### IEEE P802.11Wireless LANs

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| 11ba D6.0 Comment Resolution for WUR Duty Cycle |
| Date: 2020-04-20 |
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Abstract

This submission proposes resolutions for comments of TGba Draft D6.0 with the following CIDs:

7080, 7081

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 TGba D6.0 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGba D6.0 Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

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| **CID** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 7080 | 111.53 | 29.7 | The WUR duty cycle operation does not reduce anything by itself. The WRU duty cycle allows the WUR non-AP STA to be aware of the specific times that the WUR AP may transmit to the STA to wake it. This allows the non-AP STA to be in Doze state at all other times, without concern of missing any PPDUs being transmitted for it. The descriptive text should be clearer and more precise as to what the WUR duty cycle operation is. | Replace: "WUR duty cycle operation reduces the required amount of time that the WUR power state of a WUR non-AP STA utilizing WUR mode needs to be in the WUR awake state after the WUR non-AP STA enters the doze state (see 11.2.1 (General) and 29.8 (WUR power management procedure)) and allows a WUR AP to manage WUR activity in the BSS by scheduling a WUR non-AP STA to receive WUR frames at different times."With: "WUR duty cycle identifies the time intervals during which a WUR AP may transmit WRU PPDUs to the WUR non-AP STA (see 11.2.1 (General) and 29.8 (WUR power management procedure)). WUR duty cycle operation allows a WUR AP to manage WUR activity in the BSS by scheduling a WUR non-AP STA to receive WUR frames at different times." | Revised – We note that the description follows the descripton of TWT in 11ax as shown below.*Target wake time (TWT) allows an AP to manage activity in the BSS in order to minimize contentionbetween STAs and to reduce the required amount of time that a STA in PS mode needs to be awake.*However, use “identifies” rather than “reduces” seems to be an editorial suggestion.We also accept the change to break the description to two sentences. TGba editor to make the changes shown in 11-20/0801r0 under all headings that include CID 7080. |
| 7081 | 113.7 | 29.7 | The state of the STA is not dictated by the STA being in WUR mode. The STA may choose to stay in Doze state, even though the WUR AP may be transmitting WUR PPDUs for it. It is the assumption of the WUR AP that the stay will be in WUR awake mode, but it is not a requirement on the STA. | Replace: "If a WUR non-AP STA is in WUR mode, and the WUR non-AP STA is in the doze state (see 11.2.1 (General)), the WUR power state of the WUR non-AP STA shall be in the WUR awake state within the WUR duty cycle service period of a WUR duty cycle period."With: "A WUR AP shall transmit WUR PPDUs addressed to a WUR non-AP STA only during that STA's WUR duty cycle service period. Note: A WUR non-AP STA should be in the WUR awake state during the WUR duty cycle service period so that it can receive these WUR PPDUs." | Rejected –We note that WUR duty cycle operation is a WUR version of TWT developed in the baseline and 11ax. In TWT service period, the STA is required to be in awake state to make the protocol works as shown below.*If the NDP Paging field was not present in the TWT response corresponding to a TWT agreement, the TWT requesting STA shall be in the awake state following each TWT start time associated with each TWT agreement for the duration of the AdjustedMinimumTWTWakeDuration time associated with that TWT agreement even if no PS-Poll frame, NDP PS-Poll frame, or U-APSD trigger frame has been transmitted by the STA*Following the same spirit, in WUR, the WUR non-AP STA shall be in the WUR awake state during WUR duty cycle service period. |

**Discussion:** *None.*

***TGba editor: Change 29.7 WUR duty cycle operation as follows (track change on):***

WUR duty cycle operation identifies(#7080) the required amount of time that the WUR power state of a WUR non-AP STA utilizing WUR mode needs to be in the WUR awake state after the WUR non-AP STA enters the doze state (see 11.2.1 (General) and 29.8 (WUR power management procedure)). WUR duty cycle operation also allows a WUR AP to manage WUR activity in the BSS by scheduling a WUR non-AP STA to receive WUR frames at different times.(#7080)

(…existing texts…)