802.11ba Draft Specification

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| --- |
| Spec Text for Group ID Negotiation |
| Date: 2018-05-07 |
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Abstract

This submission contains spec text to be incorporated in P802.11ba D0.3 related to the following SFD motions:

##  WUR Negotiation

R.4.2.G: [Assigned D0.3] The value range of Group ID is a subset of consecutive values obtained from the identifier’s space.

[Motion, March 2018, see [8] [39]]

R.4.2.H: [Assigned D0.3] A STA that declares support of Group IDs is required to store at least one group ID and shall declare the Group ID bitmap size that it is capable of storing.

[Motion 2, March 2018, see [8] [40]]

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:***

***9.4.2.262 WUR Mode element***

***change Figure 9-589a as the following:***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Element ID | Length | Element ID Extension | Action Type | WUR Mode Response Status | WUR Parameter Control | WUR Parameters |
| Octets: | 1 | 1 | 1 | 1 | TBD | 1 |  TBD |
|  | * WUR Mode element format
 |

***add the following after Table 9-262b:***

The WUR Parameter Control field indicates the configuration of the following WUR Parameters field. The format of the WUR Parameter Control field is shown in Figure 9-xxxx.

|  |  |  |
| --- | --- | --- |
|  | Group ID List Present | Reserved |
| Bits: | 1 | 7 |

**Figure 9-xxxx: WUR Parameter Control field format**

The Group ID List Present subfield is set to 1 if the Group ID List subfield is present in the following WUR Parameters field; set to 0 otherwise.

***change Table 9-262c as the following:***

|  |
| --- |
| * Subfields of WUR Parameters field from WUR AP
 |
| **Subfield** | **Definition** | **Encoding** |
| WUR ID | A WUR identifier that uniquely identifies the WUR STA within the BSS of the AP  | An WUR identifier provided by the AP. |
| Duty cycle information | TBD | TBD |
| Group ID List | Indicates one or more Group IDs assigned to the STA | As shown in Figure 9-yyyy (Group ID List subfield format). |

***add the following after Table 9-262c:***

The format of the Group ID List subfield is shown in Figure 9-yyyy:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Group ID Bitmap Size | Starting Group ID | Group ID Bitmap |
| Bits: | 4 | 12 | variable |

**Figure 9-yyyy: Group ID List subfield format**

The Group ID Bitmap Size field is set to 0 to indicate that the Group ID Bitmap field is not present, set to 1 to indicate that the Group ID Bitmap field contains a 16-bit bitmap, set to 2 to indicate that the Group ID Bitmap field contains a 32-bit bitmap, and set to 3 to indicate that the Group ID Bitmap field contains a 64-bit bitmap. The values of 4 to 15 are reserved.

The Starting Group ID field contains the value of the first group ID of the Group ID Bitmap field if the Group ID Bitmap Size field is set to a non-zero value; contains the value of a single group ID assigned to the WUR STA otherwise.

The Group ID Bitmap field if present, together with the Starting Group ID field, indicates the group IDs assigned by the WUR AP to the WUR STA. When bit position n of the Group ID Bitmap field is equal to 1 and (SGID + n) is not larger than the EGID where SGID is the value of the Starting Group ID field and the EGID is the value of the Ending Group ID subfield of the most recent WUR Operation element received from the WUR AP, the group ID with a value equal to (SGID + n) is assigned to the WUR STA. When bit position n of the Group ID Bitmap field is equal to 0 and (SGID + n) is not larger than the EGID, the group ID with a value equal to (SGID + n) is not assigned to the WUR STA. When bit position n of the Group ID Bitmap field is equal to 1 and (SGID + n) is larger than the EGID, the group ID with a value equal to (SGID + n − 64) is assigned to the WUR STA. When bit position n of the Group ID Bitmap field is equal to 0 and (SGID + n) is larger than the EGID, the group ID with a value equal to (SGID + n − 64) is not assigned to the WUR STA. Each of the Starting Group ID field and the Ending Group ID subfield values is treated as a 12-bit unsigned integer.

9.4.2.264 WUR Operation element

***change F 9-589c as the following:***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Element ID** | **Length** | **Element ID Extension** | **Minimum Wake-up Duration** | **Duty Cycle Period Units** | **WUR Operation class** | **WUR Channel** | **WUR Beacon Period** | **Group ID Configuration** |
| Octets: | 1 | 1 | 1 | TBD | TBD | 1 | 1 | TBD | 2 |
| * WUR Operation element format
 |  |

***Add the following at the end of this subclause:***

The Group ID Configuration field indicates the configuration of the group ID space. The format of the Group ID Configuration field is shown in Figure 9-zzzz.

|  |  |  |
| --- | --- | --- |
|  | Ending Group ID  | Reserved |
| Bits: | 12 | 4 |

**Figure 9-zzzz: Group ID Configuration field format**

The Ending Group ID subfield contains the largest group ID that can be provided by the WUR AP transmitting the WUR Operation element.