IEEE P802.11
Wireless LANs

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| LB205 MAC Resolution to Comments in D3.0 Subclause 4.3.13a.1  |
| Date: 2014-12-1 |
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Abstract

This submission proposes resolution to comments in D3.0 subclauses 4.3.13a.1. There are 9 CIDs addressed: 5135, 5106, 5238, 5095, 5093, 5117, 5239, 5481, and 5054

Revision History:

Rev1:

**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 TGah Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGah Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

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| **CID** | **Page.Line** | **Clause** | **Comment** | **Propose Change** | **Resolution** |
| 5135 | 9.23 | 4.3.13a.1 | Looking at 24.1.1 paragraph 4, the 1MHz PHY is really an oddball, as all other bandwidths are clocked off the same rate. I suggest to change the mandatory bandwidth to only the 2MHz channel width. Only a single mandatory channel width is sufficient to support universal interoperatbility. Requiring two different channel widths is unnecessary. | Change line 23 to "Mandatory support for 2 MHz channel width" and line 47 to "Optional support of 1 MHz, 4 MHz, 8 MHz or 16 MHz channel width". | Rejected. 1 MHz channel is necessary to meet the range (>1km) and data rate (down to 150kbps) requirement as specified in the 11ah’s Functional Requirement Document.  |
| 5106 | 9.38 | 4.3.13a.1 | not clear what the limit on the number of spatial streams is. Isn't it 4? | replace with, "optional support for up to xx spatial streams". | Revised. Agreed in principle. TGah editor to make the changes showin in 11-14/1574r0 under all headings that include CID 5106. |
| 5238 | 9.54 | 4.3.13a.1 | Remove the "\*" from the end of this line as it is of no use. Also replace "NDP BA" with "NDP BlockAck" in the immediately following item. | As in comment. | Accepted. TGah editor to make the changes showin in 11-14/1574r0 under all headings that include CID 5238. |
| 5095 | 10.20 | 4.3.13a.1 | What is the definition of a "non-sensor STA"? | Define "non-sensor STA" in section 3.3. | Revised.Agreed in principle. TGah editor to make the changes showin in 11-14/1574r0 under all headings that include CID 5095. |
| 5093 | 10.21 | 4.3.13a.1 | How can you have optional support for (a) sensor STA (and) a non-sensor STA at the same time? This does not make logical sense. Surely it must either a sensor or a non-sensor STA? | Rewrite the text to state "Optional support for a sensor STA or a non-sensor STA and a EL STA" | Revised.Agreed in principle. TGah editor to make the changes showin in 11-14/1574r0 under all headings that include CID 5093. |
| 5117 | 10.21 | 4.3.13a.1 | EL STA is not defined. | include a definition for EL STA in clause 3 and include EL in the abbreviations list. | Revised.Agreed in principle. TGah editor to make the changes showin in 11-14/1574r0 under all headings that include CID 5117. |
| 5239 | 10.23 | 4.3.13a.1 | Referring to NDP frames here is not entirely correct. Replace "NDP frames" with "NDP CMAC frames" | As in comment. | Accepted. TGah editor to make the changes showin in 11-14/1574r0 under all headings that include CID 5239. |
| 5481 | 10.44 | 4.3.13a | There are many more features introduced by this amendment than just Relay. All new features and features that have been enhanced should be described in a non-normative way in this section. Add a descriptions for all significant features of this amendment | Add general descriptions for all significant features. | Rejected.It had been concluded in LB203 comments and resolution that the feature descriptions are redundant to subclause 9. Please refer to the following document for reference. <https://mentor.ieee.org/802.11/dcn/14/11-14-1021-03-00ah-lb203-clause-4-comment-resolution.docx>  |
| 5054 | 10.51 | 4.3.13a.1 | S1G features to not guarantee to reduce energy consumption or to enhance range. Hence the statement is false, as the claimed effect depends on the actual implementation (using the features). | Replace "features either reduce" with "features enable either reduction". | Revised.Agreed in principle. TGah editor to make the changes showin in 11-14/1574r0 under all headings that include CID 5054. |

**[CIDs 5095, 5117]**

**Instruction to TGah editor: Please insert the following definition in the subclause 3.2 (Definitions specific to IEEE 802.11) of TGah D3.0:**

**Non-sensor station (STA)**: A non-sensor STA is an S1G non-AP STA transmitting or receiving data frames not limited to a small payload size. A non-sensor STA may not have the power and traffic volume limitation as expected for a sensor STA.

**Energy-limited station (EL STA)**: An energy-limited STA is an S1G STA that is powered by a small energy supply and has a limited ability to transmit or receive in certain intervals of time.

**Instruction to TGah editor: Please insert the following definition in the subclause 3.3 (Abbreviations and acronyms) of TGah D3.0:**

EL Energy limited

**[CIDs 5106,5238,5093,5239,5054]**

**Instruction to TGah editor: Please modify the subclause 4.3.13a.1 (Overview) of TGah D3.0 as follows:**

### 4.3.13a.1 Overview

… …

The main PHY features in an S1G STA are the following:

* … …
* Optional support for 2 ~~or more~~ , 3 and 4 spatial streams (transmit and receive)
* … …

The main MAC features supported for S1G STA are the following~~\*~~(**Note to TGah editor to remove “\*”)**:

* … …
* Optional support for a sensor STA~~,~~ or a non-sensor STA~~,~~ and an EL STA

\*Note: some NDP CMAC frames are mandatory under certain conditions as indicated in **B.4.4.2 (MAC frames).**

Most S1G features enable either ~~reduce~~ reduction of the energy consumption of an STA or increase of the achievable range between an S1G AP and an S1G non-AP STA. The SIG AP can provide either or both of sensor services and offloading services.

An S1G STA is also a QoS STA, but does not support HCCA.