### IEEE P802.11 Wireless LANs

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| 11ax D7.0 CR for CID 25085 in SA2 | | | | |
| Date: 2020-10-07 | | | | |
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Abstract

This submission proposes resolutions for the following CIDs:

25085

Revisions:

* Rev 0: Initial version of the document.

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 TGax D7.0 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGax D7.0 Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

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| **CID** | **Commenter** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 25085 | RISON, Mark | 467.37 | 26.14.4 | It is not clear how HE SMPS interacts with HT SMPS | At the end of 26.14.4 HE dynamic SM power save add "NOTE 4—A non-AP HE STA in dynamic SM power save mode that does not support HE dynamic SM power save and that receives an individually addressed Trigger frame addressed to it behaves as described in 11.2.6 (SM power save)." | Revised –  Trigger frame is the corner stone of 11ax spec. It solicits an immediate response with its own specific rules for AP and non-AP STA, and requires separate consideration for implementation.  To accommodate SMPS in the scenario with the Trigger frame, we define HE SMPS to specifically consider MU-RTS, BSRP, and BQRP to enable multiple chains. However, the rule defined for legacy SMPS will react to any individually addressed Trigger variant, which is a different rule and implies that separate implementation consideration needs to be done when this new HE SMPS is not enabled. It is better to put reaction to Trigger frame only under HE SMPS rule and exclude Trigger frame from legacy SMPS rule.  Further, RTS is the default frame used for legacy SMPS, so there should be no issue for implementation on the field.  TGax editor to make the changes shown in 11-20/1588r0 under all headings that include CID 25085. |

**Discussion:** *None.*

**Propose:**

***TGax editor: Change 11.2.6 SM power save as follows (track change on):***

**11.2.6 SM power save**

Change the 3rd and 4th paragraph as follows:

In dynamic SM power save mode, the STA enables its multiple receive chains when it receives the start of a frame exchange sequence addressed to it. Such a frame exchange sequence shall start with a single-spatial stream individually addressed frame that is not a Trigger frame and that (#25085) requires an immediate response and that is addressed to the STA in dynamic SM power save mode. An RTS/CTS sequence may be used for this purpose. The STA shall, subject to its spatial stream capabilities (see 9.4.2.55.4 (Supported MCS Set field) and 9.4.2.157.3 (Supported VHTMCS and NSS Set field)) and operating mode (see 11.41 (Notification of operating mode changes)), be capable of receiving a PPDU that is sent using more than one spatial stream a SIFS after the end of its response frame transmission. The STA switches to the multiple receive chain mode ~~when it receives~~ if it responds to the frame addressed to it and switches back immediately when the frame exchange sequence ends. (#24044)

(..existing texts…)