IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Suggested resolution to CID 6121, 6122, and 6123** | | | | |
| Date: 2020-03-31 | | | | |
| Author(s): | | | | |
| Name | Company | Address | Phone | email |
| Kazuyuki Sakoda | Sony |  |  | Kazuyuki.Sakoda (at) sony (dot) com |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This submission brings discussion and/or suggested resolutions to CIDs 6121, 6122, and 6123.

The CIDs are in reference to Comment database on Draft IEEE 802.11ay/D5.0.

R0: Initial discussion presented at conference call on February 12, 2020

R1: Revised suggested resolutions per discussion

R2: Revised suggested resolution to CID6123, changing some of the features to mandatory

R3: Revised suggested resolution to CID6123, changing some more features to mandatory (thanks to Solomon’s investigation)

**Comment:**

|  |  |  |  |
| --- | --- | --- | --- |
| **CID** | **PP.LL** | **Comment** | **Proposed Change** |
| 6123 | 25.19 | There is a list of new PHY features for EDMG STAs, but not for MAC. We should have a list of new MAC features for EDMG STAs. | The commenter is willing to provide a suggested text. |

**Discussion:**

If we look at 4.3.30 (EDMG STA), there is no MAC feature list for EDMG STA. Also, features related to beamforming is missing. It would be better to add beamforming related feature list and MAC related feature list.

**Proposed resolution: Revise**

*Add the following new bullets after the 4th bullet “Mandatory support of non-EDMG duplicate format transmission of non-EDMG portion of EDMG format preamble” in 4.3.30 (EDMG STA).*

 Mandatory support of the BRP transmit sector sweep

 Mandatory support of the Short SSW packets

 Mandatory support of the EDMG power save enhancements

 Mandatory support of the scheduled reverse direction protocols

*Add the following new bullets to the end of the bullets in 4.3.30 (EDMG STA).*

 Optional support of the beamforming for asymmetric links

 Optional support of the first path beamforming

 Optional support of the EDMG Multi-TID Aggregation

**Comment:**

|  |  |  |  |
| --- | --- | --- | --- |
| **CID** | **PP.LL** | **Comment** | **Proposed Change** |
| 6122 | 25.9 | "TDD channel access" has been introduced to 802.11ay specification. TDD is not the appropriate term to describe single directional transmission mode. The naming TDD in this context should be reconsidered. | Replace TDD with something more appropriate. |

**Discussion:**

TDD (Time Division Duplex) does not reflect the mode of operation necessarily. It will cause confusion that could last for a long time. It will be extremely difficult to rename it once 802.11ay is incorporated into a revision of 802.11 baseline standard. Can we come up with a better terminology now?

Candidates are:

* Single directional transmission mode (SDT)
* Slot base access mode (SBA)
* Long distance transmission mode (LDT)

**Proposed resolution:**

**Reject**:

The Comment Resolution Committee has discussed and concluded to continue using the term “TDD channel access” (see the meeting minutes at <https://mentor.ieee.org/802.11/dcn/20/11-20-0243-02-00ay-task-group-ay-january-february-and-march-2020-teleconference-minutes.docx>)

**Comment:**

|  |  |  |  |
| --- | --- | --- | --- |
| **CID** | **PP.LL** | **Comment** | **Proposed Change** |
| 6121 | 37.21 | The current draft standard lacks a tool for the distribution network bootstrapping, particularly when applications are expecting low latency communication. DMG discovery assistance should enable neighbor DMG/EDMG STA discovery beyond an AP to ease implementation of the distribution network leveraging 802.11ay. In particular, the standard should provide a tool for the AP that serves discovery assistance to propagate discovery assistance request to neighbor STAs. | Add a container that allows AP to transmit discovery asssitance request to STAs in the BSS. Also, allow AP to propagate the discovery assistance request. |

**Discussion:**

Some changes are required to implement proposed scheme. We may not want to change a lot of things at this point in time.

**Proposed resolution:**

**Reject**

The Comment Resolution Committee has discussed and concluded not to implement the proposed scheme as required by the commenter because the task group believes that it may have a significant change to the contents of the existing draft amendment. (see the meeting minutes at <https://mentor.ieee.org/802.11/dcn/20/11-20-0243-02-00ay-task-group-ay-january-february-and-march-2020-teleconference-minutes.docx>).

**Reference:**

[1] Draft P802.11ay\_D5.0.

[2] 11-20/112r2 “Comments on TGay/D5.0”