### IEEE P802.11 Wireless LANs

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| **11ba WUR SA1 comments on draft 6.0** | | | | |
| Date: 22 June 2020 | | | | |
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Abstract

This document contains proposed resolutions for assorted comments on 802.11ba SA ballot 1 (3 CIDs), on 11ba draft 6.0:

1. 7035 7055 7056

r0: initial submission

r1: includes changes per discussion on 11ba CRC call June 22, ready for motion

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| CID 7035  29.9.2  120.2  Adachi, Tomoko | "…, the WUR AP should invoke a timeout before configuring a new WUR ID at the WUR non-AP STA."  Is this timeout value notified to the STAs?  If so, which parameter is it?  If not, then it should be notified, as a STA cannot do what is written in pp.ll 120.18. | As in comment. | Revised -  The use of the term "avoid" may have a negative connotation, which is not intended here.  Implement changes as shown in <this document>, which resolves the comment in the direction suggested by the commenter, and adds a Note to provide more background on the timeout. |

120.18 change as shown

—The WUR non-AP STA may transmit a WUR Wake-up Indication frame with a WUR Wake-up Indication field indicating UNSOLICITED\_WAKEUP as the first frame when it wakes up without receiving a prior WUR Short Wake-up frame or WUR Wake-up frame, so that the WUR AP does not configure a new WUR ID at the WUR non-AP STA.

120.26 add a Note as follows:

NOTE— On a secure link, the WUR ID is changed by the WUR AP after each use in a WUR Short Wake-up frame or after an unsolicited wake-up not indicating UNSOLICITED\_WAKEUP. In case of an unsolicited wake-up not indicating UNSOLICITED\_WAKEUP, the WUR AP invokes an increasing timeout before configuring a new WUR ID, to avoid that repeated false positive WUR Short Wake-up frames cause the battery at the WUR non-AP STA to drain (like in the event that an adversary repeatedly plays out all WUR IDs). After an unsolicited wake-up not indicating UNSOLICITED\_WAKEUP, the WUR non-AP STA might not respond to WUR Short Wake-up frames, and the WUR AP uses regular secure WUR Wake-up frames to wake up the WUR non-AP STA, using the current WUR ID, until the timeout expired and a new WUR ID has been configured.

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| CID 7055  29.3  106.27  Lepp, James | "new WUR channel" is undefined | defined what moving WUR channels is. | Revised -  106.27 add  "(see 29.11 WUR FDMA operation)"  after  "After moving to a new WUR channel" |

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| CID 7056  29.9.3  120.37  Lepp, James | What the note mentions isn't actually described in 29.3.  Can a WUR AP send multiple WUR Wake-up frames in a TXOP? Can it send multiple different types of WUR frames in a TXOP? | Clarify here or in 29.3 the multiple frames in a TXOP transmission. In particular can a WUR beacon and a WUR wake-up frame be sent in the same TXOP as this is the most likely scenario to deliver in a given Service Period | Revised -  The fact that multiple frames can be transmitted during a TXOP is implied by referencing EDCA and TXOP. However, the bullet items in 29.3 should be updated to reflect the option that one or more WUR frames can be included.  The types of frames can be different, which is also implied by referencing the TXOP concept.  Make changes as shown in <this document> at CID 7056, which make changes to reflect this. |

106.7 modify as shown

—The WUR AP may use any AC for sending a WUR frame.

—The WUR AP should initiate a TXOP that contains one or more WUR frames with a frame that sets NAV for the duration of the TXOP (see 10.3.2.15 (NAV distribution)).

—A WUR AP that sent one or more WUR frames using the EDCAF of a particular AC shall not update the CW and the retry counters for that AC as a result of the WUR frame transmission.