IEEE P802.11  
Wireless LANs

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| TGbi Minutes Mixed Mode November plenary Sessions 2024  11-15 November 2024 | | | | |
| Date: 2024-11-22 | | | | |
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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 November session 11-15 November 2024. The on-site location for the meeting was Vancouver (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 November 11th 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 08:00 Local time.

Agenda slide deck: [11-24-1677r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1677-01-00bi-november-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.

No questions

1. The chair covered the IEEE copyright policy and participation rules.

No questions

1. Quick review of the hybrid meeting protocols

1. **Discussion of agenda 11-24-1677r1 (slide #16)**
   1. Discussion on agenda

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

Chair indicate we may setup a dedicated topic session.

Author requested timeslots for :

24/1739r0 on Tuesday PM2

24/1304r6 on Tuesday PM2

24/1714r1 to be scheduled preferably not during PM2 session -> Planned Wednesday AM1.

* 1. Adoption of agenda by unanimous consent (26 participants online, 11 in the room).

1. **Administrative**
   1. Remaining schedule for the week:

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

Single topic session to discuss around the AID, but also thru the transition period handling.

C: I agree we need time to discuss transition

Q: When do you plan to handle this session? Can we avoid PM2 session for this discussion?

A: I think Wednesday morning is good timeslot.

Let’s move Domenico’s presentation to Thursday AM1, and Po-Kai presentation also then.

1. **Technical Submissions**
   1. [11-24/1440r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1440-02-00bi-proposed-spec-texts-for-privacy-gtk.docx): Proposed spec texts for Privacy GTK: Julien Sevin

New presentation after last presentation’s comments have been taken into account.

* + 1. Discussion

Q: In this document you do not change the computation of the start time, so clarify the instruction to the editor.

A: Yes, I can change the instruction to indicate the deletion of the sentence.

C: On this page you have the PRF function is 128 only can you use 128 here?

A: I agree, and in another contribution, we will use the PGTK and a 128.

C: OK so let’s discuss offline to see how to harmonize with the computation in the case of BPE parameters.

C: p14. Can we indicate that the PGTK is used to anonymizing the parameters in common for all the station of a EDP group.

A: Agree, but to be inline with the comment resolution I keep this definition.

Q: Last time I request to explicit the usage of the two different formulae but cannot find it here.

A: Unfortunately, we are not ready to present the second contribution but we hear you and will take this comment into account in next documents.

* 1. [11-24/1751r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1751-00-00bi-misc-section-4-5-4-cid-resolutions.docx): Misc. Section 4.5.4 CID Resolutions: Carol Ansley

Document presented by Carol.

This document resolves few CIDs related to definition and terminology.

* + 1. Discussion

CID1073:

Q: Doesn’t we already define EDP feature?

A: It was not in D0.6 and we need it.

C: This definition should probably not be in clause 3 but rather in clause 4.

C: I am ok to have the definition in the document now so that we can amend it later. Because for now we don’t not which device is supporting what for instance.

C: Your proposal is a good start. I will present a document on clause 4 introducing the different type of devices regarding privacy. We have 2 type of Frame anonymization. First for station privacy and the other for the BSS privacy.

A: I agree, we may still add addition types latter on.

C: Agree this is a good start, and we should put that in Clause 4. For sake of progress, we can start with that and work further latter on.

CID1255:

C: For a comment collection I agree we can use your rejection text. But for latter letter ballot, we have a way to reject invalid comment like this one. I recommend using the REVme language to avoid future complains.

Q: Do you know where to find such template?

A: No specific location, but rather ask Jon or Mike from REVme

CID1200:

C: I tend to agree with the comment but the MAC address can be used in different location not exposed. I think this part needs to be rewording to avoid exposing the MAC address over the air. So, I globally support accepting the comment and removing the part of the sentence introduced here, even if this is an introduction.

C: I think we need to redraft this part because this is also visible. So, I prefer to revise and modify the sentence.

A: I agree this is a place we can start to point out the DS MAC, and the OTA MAC concepts.

C: I think the sentence is correct, but we have PMKID anonymization for instance and a lot of other features. Just removing the part here require a more systematic approach.

C: I propose in the chat:” If a fixed MAC address is used to identify a STA as the transmitter or receiver of a frame, then it is trivial to track the STA.”. But I agree more discussion is required.

Q: Can we indicate “if the STA MAC address is observable, it is trivial to track the STA”?

Other friendly amendment proposed to improve the sentence.

Text is amended in live accordingly, and comment resolution is changed to “Revise”.

CID 1201 and CID 1202:

C: regarding EDP FA, EDP is not required here we can just mention Frame Anonymization.

Q: Is it a goal to have a list of EDP feature in clause 4?

A: Yes, I think.

Another contributor indicates in the chat that he is working on additional text for 4.5.4.10a to list the features.

CID1006, 1204, 1205: No comments.

CID1504:

Q: Regarding the terminology, I am working on dedicated language. So, can we defer it for now and come back to this CID latter? I am not objecting but we should rework that part.

A: Agree. We already change a lot of text, and it becomes difficult to see the unity in the text. We could start with this now and see comments on next step.

