IEEE P802.11
Wireless LANs

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| LB203 MAC Comment Resolution on Sectorization  |
| Date: 2014-09-15 |
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This document provides resolutions for MAC CIDs on Sectorization.

CID 3212, 3381, 3449, 3450, 3451, 3452, 3495, 3496, 3665, 3666, 3886, 4138, 4203, 3043, 4129, 3020, 3464, 3465, 3466, 3467, 3468, 3721

| **CID** | **Commenter** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
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| 3212 | Alfred Asterjadhi | 4.3.12b.6 | 10.49 | For consistency, throughout the draft, use the already defined terminology "STA" (see 4.2.2) to refer to a wireless station. | Replace "Station(s)" and "station(s)" with "STA(s)" throughout the draft except for their occurrences in subclause 3. | Accept |
| 3381 | Bo Sun | 4.3.12b.6 | 10.63 | We have "Beacon" defined, not "beacon". | replace all "beacon" with "Beacon" or "Beacon frame" all over the spec draft. | Accept |
| 3449 | David Hunter | 4.3.12b.6 | 11.18 | "reuse" is the correct spelling in American English. | Replace "re-use" with "reuse" here and on page 296 line 62, | Accept |
| 3450 | David Hunter | 4.3.12b.6 | 11.19 | "Spatially Orthogonal" is not the name of a frame, field, etc., so does not take initial caps. | Replace "Spatially Orthogonal" with "spatially orthogonal" here and on page 297 line 23 and page 300 lines 37 and 39. | Accept |
| 3451 | David Hunter | 4.3.12b.6 | 11.19 | In "frame exchange which can lead to significant increase of the overall network capacity." the subclause following 'which' is a side comment, so needs to be separated from the main senten by a comma. | Replace "exchange which can" with "exchane, which can". | Revised.Agree in principle. Instruct TGah editor editor to replace “exchange which can” with “exchange, which can”.  |
| 3452 | David Hunter | 4.3.12b.6 | 11.23 | "Sectorization is not the name of a frame, field, etc., so does not take the initial cap. | Replace "Sectorization" with "sectorization". | Accept  |

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| 3495 | David Hunter | 9.48.4 | 294.64 | "Group Sectorization" is not the name of a frame, field, etc., so does not include initial caps. | Replace "Group Sectorization" with "group sectorization". | Accept |
| 3496 | David Hunter | 9.48.4 | 300.35 | "indicates ... that it can cancel its NAV and its RID setting if ...": Huh? Otherwise it cannot ever cancel its NAV or RID? How is it able to do that in these circumstances, whe it could not possibly to such previously? | Either change "can" with "might" or replace this description with one that explains why the receiver OBSS STAs would be interested in what the transmitter can possibly to. | Accept |

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| 3665 | kaiying Lv | 9.48.4 | 297.49 | The time point for an OBSS non-AP STA or OBSS AP to reset its NAV/RID is not clear. A minimum sensing time should be defined for an OBSS non-AP STA or OBSS AP to determine that it can't observe the subsequent beamformed transmission. The minimum sensing time could be the length of STF. | Please change the text such as " not observing the subsequent sectorized beam preamble transmission from the AP during the time for transmitting STF after the omni-preamble of the long preamble ". And change the text for SO frame exchange sequence 3 and 4 accordingly. | Revised. Agree in principle. Instruct TGah editor editor to make changes under the heading of CID3665 in the Document 11-14-1254r1. |
| 3666 | kaiying Lv | 9.48.4 | 298.36 | A minimum sensing time should be defined for an OBSS non-AP STA or OBSS AP to determine that it can't observing the subsequent beamformed transmission.The minimum sensing time could be the PIFS interval. | Please change the text such as" not observing the subsequent sectorized beam transmission from the AP for a PIFS interval after the omni-beam transmission from the AP ". And also change the text for SO frame exchange sequence 3 and 4 accordingly. | Revised. Agree in principle. Instruct TGah editor editor to make changes under the heading of CID3665 in the Document 11-14-1254r1. |
| 3886 | Matthew Fischer | 9.48.4 | 296.48 | what is the meaning of "protected duration"? | provide a meaning for the term "protected duration" - see also p297 L40 and several other locations in this subclause | Revised. Agree in principle. Instruct TGah editor editor to make changes under the heading of CID3665 in the Document 11-14-1254r1. |
| 4138 | Tom Kolze | 9.48.4 | 296.48 | delete undefined term | delete the term "protected duration" from this section | Revised. See CID 3886 |
| 4203 | Vinko Erceg | 9.48.4 | 296.48 | what is the meaning of "protected duration"? | provide a meaning for the term "protected duration" - see also p297 L40 and several other locations in this subclause | Revised. See CID 3886 |

**CID 3665**

**Discussion:**

Commenter proposes that the time point for an OBSS AP or OBSS non-AP STA to confirm SO condition and reset its NAV/RID shall be the instant after D-STF in the S1G\_LONG format. It makes sense to define an observation time.



*Reset NAV/RID after confirming SO condition*

**Proposed Changes:**

*Instruct the editor to make the following changes:*

P297.49

* not observing the subsequent sectorized beam transmission from the AP for the duration of one symbol (D-STF) following the omni portion of the S1G\_LONG format.

