
IEEE P802.11
Wireless LANs

Instructions to Editor of Comment Resolution Group 2 for TGb

Date: January 13, 1999

Author: Anil K. Sanwalka
Neesus Datacom Consultants
100 Dynamic Dr, Suite 201, Toronto, Ont, M1V 5C4
Phone: (416) 754-8007
Fax: (416) 754-8006
e-Mail: anil@neesus.com

1. Comment resolution for BO comment number 67 for section 1.4.2:

Page 507 lines 16 and 17 change "shall be" to "is"

Page 507 - Lines 31 change "shall" to "may" and on line 32 delete the comma after BSS and insert by word "by"

Page 507 – Line 35 Change sentence "To transmit using ... header." to "To transmit an HR/DSSS/FH frame, the station begins transmission with the FH preamble and PLCP header indicating a 4Mbps data rate."

Page 507, Line 36 – Delete the sentence "The PHY ... Mbit/s"

Page 507, Line 37 - Replace "shall terminate" with "terminates".

Page 507, Line 38 – Replace "After a specified ... clauses." to "After a specified gap duration, the station transmits the PSDU using the HR/DSSS/short format as defined in the following clauses."

Page 507, Line 39 - Delete sentence "The formatting ... PHY."

Page 507, Line 40 – Delete the words "to be"

Page 507, Line 41 -- Replace "shall be" with "is".

Page 507, Line 42 - Replace "shall not be" with "is not".

2. Comment resolution for SB comment number 63 page 512 1.2.2.3

Line 37 – Replace "both an ... element" with "an FH parameter set element."

3. Comment resolution for BO comment number 67 page 527 1.4.2

Line 37 – Replace "shall be" with "is"

Line 39 – Replace "shall be" with "is"

4. Comment resolution for comment 68 from ko

1.2.4 Line 45 – Replace "a short" with "a short or long" and add the word "preamble" after "PLCP"

5. Comment resolution for comment 78 from BO

Accept comments change for figure 11 in section 1.4.3: Extend the MAC block to the right, pushing the MAC Management block further to the right until it is no longer above the convergence layer.

6. Comment resolution for comment 82 from HMO

Section 1.2.5 -- On line 49 add “and HR/DSSS/PBCC” after “HR/DSSS” and in line 53 add “and HR/DSSS/PBCC/short” after “HR/DSSS/short”

Section 1.2.6 – On line 15 replace “The rate change ... 18.2.5.” with “The rate and modulation change indicated in the SIGNAL field shall be initiated with the first symbol of the PSDU as described in 1.2.5.”

7. Comment number 98

Section 1.2.6 – Add the following sentences to the first paragraph: “If the PHY implements the short preamble option, it shall detect both short and long preamble formats and indicate which type of preamble was received in the RXVECTOR. If the PHY implements the PBCC modulation option it shall detect either CCK or PBCC modulations as indicated in the SIGNAL field and shall report the type of modulation used in the RXVECTOR.”

Paragraph that starts on line 51 on page 521. Delete the sentence starting with “If a PPDU...”

Replace the paragraph starting on line 51 with on page 521 with “The receive shall implement the CCA procedure as define in clause 1.4.8.4.”

Line 1 of page 522 change “defers” to “shall defer”

Lines 4-14 page 522 -- Replace both paragraphs with the following paragraph:

Upon receiving a PPDU the receiver shall distinguish between a long and short header format by the value of the SFD as specified in 1.2.2. The receiver shall demodulate a long PLCP header using BPSK at 1 Mbit/s. The receiver shall demodulate a short PLCP header using QPSK at 2 Mbit/s. The receiver shall use the SIGNAL and SERVICE fields of the PLCP header to determine the data rate and the modulation of the PSDU.

Lines 40-43 page 553 -- Replace both paragraphs with the following paragraphs:

b) CCA Mode 2: Carrier Sense with timer. CCA shall start a timer for 3.65 ms and report a busy medium only upon the detection of a HR/DSSS signal. CCA shall report an idle medium after the timer expires and no HR/DSSS signal is detected.

c) CCA Mode 3: A combination of Carrier Sense and energy above threshold. CCA shall report busy at least while an HR/DSSS PPDU with energy above the ED threshold is being received at the antenna.

8. Comment resolution for BO comment number 67 for section 1.4.2:

Page 507 lines 16 and 17 change “shall be” to “is”

Page 507 - Lines 31 change “shall” to “may” and on line 32 delete the comma after BSS and insert by word “by”

Page 507 – Line 35 Change sentence “To transmit using ... header.” to “To transmit an HR/DSSS/FH frame, the station begins transmission with the FH preamble and PLCP header indicating a 4Mbps data rate.”

Page 507, Line 36 – Delete the sentence “The PHY ... Mbit/s”

Page 507, Line 37 - Replace “shall terminate” with “terminates”.