New revision r1 of the document is created according to the inline modification.

Author will come back for SP in a future session

* 1. [11-24/1792r](https://mentor.ieee.org/802.11/dcn/24/11-24-1792-00-00bi-resolution-to-cids-regarding-edp-epoch-request-response-frames.docx)0: Resolution to CIDs regarding EDP Epoch Request/Response frames: Antonio de la Oliva

Document presented by Antonio, defining 3 new action frames needed for the EDP epoch setup:

EDP epoch request, response and MAC address collision warning.

This includes frame format, parameters description, status code, etc.

* + 1. Discussion

Q: CID1066 that is in both Carol document and your document for any reason.

A: Let me check. It was a typo, the comment In Carol’s document in 1006, not 1066.

C: Editorial friendly amendment for the CID resolution text. Proposing to incorporate the text rather than indicating the creation.

C: indicate ANA rather than TBD.

A: OK.

Q: Do you intent to introduce the usage of this action frame in this document.

A: I have another document to do that.

C: I started working on it, with Jerome.

A: Yes, I started with the latest revision of your document. We can work offline and converge.

Q: You have Epoch request and status code. Meaning of the value 0 is reserved?

A: yes, is it a problem, I can start at 0

Q: Regarding the action. You indicate “create”; this mean that you know what exists.

A: We can have creation or joining.

Q: If we have “create” then we need to indicate that we join.

A: Agree.

Q: What about “leave” and “leave all”. I thought we have only one epoch?

A: Current agreement is to have multiple epochs.

C: But for a given STA, each STA has only one epoch, right?

A: Agree, so we only need one “leave” request.

Due to lack of time, Author will come back to finish the discussion.

1. Other businesses

No other business.

1. Chair adjourn (since we are in ad-hoc) the meeting at 10:01 local time

**2nd slot: Tuesday November 12th 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 10:32 Local time.

Agenda slide deck: [11-24-1677r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1677-02-00bi-november-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 11-24-1677r2 (slide #16)**
   1. Discussion on agenda

Antonio would like to finish its previous document 11-24/1792r0 presentation

Jerome would like to present latest release of 11-24/1676r6 and 11-24/1679r6

Po-Kai also request to present a document 11-24/1927r0 with 1 CID, maybe tomorrow if time permits.

Chair indicates that there will be motion to authorize the creation of the Draft D0.7 on Thursday.

* 1. Adoption of agenda by unanimous consent (23 participants online, 11 in the room).

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

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

**Motion#51** text: Approve the prior session minutes and teleconference minutes:

24/1612r0 (Sept. Interim), 24/1683r0 (Oct. 2 Telecon), 24/1707r0 (Oct. 23 Telecon), 24/1723r0 (October ad Hoc)

Y/N/A

**Motion #51** moved by Jerome Henry and seconded by Antonio De la Oliva

**Discussion on** **Motion#51**:

No discussion.

**Motion#51 result**: approved by unanimous consent.

1. **Technical Submissions**
   1. [11-24/1792r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1792-01-00bi-resolution-to-cids-regarding-edp-epoch-request-response-frames.docx): Resolution to CIDs regarding EDP Epoch Request/Response frames : Antonio de la Oliva

Second presentation following yesterday presentation stopped due to lack of time. This new revision of the document also includes modification taking into account some comments received during the first presentation.

* + 1. Discussion

Editorial modification of header, and some typo.

Q: In association you can go to default Epoch?

A; You can provide EDP element with minimum pacing during association. You join the default group, or you can join another group if your requirements are covered by another group different from the default.

Q: Having only the signaling without explanation is not clear.

A: I agree but the behavior is defined in another document to be presented just after.

Author created r2 and request a vote on this document.

**StrawPoll#1 text**:

Approve adding to the Draft the resolutions in 24/1792r2 for CIDS: 1013, 1014, 1015, 1060, 1062, 1066, 1115, 1119, 1167, 1170

Y: / N: / A:

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

No Discussion

**SP#**1 **results:** Approved with unanimous consent.

* 1. [11-24/1844r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1844-02-00bi-new-resolution-to-cid-1091-and-1092.docx): New Resolution to CID 1091 and 1092: Antonio de la Oliva

The document presented by Antonio, proposes new resolution for the 2 CIDs dealing with the introduction part of the clause 10.71.2

* + 1. Discussion

First part is dedicated to general discussion to find agreement on some important questions regarding the EPD epoch setting.

Q: Do we need “group” in “group EDP epoch”? Can we just have “EDP epoch”.

A: OK, seems simpler.

Q: We have already EDP group, so why not EDP group epoch?

A: I think EDP epoch is simpler, so can we keep that?

A: OK.

Conclusion is that the name is now “EDP Epoch”.

Q: Are the EDP epoch operations at MLD level or at link level?

A: I think this is at MLD level since we compute all the parameters at once for all links, and EDP epochs are synchronized among links.

Conclusion is that the group agree that EDP epoch operation is at MLD level

Discussion on the emission of the frames to manage Epoch:

Q: Do you think that the management frames should be sent on a specific link to establish epoch settings?

A: I think this doesn’t matter. We can send the frames on any link and the key point is that the affiliated station shall be able to receive it.

