IEEE P802.11  
Wireless LANs

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| TX LO leakage limits in discontinuous Tx - resolving CID 1007 | | | | |
| Date: 2013-01-09 | | | | |
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Abstract

In this submission we propose a resolution to CID 1007 of CC4.

The CID points to clause 23.3.18.4.2 page 247 line 64

The baseline of this text is P802.11af\_D2.2

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

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

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

The editing instructions are shown in ***bold italic***. Four editing instructions are used: ***change, delete, insert, and replace***. Change is used to make corrections in existing text or tables. The editing instruction specifies the location of the change and describes what is being changed by using ~~strikethrough~~ (to remove old material) and underscore (to add new material). ***Delete*** removes existing material. ***Insert*** adds new material without disturbing the existing material. Insertions may require renumbering. If so, renumbering instructions are given in the editing instruction. ***Replace*** is used to make changes in figures or equations by removing the existing figure or equation and replacing it with a new one. Editorial notes will not be carried over into future editions because the changes will be incorporated into the base standard.

This amendment’s baseline is IEEE Std 802.11™–2012, as amended by

* Amendment 1 802.11ae-2012
* Amendment 2 802.11aa-2012
* Amendment 3 P802.11ad Draft 9.0
* Amendment 4 P802.11ac Draft 4.0

# Comment and discussion

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 1007 | 247 | 23.3.18.4.2 | Need to include definitions for TVHT\_MODE\_2N and TVHT\_MODE\_4N where the RF LO does not fall outside both BCUs (at the moment, undefined) | Inspired by the solution to the same problem in 802.1ac: Change "For transmissions using TVHT\_MODE\_1, TVHT\_MODE\_2C and TVHT\_MODE\_4C, TX LO leakage shall meet" to "For transmissions using all formats except non-contiguous where the RF LO falls outside both BCUs, TX LO leakage shall meet" |

## Discussion

The existing draft D2.2 has two different specifications in clause 23.3.18.4.2, one for “transmissions using TVHT\_MODE\_1, TVHT\_MODE\_2C and TVHT\_MODE\_4C” and one for ”transmissions using TVHT\_MODE\_2N and TVHT\_MODE\_4N, where the RF LO falls outside both BCUs.” Logically, there is a third choice: non-contiguous transmissions, TVHT\_MODE\_2N or TVHT\_MODE\_4N, where the LO does not fall outside both BCUs. Since we carefully list the modulation modes covered by the first specification, we are leaving out those systems using the third choice, although the amendment we’re using as a model (802.11ac D4.0) does not use a list here, but rather a negation of the second condition.

The corresponding two specifications in 802.11ac D4.0 are: “all formats and bandwidths except non-contiguous 80+80 MHz where the RF LO falls outside both frequency segments” and “80+80 MHz transmission where the RF LO falls outside both frequency segments.”

# Proposed resolution

**Accept**.

***Instruct the TGaf editor to change the text in clause 23.3.18.4.2 as follows:***

For transmissions using ~~TVHT\_MODE\_1, TVHT\_MODE\_2C and TVHT\_MODE\_4C~~ all formats except non-contiguous where the RF LO falls outside both BCUs, TX LO leakage shall meet the following requirements

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