IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Subclause 22.3.6 comment resolution for LB188 | | | | |
| Date: 2012-07-12 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Yusuke Asai | NTT | 921A, 1-1, Hikarinooka, Yokosuka, Kanagawa 2390847 | +81 46 859 3494 | asai.yusuke@lab.ntt.co.jp |
|  |  |  |  |  |

Abstract

This submission contains proposed comment resolutions to comments received during WG letter ballot 188.

The comments included are non-editorial comments on 22.3.6 Timing-related parameters.

There are 4 such comments: 6342, 6589, 6344 and 6646.

R1: Revise the resolutions to CIDs 6589, 6344 and 6646. Add the result of straw poll for the resolution to CID 6344.

R0: Initial Version

| **CID** | **By** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| --- | --- | --- | --- | --- | --- |
| 6342 | Yusuke Asai | 210.26 | 22.3.6 | The largest number of user index u is not always 3 but N\_u - 1. Ditto the "Explanation" cells for N\_CBPSS (in P210L34), N\_CBPSSI(in P210L47), N\_DBPS(in P210L54), N\_BPSCS(in P210L59) and R(in P211L49) in Table 22-6. | Replace "u = 0, 1, 2, 3" with "u = 0, .., N\_u - 1". |

**Discussions:**

As the table 22-6 defined, *Nu* represents the number of users in the transmission, which is equal to the TXVECTOR parameter NUM\_USERS; therefore, the range of user index u should also been defined by using *Nu*.

**Proposed resolution to CID 6342:**

Accepted. 11-12/0812r1 provides proposed text change to revise the range of user index.

**Proposed text change:**

At 210.26: Revise the range of user index for *NCBPS,u* as follows.

*u*= 0, …, *Nu*-1.

At 210.34: Revise the range of user index for *NCBPSSI,u* as follows.

*u* = 0, …, *Nu*-1

At 210.54: Revise the range of user index for *NDBPS,u* as follows.

*u* = 0, …, *Nu*-1

At 210.59: Revise the range of user index for *NBPSCS,u* as follows.

*u* = 0, …, *Nu*-1

At 211.49: Revise the range of user index for *Ru* as follows.

*u* = 0, …, *Nu*-1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 6589 | Sigurd Schelstraete | 210.32 | 22.3.6 | Clarify value of N\_CBPSS for VHT-SIG-B | Change  "For the VHT-SIG-B field, N\_CBPSS=N\_SD for all users"  to :  "For the VHT-SIG-B field, N\_CBPSS=N\_SD for all streams of all users" |

**Discussions:**

As P211L27 defines and Figure 22-7 shows, *NSS* (the number of spatial streams) for each user’s VHT-SIG-B is 1. This means that the number of “*NCBPSS*”s is also one per user in VHT-SIG-B; however, the text is not clear as well as the definition of NES for the VHT-SIG-B field, which has been pointed out by CID 6646.

**Proposed resolution to CID 6589:**

Revised. It should be clarified that the number of *NCBPSS*s is one per user in VHT-SIG-B. 11-12/0812r1 provides the proposed text.

**Proposed text change:**

At 211.27: Change the sentence as follows:

For the VHT-SIG-B field, *NSS* = 1 for each user.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 6344 | Yusuke Asai | 211.06 | 22.3.6 | TGac D3.0 globally uses the small character of u in italic form as a variable for user index, however, only the "u" in N\_u does not mean the user index but the abbreviation of "user", which may make some confusions. | Change the symbol "N\_u" to "N\_{USER}". |

**Discussions:**

In TGac D3.0, there are many variables including “*u*”, which are liseted as follows:

* *u*: The user index widely used in Clause 22.
* *NCBPS*,*u*: The number of coded bits per symbol for user *u*.
* *NCBPSS*,*u*: The number of coded bits per symbol per spatial stream for user *u*.
* *NCBPSSI*,*u*: The number of coded bits per symbol per BCC interleaver block for user *u*.
* *NDBPS*,*u*: The number of data bits per symbol for user *u*.
* *NBPSCS*,*u*: The number of coded bits per subcarrier per spatial stream for user *u*.
* *Nu*: The number of users in the transmission.
* *NSTS,u*: The number of space-time streams for user *u*.
* *NSTS,u*: The number of space-time streams for user *u*.
* *NES,u*: The number of BCC encoders for user *u*.
* *Ru*: Coding rate for user *u*.

All valiables except *Nu* use the subscript of “*u*” as an index for user number and has the range of 0 to 3. On the other hands, “*u*” in *Nu* is just an initial character of the word “user” and it is nota variable. To keep consistency on notation, “*u*” in *Nu* should be replaced with another phrase.

Straw Poll in TGac F2F meeting (12Jul): Which one do you prefer?

* *Nu* (remains as it is): 0/7
* *NU* (change *u* to *U*): 3/1
* *Nuser* (change *u* to *user*): 15/0
* Others: 0/0

**Proposed resolution to CID 6344:**

Accepted. To keep consistence on notation, “*u*” in *Nu* should be replaced with “*user*”. 11-12/0812r1 provides proposed text change to revise the variable *Nu*.

**Proposed text change:**

Replace all “*Nu*”s with ”*Nuser*”s throughout the Draft D3.0.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 6646 | Vinko Erceg | 211.37 | 22.3.6 | "For the VHT-SIG-B field, NES = 1 for all users." This is not clear since it may mean that one encoder is for all users or may mean that each user has one encoder. Please clarify. | As in comment |

**Discussions:**

As Figure 22-7 shows, “*NES* = 1 for all users” means that one encoder per user is required to construct VHT-SIG-B field because VHT-SIG-B field is defined as per-user basis. However, this sentence is not clear whether “one encoder for all user” or “one encoder per user.”

**Proposed resolution to CID 6646:**

Revised. To clarify one encoder per user is needed to construct VHT-SIG-B field, the text should be revised. 11-12/0812r1 provides proposed text change.

**Proposed text change:**

At 211.37: Change the sentence as follows:

For the VHT-SIG-B field, *NES* = 1for each user.