A: I Agree, the AP is free to select the enabled link it can send EDP epoch settings on.

C: The AP can even send the send the same parameters on several links

Conclusion is that the group agree on the fact that the EDP epoch setup frames can be sent on any link.

After the general discussion section, the author goes thru the document contain itself.

Q: We do not need “operation” in “EDP epoch operation” since if we support the EDP epoch? We obviously support its operation.

A: agree, I remove it.

Q: Do we need first sentence? I don’t know what “valid” means here?

A: I think we can remove, but this doesn’t harm to keep it.

Q: So, what does valid means here? Do we already have in such word in 802.11 spec?

A: Let me check.

C: We can remove the sentence since EDP epoch operation are under FA operation that is already indicating that.

Second sentence:

C: Please modify the text as previously agreed by indicating the scheduling of sequences.

A: Agree.

Q: Can we have a BPE AP supporting CPE operations?

A: you mean a BPE allowing another epoch for stations?

A: yes.

C: The point is to know what a BPE AP will do when it receives an epoch creation request from a client.

C: Maybe we need to clarify CPE EDP epoch and BPE EDP epoch.

The group agree that more discussion is needed on this topic.

C: If it is associated, then we do not need to have BPE or CPE clarification.

Q: Does it mean that when you associate with a BPE AP then you are BPE client?

A: Yes.

Q: In our current draft everything is optional. I think here we do not need to have EDP CPE or BPE indicated. Can we just indicate that a stations belong to at most one EDP group?

A: So then both sentences are equivalent.

Q: Can we merge sentences then ?

A: I think there is a significant difference between BPE and CPE. For a BPE we have one group, while in CPE AP we have several groups. So, we need to keep this difference and we cannot unify all the sentences.

Q: Can we change to “the EDP client has at most one epoch”?

C: I think this is desirable that a BPE AP allows to have CPE operations allowing a station to change its MAC address independently of the AP.

A: I think that, if we have several CPE epochs in a BPE AP, then when you change your STA MAC address, then the AP need to change its address also.

C: I think belonging to group make more sense than to have an epoch. We should rephrase the sentence accordingly.

C: The point is that an AP shall not assign a STA to more than one group.

C: I think both sentences are required, since we are setting limits to the AP and to the stations independently.

Q: Can we indicate "an AP shall not assign an associated non-AP MLD to more than one EDP group"?

A: Ok

Q: Then we should have a symmetric sentence for the non-AP MLD: “a non-AP MLD shall not request to be assigned to more than one group”.

A: agree.

Next paragraph (10.71.2.2):

Q: Should we have a bit for BPE and one bit for CPE support, I think one bit is enough?

C: I think there will be no need for a capability bit for the BPE support in Beacon since it is encrypted and the stations needs to know the AP supports BPE to decode the beacon.

Q: Do we need to have a note stating that the bit is not advertised?

A: in privacy beacon there is no RSNXE.

Due to lack of time, presentation stops but the chair indicate that the presentation will resume during next slot.

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1. Other businesses

No other business.

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

**3rd slot: Tuesday November 12th 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: [11-24-1677r3](https://mentor.ieee.org/802.11/dcn/24/11-24-1677-03-00bi-november-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 11-24-1677r3 (slide #16)**
   1. Discussion on agenda

Q: can we have a quick discussion on CID allocation.

A: OK.

Q: I have a document 1936r0 to present.

A: OK, added to the list.

* 1. Adoption of agenda by unanimous consent (38 participants online, 8 in the room).

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

* Wednesday AM1
* Thursday AM1
  1. CID assignment

CID1114 is requesting the definition of EDP epoch request and responses that are defined in Antonio’s previous document so, I think the best way is to add this Cid in the list.

A: OK, CID1114 is assigned to Antonio.

1. Thursday **Technical Submissions**
   1. [11-24/1844r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1844-02-00bi-new-resolution-to-cid-1091-and-1092.docx): New Resolution to CID 1091 and 1092: Antonio de la Oliva

Resumed discussion initiated during previous session.

Chair allocates one hour to go thru this document.

* + 1. Discussion

Discussion on the minimum Epoch pacing

Q: Is it to protect the station?

A: Right, if the station cannot support as fast change as the defined EDP epoch, it cannot be in any group.

Editorial changes to clarify the wording.

C: If you are BPE, the epoch info is not in the beacon.

A: we can remove this part to be generic.

Q: How many sets of EDP epoch is the AP advertising?

A: If it is not a BPE AP, it advertises one or more group. If it is BPE then the station does not know anything.

Q: Why having a minimum time? If you are a high-end device entering this game you need to follow the minimum requirements.

A: There will be different type of devices and some will not support changing too fast.

Q: So why do we not define a minimum value that any station shall support?

A: I understand your proposal, but this is a change compared to what we have today, so you can put a comment on next stage and we will see then how to solve that.

Q: If the STA doesn’t match any group, what will happen? Is the station association rejected, or the station have no privacy?

A: I would say that you are associate but not in any group and not change your MAC address.

C: Then we need to indicate what the station will receive and what the station will do.

