IEEE P802.11
Wireless LANs

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| CC9 miscellaneous comment resolution |
| Date: 2013-09-15 |
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Abstract

This submission proposes comment resolutions of the following CIDs from TGah Draft 0.1 Comment Collection 9.

* 518, 580, 551, 705, 706, 707, 709, 710, 711, 712, 713, 5, 876, 101, 115, 116, 118, 134, 496, 528, 538, 539, 569, 603, 604, 617, 629, 659, 754, 758, 759, 768, 769, 772, 792, 807

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.***

| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- |
| 518 | 158.00 | 9.32n.1 | Addressing and forwarding rules described in subclause 9.32n.1 and 9.32n.2 are applicable only to Regular frame format. As TXOP sharing assumes use of Short frame format, rules for Short frame format (use AID instead of MAC address) are needed. | Add support of Short frame format. | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 518 |

**CID 518**

**Discussion:**

Agree in principle. A short frame can be used in the Relay operation.

**Propose:**

Revised for CID 518, per discussion and editing instructions in 11-13/1087r0.

***TGah editor: Modify the sub-clause 9.32n.1 and 9.32n.2 as the following:***

**9.32n.1 Addressing and forwarding of individually addressed relay frames**

MSDUs received at the MAC SAP of a Relay STA which are not destined for the Relay STA are forwarded via the air interface to the Relay AP to which it is associated, using either a 4-address frame format or an AMSDU format.

The addressing of the 4-address frame shall be as follows in this case:

— Address 1 is the MAC address of the AP (the receiver of the MPDU)

— Address 2 is either the MAC address or the AID of the Relay STA (the transmitter of the MPDU)

— Address 3 is the DA of the MSDU (the destination address of the MSDU).

— Address 4 is the SA of the MSDU (the source address of the MSDU)

The addressing of the A-MSDU frame shall be as follows in this case:

— Address 1 is the MAC address of the AP (the receiver of the MPDU)

— Address 2 is either the MAC address or the AID of the Relay STA (the transmitter of the MPDU)

— Address 3 is the MAC address of the AP (the BSSID) and not present in a short frame.

— DA in A-MSDU subframe header is the DA of the MSDU (the destination address of the MSDU)

— SA in A-MSDU subframe header is the SA of the MSDU (the source address of the MSDU)

MSDUs received at the MAC SAP of a Relay AP which are not destined for the Relay AP or one of its associated STAs are forwarded via the air interface to an appropriate Relay STA, using either a 4-address frame format or an A-MSDU format.

The addressing of a 4-address frame shall be as follows in this case:

— Address 1 is either the MAC address or the AID of the Relay STA (the receiver of the MPDU)

— Address 2 is the MAC address of the Relay AP (the transmitter of the MPDU)

— Address 3 is the DA of the MSDU (the destination address of the MSDU)

— Address 4 is the SA of the MSDU (the source address of the MSDU)

The addressing of an A-MSDU frame shall be as follows in this case:

— Address 1 is either the MAC address or the AID of the Relay STA (the receiver of the MPDU)

— Address 2 is the MAC address of the Relay AP (the transmitter of the MPDU)

— Address 3 is the MAC address of the AP (the BSSID) and not present in a short frame.

— DA in A-MSDU subframe header is the DA of the MSDU (the destination address of the MSDU)

— SA in A-MSDU subframe header is the SA of the MSDU (the source address of the MSDU)

**9.32n.2 Addressing and forwarding of group addressed relay frames**

Group addressed MSDUs received from a local LLC sublayer at the MAC SAP of a Relay STA are forwarded via the air interface to an AP to which it is associated, using either a 4-address frame format or an A-MSDU format.

The addressing of the 4-address frame shall be as follows in this case:

— Address 1 is the MAC address of its associated AP (the receiver of the MPDU)

— Address 2 is either the MAC address or the AID of the Relay STA (the transmitter of the MPDU)

— Address 3 is the DA of the MSDU (the group address).

