IEEE P802.11  
Wireless LANs

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| LB 205 Comment Resolution for 9.42b.2 | | | | |
| Date: 2014-11-13 | | | | |
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Abstract

This document provides resolutions for CID 5229, 5312, 5313, 5314, 5315, 5316.

The changes are in the following clause: 9.42b.2.

Table of Contents

[0 Revision Notes 2](#_Toc350888716)

# 0 Revision Notes

R0: First draft

| **CID** | **Commenter** | **Page.Line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- | --- |
| 5229 | Liwen Chu | 295.55 | 9.42b.2 | The Poll Type definition here contradicts with subclause 8. | Make them consistant. | Revised-  Agree in principle.  TGah editor to make changes shown in 11-14/1555r0 under the heading for CID 5229. |
| 5312 | Alfred Asterjadhi | 296.1 | 9.42b.2 | This paragraph containes two declarative statements. One that applies to an S1G AP's response to different poll frame types from S1G STAs (which is applicable to either non-TIM and TIM STA) and one to the PS-Poll frame with Poll types of different values that are sent by a non-TIM STAs. Suggest to make it clearer to avoid ambiguity. | Split the paragraph in P296L1 into 2 paragraphs (one sentence each).  Insert "sent by an S1G STA" immediately after equal to 0" of the first sentence.  Insert a note immediately after the first sentence: "NOTE-- The S1G STA can be a TIM STA or a non-TIM STA".  Insert "sent by a non-TIM STA" immediately after "not equal to 0" of the second sentence and replace"described in this sub-clause." with "follows:" | Accepted. |
| 5313 | Alfred Asterjadhi | 296.1 | 9.42b.2 | There is no description of sending a PS-Poll of Type 3 in 10.2.2.6. Actually in that subclause there is a statement that only non-TIM STAs that follow the procedures in this subclause may set the poll type to non-zero values. So there is a conflict here. I think the intent here was to indicate that the AP responds to a PS-Poll of Type 3 the same way it would respond to other poll types as described in 10.2.2.6 except when the AP was UL-Sync Capable in which case the additional rules here apply. Proposed change fixes this inconsistency. | Replace this paragraph with:  "- If the Poll Type subfield is equal to 3 then the AP can respond with an NDP Ack frame that includes a wakeup timer as described in 10.2.2.6 (AP operation during the CP)  -- If the STA has requested time slot protection and the AP is UL-Sync capable then the AP shall protect the TXOP duration following the expiration of the wakeup timer as described in 9.42c.1 (Sync frame transmission procedure for uplink traffic). "  -- The UL-Sync capable AP may also respond with a control response frame that includes a Duration field that indicates a wakeup timer (i.e., an NDP (PS-Poll-Ack) frame with Idle Indication field equal to 1) if it receives a trigger or NDP PS-Poll frame from a non-TIM STA that satisfies the criteria above." | Revised-  Agree in principle.  The comment should be for the paragraph starting at P296L20 rather than P296L1.  The description of sending a PS-Poll Type is given in 10.2.2.2, “An S1G STA shall set the Poll Type subfield in the Frame Control field of the transmitted PS-Poll(+BDT) frame to 0 unless it is a non-TIM STA that follows the procedures described in 9.42b.2 (Rescheduling of awake/doze cycle). An S1G TIM STA shall not send a PS-Poll with the Poll Type subfield equal to 1 to an S1G STA.”  The intent here is to indicate that the AP responds to a PS-Poll of Type 3 the same way it would respond to poll type equal to 0 as described in 10.2.2.6 except when the AP was UL-Sync Capable in which case the additional rules here apply.  Replace this paragraph starting at P296L20 with:  "- If the Poll Type subfield is equal to 3 then the AP may respond with an NDP Ack frame that includes a wakeup timer as described in 10.2.2.6 (AP operation during the CP)  -- If the STA has requested time slot protection and the AP is UL-Sync capable then the AP shall protect the TXOP duration following the expiration of the wakeup timer as described in 9.42c.1 (Sync frame transmission procedure for uplink traffic). "  -- The UL-Sync capable AP may also respond with a control response frame that includes a Duration field that indicates a wakeup timer (i.e., an NDP Ack or NDP PS-Poll-Ack frame with Idle Indication field equal to 1) if it receives a trigger or NDP PS-Poll frame from a non-TIM STA that satisfies the criteria above." |
