IEEE P802.22
Wireless RANs

|  |
| --- |
| TGb LB2 Comment Resolution (CID #5, #8, #9, #10, #11, #12, #16, #17, #18) |
| Date: 2014-06-26 |
| Author(s): |
| Name | Company | Address | Phone | email |
| cwpyo | NICT |  |  | cwpyo@nict.go.jp |
|  |  |  |  |  |

Abstract

Comment resolution for CID #5, #8, #9, #10, #11, #12, #16, #17, #18

**Notice:** This document has been prepared to assist IEEE 802.22. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.

**Release:** The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE’s name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE’s sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.22.

**Patent Policy and Procedures:** The contributor is familiar with the IEEE 802 Patent Policy and Procedures

<[**http://standards.ieee.org/guides/bylaws/sb-bylaws.pdf**](http://standards.ieee.org/guides/bylaws/sb-bylaws.pdf)>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair Apurva Mody <apurva.mody@ieee.org> as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.22 Working Group. **If you have questions, contact the IEEE Patent Committee Administrator at <****patcom@ieee.org****>**.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Clause** | **Subclause** | **Type** | **Comment** | **Suggested Remedy** |
| 5 | 7 | 7.4b.3.1 | T | Access Zone is used in both PHY mode 1 and PHY mode 2, but the description is not complete for PHY mode . | Add the following description at the begining "At the beginning of every superframe in AZ on PHY mode 1, the A-BS shall transmit the superframe preamble and the SCH on the operating channel using the modulation/coding specified in 9.4.1.2 and Table 202 respectively.." |

1. Proposed Resolution

Accept the comment.

“At the beginning of every frame in AZ, the A-BS shall transmit the frame preamble and the FCH on the operating channel using the modulation/coding specified in 9a.2 and Table HU1 respectively.”

The above paragraph for AZ explanation is only for PHY Mode 2. AZ is used in both PHY mode 1 and PHY mode 2.Then the above paragraph is modified as follows.

“At the beginning of every superframe in AZ being operated on PHY mode 1, the A-BS shall transmit the superframe preamble and the SCH on the operating channel using the modulation/coding specified in 9.4.1.2 and Table 202, respectively.

At the beginning of every frame in AZ being operated on PHY mode 2, the A-BS shall transmit the frame preamble and the FCH on the operating channel using the modulation/coding specified in 9a.2 and Table HU1 respectively.”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Clause** | **Subclause** | **Type** | **Comment** | **Suggested Remedy** |
| 8 | 7 | 7.7.7.3.6.12 | T | Permananent Station ID is shown in 7.7.7.3.4.12 | Remove 7.7.7.3.6.12 |
| 9 | 7 | 7.7.7.3.6.12 | T | CPE operational capability is shown in 7.7.7.3.4.13 | Remove 7.7.7.3.6.13 |
| 10 | 7 | 7.7.25 | T | Message Type = xx in Table Y1 is not defined | Remove it |
| 11 | 7 | 7.7.25 | T/E | Unnecessary Information elements (Ies) in Table Y1 | Remove IE |
| 12 | 7 |  | T/E | "Wait for Local Cell Update RSP " in figure AX1 is unncessary | Change to "Done" |

1. Proposed Resolution

Accept Comments

* CID #8 and #9

Permananent Station ID and (7.7.7.3.4.12) CPE operation capability (7.7.7.3.4.13) are duplicated in 7.7.7.3.6.12 and 7.7.7.3.4.13, respectively. Remove 7.7.7.3.6.12 and 7.7.7.3.4.13

* CID #10, #11, #12
* Refer doc. Doc.110rX for revised Local cell update REQ/RSP

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Clause** | **Subclause** | **Type** | **Comment** | **Suggested Remedy** |
| 16 | 7 | 7.14.3.9.3 | T | Timer "Txx" (Figure AQ1, Figure AR1) is not defined  | Define Timer "Txx" |
| 17 | 7 | 7.14.3.11.2 | T | Timer "Txx" (Figure AT1, AU1, AV1, AW1) is not defined  | Define Timer "Txx" |
| 18 | 7 | 7.14.3.11.3 | T | Timer "Txx" (Figure AY1, AZ1) is not defined  | Define Timer "Txx" |

1. Proposed Resolution

12.1.1.1 MAC (Relay, Multi-channel)

Table xxx MAC parameters, timers, message IEs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Entity | Name | Reference | Min value | Default value | Max value |
| CPE | T61 | Wait for container ACK | 10ms | - | < T9 |
| CPE | T62 | Wait for local cell update acknowledgement | - | - | 3s |
| CPE | T63 | Wait for DTT-RSP timeout | 10ms | - | < T9 |
| BS | T64 | Wait for DTT-RPT timeout | 10ms | - | < T9 |
| CPE | T65 | Wait for DTT-CFM timeout | 10ms | - | < T9 |
| BS | T66 | Wait for CAM-STP timeout | 10ms | - | 160ms |
| BS | T67 | Wait for CAM-SWH timeout | 10ms | - | 160ms |

Modify the following figures



**Figure AQ1 - Wait for CBC-REQ and Sending container message including CBC-REQ at a centralized scheduling A-CPE**



**Figure AR1 - Wait for Container ACK at a centralized scheduling A-CPE**



**Figure AV1 - Sending Local Cell Update IND from a distributed scheduling A-CPE**



**Figure AW1 - Wait for Local Cell Update ACK at a distributed scheduling A-CPE**

Add the following figures in 7.15.1.3



**Figure BE1 - Downstream transit request - CPE**



**Figure BF1 - Wait for DTT-RSP and Downstream Transit Test - CPE**



**Figure BG1 -Wait for DTT-RPT - A-BS**

**7.24.1.3.2 BS-CHU starts stop operation timer**

The BS-CHU shall start the stop operation timer (T66) after receiving the stop operation request from BS-CAM.

The start of the stop operation timer shall determine the frame number where the operation is scheduled to stop.

**7.24.1.4.2 BS-CHU starts channel switch timer**

The BS-CHU shall start the channel switch timer (T67) after receiving the channel switch request from BS-CAM.

The start of the channel switch timer shall determine the frame number where the new operating channel is scheduled to switch.

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Commenter Name** | **Comment** | **Suggested Remedy** |
| 48 | Sunghyun Hwang | QPSK and code rate 1/2 are not defined. The coding scheme should also be defined. | Define MCS scheme of QPSK-code rate 1/2 and coding scheme to the CPE demodulator capability IE. |

Proposed Resolution

Accept

|  |
| --- |
| **Table S1 - Supported Modulation** |
| **b0** | **b1** | **b2** | **b3** | **b4** | **b5** | **b6** | **b7** |
| QPSK | 16-QAM | 64-QAM | 256-QAM | MD-TCM | Reserved |

|  |
| --- |
| **Table T1 - Supported Coding Rates** |
| **b8** | **b9** | **b10** | **b11** | **b12** | **b13** | **b14** | **b15** |
| 1/2 | 2/3 | 3/4 | 5/6 | 7/8 | 10/11 | 14/15 | Reserved |