— Address 4 is the SA of the MSDU (the source address of the group addressed MSDU)

The addressing of the A-MSDU frame shall be as follows in this case:

— Address 1 is the MAC address of its associated AP (the receiver of the MPDU)

— Address 2 is either the MAC address or the AID of the Relay STA (the transmitter of the MPDU)

— Address 3 is the MAC address of its associated AP (the BSSID) and not present in a short frame.

— DA in A-MSDU subframe header is the DA of the MSDU (the group address)

— SA in A-MSDU subframe header is the SA of the MSDU (the source address of the group addressed MSDU)

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| 580 | 59.00 | 8.4.2.1 | An S1G Operation element is not defined in 8.4.2. The S1G Operation element is necessary from following reasons:- The subclause 10.43c.1 refers it.- A VHT Operation element nor an HT Operation element are not adequate for S1G. | 1) Insert a new row to Table 8-55 as follows:---S1G Operation | | TBD2) Insert a new subclause 8.4.2.170? which specifies S1G Operation element. S1G Operation element shall include following fields: - Primary channel - Channel Width - Channel Center Frequency - Basic S1G-MCS and NSS Set3) Insert the S1G Operation to the table on the various elements of BSSDescriptionSet in subclause 6.3.3.3.2 (Semantics of the service primitive) of MLME-SCAN.confirm4) Insert the S1G Operation to the primitive parameters of MLME-START.request in 6.3.11.2.2 (Semantics of the service primitive). | Revised- Agree with the comment. But, TGah Draft 0.2 already fixed this comment. Any spec changes are not needed. |

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| 551 | 130.00 | 9.19.4a.1 | The last paragraph of subclause 9.19.4a.1 states Channel Indication field of RPS can specify the allowed subchannel in the BSS. If allowed subchannel in Channel Indication filed is not included primary channel of BSS, each STA assigned to the RAW slot may select different channel and start transmit on same time. Also, relation of Channel Indication field and SST is not clear.SST shall be used for limiting accessible channel for STAs, and no other mechanism shall not be provided. | Delete the last paragraph of subclause 9.19.4a.1 and the Channel Indication field from RPS element (8.4.2.170b). | Rejected- Inside RAW, any channel access procedures can be utilized. When the SST is used, the RPS element should indicate the operating sub-channel. The last paragraph is saying the behavior of the SST protocol inside the RAW. |

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| 705 | 160.00 | 9.32n.3 | The sentences below conflicts with each other: "When Relay STA uses the Explicit ACK procedure to acknowledge the reception of a valid frame, the Relay STA shall set the Relayed Frame field to 1 in the immediate ACK frame. A Relay STA may set Relayed Frame field to 1 only if the More Data field was set to 0 in the frame most recently received from the non-AP STA.A non-AP STA that receives the ACK frame that matches its address shall not initiate any further frame transmissions within the current TXOP."Line 24-28 implies that the More Data field in the frame sent from the source node will impact the Relayed Frame field setting in the ACK frame. However, lines 30-31 states that no matter how Relayed Frame field is set (0 or 1) in the ACK frame, the source node will not perform any SF exchange in the current TXOP. | Clarify whether the SF exchange is done under Relay operation. Clarify whether the Relayed Frame field setting (driven by More Data field setting) has any impact on SF exchange. | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 705, 706, 707, 709, 710, 711, 712, 713 |
| 706 | 160.00 | 9.32n.3.1 | non AP STA sends information to the wrong entity : "addressed to the relay STA" | use "addressed to the relay AP" | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 705, 706, 707, 709, 710, 711, 712, 713 |
| 707 | 160.00 | 9.32n.3.1 | response from the wrong entity to non AP STA: "The relay STA shall" | "The relay AP shall" | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 705, 706, 707, 709, 710, 711, 712, 713 |
| 709 | 160.00 | 9.32n.3 | what are "S1G frames"?Searched entire 11ah/D0.1; only one occurrence in line 36 page 160, but no definition. | Provide clarification to "S1G frames" in line 36 page 160. | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 705, 706, 707, 709, 710, 711, 712, 713 |
| 710 | 160.00 | 9.32n.3 | The sentence in line 34 page 160 needs clarification. How could "the choice" beceom optional? Does it mean a Relay may not make a choice? If so, does it mean no ack? | Change the sentence in line 34 page 160 to the following text:The Relay STA decides which acknowledgement procedure is used, Explicit ACK procedure or Implicit ACK procedure. | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 705, 706, 707, 709, 710, 711, 712, 713 |
| 711 | 160.00 | 9.32n.3.1 | The description in the paragraph in line 50 page 160 is very confusing. Let's use the Relay structure diagram in Figure 4-23a on page 3 as a reference, the Non-AP STA is communicating with the Relay, or more specfically, the Relay AP in the Relay. However, the description in the paragraph in line 50 page 160 says Non-AP STA communicating wthe the relay STA. | Make the following changes:1) In the paragraph in line 50 page 160, change the two occurences of "relay STA" to "Relay".2) in line 57 page 160, change "relay STA" to "Relay".3). Line 7 page 161, change "Relay STA" to "Relay" | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 705, 706, 707, 709, 710, 711, 712, 713 |
| 712 | 161.00 | 9.32n.3.1 | wrong entities used in text | when the direction of the frame is from the AP to the non-AP "STA", the AP starts a | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 705, 706, 707, 709, 710, 711, 712, 713 |
| 713 | 161.00 | 9.32n.3.1 | wrong entities used in text | "The relay AP shall" | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 705, 706, 707, 709, 710, 711, 712, 713 |

