

Relay midamble

IEEE 802.16 Presentation Submission Template (Rev. 8.3)

Document Number:

IEEE S802.16j-06/144

Date Submitted:

2006-11-14

Source:

Mike Hart

Yuefeng Zhou

Sunil Vadgama

Fujitsu Labs of Europe Ltd.

Chenxi Zhu

Fujitsu Labs of America

Voice: +44 20 8606 4523

Fax: +44 20 8606 4539

Email: mike.hart@uk.fujitsu.com

Venue:

IEEE 802.16 Session #46, Dallas, USA

Base Document:

IEEE C802.16j-06/144 and URL <http://ieee802.org/16/... C80216j-06_144.pdf>.

Purpose:

For discussion and approval of inclusion of the proposed text into the P802.16j baseline document.

Notice:

This document has been prepared to assist IEEE 802.16. 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.

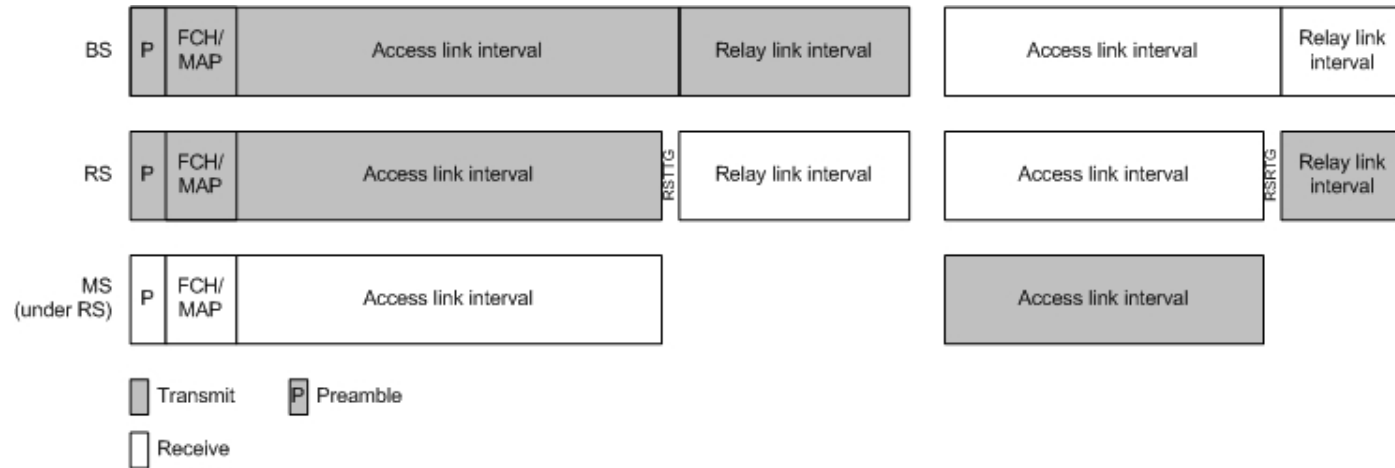
Release:

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 802.16.

IEEE 802.16 Patent Policy:

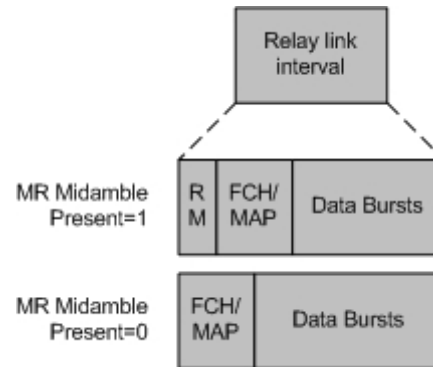
The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures <<http://ieee802.org/16/ipr/patents/policy.html>>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or 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 <<mailto:chair@wirelessman.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 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site <<http://ieee802.org/16/ipr/patents/notices>>.

Applied frame structure (C80216j-06_138)



- When MR-BS and RS transmit 802.16e preamble simultaneously, RS cannot receive the BS preamble at the beginning of the frame.
- RS may need to receive a preamble from BS for adjusting its time/frequency sync during its relay operation.

Relay midamble (RM)



- A relay midamble may be optionally inserted at beginning of relay link interval (MR-BS→RS).

Relay midamble properties

Property	Preamble	Relay midamble
Duration	1 symbol	1 symbol
Sequence	Defined in 8.4.6.1.1 of 802.16e_2005	Defined in 8.4.6.1.1 of 802.16e_2005
Power	+9dB	+6dB
Repetition rate	Every frame	flexible
Location	First symbol	flexible
Status	M	O