IEEE P802.11  
Wireless LANs

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| Clause 32.1 Comments Resolution | | | | |
| Date: 2021-2-16 | | | | |
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Abstract

This submission proposes resolutions for 22 of the technical comments submitted on LB251

The following 20 comments on clause 32.1:

CIDs: 1363, 1157, 1076, 1764, 1471, 1524, 1077, 1078, 1026, 1085, 1028, 1523, 1783, 1249, 1474, 1473, 1525,1526, 1793, 1792

* 1249 mistakenly was marked for clause 31.1.1

And the following 2 comments on clause 32.3.3:

CIDs: 1802, 1805

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| **CID** | **Page.line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1363 | 41.35 | 32.1.1 | An error correcting code is a set of codewords. An error correcting encoder is device/rule that maps information bits to the codewords in the code. One code ( that is, one set of codewords) can be generated with several different encoders. Such encoders map the information bits differently on the different codewords. Different encoders that generate the same code (but with different mappings) are said to be equivalent. With this basic terminology in place, it does not make sense to say that something is "encoded by convolutional code" or "encoded by LDPC" | Change the sentence to "The NGV PHY preamble is encoded by a convolutional encoder and the NGV PHY data payload is encoded by an LDPC encoder." Compare e.g. 17.3.4.3. Prehaps also adding a reference to what convolutional encoder and LLDPC encoder are used for the encoding. | Accept.  Editor: Change the sentence to "The NGV PHY preamble is encoded by a convolutional encoder and the NGV PHY data payload is encoded by an LDPC encoder." |
| 1157 | 41.46 | 32.1.1 | Describe what "All LTF formats" includes | Change to "NGV-LTF-2x, NGV-LTF-1x, and repeated NGV-LTF-2x" | Revised.  Editor: change to “Three LTF formats: NGV-LTF-1x, NGV-LTF -2x, and repeated NGV-LTF-2x” |
| 1076 | 41.46 | 32.1.1 | Not clear what "All LTF formats" means | Spell out the LTF formats to be supported | Revised.  Editor: change to “Three LTF formats: NGV-LTF-1x, NGV-LTF -2x, and repeated NGV-LTF-2x” |
| 1764 | 41.57 | 32.1.1 | Building the 20MHz mode, given its lack of usefulness, should not be mandatory. | Remove the 20MHz CBW or make it optional | Revised.  Agree with the comment that 20 MHx CBW should be optional.  Editor: move “Class C2 of spectrum mask requirementfor 20 MHz NGV PPDU” to the list following “An NGV PHY may support..” |
| 1471 | 41 | 32.1.1 | "an NGV STA shall be capable of transmitting and receiving  PPDUs that are compliant with the mandatory requirements of the following PHY specification:  -- Clause 17 (Orthogonal frequency division multiplexing (OFDM) PHY specification)" suggests an NGV STA is required to support 20 MHz PPDUs, but the list at 41.41 does not include 20 MHz PPDUs | Add "20 MHz NGV PPDU" to the list (which is needed for the last item in the list anyway!) | Revised.  Editor: add “20 MHz NGV PPDU” to the list following “An NGV PHY may support …”  Discussion for TG:  Does “an NGV STA shall be capable of transmitting and receiving  PPDUs that are compliant with the mandatory requirements of the following PHY specification:  -- Clause 17" suggest an NGV STA is required to support 20 MHz PPDUs? If so need to change that sentence as well… |
| 1524 | 41.60 | 32.1.1 | 20MHz PPDU is neither in "shall" nor in "may" feaures. Need to clarify. | As in comment | Revised.  Editor: add “20 MHz NGV PPDU” to the list following “An NGV PHY may support …” |
| 1077 | 41.57 | 32.1.1 | "Class C2 of spectrum mask requirement for 20 MHZ NGV PPDU". Is 20MHz PPDU support mandatory or optional? | Clarifiy the requirements on 20MHz PPDU | Revised.  Editor: add “20 MHz NGV PPDU” to the list following “An NGV PHY may support …” |
| 1078 | 41.54 | 32.1.1 | "Coexistence with non-NGV STAs". Not clear what the definition of this requirement is | Calrify the requirements | Revised.  Other PHYs do not list coexistence as a feature, it is something that is supported by the PHY design, hence no need to be included.  Editor: remove “Coexistence with non-NGV STAs” |
| 1026 | 41.54 | 32.1.1 | Actual requirements for the text 'Coexistence with non-NGV STAs" should be detailed out in the specification as it provides clarity for developers | Calrify the requirements | Revised.  Other PHYs do not list coexistence as a feature, it is something that is supported by the PHY design, hence no need to be included.  Editor: remove “Coexistence with non-NGV STAs” |
| 1085 | 41.36 | 32.1.1 | Since STBC is not supported, do a global search and replace Nsts by Nss | As in comment | Accept.  Editor: Do a global search and replace Nsts by Nss |
| 1028 | 41.36 | 32.1.1 | Replace Nsts with Nss since the spec does not support STBC | As in comment | Accept.  Editor: Do a global search and replace Nsts by Nss |
| 1523 | 41.36 | 32.1.1 | Write full name for STBC as it is used for the first time. | As in comment | Reject.  11bd draft amendment is part of the .11 standard where STBC and other coding names defined are defined. |
| 1783 | 41.36 | 32.1.1 | There is no need to list what is not supported. | Delete "STBC is not employed." | Accept?  Discusison w/ TG:  This comment was discussed during D0.3 and TG decided to explicitly mention that STBC is not supported. |
| 1249 | 41.36 | 3~~1~~2.1.1 | a standard specifies what is supported, and how its supported.  not specifying what is not supported.  Thus statements such as STBC is not employed are redundant. | Delete "STBC is not employed." | Duplicate of 1783 |
| 1474 | 41.65 | 32.1.1 | "10 and 20 MHz bandwidth PPDUs" is not clear | Change to "10 and 20 MHz NGV PPDUs" | Accept |
| 1473 | 41.49 | 32.1.1 | "Midamble periodicity of 4, 8, 16" -- what? | Add "OFDM symbols" at the end | Accept |
| 1525 | 42.57 | 32.1.4 | Change "Non-NGV 10 MHz format" to "non-NGV  format of 10 MHz bandwidth" to be consistent with other parts of the spec. | As in the comment. | Accept |
| 1526 | 42.59 | 32.1.4 | For Non-NGV 10 MHz format, need to add duplicated NON\_NGV\_10 in the description. | Add "and including non-NGV duplicate format" at the end of the bullet. | Revised  Does not require “and”.  Editor add “including non-NGV duplicate format” to the end of the sentence. |
| 1793 | 42.10 | 32.1.2 | no multi users supported in 11bd. | "between two or more STAs" should be "between two STAs" | Reject.  Many of NGV PPDUs are broadcast messages, which makes it communication between one and multiple STAs. |
| 1792 | 42.6 | 32.1.2 | no multi users supported in 11bd. | "between two or more STAs" should be "between two STAs" | Reject.  Many of NGV PPDUs are broadcast messages, which makes it communication between one and multiple STAs. |
| 1802 | 53.20 | 32.3.3 | reduce the ambiguity of 2 10 MHz in Figure 32-6 | "2 10 MHz" should be "two 10 MHz" | Accept |
| 1805 | 54.16 | 32.3.3 | no STBC supported such that STS is not necessary | CSD per STS should be CSD per SS (or spatial stream) | Accept |