**CID 705, 706, 707, 709, 710, 711, 712, 713**

**Discussion:**

The procedure of TXOP sharing was described in different terminology than the general description of the Relay operation. So, a Relay STA shall be changed to either a Relay AP or a Relay STA. Also, ACK Indication was changed to the Response Indication. Accordingly, the procedure of TXOP sharing shall be updated.

**Propose:**

Revised for CID 705, 706, 707, 709, 710, 711, 712, 713, per discussion and editing instructions in 11-13/1087r0.

***TGah editor: Modify the sub-clause 9.32n.3 as the following:***

**9.32n.3 Procedures TXOP sharing**

The sequence of frames exchanged over the first hop and second hop depends on the acknowledgement procedure used at the Relay ~~STA~~. ~~Frames STA~~ A Relay can use either:

— Explicit ACK procedure

— Implicit ACK procedure

When Relay ~~STA~~ receives a valid frame with the Relayed Frame field set to 1, Relay ~~STA~~ may acknowledge the received frame using the Implicit ACK procedure.

When Relay ~~STA~~ receives a valid frame with the Relayed Frame field set to 0, Relay ~~STA~~ shall not acknowledge the received frame using the Implicit ACK procedure.

When Relay ~~STA~~ uses the Explicit ACK procedure to acknowledge the reception of a valid frame, the Relay ~~STA~~ shall set the Relayed Frame field in the immediate ACK frame to 1 only if the More Data field was set to 0 in the frame most recently received from the non-AP STA.

A non-AP STA that receives the ACK frame that matches its address shall not initiate any further frame transmissions within the current TXOP.

~~The choice of acknowledgement procedure is optional to the Relay STA.~~

The operation of TXOP sharing is supported only for S1G ~~frames~~ STA.

NOTE- The frames transmitted over the first hop and second hop can be sent at two different MCSs.

**9.32n.3.1 Explicit ACK procedure**

Throughout this subclause, a Response Indication of Long Response is signaled by setting the Duration Indication field to 1 and the Duration field to 0 for NDP ACK.

A non-AP STA is the source of the frame to be relayed when the direction of the frame is from the non-AP STA to the AP.

An AP is the final destination of the frame to be relayed when the direction of the frame is from the non-AP STA to the AP.