Page 507, Line 38 – Replace “After a specified ... clauses.” to “After a specified gap duration, the station transmits the PSDU using the HR/DSSS/short format as defined in the following clauses.”

Page 507, Line 39 - Delete sentence “The formatting ... PHY.”

Page 507, Line 40 – Delete the words “to be”

Page 507, Line 41 -- Replace “shall be” with “is”.

Page 507, Line 42 - Replace “shall not be” with “is not”.

9. Comment resolution for SB comment number 63 page 512 1.2.2.3

Line 37 – Replace “both an ... element” with “an FH parameter set element.”

10. Comment resolution for BO comment number 67 page 527 1.4.2

Line 37 – Replace “shall be” with “is”

Line 39 – Replace “shall be” with “is”

11. Comment resolution for comment 68 from ko

1.2.4 Line 45 – Replace “a short” with “a short or long” and add the word “preamble” after “PLCP”

12. Comment resolution for comment 78 from BO

Accept comments change for figure 11 in section 1.4.3: Extend the MAC block to the right, pushing the MAC Management block further to the right until it is no longer above the convergence layer.

13. Comment resolution for comment 82 from HMO

Section 1.2.5 -- On line 49 add “and HR/DSSS/PBCC” after “HR/DSSS” and in line 53 add “and HR/DSSS/PBCC/short” after “HR/DSSS/short”

Section 1.2.6 – On line 15 replace “The rate change ... 18.2.5.” with “The rate and modulation change indicated in the SIGNAL field shall be initiated with the first symbol of the PSDU as described in 1.2.5.”

14. Comment number 98

Section 1.2.6 – Add the following sentences to the first paragraph: “If the PHY implements the short preamble option, it shall detect both short and long preamble formats and indicate which type of preamble was received in the RXVECTOR. If the PHY implements the PBCC modulation option it shall detect either CCK or PBCC modulations as indicated in the SIGNAL field and shall report the type of modulation used in the RXVECTOR.”

Paragraph that starts on line 51 on page 521. Delete the sentence starting with “If a PPDU...”

Replace the paragraph starting on line 51 with on page 521 with “The receive shall implement the CCA procedure as define in clause 1.4.8.4.”

Line 1 of page 522 change “defers” to “shall defer”

Lines 4-14 page 522 -- Replace both paragraphs with the following paragraph:

Upon receiving a PPDU the receiver shall distinguish between a long and short header format by the value of the SFD as specified in 1.2.2. The receiver shall demodulate a long PLCP header using BPSK at 1 Mbit/s. The receiver shall demodulate a short PLCP header using QPSK at 2 Mbit/s. The receiver shall use the SIGNAL and SERVICE fields of the PLCP header to determine the data rate and the modulation of the PSDU.

Lines 40-43 page 553 -- Replace both paragraphs with the following paragraphs:

b) CCA Mode 2: Carrier Sense with timer. CCA shall start a timer for 3.65 ms and report a busy medium only upon the detection of a HR/DSSS signal. CCA shall report an idle medium after the timer expires and no HR/DSSS signal is detected.

c) CCA Mode 3: A combination of Carrier Sense and energy above threshold. CCA shall report busy at least while an HR/DSSS PPDU with energy above the ED threshold is being received at the antenna.

15. Comment resolution for Comment 96 by MIF:

Page 523 Line 12 – After “1.2.3.5),” insert “RXPREAMBLE_TYPE (which is an enumerated type taking on values SHORTPREAMBLE or LONGPREAMBLE),”

16. Comment resolution for 119 by Mark Webster:

In section 1.4.5.12.2 on page 535 on line 43, delete the sentence “RSSI indication ... are supported.”

In section 1.4.5.13.2 on page 536 on line 15, Change the paragraph “The SQ shall ... are supported.” To

“This primitive shall be a measure of the signal quality received by the HR/DSSS PHY.”

17. Comment resolution for Mark Webster question number 120:

Change the following sections as follows:

1.2.3.1 Long PLCP Synchronization Field (SYNC)

The SYNC field shall consist of 128 bits of scrambled “1” bits. This field is provided so the receiver can perform the necessary synchronization operations. The initial state of the scrambler shall be X’6C’, where the LSB specifies the lowest delay element and the MSB specifies the highest delay element in the scrambler. The first 8 bits out of the scrambler shall be X’81’, where the LSB is output first.

To support the reception of IEEE802.11-1997 DSSS signals, the receiver shall be capable of synchronization on a SYNC field derived from any non-zero scrambler initial state.

1.2.3.8 Short PLCP Synchronization Field (shortSYNC)

The SYNC field shall consist of 56 bits of scrambled “0” bits. This field is provided so the receiver can perform the necessary synchronization operations. The initial state of the scrambler shall be X’6C’, where the LSB specifies the lowest delay element and the MSB specifies the highest delay element in the scrambler. The first 8 bits out of the scrambler shall be X’CE’, where the LSB is output first.