IEEE P802.11
Wireless LANs

|  |
| --- |
| Proposed resolution to CID 902, 903, 905, 906, 910-912, 915-918 and 920-925 from the first recirculation Sponsor Ballot |
| Date: 2017-06-29 |
| Author(s):  |
| Name | Company | Address | Phone | Email |
| Jiamin Chen | Huawei/HiSilicon |  |  | Jiamin.chen@mail01.huawei.com |
|  |  |  |  |  |

 Abstract

This document proposes resolutions to 17 CIDs on TGaj D6.0: 902, 903, 905, 906, 910-912, 915-918 and 920-925.

**Revision History**

R0: Initial version.

**General comments:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 905 | 9.4.2.232.5 | 61 | 42 | G | In Figure 9-589ac, the Transmit Beamforming Capabilities field has 18 bits. However, usually the total number of bits for a field is an integral multiple of 8-bits. | Extend the total number of bits from "18" to "24" for the Transmit Beamforming Capabilities field by adding 6 reserved bits at the end of the field. |  |

Proposed resolution: **Accepted.**

The changes are as follows:

“

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| B0 | B1 | B2 | B3 | B4 | B5 B7 |
| Receive Staggered Sounding Capable | Transmit Staggered Sounding Capable | Receive NDP Capable | Transmit NDP Capable | Explicit Compressed Steering Capable | Explicit Compressed Beamforming Feedback Capable |
| Bits: 1 | 1 | 1 | 1 | 1 | 3 |
| B8 B9 | B10 B11 | B12 B13 | B14 B15 | B16 B17 | B18 B23 |
| Minimal Grouping | CSI Number of Beamformer Antennas Supported | Compressed Steering Number of Beamformer Antennas Supported | CSI Max Number of Rows Beamformer Supported | CSI Max Number of Rows Beamformer Supported | Reserved |
| Bits: 2 | 2 | 2 | 2 | 2 | 6 |

**Figure 9-589ac-Transmit Beamforming Capabilities field**”

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 906 | 10.32.5 | 98 | 12 | G | "...This feedback response may have one of three formats:" Wrong description here as there is only one feedback response format shown below. | Change to "...This feedback response has the following format:" |  |

Proposed resolution: **Accepted.**

The changes are as follows:

“A CMMG beamformer uses the feedback response that it receives from the CMMG beamformee to calculate a beamforming feedback matrix for transmit beamforming. This feedback response ~~may have one of three formats~~ has the following format:

— Compressed beamforming: The CMMG beamformee sends compressed beamforming feedback matrices to the CMMG beamformer.”

**Editorial comments:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 902 | 25.3.5.2.1 | 197 | 62 | E | In equation (26-10), the length of the sequence should be 32 not 256 and the number of repetitions is 50 not 14. | Propose to correct this equation. |  |

Proposed resolution: **Accepted.**

In Equation 26-10, change the length of the sequence to “32” and change the number of repetitions of the sequence to “50”.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 903 | 25.3.5.2.2 | 198 | 12 | E | In equation (26-11), the length of the sequence should be 32 not 256 and the number of repetitions is17 not 14. | Proposed to correct this equation. |  |

Proposed resolution: **Accepted.**

In Equation 26-11, change the length of the sequence to “32” and change the number of repetitions of the sequence to “17”.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 920 | 24.5.3.2.2 | 174 | 39 | E | "The description for CDMG SC mode scrambler is the same as that contained in See 20.6.3.2.2 (Scrambler)." Remove typo "See". | Change to "The description for CDMG SC mode scrambler is the same as that contained in 20.6.3.2.2 (Scrambler)." |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 923 | 10.32.5 | 99 | 15 | E | "The CMMG frameeamformee decides on any tone grouping to be used in the explicit beamforming feedback..." Typo, the "frameeamformee" should be "beamformee". | Change to "The CMMG beamformee decides on any tone grouping to be used in the explicit beamforming feedback...". |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 924 | 10.36.8.2 | 111 | 49 | E | Typo in "a adjacent BSS" | Change "a adjacent" to "an adjacent BSS" |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 925 | 9.4.2.132 | 40 | 56 | E | Typo in "Ttruncation Type subfield" | Change "Ttruncation Type subfield" to " Truncation Type subfield". |  |