A non-AP STA starts a frame exchange by sending a frame addressed to the relay ~~STA~~ AP with ~~ACK~~ Response Indication field set to ~~ACK~~ NDP Response. The relay ~~STA~~ AP shall set the ~~ACK~~ Response Indication field of the response NDP ACK that is transmitted to the non-AP STA to ~~Not ACK, BlockAck or CTS~~ Long Resonse and shall set the Relayed Frame field of the response frame that is transmitted to the non-AP STA to 1.

The Relay STA shall transmit the previously received frame which is addressed to the AP, SIFS after sending the response transmission that included an ~~ACK~~ Response Indication field value of ~~ACK~~ NDP Response. Upon the successful receipt of the relayed frame, the AP shall set the ~~ACK~~ Response Indication field of the response frame ~~No ACK~~ to No Response.

The non-AP STA uses a new TXOP for a new frame transmission.

When the direction of the frame is from the AP to the non-AP, the AP ~~STA~~ starts a frame exchange by sending a frame addressed to the relay STA with ~~ACK~~ Response Indication field set to ~~ACK~~ NDP Response. The relay STA shall set the ~~ACK~~ Response Indication field of the response ~~frame~~ NDP ACK that is transmitted to the AP ~~STA~~ to ~~Not ACK, BlockAck or CTS,~~ Long Response and shall set the Relayed Frame field of the response frame that is transmitted to the ~~non-AP STA~~ AP to 1.

The Relay AP shall transmit the received frame addressed to the non-AP STA SIFS after sending the response frame transmission that included an ~~ACK~~ Response Indication field value of ~~ACK~~ NDP Response. Upon the successful receipt of the relayed frame, the non-AP STA shall set the ~~ACK~~ Response Indication field of the response frame to No ~~ACK~~ Response.

The AP uses a new TXOP for a new frame transmission.

**9.32n.3.2 Implicit ACK procedure**

When a Relay ~~STA~~ receives an MPDU for forwarding in TXOP sharing relay operation, the Relay ~~STA~~ may directly forward the received MPDU without sending back acknowledgement frame to the transmitter of the MPDU. This implicit ACK mechanism is available only when PAID information is included in the PLCP header (2MHz PHY frame format).

If an MPDU is transmitted by a non-AP STA associated with a Relay ~~STA~~ AP to the ~~Relay STA~~ AP, the Relay ~~STA~~ AP forwards the received MPDU to the AP that it is associated with in SIFS time. After transmitting the MPDU, the non-AP STA shall wait for an ACKTimeout interval, with a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay, starting at the PHY-TXEND.confirm primitive. If the non-AP STA receives a valid PLCP header within the ACKTimeout interval and PAID in the received PLCP header is identical to PAID corresponding to BSSID of the AP, the non-AP STA recognize it as successful acknowledgement, permitting the frame sequence to continue, or to end without retries, as appropriate for the particular frame sequence in progress.

If an MPDU is transmitted by an AP to a Relay STA, the Relay STA forwards the received MPDU to the non-AP STA that is associated with in SIFS time. After transmitting the MPDU, the AP shall wait for an ACKTimeout interval, with a value of aSIFSTime + aSlotTime + aPHY-RX-START-Delay, starting at the PHYTXEND.confirm primitive. If the AP receives a valid PLCP header within the ACKTimeout interval and PAID in the received PLCP header is identical to PAID corresponding to DA of the transmitted MPDU, the AP recognizes it as successful acknowledgement, permitting the frame sequence to continue, or to end without retries, as appropriate for the particular frame sequence in progress. If the RA of the forwarded MPDU is different from DA of MPDU transmitted by the AP, the Relay ~~STA~~ shall use explicit ACK procedure.

For downlink implicit ACK procedure, an AP that the ~~relay~~ Relay STA is associated with shall know PAID of the non-AP STAs associated with a Relay ~~STA~~ AP. For this purpose, a Relay STA may indicate an associated STA's AID to the AP by sending an STA Information Announcement frame including an AID Announcement element when the non-AP STA becomes associated or the non-AP STA's AID is changed.

