| Project           | IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a>   |  |  |
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| Title             | Cleanup texts for Superframe Header (16.3.6.2.1)  |  |  |
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| Re:               | IEEE 802.16-10/0011, "IEEE 802.16 Working Group Letter Ballot#31"   |  |  |
|                   | Target topic: "IEEE P802.16m/D4, section 16.3.6.2.1".   |  |  |
| Abstract          | The contribution provides the clean up text for SFH   |  |  |
| Purpose           | To be discussed and adopted by TGm for the 802.16m/D5   |  |  |
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# Cleanup texts for Superframe Header (16.3.6.2.1)

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#### 1. Introduction

This contribution provides the cleanup text to clarify the following issues:

- Remedy #1: To describe how to determine the DLRU size of P-SFH and S-SFH, respectively
- Remedy #2: The usage of the remaining DLRU not occupied by SFH in first subframe of superframe is already described in line 25, page 433. Remove the redundant text in line 52, page 434.

#### Removed text

Added text

### 2. References

[1] IEEE P802.16m/D4, "P802.16m DRAFT Amendment to IEEE Standard for Local and metropolitan area networks Part 16: Air Interface for Broadband Wireless Access Systems", 2010-02-03

## 3. Proposed Text Changes

[Remedy#1: Adopt the following modification text in line 40 on page 433, Table 806, section 16.3.6.2.1]

| Parameters         | Description  | Value  |
|--------------------|--|--|
| N <sub>SFH</sub>   | The number of distributed LRUs which are occupied by SFH.<br>Note that $N_{SFH} = N_{P-SFH} + N_{S-SFH}$ | N <sub>P-SFH +</sub> N <sub>S-SFH</sub>  |
| N <sub>P-SFH</sub> | The number of distributed LRUs which are occupied by P-SFH   | Fixed (value is TBD)<br>Ceil(N <sub>Rep. P-SFH</sub> ×Size <sub>P-SFH</sub> /40)             |
| N <sub>S-SFH</sub> | The number of distributed LRUs which are occupied by S-SFH   | Variable according to the type of<br>S-SFH SP<br>Ceil(N <sub>Rep</sub> , S-SFH×SizeS-SFH/40) |

Table 806 - Parameters and values for resource allocation of SFH

Where:

N<sub>Rep. P-SFH</sub> is the number of repetitions for P-SFH transmission.

Size<sub>P-SFH</sub> is the sum of the bit size of P-SFH IE and 5 bit CRC. This value is 26.

<u>*N<sub>Rep, S-SFH</sub>* is the number of repetitions for S-SFH transmission and carried in P-SFH IE.</u>

<u>Size<sub>S-SFH</sub></u> is the sum of information bit of S-SFH IE and 16 bit CRC. <u>Size<sub>S-SFH</sub></u> is different according to the scheduled S-SFH SPx IE. When any S-SFH SPx IE is not scheduled at the superframe, <u>Size<sub>S-SFH</sub></u> is 0.

The factor of 1/40 is calculated by considering the code rate of 1/4 and QPSK across 80 data subcarriers

#### [Remedy#2: Delete the text in line 52 on page 434, section 16.3.6.2.1]

When there is no S SFH SP in the SFH, the SFH resources are used for transmitting other control information or A MAP.