C: This can be handled as a parameter mismatch but the station has to know what to do.

Q: What is the minimum epoch pacing element, since it is included in the Assoc request, but it potentially don’t know all the group?

A: The AP check against all existing groups not only the default one.

Q: Why don’t we treat the element included by the STA as a request for epoch creation if it doesn’t match the existing ones.

A: This can be.

Q: If the station is a privacy STA and associates without privacy, what is the point?

A: The station can request a group creation after association.

C: I think the situation is different for BPE AP and CPE, since a non-privacy station only harm itself if not supporting privacy, but for BPE AP, the station can break AP’s privacy.

A: Agree, we have to mention that the paragraph only applies to CPE.

Q: What if the AP refuses the station? Who has the last word?

A: The AP can recommend the group that is the most appropriate regarding its parameters provide upon association.

C: I propose to add a note indicating that the station can remains associated without FA.

C: This should be normative.

A: We do not mandate anything, just clarifying.

Q: Do we have the case when you are part of the group?

A: in next paragraph.

C: So please put the positive first and exception after.

Author inverted the chapters order.

After the allocated hour, chair ask if people disagree to continue.

Other presenters agree, and presentation continue on this document.

Q: You first stated that a station is automatically in the default group, but latter you indicated that you may be put in another group.

A: If you provide an element, you will not be in the default group, only if you provide only the minimum epoch pacing element and it is below the default group interval.

Discussion regarding the after-association part.

Q: Did we decide what “similar” means? If a station asks for 10 and the AP have 100 is it similar?

A: This is right, we need to consider it.

C: Can we indicate that the AP may allocate the STA to a similar epoch?

Q: About the status code. Is it defined already?

A: Yes, document 11-24/1792 defines this frame and associated status code.

Q: Can we indicate that the AP will assign the STA to the group with the lowest interval supported by the STA?

A: Sounds good.

Q: What is the status code in case of success of the request to join a group?

A: Should be “success”, I will check offline.

Discussion around the possibility for the AP to request a non-AP STGA to change its group.

C: I think we should have a parameter to indicate when joining make sense to avoid reducing the STA privacy.

A: I don’t think we want to do that.

C: I think the AP can control the group of stations.

C: I would prefer that once allocated to a group, stations stick to that. This is much simpler.

C: Merging groups may make sense.

C: You don’t need to define everything, you define the method, but how we do it can remain out of scope.

Q: Can the AP refuse the STA to leave a group?

A: No.

C: Regarding the transition period related text, there is an ongoing contribution already presented that covers this part but requires a new revision.

Q: can you remove this part for now?

A: ok.

Chair reminds next session is tomorrow AM1 and we will have a one-hour discussion about the transmission during transition.

1. Other businesses

No other business.

1. Chair recess the meeting at 17:57 local time

**4th slot: Wednesday November 13th 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 08:03 Local time.

Agenda slide deck: [11-24-1677r4](https://mentor.ieee.org/802.11/dcn/24/11-24-1677-04-00bi-november-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 11-24-1677r4 (slide #16)**
   1. Discussion on agenda

Q: Can we have in priority the CIDs that are nearly ready for motion, to run SP and then see progress on our CIDs first.

A: So, we can present the documents in R6 for instance first, so then we can run SP. However, I think the discussion is important. We may run it during telecon.

Chair then ask people if they have documents to present that are ready for motion.

Some people answer the call and indicate that document 1304r6, 1936r0, 1576r6, 1579r6, are close to be ready

1927r1 and 1914r2 documents are scheduled for Thursday session.

Documents related to the operations during transition are deferred potentially to telecon.

* 1. Adoption of agenda by unanimous consent (41 participants online, 12 in the room).

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

* Thursday AM1

1. **Technical Submissions**
   1. [11-24/1304r6](https://mentor.ieee.org/802.11/dcn/24/11-24-1304-06-00bi-establishing-frame-anonymization-parameter-sets-text-for-11bi.docx) : Establishing frame anonymization parameter sets text for 11bi: Phil Hawkes

New presentation including remarks received during last presentation in telecon.

* + 1. Discussion

Q: I think we should mention before the start of the margin

A: Agree

Text modified accordingly.

Q: You can retransmit a frame on another link, is it possible with this sentence.

A: I don’t think this change anything to the existing 11be mechanisms. And the encryption is

Q: Can we simplify by integrating the margin at the beginning of the transition?

A: If we simplify here, we will have to complexify the paragraph for the addressing.

Q: Can we go for this text since it is correct and decide to simplify later on ?

A: OK. Let’s do it.

Author make an r7 including the latest editorial modification and request a SP on the document.

While author prepare the SP, next document is presented.

* 1. [11-24/1936r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1936-00-00bi-d0-6-more-misc-cids.docx) : d0.6 more misc CIDs: Jerome Henry

This document presented by Jerome deals with CIDs that are now “orphan” since the resolution of those CIDs are already addressed in other documents or in the latest D0.6

* + 1. Discussion

Q: What if the colliding epoch is the last one?

A: I think there is no problem here, the AP will have to indicate new values for the next epoch.

Q: The document you mention in the comment resolution is not straw polled yet, so can change the resolution text?