P299.2

3). an OBSS non-AP STA or OBSS AP infers its spatial orthogonality with the AP by observing the omni-beam RTS frame and ~~omni-preamble~~ the omni portion of the long ~~preamble~~ format for the duration of one symbol (D-STF) following the omni portion of the S1G\_LONG format but not the subsequent sectorized beam transmission and …

p299.47

4). an OBSS non-AP STA or OBSS AP infers its spatial orthogonality with the AP by observing the omni-beam frame and the  ~~omni-preamble~~ omni portion of the long ~~preamble~~ format for the duration of one symbol (D-STF) following the omni portion of the S1G\_LONG format but not the subsequent sectorized beam transmission and …

**CID 3666**

**Discussion:**

Commenter proposes that the time point for an OBSS AP or OBSS non-AP STA to confirm SO condition and reset its NAV/RID shall be PIFS interval after the omni beam transmission from the AP. It makes sense to define an observation time.

**Proposed Changes:**

*Instruct the editor to make the following changes:*

P298.36

* not observing the subsequent sectorized beam transmission from the AP for aSIFSTime + aSlotTime + aRxPHYStartDelay duration.

P299.8

3). An OBSS non-AP STA or OBSS AP infers spatial orthogonality with the AP by observing the transmission of the omni-beam RTS frame

and the omni-beam packet of the short format but not observing the subsequent sectorized beam transmission for aSIFSTime + aSlotTime + aRXPHYSTARTDELAY duration and ...

P299.55

* not observing the subsequent sectorized beam transmission from the AP for aSIFSTime + aSlotTime + aRXPHYSTARTDELAY duration.

**CID 3886 and 4138**

**Discussion**

Commenters ask to provide a meaning for “protected duration” or to delete the term. “Protected duration” means the duration inferred from NAV and CID settings in the received frames. The terms “NAV protection” is frequently used in REVmc. By changing “Protected duration” to “the duration of the NAV/RID protection” should clarify it.

**Proposed Changes:**

*Instruct the editor to make the following changes:*

Replace “for the remainder of the protected duration” with “remaining duration of the NAV/RID protection”.

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| 3043 | Adrian Stephens | 9.48.4 | 298 | This figure and following ones use colour.The use of colour is strongly discouraged by the IEEE-SA, because this will be printed in black and white. The colour overlay will turn into a dark grey that will render the text below unreadable. | Replace all use of colour with black and white. | Revised. Instruct 11ah editor to use the attached figures as in Doc 11-14-1254r1. |
| 4129 | Stephen Mccann | 9.48.4 | 298.7 | Figure 9-37 has some colour features. These should be changed to black and white to ease printing of the amendment. | Edit the figure (and others) so they can be printed in black and white. | Revised. See CID 3043. |

*Supply figures with color removed.*

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| 3020 | Adrian Stephens | 8.4.2.170e | 133.60 | "The Period field has 6 bit length" -- this is already normatively specified in the figure. | Remove any such statements of length throughout the draft that duplicate material defined normatively elsewhere, such as in figures and tables. | Revised. Instruct the editor to make the following changes “ The period field has 6 but length and specifies the …” to “The period field specifies the …” and other bit lengths for the fields in this clause. |
| 3464 | David Hunter | 8.4.2.170e | 133 | "indicates the format of S1G Sector Operation element is for group sectorization": missing some valuable sentence components. | Replace: "indicates the format of S1G Sector Operation element is for group sectorization operation."with: "indicates that the format of the S1G Sector Operation element is structured for the group sectorization operation." | Accept |
| 3465 | David Hunter | 8.4.2.170e | 134 | The specification of the Periodic Training Indicator field begins "The Periodic Training Indicator is set to 1". Clearly this is referring to the field that has that name, so make that clear. | Replace "Indicator is set to 1" with "Indicator field is set to 1". | Accept |
| 3466 | David Hunter | 8.4.2.170e | 134.63 | "indicates the format of S1G Sector Operation element is for TXOP-based sectorization": missing some valuable sentence components. | Replace: "indicates the format of S1G Sector Operation element is for TXOP-based sectorization operation."with: "indicates that the format of the S1G Sector Operation element is structured for the TXOP-based sectorization operation." | Accept |
| 3467 | David Hunter | 8.4.2.170e | 135.8 | "number of beacon Intervals in which": but "Interval" is not the name of a frame, field, etc., so does not use an initial cap. | Replace "Intervals" with "intervals". | Accept |
| 3468 | David Hunter | 8.4.2.170e | 135 | "is set to the remaining beacon intervals before": how can a field be set to any beacon interval, much less several of them? | Replace "is set to the remaining beacon intervals before" with "is set to the number of beacon intervals remaining before". | Accept |
| 3721 | Liwen Chu | 8.4.2.170e | 134.1 | When Omni bit is 1, shouldn't this field be reserved? | As proposed | Revised. Instruct the editor to replace P134.1“The Sector ID is 3 bit length and identifies the ID of the active sector.” To “The Sector ID identifies the ID of the active sector. It is reserved when Omni field is equal to 1.”  |