802.11ba Draft Specification

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| Proposed Spec Text for clause 32.2.13 |
| Date: 2018-07-09 |
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Abstract

This submission proposes the spec text to be incorporated in IEEE802.11ba D1.0 related to the following clauses 32.2.13 WUR receive procedure

Revision History:

* Rev 0: Initial version of the document

***Editing instructions formatted like this are intended to be copied into the TGba 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 or insert 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.***

**TGba Editor: *Instruction: Add the following content under 32.2.13 WUR receive procedure***

32.2.13 WUR receive procedure

A typical PHY receive procedure is shown for WUR format in Figure 32-xx. A tyical state machine implementation of the receive PHY is given in Figure 32-yy. The PHY is set to operate at the appropriate frequency through station management via the PLME, as specified in 32.3 (WUR PLME). The receive parameters, such as RSSI, may be accessed via the PHY-SAP.

The PHY measures a receive signal strength and searches for a valid WUR Sync sequence, in order to aquire WUR packet, to determine the WUR data rate and the start of the WUR Data. If a valid Sync sequence is detected, WUR PHY issues PHY-RXSTART.indication primitive along with the WUR\_DATARATE indication. If the Sync sequence detection fails, a PHY-RXSTART.indication primitive is not issued, and instead the PHY shall issue the error condition PHY-RXEND.indication primitive. RSSI measurement is done on the WUR Sync. Based on the WUR data rate, the PHY sets the *NSPDB* parameter as given in Table 32-4.

The PHY entity shall begin receiving the WUR Data symbols. If signal loss occurs during reception, prior to completion of the PPDU reception, the error condition PHYRXEND.indication (CarrierLost) shall be reported to the MAC. The received PPDU bits are decoded, assembled into octets and presented to the MAC using a series of PHY-DATA.indication (DATA) primitive exchanges. Any final bits that cannot be assembled into a complete octet are discarded. The WUR PHY shall maintain decoding the data as long as the receive signal strength is maintained the same. If either the receive signal strength falls or PHY-CCARESET.request is received, the WUR PHY terminates and enter to the RX IDLE state. If it terminates due to reduction of the receive signal strength, a PHY-RXEND.indication (NoError) primitive shall be issued. If it terminates due to PHY-CCARESET.request, a PHY-RXEND.indication (MAC Reset) primitive shall be issued.



Figure 32-xx – PHY receive Procedure WUR PPDU



Figure 32-yy –PHY receive state machine