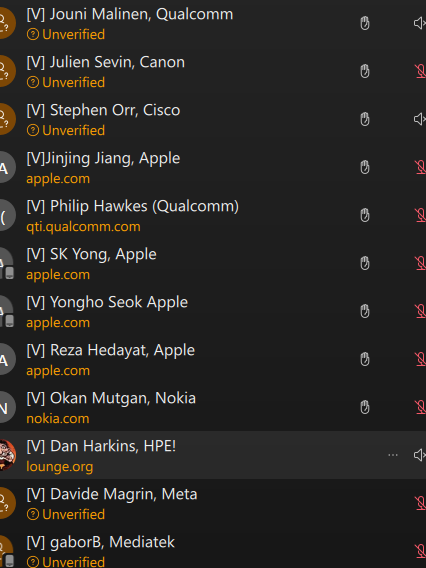
1 participant object.

The motion is then run.

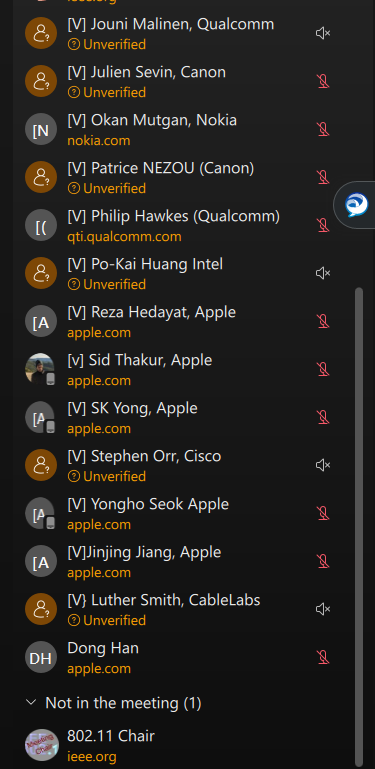
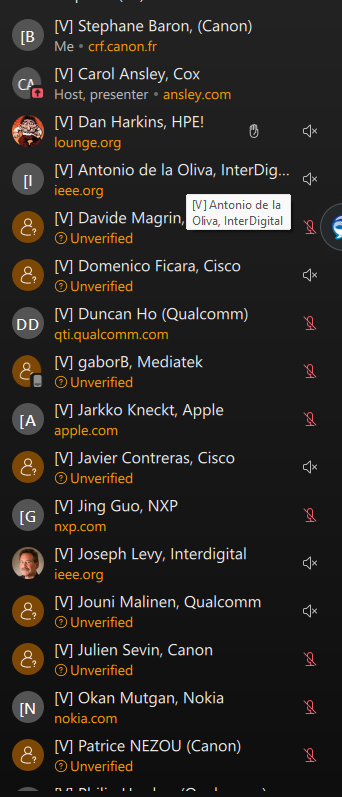
Due to the Webex current version limitation, the vote occurred by clicking on the “raising hand” button on the application. The screen shots below show the voting results.

**Motion #46 raw result:**

People voting Yes:

People voting No :



**Motion #46 results: Y: 20 / N: 1 / A:0**

**Motion #46: passed**

1. Other businesses

No other business.

1. Chair adjourn the meeting at 10:08 local time