IEEE P802.11  
Wireless LANs

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| LB 200 MAC miscellaneous comment resolution part 2 | | | | |
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Abstract

This submission proposes comment resolutions of MAC miscellaneous comments from TGah Draft 1.0.

* CIDs: 1408, 1407, 2580, 2492, 1989, 2407, 2408, 2409, 1000, 2628, 2792, 2629 (12 CIDs)

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGah Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGah Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGah Editor: Editing instructions preceded by “TGah Editor” are instructions to the TGah editor to modify existing material in the TGah draft. As a result of adopting the changes, the TGah editor will execute the instructions rather than copy them to the TGah Draft.***

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| **CID** | **Commenter** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1408 | amin jafarian | 10.17 | Any changes to the BSS Coexistence Management frame usage for 11ah? | Clarify coexistence management for 11ah | Rejected-  The TGmc decided the following. We don't need to clarify the PCO operation for 11ah.  "The PCO mechanism is obsolete. Consequently, this subclause might be removed in a later revision of this standard.(#2114)" |
| 1407 | amin jafarian | 10.23.6 | 10.23.6 TDLS channel switching; needbe adapted to S1G | define equivalent rules within S1G | Rejected-  Witdrawn by commenter. |
| 2580 | Mitsuru Iwaoka | 10.47.1 | Current specification in 10.47.1 prohibits use of 1MHz PPDU in SST. While SST is more effective for 1MHz PPDU, use of 1MHz PPDU in SST shall be allowed. | Modify the subclause 10.47.1 (Basic S1G BSS functionality) and the 9.46 (Subchannel Selective Transmission (SST)) to allow 1MHz PPDU in the SST operation. Details are TBD. | Revised- Agree in principle. Please the see the proposed change of CID 1530 from the following document.  <https://mentor.ieee.org/802.11/dcn/14/11-14-0610-00-00ah-lb200-clause-9-46-sst.docx> |
| 2492 | Matthew Fischer | 3.1 | What happened to the TCLAS description changes? Note that the previous version of the definition had problems as follows: This language is a bit off. Why was "belonging to a particular traffic stream" deleted? traffic classification (TCLAS): The specification of certain parameter values to identify the medium access control (MAC) service protocol data units (MSPDUs) belonging to a particular traffic stream (TS). The classification process, performed above the MAC service access point (MAC\_SAP) at a quality-of-service (QoS) access point (AP), uses the parameter values for a given TS to examine each incomingoutgoing MSPDU and determine whether this MSPDU belongs to that TS matches a classification specification. TCLAS might also occur at non-access-point (non-AP) QoS station (STA) with multiple streams. | Restore the TCLAS definition and its changes from the earlier Tgah draft, but with the NOTE changed to read: "NOTE - The determination of the values of the parameters for each classifier are beyond the scope of this standard." and with the following wording for the definition: "traffic classification (TCLAS): The specification of certain parameter values used to identify the medium access control (MAC) service protocol data units (MPDUs) belonging to a particular traffic stream (TS). The classification process, performed at a quality-of-service (QoS) access point (AP) and at a QoS STA, uses the parameter values for each TS to examine each outgoing MPDU and identifies it as belonging to the TS if the MPDU matches the classification specification for that TS." | Rejected- Commenter agrees that the change of the TCLAS description of the REVmc is resolving the issue. No change is needed for the TGah draft. |
| 1989 | Henry Ptasinski | 8.4.2.30 | Classifier type 6 already exists in base standard | Change classifier types 6-8 to not conflict with base standard. | Revised- Agree in principle. But, the 11-14/395r1 (see CID 1104) approved in March meeting is addressing this comment. TGah Editor: No change is needed. |
| 2407 | Mark RISON | 8.4.2.30 | TCLASes do not always identify MPDUs; the existing text is at least partially correct; ditto 8.4.2.32 | Change to "to identify incoming MPDUs or MSDUs" | Revised- Agree in principle. But, the 11-14/395r1 (see CID 1104) approved in March meeting is addressing this comment. TGah Editor: No change is needed. |
| 2408 | Mark RISON | 8.4.2.30 | The UP field is unsigned, so it's not necessary to qualify it as being greater than or equal to 0 | Delete "and greater than or equal to 0" | Accepted- Agree in principle. But, the 11-14/395r1 (see CID 1104) approved in March meeting is addressing this comment. TGah Editor: No change is needed. |
