IEEE P802.11
Wireless LANs

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| CR 27.2 SRG Updates |
| Date: 2017-04-26 |
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Abstract

In the January 2017 meeting, 11-16-0947r21 was adopted to resolve many OBSS PD spatial reuse related comments.

There were a few errors in that document which need to be resolved.

This submission proposes to reopen and reresolve CIDs:

8111

8111 is the CID that was used as the basis for the adoption of 11-16-0947r21

The proposed changes on this document are based on TGax Draft 1.2.

**REVISION NOTES:**

**R0**:

initial

**R1**:

Added the case of finding and using BSSID information from within the MAC portion of the frame – this language should supersede the language of 267r5

**R2**:

Change a “]” to “[“

**END OF REVISION NOTES**

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

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

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

**CIDs**

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| 8111 | Matthew Fischer | 190.17 | 27.9.2 | The utility of OBSS PD seems most beneficial to scenarios where the intra-BSS SINRs are generally higher than inter-BSS SINRs. Identifying when a STA is operating within such a scenario would greatly improve the performance of OBSS PD. Add a mechanism to allow a STA to identify when OBSS PD would provide benefit, such as providing a list of OBSSs that meet the condition of inter-BSS SINR << intra-BSS SINR | Define the concept of a spatial reuse group that identifies OBSSs that meet the condition inter-BSS SINR << intra-BSS SINR and provide a means for disseminating this information. Expect a submission | REVISED (EDITOR: 2017-01-20 04:52:04Z) - Move to accept to resolve CID 8111 as revise, make the changes to D1.0 as shown in doc 11-16/0947r21 and make changes to D1.2 as shown in 11-17/0640r2 |
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**Discussion:**

The updates in this document are effectively changes to the previously adopted 11-16-0947r21 which, in addition to a few other changes, added the concept of SRG OBSS SR. The updates are summarized as follows:

1. 27.2.2. – the changes here provide more detailed instructions on identifying an SRG PPDU – there is no real technical change here, but only a clarification of the language which is effected by rewriting the language to create a more formal and precise description

**Proposed Changes to Draft Text of TGax D1.2:**

***TGax editor: modify subclause 27.2.2 SRG and non-SRG frame determination (#8111)as follows:***

**27.2.2 SRG and non-SRG frame determination(#8111)**

An HE STA that has received a Spatial Reuse Parameter Set element from its associated AP with a value of 1 in the SRG Information Present subfield shall use information provided in the Spatial Reuse Parameter Set element to identify BSSs that are members of the STA's SRG to determine whether or not a received inter- BSS PPDU is an SRG PPDU.

A received HE PPDU that is an inter-BSS PPDU is an SRG PPDU if the bit in the SRG BSS Color Bitmap field which corresponds to the numerical value of the BSS\_COLOR parameter of the RXVECTOR is set to 1. A received VHT PPDU that is an inter-BSS PPDU is an SRG PPDU if the GROUP\_ID parameter of the RXVECTOR has a value of 0 and the bit in the SRG Partial BSSID Bitmap field which corresponds to the numerical value of PARTIAL\_AID[0:5] of the RXVECTOR is set to 1 A received PPDU that is an inter-BSS PPDU is an SRG PPDU if BSSID information from an MPDU of the PPDU is correctly received and the bit in the SRG Partial BSSID Bitmap field which corresponds to the numerical value of BSSID[39:44] is set to 1. Otherwise, the PPDU is not determined to be an SRG PPDU. An HE STA that has not received a Spatial Reuse Parameter Set element from its associated AP with a value of 1 in the SRG Information Present subfield shall not classify any received PPDUs as an SRG PPDU.

**End of proposed changes.**