IEEE P802.11
Wireless LANs

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| Comment Resolution LB249 - CID 3772 |
| Date: 2020-08-06 |
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Abstract

This submission proposes a resolution to CID 3772

Revisions:

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 TGaz Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

**The text preceded by “Discussion” is not part of the adopted changes.**

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| **CID** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| **3772** | 158.41 | 11.22.6.4.6.2 | This equation is fairly incomprehensible. OK, so k goes over each member of the MaxOffset set. But it's not clear how i or j relate to k, nor is it clear which j is used to pick a particular member of the MinOffset set. Can I just pick one j, or does the equation need to hold for all possible js? | As it says in the comment | **Revised**TGaz editor, make the changes as depicted below in document 11-20/XXXX |
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11.21.6.4.5.2 TB Ranging Measurement Exchange with Secure LTF

TGaz Editor: Modify the following paragraphs starting on page 160, line 1 as follows:

The RSTA that sends the Ranging NDP Announcement frame shall set the Offset subfield in the STA Info field corresponding to the ISTA in the Ranging NDP Announcement frame to values meeting the Equations (11-aa) and (11-ab):

$$Offset\_{i} <\sum\_{k\in MaxOffset}^{}N\\_LTF\_{k}×Rep\_{k}$$

Offset i < ∑ N\_LTFk x Repk

 k € MaxOffset
(11-aa)

$$Offset\_{i}\geq Offset\_{j}+N\\_LTF\_{j}×Rep\_{j},∀j\in MinOffset$$

Offset i ≥ Offset j + N\_LTF j x Rep j for all j € MinOffset
(11-ab)

where

Offset*n* : represents the Offset subfield value of *nth* STA Info field in the Ranging NDP Announcement frame.

N\_LTF*n* : represents the number of HE-LTF symbols required for the R2I N\_STS subfield value plus 1 space-time streams of *nth* STA Info field in the Ranging NDP Announcement frame.

Rep*n* : represents the R2I Rep subfield value plus 1 of *nth* STA Info field in the Ranging NDP Announcement frame.

MinOffset : represents the set of indexes of the STA Info fields of which the Offset subfield values are less than the Offset subfield value of *ith* STA Info field in the Ranging NDP Announcement frame.

MaxOffset : represents the set of indexes of all STA Info fields excluding *ith* STA Info field.

**Discussion and Examples**:

Let’s say there are three STAs, with 2 LTF each (N\_LTF=2, Rep=1)

1. For i=1 (first STA), Offset=0, sum off all other LTF is 4 (MaxOffset = {2,3}), and there are no other STA with lower Offset (MinOffset = {})
2. For i=2 (second STA), Offset=2, sum off all other LTF is 4 (MaxOffset = {1,3}), and STA with lower Offset are (MinOffset = {1}), so 2>= 0+2 (j=1)
3. For i=3 (third STA), Offset=4, sum off all other LTF is 4 (MaxOffset = {1,2}), and STA with lower Offset are (MinOffset = {1,2}), so 4>= 0+2 (j=1), 4>=2+2 (j=2)