For uplink implicit ACK procedure, the non-AP STAs associated with a Relay ~~STA~~ AP shall know BSSID of the AP that serving Relay STA is associated with. For this purpose, a Relay ~~STA~~ AP may indicate the BSSID of the AP to newly associated non-AP STAs by using RootAP BSSID ~~information~~ field in the Relay element in Beacon frame or Probe Response frame.

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| 5 | 123.00 | 9.3.2.8 | Currently, a STA is allowed to respond either with 1 or 2mhz control response frames. Transmitter use of ACK Timeout should be clearly specifeid per each of the frame exchange cases allowed by 11ah. | Specify that the ACKTimeout interval depends on the TXVector indicaiton of the expected response frame for a >=2MHz eliciting frame. | Revised- Agree with the comment. But, TGah Draft 0.2 already fixed this comment. Any spec changes are not needed. |

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| 876 | 142.00 | 9.32g | Because the non-TIM STA operation is a power saving mechanism, Section 10.2.2.22 is more appropriate. | Move Section 9.32g to Section 10.2.2.22. | Accepted-The non-TIM STA operation is a power saving mechanism. All power saving feature should be written in the same clause.  |

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| 101 | 34.00 | 8.3.1.20b | The A1 and A2 values in the RA and TA fields respectively of the TACK frame have not been defined. | Define those values | Rejected-The A1 and A2 values in TACK frame are clearly defined. |

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| 115 |  |  | Even thought it is allowed that TWT values are periodic or aperiodic the the required signaling for the periodic case is missing. | Define the appropriate signaling for periodic TWT | Rejected-The TWT element is providing the enough information to set up a periodic TWT.  |

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| 116 | 94.00 | 8.4.2.170m | It is not clear how the Channel Activity Bitmap looks like | Define the Channel Activity Bitmap | Rejected-The current definition of the channel activity bitmap is clearly described. See the below description. “The Channel Activity Bitmap subfield contains a bitmap indicating on which channels there is expected or permitted to be transmission activity at a given time. Each bit in the bitmap corresponds to one minimum width channel for the band of operation with the LSbit corresponding to the lowest numbered operating channel of the BSS.” |

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| 118 | 105.00 | 8.4.2.170x | How can a station belong to multiple groups? | Clarify how this is possible and what a group can mean. | Rejected-This is an invalid comment. Question is not an appropriate comment. If you want to know an answer for your question, See 9.32m Sectorized beam operation for the detailed information. |

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| 134 | 109.00 | 8.4.23.4a | How does the AP respond to Sector ID Feedback? Does it always accept the STA's choice or can it also reject it? | Please explain | Rejected-This is an invalid comment. Question is not an appropriate comment. If you want to know an answer for your question, See 9.32m Sectorized beam operation for the detailed information.  |

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| 496 | 1.00 | 3.1 | Following P802.11ah specific definitions are missing.- non-TIM STA- Sensor type STA | Insert the definitions of following terms.----non-TM STA: The STA which does not require reception of TIM.Sensor type STA: The STA characterized as small data size, low traffic, limited available power, and large number of STA per AP. | Accepted- Agree in principle. TGah editor will update the specific definitions. |

| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
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| 528 | 33.00 | 8.3.1.20a | The last sentence of sixth paragraph of subclause 8.3.1.20a is not necessary as the Next TWT Present subfield in the FC field can control presence of Next TWT value. | Remove the last sentence of sixth paragraph of subclause 8.3.1.20a. | Accepted- Agree with the comment. But, TGah Draft 0.2 already fixed this comment. Any spec changes are not needed. |

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| 538 | 35.00 | 8.3.3.2 | It is not clear why the "dot11S1GSectorizationBeaconElement" is needed to select presence of Sector Operation element in the Beacon. | Remove "anddot11S1GSectorizationBeaconElement is true." from Notes of Table 8-24. | Accepted-“dot11S1GSectorizationBeaconElement” is not defined and not used in 11ah draft. TGah editor removes "anddot11S1GSectorizationBeaconElement is true." from Notes of Table 8-24. |