| 5314 | Alfred Asterjadhi | 296.08 | 9.42b.2 | "Upon reception of a PS-Poll with the ..." is already stated by the last sentence of the first paragraph of this page. So it is redundant. Also The field of the TACK frame Next TWT field is actually called Next TWT Info/Suspend Duration field. Proposed change fixes these inconsistencies. | Replace this paragraph with: "- If the Poll Type subfield is equal to 1 then the AP with dot11PollTACKResponseSupport equal to true shall respond with a TACK frame that does not contain the Next TWT Info/Suspend Duration field. An S1G STA shall not send a PS-Poll with the Poll Type subfield equal to 1 to an AP unless the TACK Support as PS-Poll Response field of the S1G Capabilities element received from that AP is equal to 1." | Accepted. |
| 5315 | Alfred Asterjadhi | 296.14 | 9.42b.2 | Similarly in this paragraph "Upon reception of a PS-Poll with the ... is already stated in a previous paragraph so you don't need it twice. In addition a TWT STA in twt procedure is called a TWT requester STA and the capabilities field is called TWT responder Support. Moreover the paragraph in P296L29 describes the other case of the poll type equal to 2 so these two paragraphs should be contiguous. Proposed change fixes these inconsistencies | Replace this paragraph with "- If the Poll Type subfield is equal to 2 and is sent by a TWT requester STA within the negotiated TWT SP then the AP responds with a TACK frame as described in 9.42a (Target wake time (TWT)). A TWT STA shall not send a PS-Poll with the Poll Type subfield equal to 2 to an AP unless the TWT Responder Support field of the S1G Capabilities element received from that AP is equal to 1.  - If the Poll Type subfield is equal to 2 and is either sent by a STA that is not a TWT requester STA or is sent by a TWT requester STA not within the negotiated TWT SP then the AP shall either respond with the DL BU or with an NDP Ack frame. The NDP Ack frame may include a wakeup timer value (i.e., its Idle Indication field is equal to 1) that expires at the next TBTT. The non-TIM STA may re-synchronize to the S1G Beacon frame with the help of the wakeup timer.  -- The AP may also respond with a control response frame that includes a Duration field that indicates a wakeup timer (i.e., an NDP (PS-Poll-Ack) frame with Idle Indication field equal to 1) if it receives a trigger or NDP PS-Poll frame from a non-TIM STA that satisfies the criteria above."  Remove paragraph in P296L29. | Revised-  Agree in principle.  Replace this paragraph with "- If the Poll Type subfield is equal to 2 and is sent by a TWT requester STA within the negotiated TWT SP then the AP responds with a TACK frame as described in 9.42a (Target wake time (TWT)). A TWT requester STA shall not send a PS-Poll with the Poll Type subfield equal to 2 to an AP unless the TWT Responder Support field of the S1G Capabilities element received from that AP is equal to 1.  - If the Poll Type subfield is equal to 2 and is either sent by a STA that is not a TWT requester STA or is sent by a TWT requester STA not within the negotiated TWT SP then the AP shall either respond with the DL BU or with an NDP Ack frame. The NDP Ack frame may include a wakeup timer value (i.e., its Idle Indication field is equal to 1) that expires at the next TBTT.  -- The AP may also respond with a control response frame that includes a Duration field that indicates a wakeup timer (i.e., an NDP Ack or NDP PS-Poll-Ack frame with Idle Indication field equal to 1) if it receives a trigger or NDP PS-Poll frame from a non-TIM STA that satisfies the criteria above.  -- The non-TIM STA may re-synchronize to the S1G Beacon frame with the help of the wakeup timer."  Remove paragraph in P296L29. |
| 5316 | Alfred Asterjadhi | 296.59 | 9.42b.2 | There has been a terminology change in Target Wake Time procedure so the terminologies need to be consistent. Replace "TWT STA" with "TWT requester STA" and TWT AP with TWT responder AP" throughout this paragraph. | As in comment. | Accepted. |

***Proposed changes:***

***CID 5229***

**Instruction to Editor: *Please make the following changes for Table 8-4c (TGah D3.0):***

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| **Poll Type value**  **B15 B14** | **Description** |
| 00 | Request for a buffered frame without a request to reschedule the awake/doze cycle |
| 01 | Request for Change Sequence/Timestamp  ~~Request for a duration to a TBTT or Next TWT to reschedule awake/doze cycle~~ |
| 10 | ~~Request for Change Sequence/Timestamp~~  Request for a duration to a TBTT or Next TWT to reschedule awake/doze cycle |
| 11 | Request for a duration to a service period |

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