A: OK, so we can table the CID related to the document not approved yet and we will come back later with the same document to vote on the remaining CIDs.

Q: “Start accepts the new parameters” is not clear to me, can you indicate that both previous and new parameters are accepted.

Q: can we indicate “do not filter out” instead of “accept”?

A: agree

Text is modified accordingly, and the author will come back later on.

* 1. SP for document 1304r7.

Now that the SP is ready, the group come back to document 1304r7.

**StrawPoll#2 text**:

Approve adding the resolutions in 24/1304r7 of the following CIDs to the TGbi draft. CIDs: 1002, 1003, 1008, 1009, 1089, 1090, 1367, 1368, 1369, 1370, 1373, 1375, 1379, 1380, 1381, 1382, 1383, 1387, 1388, 1083, 1084, 1371, 1372, 1374, 1377, 1378, 1384, 1385, 1386, 1517

Y: / N: / A:

**Discussion on** **SP**#2:

No Discussion

**SP#**2 **result:** SP#2 approved with unanimous consent

* 1. [11-24/1576r6](https://mentor.ieee.org/802.11/dcn/24/11-24-1576-06-00bi-bss-privacy-frame-anonymization.docx) : BSS privacy - Frame Anonymization: Jerome Henry

New presentation after minor update (PGTK name update)

* + 1. Discussion

No discussion

Author then request a straw poll

**StrawPoll#3 text**:

Approve adding the text in 24/1576r6 into the TGbi draft to resolve CID 1521.

Y: / N: / A:

**Discussion on** **SP**#3:

Q: This is quite a large amount of text, so can I request more time to analyze it. This is the first time we change the MAC address of an AP. Couple weeks delay would be fine.

A: This document is on the server for long and we are at revision 6.

A: I think we should have this as a skeleton for BPE in the D0.7.

Q: Can we defer till tomorrow.

A: OK.

**SP#**3 **final:** SP deferred till next session

* 1. [11-24/1579r6](https://mentor.ieee.org/802.11/dcn/24/11-24-1579-06-00bi-bss-privacy-beaconing.docx) : BSS Privacy - beaconing: Jerome Henry

New presentation of this document indicating that the document does not fully describe the discovery part.

* + 1. Discussion

Q: The way you define the beacon looks like a brand-new frame and a new version of the protocol. This is not a beacon anymore.

A: We are defining an extension frame type. We do not want to reuse existing beacon frame to avoid confusing legacies. So, type and subtype values should be different.

Q: What does the solicit message solicits?

A: At the moment it is not specified in detail. Current document is more for beaconing description.

Q: About the format: there is an extension frame and a GCMP header, but the frame is encrypted. So, se shouldn’t mention the GCMP in the header but rather in the frame body.

A: Agree, we should fix that.

Q: In the discovery, we indicate that the beacon is encrypted by the GTK. Is there a plan to indicate how the client get this GTK?

A: It is acquired during the 4-way hand check. Th scheme here is for beacon privacy.

C: Still not clear as the client receives the GTK.

Q: For normal procedure you need to discover the A first, right?

A: yes, you first need to detect the AP.

C: The STA is then preconfigured and have the GTK to decode the beacon.

A: How to discover is not described here.

Q: Regarding the Frame format. It is misleading to see what is in the header.

A: Timestamp is in the MAC header.

Q: Why do you have 2 octets reserved if you do not need it?

A: The are there to keep sequence number alignment.

C: But you are defining a new frame, so you don’t need those 2 octets.

Q: you cannot say you use GCMP if you use a completely new frame?

A: OK.

Q: Can the GCMP be in the frame body?

A: the GCMP header and MIC are in the body it is not encrypted.

Q: The GTK is not at MLD level. Do you encrypt with a key that belong to a link? Do you have a GTK per link?

A: We will have two different keys. The first to encrypt data, and another key to anonymize the MAC header.

C: I am not comfortable with having a frame that I do not understand and that is not described. Please remove the solicit frame.

Q: Why using address 3 field name and put a checksum inside. Can we just call this field “checksum”?

A: OK.

C: We are very close to the GCMP but we need to clearly indicate how it works.

A: OK I note all your comment and I will revise the description of the frame in a future revision.

Author will come back with a new revision.

* 1. [11-24/1739r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1739-00-00bi-d0-4-misc-fixes.docx) : d0.4\_misc\_fixes: Jerome Henry
     1. Discussion

C: Please write the comment resolution in a way that is understandable and applicable by the technical editor

A: Noted. I had a look in REVme to find resolution template, so then I will be more accurate for the next comment resolution phase.

Two CIDs: 1109 1166 are deferred to allow more discussion

Author will draft an r2 and will ask for a SP later.

C: General comment on comment resolution: Making it easy for the commenter to understand what have been done to consider his comment is a good thing. The way to solve the comments now requires a lot of effort for the commenter to figure out how the comment is resolved.

1. Other businesses

Chair indicates that he will make list for document to be straw polled and motioned.

Chair ask people willing to have a document in this list to contact her.