Proposed resolution: **Accepted.**

**Technical comments:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 910 | 25.3.5.2.1 | 197 | 62 | T | In equation 26-10, the number of the repetition of sequence Z(n) should be 50 and the length of Z(n) should be 32. | Change "(n mod 256)" to "n mode 32". Change "14\*256-1" to "50\*256-1". |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 911 | 25.3.5.2.2 | 198 | 12 | T | In equation 26-11, the number of repetitions of sequence Z(n) should be 17 and the length of Z(n) should be 32. | Change "(n mod 256)" to "n mode 32". Change "10\*256-1" to "17\*256-1". |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 912 | 9.4.2.232.2 | 57 | 46 | T | There is no "CMMG antenna" defined in 11aj. CMMG STAs use DMG STAs' antenna model and pattern. Same issues at 57.48 and 58.35 | Change all of "CMMG antennas" to "DMG antennas" throughout the draft. |  |

Proposed resolution: **Accepted.**

Change "CMMG antennas" to "DMG antennas" at 57.46, 57.48 and 58.35.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 915 | 9.6.31.1 | 80 | 11 | T | "CMMG Noncompressed Beamforming" The CMMG Noncompressed Beamforming method has been removed from 11aj. | Remove "CMMG Noncompressed Beamforming" and change the table accordingly |  |

Proposed resolution: **Revised.**

Make change as follows:

“

|  |
| --- |
| **CMMG Action field values** |
| **Value** | **Meaning** | **Time priority** |
| 0 | CMMG CSI | Yes |
| ~~1~~ | ~~CMMG Noncompressed Beamforming~~ | ~~Yes~~ |
| ~~2~~1 | CMMG Compressed Beamforming | Yes |
| ~~3~~2 | Operating Mode Notification frame format | Yes |
| ~~4~~3-255 | Reserved |  |

”

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 916 | 25.14.2 | 258 | 25 | T | "dot11ExplicitNonCompressedBeamformingMatrixOptionImplemented" The CMMG Noncompressed Beamforming method has been removed from 11aj. | Remove "dot11ExplicitNonCompressedBeamformingMatrixOptionImplemented" |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 917 | 25.14.2 | 258 | 30 | T | "dot11ExplicitNoncompressedBeamformingFeedbackOptionImplemented" The CMMG Noncompressed Beamforming method has been removed from 11aj. | Remove ""dot11ExplicitNoncompressedBeamformingFeedbackOptionImplemented"" |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 918 | 25.14.2 | 258 | 38 | T | "dot11NumberNonCompressedBeamformingMatrixSupportAntenna" The CMMG Noncompressed Beamforming method has been removed from 11aj. | Remove "dot11NumberNonCompressedBeamformingMatrixSupportAntenna" |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 921 | 9.6.30.6 | 78 | 55 | T | "The format of the CDMG Allocation Request frame Action field is shown in Figure 9-740c (Channel Splitting Request frame Action field format)." Wrong filed name. It should be "Figure 9-740c (CDMG Allocation Request frame Action field format)" | Change to "The format of the CDMG Allocation Request frame Action field is shown in Figure 9-740c (CDMG Allocation Request frame Action field format)." |  |

Proposed resolution: **Accepted.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Type | Comment | Proposed Change | Remark |
| 922 | 9.6.30.6 | 78 | 65 | T | "Figure 9-740c (Channel Splitting Request frame Action field format)." Wrong filed name. It should be "Figure 9-740c (CDMG Allocation Request frame Action field format)" | Change to "Figure 9-740c (CDMG Allocation Request frame Action field format)" |  |

Proposed resolution: **Accepted.**