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| 539 | 36.00 | 8.3.3.5 | A dot11TargetWakeTimeOptionImplemented is used to select presence of a TWT element in subclauses 8.3.3.5, 8.3.3.6, 8.3.3.7 and 8.3.3.8. Though, in subclause 9.32f.1, a dot11TWTOptionActive is used for the same purpose. | Modify "dot11TargetWakeTimeOptionImplemented" to "dot11TWTOptionActivated". | Revised-Replace "dot11TargetWakeTimeOptionImplemented" to "dot11TWTOptionActivate" in sub-clauses 8.3.3.5, 8.3.3.6, 8.3.3.7 and 8.3.3.8. |

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| 569 |  | G | In Annex G (normative) "Frame exchange sequences", S1G frame sequences shall be defined. | Insert a new subclause G.5 "S1G sequence".Details are TBD. | Rejected-Agree in principle. Annex G shall define the frame exchange sequence of NDP MAC frame defined in 802.11ah. But, it is better to wait until the 11ah MAC protocol is stabilized. Before going to a Sponsor Ballot, it will be updated.  |

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| 603 |  | 8.2.4.1.8 | The "More Data" field should be updated since now a STA may also use it to indicate that it has UL data to transmit in ACK, Data or other type of frames. | Note that clause 8.2.4.1.8 is not in the Draft, but should be added.Clarify that the more data field may be used by a non-AP STA (currently only AP STA uses it):A STA may set More Data bit to "1" in frames such as ACK, Data in Speed Frame Exchange indicate that it has buffered UL packets to transmit. | Revised- TGah editor to make changes shown in 11-13-1087r0 under the heading for CID 603 |

**CID 603**

**Discussion:**

Agree in principle. The description of the More Data field shall be updated for supporting the SF exchange.

**Propose:**

Revised for CID 603, per discussion and editing instructions in 11-13/1087r0.

***TGah editor: Insert the following after 6th paragraph of sub-clause 8.2.4.1.8:***

**8.2.4.1.8 More Data field**

For a S1G STA, the More Data field is set to 1 to indicate that the S1G STA has MSDUs or A-MSDUs buffered for transmission to the frame’s recipient during the current SP or TXOP. A S1G STA does not set the More Data field to 1 if it does not have any MSDUs or A-MSDUs buffered for transmission to the frame’s recipient during the current SP or TXOP.

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| 604 | 1.00 | 3.1 | The changes made to the defintion of traffic classification (TCLAS) clearly change the classification object from MSDU to MPDU, which is very problematic for multiple reasons, e.g., 1) logically not correct, as MAC classification classifies the ingress data of the MAC layer for transporting over the air link in a differentiated way, where the ingress data are MSDU, plus MMPDU (generated by MAC management/control functions), while MPDU is actually the outcome of MAC framing; 2). MAC classification function may use some information in MSDU header, however the MSDU header is not always in a MPDU, due to fragmentation; etc.If 11ah really needs MPDU level classification for convinceable reasons, then it can introduce an additional classification, i.e., MPDU classification, and leave the current MSDU classificaiton unchanged. | Make the following changes:1) .revoke the changes made in the defintion of traffic classification (TCLAS) in line 13, page 1.2). Remove line 21 on page 1. | Revised -IEEE 802.11mc Draft 1.6 already updated those change for supporting IEEE 802.11 MAC header parameters of frame classifier type. TGah editor removes a traffic classification (TCLAS) from sub-clause 3.1.  |
| 754 | 1.00 | 3.1 | TCLAS was originally defined to classify "traffic" rather than individual Frame litrally in my understanding, hence it is not radical if TCLAS as Frame classification is defined only for S1G(11ah). | Language such a way as in comment. | Revised -IEEE 802.11mc Draft 1.6 already updated those change for supporting IEEE 802.11 MAC header parameters of frame classifier type. TGah editor removes a traffic classification (TCLAS) from sub-clause 3.1. |