1. Chair recess the meeting at 09:59 local time

**5th slot: Thursday November 14th 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 08:02 Local time.

Agenda slide deck: [11-24-1677r6](https://mentor.ieee.org/802.11/dcn/24/11-24-1677-06-00bi-november-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 11-24-1677r6 (slide #16)**
   1. Discussion on agenda

Q: Can we add motion for the technical editor to draft D0.7?

A: Yes.

Q: Can I run SP on document 1440r3

A: OK

C: can we swap Domenico’s and Jerome’s presentation timeslot?

A: ok.

* 1. Adoption of agenda by unanimous consent (24 participants online, 13 in the room).

1. **Administrative**
   1. Teleconference Schedule

Teleconference Schedule: Dec. 4, 11, 18, Jan. 8

Wednesday 10AM ET

1. **Straw polls**
   1. [11-24/1792r3](https://mentor.ieee.org/802.11/dcn/24/11-24-1792-03-00bi-resolution-to-cids-regarding-edp-epoch-request-response-frames.docx) : Resolution to CIDs regarding EDP Epoch Request/Response frames : Antonio De La Oliva

Document updated to include CID1114. No change of content, just addition of the CID1114 resolution.

**StrawPoll#4 text**:

Approve adding the comment resolutions from 24/1792r3 where the only additional CID from the earlier approval is CID 1114.

Y: / N: / A:

**Discussion on** **SP**#4:

No Discussion

**SP#4 results: Approved with unanimous consent**

* 1. [11-24/1751r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1751-01-00bi-misc-section-4-5-4-cid-resolutions.docx): Misc. Section 4.5.4 CID Resolutions: Carol Ansley

New presentation after integration of comments received during the previous presentation

Discussion:

No discussion

SP is then run.

**StrawPoll#5 text**:

Approve adding the comment resolutions in 24/1751r1 to the TGbi draft, CIDs including: 1206, 1073, 1200, 1201, 1202, 1006, 1504, 1255, 1204, 1205.

Y: / N: / A:

**Discussion on** **SP**#5:

No Discussion

**SP#**5 **results:** Approved with unanimous consent

* 1. [11-24/1678r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1678-00-00bi-cr-for-1148.docx): CR for 1148: Po-kai Huang

No modification, author request for a SP

**StrawPoll#6 text**:

Approve adding the comment resolution for comment 1148 in 24/1678r0 to the TGbi draft.

Y: / N: / A:

**Discussion on** **SP**#6:

No Discussion

**SP#**6 **final results:** Approved with unanimous consent

* 1. [11-24/1927r0](https://mentor.ieee.org/802.11/dcn/24/11-24-1927-00-00bi-cr-for-1145.docx): CR for 1145: Po-Kai Huang

Discussion:

Q: It doesn’t seem complete. why you doing this? Does it does to cover FILS or OWE?

A: I focus on suite B because it was TBD and want to propose a unified format.

Author decides to defer this CID resolution.

1. **Technical Submissions**
   1. [11-24/1739r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1739-01-00bi-d0-4-misc-fixes.docx): d0.4\_misc fixes : Jerome Henry

Discussion:

C: if you say “accept” you are not allowed to put anything in the box except “accept”, do either put revised or remove the content of the box. Do not change it now, but for future you need to take that into account.

Author take notes and will be carful about that in the future.

**StrawPoll#7 text**:

Approve adding the comment resolutions in 24/1739r1 to the TGbi draft, CIDs including: 1232, 1163, 1319, 1320, 1321, 1024, 1322, 1164, 1165, 1108, 1324, 1025, 1325, 1018, 1111, 1326, 1502, 1327, 1505, 1356, 1342, 1506, 1235, 1257, 1281, 1289, 1290.

Y: / N: / A:

**Discussion on** **SP**#7:

No Discussion

**SP#**7 **final results:** Y: / N: / A: Approved with unanimous consent

* 1. [11-24/1576r8](https://mentor.ieee.org/802.11/dcn/24/11-24-1576-08-00bi-bss-privacy-frame-anonymization.docx): BSS Privacy – Frame anonymization: Jerome Henry

Document presented by Jerome.

Only typo correction compared to r7

Discussion:

Q: Is it the document having the frame format?

A: No, it is the other one related to BPE beaconing.

**StrawPoll#8 text**:

Approve adding the comment resolution for comment 1521 in 24/1576r8 to the TGbi draft.

Y: / N: / A:

**Discussion on** **SP**#8:

Text is not correct for a straw poll.

**Text for SP#8 is** modified as follow:

“Is the comment resolution text for CID 1521 in 24.1576r8 ready for motion to add to the TGbi draft?

“

**SP**#8 **final results:** Y: / N: / A: Approved with unanimous consent

* 1. [11-24/1579r7](https://mentor.ieee.org/802.11/dcn/24/11-24-1579-07-00bi-bss-privacy-beaconing.docx): BSS Privacy - beaconing: Jerome Henry

Document presented by Jerome.

New revision with requesting action frame removed and modification of the frame body to get ride of GCMP an MIC.

This version also has AAD construction for the GCMP.

Discussion:

Q: Can you clarify why you are masking out control field.

A: This is to keep same format as existing AAD, but I have no objection to remove it if you want.