| 2409 | Mark RISON | 8.4.2.30 | Existing conformant devices will not understand the new UP values | Qualify the new stuff as being for S1G | Revised- Agree in principle. But, the 11-14/395r1 (see CID 1104) approved in March meeting is addressing this comment. TGah Editor: No change is needed. |
| 1000 | Adrian Stephens | General | There are no Annex G (frame exchange sequence) updates | Please provide changes to the frame exchange sequences describing all the new frame exchange sequences provided by 802.11ah. | Rejected-  Could you clarify why the TGah updates the Annex G.  The question arisen by the task group is that why other task group (e.g., TGad) didn't update the new frame exchange sequences.  Also,we found a related discussion of the REVmc from 11-12/1229r6. The commenter was that Annex G does not cover all HT sequences.  And, the response from the REVmc is as the following:  "Rejected.  The commenter does not indicate specific changes that would satisfy the comment."  In that sense, we would like to reject this comment at this moment. But, if the commenter thinks that the updating of Annex G for TGah is absolutely right, please resubmit the comment with the specific indications. |
| 2628 | Paul Lambert |  | The modified nonce usage for CCM should include test vector to ensure interoperability | Add text vectors for 11ah CCM usage and GCM usage | Rejected-  We need more specific suggestions from the security experts. We encourage the commenter to submit a detailed Annex M.6 update proposal for the PV1 MPDU. |
| 2792 | Shusaku Shimada | 8.4.2.170n | TSF Timer Accuracy field should be able to include a flag indicating if the field carry the (absolute) TSF accuracy better than +/-100ppm or the drift rate (stability) of TSF timer. Please refer to "11-13-1197-00-00ah-cc9-resolution-cid773+774-TSF-stability" and "11-13-1035-01-00ah-cc9-possible-integration-regarding-cid773&774" | The TSF Timer Accuracy field is a 1 octet signed integer information that specifies the accuracy of the TSF timer of transmitting STA if Bit 7 equal to 0, and the stability of TSF timer excluding frequency offset for the duration until next DTIM if Bit 7equal to 1 and Bit 6 equal to 0, as shown in Table 8-191f. The condition both Bit 7 and Bit 6 are equal to 1 is reserved for future extention. The unit of the TSF Timer Accuracy field is PPM. The range of TSF timer accuracy and stability are 1 to 100 ppm and 1 to 63 ppm, respectively. | Revised-  The stability information of the TSF timer may be helpful to improve the accuracy of the TSF Timer.  But, the benefit through the stability information of the TSF timer is not great.  For the future expansion, it is good to reserve some values of the TSF Timer Accuary field.  TGah editor to make changes shown in 11-14-0651r0 under the heading for CID 2729. |
| 2629 | Paul Lambert |  | No text is provided describing nonce usage a the GCM algorithm | Add description of nonce calculation and test vectors for GCM | Revised-  Agree in principle. The nonce construction of the GCM should be updated for the PV1 MPDU.  TGah editor to make changes shown in 11-14-0651r0 under the heading for CID 2628, 2629.  But, also please remind that the proposed changes are not complete. We need more specific suggestions from the security experts. We encourage the commenter to submit a detailed proposal. |

**Propose:**

Revised for CID 2729, 2628, 2629, per discussion and editing instructions in 11-14/0651r0

8.4.2.170m TSF Timer Accuracy element

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The TSF Timer Accuracy field is a 1 octet unsigned integer that specifies the accuracy of the TSF timer of transmitting STA. The unit of the TSF Timer Accuracy field is PPM. The values between 125 and 255 are reserved for future expansion.

**11.4.5.3.4 Construct GCM nonce(11ad)**

The Nonce field occupies 12 octets, and its structure is shown in Figure 11-26 (Nonce construction(11ad)).

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|  | STA MAC Address identified by A2 | PN |
| Octets: | 6 | 6 |

**Figure 11-26—Nonce construction(11ad)**

The Nonce field has an internal structure of STA MAC Address identified by A2 || PN (“||” is concatenation), where

— MPDU STA MAC A~~a~~ddress identified by A2 field occupies octets 0 to 5. This shall be encoded with the octets ordered with STA MAC Address identified by A2 octet 0 at octet index 0 and STA MAC Address identified by A2 octet 5 at octet index 5.

— The PN field occupies octets 6 to 11. The octets of PN shall be ordered so that PN0 is at octet index 11 and PN5 is at octet index 6.