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| 617 | 4.00 | 4.11a | "Frames transmitted over the first hop and second hop are separated by SIFS." It is not clear which SIFS is referenced here. For example, in the DL, does the relay AP transmit SIFS after the Relay STA receives the transmission from the AP, or SIFS after transmitting an ACK from the Relay STA to the AP? |  | Rejected-This is an invalid comment. Question is not an appropriate comment. And, the commenter should say the proposed change. |

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| 629 | 33.00 | 8.3.1.20a | What's the unit of the TWT value? Is it TU (Time Unit, i.e., 1024us)? | Clarify the TWT value unit in the paragraph in line 28 page 33. | Rejected-TWT value is set to the lowest six bytes of the TSF time for the next TWT. And, the unit of TSF time is 1024us. There is no ambiguity. |

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| 659 | 114.00 | 8.5.23a.8 | The Dialog Token field is used to differentiate different transactions of the TWT request and the TWT response sequence. Although it does not need to standardize how to choose the value for Dialog Token field at the TWT requesting STA, it is neccesary to specify that a dffierent value shalld be chosen between any consecutive TWT requests. | add the following sentence at the end of the paragraph in line 14 page 114:The TWT requesting STA shall set different values for consecutive TWT requests. | Rejected-The dialog token is used to identify a request/response transaction. Additional rule for choosing the value of the dialog token is not needed. |

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| 758 | 4.00 | 4.11a.2 | TXOP sharing operation has to work with beacon collision avoidance capability. | Clarify. One of the possible ways to adopt is to reuse maximally MBCA, while RAW protection may work inconsistently to generate too much ovarlapped restricted windows. Or otherwise discard entire "Relay" concept. | Rejected-A Relay decides whether the TXOP sharing is used or not. If the Relay thinks that the TXOP sharing makes a beacon collision, it may not use the TXOP sharing.  |

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| 759 | 4.00 | 4.11b | "Sectorization" is wrong terminology here, for areal or geographical grouping. | Change "secttorization" to "areal zoning", for instance. | Rejected-Sectorization is more general than other terminologies. There is no reason to choose a different terminology. |

| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
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| 768 | 33.00 | 8.3.1.20a | TACK and BAT include 5 least significant octets of TSF timer as partial timestamp while STACK, short beacon and short probe response carry only 4 least significant octets. This seems inconsistent. | unify to 4 least significant octets for partial timestamp. | Rejected -TACK, BAT, STACK, short beacon and short probe response are optimized for their specific use case. It is not necessary to unifying it with single format.  |
| 769 | 34.00 | 8.3.1.20b | TACK and BAT include 5 least significant octets of TSF timer as partial timestamp while STACK, short beacon and short probe response carry only 4 least significant octets. This seems inconsistent. | Equivalent 4 least significant octets for partial timestamp may be preferable. | Rejected -TACK, BAT, STACK, short beacon and short probe response are optimized for their specific use case. It is not necessary to unifying it with single format.  |

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| 772 | 94.00 | 8.4.2.170m | Transmission power density may be altered in case of total signal bandwidth is changed. But Subchannel Selective Transmission element can not discribe. | Power density limit entries according to selected taransmission bandwidth may be needed in channel activity schedule subfield. | Rejected –The power spectrum density is a regulatory requirement. The STA shall satisfy this regulatory requirement. But, it is not a standardization issue. |

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| 792 | 94.00 | 8.4.2.170m | Combinatory usage with Type 0 sectorization has to be defined. | Type 0 sectorization has to be introdueced and appended. | Rejected-This is an invalid comment. The commenter shall say how to do to satisfy the concern. The proposed change does not say how to resolve the comment. |

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| 807 | 5.00 | 4.11f | TDLS/DLS can be a useful 11ah networking form with SST (and combined channel switching) and PU power saving (and combined usage with PRAW protection). | Include the possible set of scenerios interm of TDLS/DLS mechanism appropiate for S1G operation, including SST and PU and P-PS with PRAW/TWT protection. | Rejected-TDLS supports an off-channel mechanism. Off-channel TDLS can provide the same benefit with the SST operation. |