C: since this is not the same exact frame, I would like to not have those bits

Author defer it for now to have time to update the document

* 1. [11-24/1936r1](https://mentor.ieee.org/802.11/dcn/24/11-24-1936-01-00bi-d0-6-more-misc-cids.docx): BSS Privacy - beaconing: Jerome Henry

This contribution is not presented.

Author indicates that this document is parked until Phil have an approval on his document. 11-24/1304

* 1. [11-24/1714r2](https://mentor.ieee.org/802.11/dcn/24/11-24-1714-02-00bi-proposed-spec-text-for-aid-anonymization.docx): Proposed spec text for AID anonymization: Domenico Ficara

Document presented by Domenico.

Document resolving CID 1515 and 1516.

Revision compared to r1 some comments collected during last presentation are taking into account.

Discussion:

Q: The start epoch field is 2 octets, is it correct?

A: yes, should we have only 1 octet?

C: This is not coherent with EDP epoch setup fields.

A: It is then not defined yet.

C: AID assignment frame requires a response, I think. And add a dialog token

A: ok.

C: If it is an AID assignment, why do we need a answer from the STA since the frame is acknowledge.

A: It is because the AID is important and the STA need to confirm it is ok.

C: So, we need a status code for the failure.

A: Agree.

No SP for now.

* 1. [11-24/1440r3](https://mentor.ieee.org/802.11/dcn/24/11-24-1440-03-00bi-proposed-spec-texts-for-privacy-gtk.docx): Proposed spec texts for Privacy GTK: Julien Sevin

Document presented by Julien

New presentation after a change is the definition of the PGTK according to one commenter request.

Discussion:

Q: They key is only use for the computation of the Epoch variation. So, we don’t need so big tech modification for such small feature.

A: This key is also used in document 1576r8 to compute all the FA parameters for BPE.

C: OK, if it is used in more than one place, I am fine.

C: I think we should delete the end of the definition for now to avoid changing it later. Because the definition is not clear

People agree to delete this part of the definition for now.

Chair ask it tech editor can handle the text as it is, and the tech editor answer he can after removal of the definition.

Author then create r4 accordingly and request a SP.

**StrawPoll#9 text**:

Is the comment resolution text for CIDs 1001, 1085, and 1086 in 24/1440r4 ready for motion to add to the TGbi draft?

Y: / N: / A:

**Discussion on** **SP**#9:

No Discussion

**SP#**9 **final results:** Approved with unanimous consent

* 1. [11-24/1844r4](https://mentor.ieee.org/802.11/dcn/24/11-24-1844-04-00bi-new-resolution-to-cid-1091-and-1092.docx): New Resolution to CID 1091 and 1092: Antonio De La Oliva

Document presented by Antonio.

New presentation to solve comments received

Discussion

Q: The sentence for the first EDP epoch number is not clear.

C: Proposal in the chat:” The first EDP epoch of an edp epoch sequence is EDP epoch number 0”

A: agree with the proposal.

Text modified accordingly.

Q: About the similarity parameters. Do you think only the frequency is important? Potentially other parameters like number of stations are also important.

A: the most important and critical one is to not be put in a group having worse privacy than what you are proposing.

Author then request a SP on the revision 5 to take into account comments received during the presentation.

**StrawPoll#10 text**:

Is the comment resolution text for CIDs 1026, 1092, and 1091 in 24/1844r5 ready for motion to add to the TGbi draft?

Y: / N: / A:

**Discussion on** **SP**#10:

No Discussion

**SP#**10 **final results:** Approved with unanimous consent

Chair comment:

Handling ongoing transactions across epoch boundaries – postponed, potentially to after the Plenary.

Is there any other topic to address now?

No other topics.

1. Motion to prepare next draft D0.7

Chair request a motion for the Cid resolution that received unanimous support thru associated Straw polls.

Motion #52 initial text :

Approve directing the Editor to create a Draft 0.7 with the texts and CID resolutions that have reached consensus within the group during this plenary and earlier ad hoc session.

Specifically:

- CID resolution from Doc 24/1724r2 : for 16 CIDs : 1005, 1121, 1180, 1198, 1199, 1217, 1218, 1389, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1498

- Text from document 24/1710r0

- CID resolution from Doc 24/1727r3 : for 1 CID : 1146

- CID resolution from Doc 24/1679r3 for 5 CIDs : 1227, 1229, 1287, 1203, 1224

- CID resolution from Doc 24/1738r1 for 29 CIDs : 1104, 1059, 1297, 1160, 1298, 1300, 1299, 1301, 1302, 1304, 1305, 1501, 1007, 1315, 1317, 1022, 1323, 1023, 1106, 1110, 1169, 1340, 1064, 1174, 1351, 1352, 1357, 1303, 1329.

- CID resolution from Doc 24/1737r2 for 7 CIDs : 1156, 1184, 1185, 1044, 1186, 1045, 1318.

