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| Re: | 80216j-07_007r2 : "Call for Technical Comments and Contributions regarding IEEE Project 802.16j" | |
| Abstract | This document specifies the RS amble repetition rate. | |
| Purpose | Text proposal for 802.16j Baseline Document | |
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RS Amble Repetition Rate

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1. Introduction

In order to provide proper time and frequency synchronization, and Cell ID information for the sub-ordinate Relay Stations attempting to enter the network through a parent RS, a relay amble structure has to be defined. One of the parameters of this relay structure is its repetition rate.

2. Details

The repetition rate of the relay amble has to comply with the following conditions:

- The intended amble position.
- The relay amble has to provide support for the time and frequency synchronization algorithms (implementation specific). The initial synchronization takes places on the access preamble while the RS' holding sync and AFC tracking logic rely on the repetition rate of the relay amble sequence.
- The functionality of the Common Sync symbol as defined by [2], Section 8.4.6.1.1.1 has to be preserved
- The BW throughput degradation due to relay amble repetition rate has to be minimized.

3. Conclusion

In order to comply with the above conditions, the relay amble shall be a repetitive structure, with a repetition rate of at least 1 out of 4 every frames. It is proposed that the text in the following section be included into the baseline document to specify this requirement.

4. Specific text changes

[Insert new subclause 8.4.6.1.1.3]

8.4.6.1.1.3 Relay amble

The relay amble is a repetitive structure with a repetition rate given by Equation xxx.

RelayAmbleRepetitionRate = 4 frames

Equation xxx

References

1. IEEE 802.16-2004 "IEEE Standard for Local and Metropolitan Area Networks – Part 16"
2. IEEE 802.16e-2005