IEEE P802.11  
Wireless LANs

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| Comment Resolutions on WUR Capability element | | | | |
| Date: 2019-11-11 | | | | |
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Abstract

This submission proposes resolutions for multiple comments related to TGba D1.0 with the following CIDs:

* 4 CIDs: 4014, 4052, 4059, 4082

R0: Original text

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 Draft. This introduction is not part of the adopted material.

***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 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.***

# Capability Element

| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- |
| 4014 | 60.16 | 9.4.2.297 | Figure 9-780b the support band field: Each supported frequency band has an assigned capability bit. B0 for 2.4GHz and B1 for 5 GHz. A "Note" should be added below the figure stating "At least one frequency band should be supported" A zero in both B0 and B1 could potentially cause interoperability problems. | Add NOTE: At least one frequency band (2.4 GHz or 5 GHz) should be supported. | Rejected.  If the two bits are zero, they cannot be transmitted because it means the AP doesn’t support any band for WUR.  Adding note doesn’t seem necessary. |
| 4052 | 113.42 | 29.8.2 | WUR mode setup and activation frame exchanges are not well defined and hence it is unclear as to when WUR mode begins and how it is terminated. There also is a lack of clarity as to when a WUR mode is configured and when it is activated. | Replace: "To use the WUR power management service, a WUR non-AP STA exchanges WUR Mode elements in WUR Mode Setup frames or (Re)Association Request/Response frames with a WUR AP. The settings for WUR mode setup are defined in Table 29-1 (Settings for WUR mode setup frame exchange - Request and Response) and Table 29-2 (WUR Mode Setup/Teardown frame transmission)."  With: "To use the WUR power management service, a WUR non-AP STA instigates a successful frame exchanges with its associated WUR AP. Table 29-1 (Settings for WUR mode setup frame exchange - Request and Response) defines the frames used in the WUR mode setup frame exchange and the resultant status after the exchange. These frames contain the WUR Mode elements necessary to define the WUR power management service. in WUR Mode Setup frames or (Re)Association Request/Response frames with a WUR AP. The settings for WUR mode setup are defined in Table 29-1 (Settings for WUR mode setup frame exchange - Request and Response) and Table 29-2 (WUR Mode Setup/Teardown frame transmission) define the frames used in the WUR Setup and Teardown frame exchanges."  Note: What a successful frame exchange is must also be defined, e.g.: A successful WUR mode set up frame exchange requires a non-AP STA to send a request frame in Table 2.9-1, that the AP STA responses to with a response frame in Table 2.9.1 with the WUR Mode Response Status field set to Accept, followed by the non-AP STA sending an ACK frame. The successful completion of this frame exchange will result in the WUR AP supporting the non-AP STA being in the defined WUR mode. | Revised.  The proposed change is accepted except one word ‘instigates’. Propose to change ‘instigates’ to ‘initiates’.  TGba editor to make the changes shown in 11-19/1945r1 |
| 4059 | 114.19 | 28.8.2 | The use of "Enter" in Enter WUR Mode Request and Enter WUR mode Suspend Request is very confusing. What is being entered into? These frames are used to configure the WUR mode and suspend the configured WUR mode. They are not used to enter into WUR mode as that is accomplished via a PPDU with the Power Management subfield set to 1, that is ACKed (well at least that is what I understand). Therefore, the use of "Enter" is confusing as the STA is not entering the WUR mode, only configuring it.  This is a repeat comment of CID 3151, it is repeated as the commenter does not believe the resolution to be vaild: REJECTED (Editor: 2019-09-18 03:10:50Z) - The comment fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter cannot be determined. | "Change ""Enter WUR Mode Request"" to be ""WUR Mode Configuration Request""  Change ""Enter WUR Mode Suspend Request"" to be ""WUR Mode Suspend Request""  Change ""Enter WUR Mode Response"" to be ""WUR Mode Configuration Response""  Change (Enter WUR Mode Suspend Response"" to be ""WUR Mode Suspend Response""  Also correct related text." | Rejected.  These frames are used to enter mode. If the STA receives “Enter WUR Mode Response”, it enters to WUR Mode.  It is Power Management mode not WUR mode which is changed due to the PPDU with the Power Management subfield set to 1.  Signaling for PM mode and WUR mode operates independently.  So, it is appropriate to maintain the current names. |
| 4082 | 61.6 | 9.4.2.297 | The distinction between FL and VL only seems to apply to WUR Wake-up frames. Typically, support is for an operation and not just a frame type. | At a minimum, change the name of the field to VL WUR Wake-up Frame Support. Better yet, identify functionality that applies to the use of this frame and give it a name. For example, you might have basic wake-up operation (makes use of FL WUR Wake-up frame) and enhanced wake-up operation (makes use of FL and VL WUR Wake-up frames). Separate the behavior into two subclauses in Clause 29.9 | Rejected.  WUR Vendor Specific frame format can have Frame Body field with variable length.  So, it is appropriate to maintain the current name “VL WUR Frame Support” |

29.8 WUR power management procedure

**29.8.2 WUR mode setup**

**TGba Editor: Modify of 1st paragraph as follows [4052]:**

To use the WUR power management service, a WUR non-AP STA initiates a successful frame exchanges with its associated WUR AP. Table 29-1 (Settings for WUR mode setup frame exchange - Request and Response) defines the frames used in the WUR mode setup frame exchange and the resultant status after the exchange. These frames contain the WUR Mode elements necessary to define the WUR power management service in WUR Mode Setup frames or (Re)Association Request/Response frames with a WUR AP. Table 29-1 (Settings for WUR mode setup frame exchange - Request and Response) and Table 29-2 (WUR Mode Setup/Teardown frame transmission) define the frames used in the WUR Setup and Teardown frame exchanges.