- CID resolution from Doc 24/1792r2 for 10 CIDS: 1013, 1014, 1015, 1060, 1062, 1066, 1115, 1119, 1167, 1170

- CID resolution from Doc 24/1304r7 for 30 CIDs: 1002, 1003, 1008, 1009, 1089, 1090, 1367, 1368, 1369, 1370, 1373, 1375, 1379, 1380, 1381, 1382, 1383, 1387, 1388, 1083, 1084, 1371, 1372, 1374, 1377, 1378, 1384, 1385, 1386, 1517

- CID resolution from Doc 24/1792r3 for 1 CIDs: 1114

- CID resolution from Doc 24/1751r1 for 10 CIDs : 1206, 1073, 1200, 1201, 1202, 1006, 1504, 1255, 1204, 1205.

- CID resolution from Doc 24/1678r0 for 1 CID : 1148

- CID resolution from Doc 24/1739r1 for 27 CIDs :  1232, 1163, 1319, 1320, 1321, 1024, 1322, 1164, 1165, 1108, 1324, 1025, 1325, 1018, 1111, 1326, 1502, 1327, 1505, 1356, 1342, 1506, 1235, 1257, 1281, 1289, 1290.

- CID resolution from Doc 24/1576r8 for 1 CID : 1521.

- CID resolution from Doc 24/1440r4 for 3 CIDs : 1001, 1085, 1086

* CID resolution from Doc 24/1844r for 3 CIDs : 1026, 1092, 1091

**Motion #52 moved** by Stephane Baron, **and seconded** by Jerome Henry

**Motion#52 discussion** on the motion:

No discussion

**Motion #52 result**: passes with unanimous consent

Because some revisions error was included in the motioned text (no revision number for doc 11-24/1844, and wrong revision number for document 11-24/1727), a motion to reconsider the motion #52 is run.

People ask for 10 minutes extension to allow motion#52 to be amended.

The group agrees.

**Motion to reconsider motion #52:**  **proposed by** Joe levy and **seconded by** Jarkko Knecht

No objection received

**Motion#52 is then reconsidered**

**Motion to amend motion #52** **proposed by** Joe Levy **and seconded** by Jerome Henry

No objection

**Motion to amend motion #52 result: passes with unanimous consent.**

**Motion #52** **is then amended** by correcting revision numbers on document 1727 and 1844

**Motion#52 amended text**:

Approve directing the Editor to create a Draft 0.7 with the texts and CID resolutions that have reached consensus within the group during this plenary and earlier ad hoc session.

Specifically:

- CID resolution from Doc 24/1724r2 : for 16 CIDs : 1005, 1121, 1180, 1198, 1199, 1217, 1218, 1389, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1498

- Text from document 24/1710r0

- CID resolution from Doc 24/1727r2 : for 1 CID : 1146

- CID resolution from Doc 24/1679r3 for 5 CIDs : 1227, 1229, 1287, 1203, 1224

- CID resolution from Doc 24/1738r1 for 29 CIDs : 1104, 1059, 1297, 1160, 1298, 1300, 1299, 1301, 1302, 1304, 1305, 1501, 1007, 1315, 1317, 1022, 1323, 1023, 1106, 1110, 1169, 1340, 1064, 1174, 1351, 1352, 1357, 1303, 1329.

- CID resolution from Doc 24/1737r2 for 7 CIDs : 1156, 1184, 1185, 1044, 1186, 1045, 1318.

- CID resolution from Doc 24/1792r2 for 10 CIDS: 1013, 1014, 1015, 1060, 1062, 1066, 1115, 1119, 1167, 1170

- CID resolution from Doc 24/1304r7 for 30 CIDs: 1002, 1003, 1008, 1009, 1089, 1090, 1367, 1368, 1369, 1370, 1373, 1375, 1379, 1380, 1381, 1382, 1383, 1387, 1388, 1083, 1084, 1371, 1372, 1374, 1377, 1378, 1384, 1385, 1386, 1517

- CID resolution from Doc 24/1792r3 for 1 CIDs: 1114

- CID resolution from Doc 24/1751r1 for 10 CIDs : 1206, 1073, 1200, 1201, 1202, 1006, 1504, 1255, 1204, 1205.

- CID resolution from Doc 24/1678r0 for 1 CID : 1148

- CID resolution from Doc 24/1739r1 for 27 CIDs :  1232, 1163, 1319, 1320, 1321, 1024, 1322, 1164, 1165, 1108, 1324, 1025, 1325, 1018, 1111, 1326, 1502, 1327, 1505, 1356, 1342, 1506, 1235, 1257, 1281, 1289, 1290.

- CID resolution from Doc 24/1576r8 for 1 CID : 1521.

- CID resolution from Doc 24/1440r4 for 3 CIDs : 1001, 1085, 1086

* CID resolution from Doc 24/1844r5 for 3 CIDs : 1026, 1092, 1091

Then Antonio De La Oliva **calls the question for the amended motion #52**

**Motion#52 is then Moved** by Stephane Baron **and seconded** by Jerome Henry

Chair request if there is any objection to approve the motion #52 by unanimous consent

No Objection.

**Motion #52** is then Approved by unanimous consent.

People then ask for document 1936 to be motioned following 11-24/1404 being motioned.

For sake of time and to avoid creating last minute issue, chair deny the request, and no motion is run on document 1936.

1. Other businesses

No other business.

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