IEEE 802.11 Committee

Tentative Minutes of the PHY Meeting held in Maui, July 10 to 13, 1995.

Jim McDonald serving as Chair
Brad Herrin recording minutes

Minutes of Full Phy meeting of 7/11/95

1:00 - 3:30PM

Presentations

(#95/152)

Presentation of BER vs. FER for DS Wireless LAN performance Measure, John Fakatselis

Recommends that BER be used instead of FER because of methods that exists already for testing BER.

Recommends that an exposed interface be provided.

Both FER and BER specs/measurements are required.

If only one spec, then it should be FER.

(#95/103)

Presentaton of Calculating decoded bit-error rates of 802.11 Physical layer equipment using error rate measurements of entire transmissions.

determining the Bit-error rate of received for the purpose of 802.11 Wireless Compliance Testing.

Calculating BER from FER.

FER measurements can be made and used to calculate BER.

Design for testing could be used to eliminate the need to using FER to calculate the BER value.

Suggest that 2 points of draft Standard of Sensitivity be used to calculate the BER.

(#95/151)

Presentation of Bit Error Rate vs. Frame Error Rate in Wireless LANs.

Supports an exposed interface to measure parameters.

Noise models

Single Bit errors (Model 1)

Multiple Bit Errors (Model 2)

Disturbance length

Interframe spacing

Frame Length

Statistics of the disturbance

Error Calculation Methods

Direct Measurements

Indirect Measurements

recommends to have an exposed interface to make making measurements easier.

15 minutes to discuss BER vs. FER

EDG suggest that putting PER in PMD is recomended

DK DS,IR have settled on FER

motions to use FER in all 802.11 PHY's.

Dean/Larry

Friendly ammendment to apppend to use FER to verify BER of 10^-5

Ron /Jerry

Larry calls question/ jerry seconds

11-3-8 passes

call question Jerry/Ron

16-2-5 passes

95/155 Japanese regulations

rescheduled till tomorrow after submission

MIB issues

time till 3:00PM then break

95/122

Wireless Access Methods and Physical Layer Specifications

reviewed changes to Section 9 of Draft spec.

Watchdog timers parameters and their uses, do we need them.

motion to delete CCA_watchdog_time_MAX, CCA_watchdog_time_MIN,CCA_watchdog_count_MAX, CCA_watchdog_count_MIN, because these are MAC functions.

ed/dean

passes 15-0-3

MPDU Data rates

Must be able to receive at both 1 and 2Mbs but only has to be able to transmit at 1Mps

Changed aSuprt_data_Rates to aSuprt_data_Rates_Tx

Added aSuprt_data_Rates_Rx

removed aMPDU_Max_LNGTH_2M

Antenna groups

motion to agree on current progress.

adjourned to eleven o'clock on Thursday.

Full Phy Mtg. Wed. Afternoon (4:15PM)

MPDU_Max_Length

Defined as : Maximum MPDU length the Phy can accept from the MAC sublayer or the media.

Pref_MAX_MPDU_Frgmnt_Lngth

Defined as: The preferred initial maximum fragment length the MAC will use when fragmenting a packet. This variable can be modified by the LME.

Comment to change to wording in DOC 122 to reflect reference to All PHYs to correspond to the affected PHYs ie all FH Phys etc.

Request to add the previous variables to IR and DS MIB tables to consistant with all PHYs.

MAC may already have hooks to support the above variables to enable the fragmenting of packeting.

Wayne-The LME doesn't make decissions to pass on to the PHY.

Ed- The LME does control the Phy and takes control of the PHY.

Straw poll- Does everyone agree with the object of the two variables and their goal?

The maximum length of a packet length of a DS Phy is 64K

The MAC shouldn't send a packet length with anything larger than the MPDU_Max_Length.

Motion to accept the variables MPDU_Max_Length and Pref_MAX_MPDU_Frgmnt_Lngth, that passed the FH group to the Full PHY group

Jim/Ed

19/0/0 passes

Talked about the possibility of added additional variables from other PHY groups (i.e. DS, IR Phys)

From DS Phy group , variable

aOperating_Temp_Range

Defined as: "The operating temperature range for the radio. This attribute can have the following values:

01= Type 1

02= Type 2"

aPwr_Dwn_Modes

Defined as: "The type of Power down modes supporte by this implementation. This list can contain the following values:

01 = No Power Down Support

02 = Sleep

03 = Dooze"

aSleep_Awake_Time

Defined as:"The Time in microseconds an implementation requires to change from the Sleep mode to fully functional mode"

aDooze_Awake_Time

Defined as:"The Time in microseconds an implementation requires to change from the Dooze mode to fully functional mode"

Jerry- What does these variable have to do with the interoperaability of unit?

Dean- The point is that you will have to make this work with your radio.

alot of discusson and talking about whether variable are needed or not and why.

Variables need to be implemented and number are implementation dependent.

Meeting adjourn- Brad/Nathan

Full Phy mtg. Thursday Morning 11:00AM

Proposed agenda

Ground Rules for late Changes to Plenary

Trying to changes to a minimum

Japan Regulatory Issue

Motion to table Japanese report till next meeting,

lz/bh

passes by majority

Translation had difficulties

Internal AMD translation was better but still difficult to decipher.

Received a third translation

Wants create a revised submission at a later meeting.

by Larry Zuckerman

Call sign issues discussed

DS Report

Yan

Worked on finalize section 12

editorials

MIB table + DS values (95/122)

CCA adaption (not required to drop CCA on a non-DS energy level).

Move to accept the changes in doc 95/176 to be incorporated in the Draft standard text.

Brief discussion of CCA methodology.

document has been stuffed

DS 6-0-0 passes

Phy 14-2-4 passes

Plenary

IR Report

Met with only two people

answer a question from someone within IEEE

one paper presented and tabled for more attendies

MIB table changes need to be looked at in Schaumberg.

FH Report

Section 11.8

Motion: Replace MPDU_Max_Length_1M and MPDU_Max_Length_2M fields of MIB variable with the following two variables.

MPDU_Max_Lngth (Static)

Defined as : Maximum MPDU length the Phy can accept from the MAC sublayer or the media.

Pref_MAX_MPDU_Frgmnt_Lngth (Dynamic)

Defined as: The preferred initial maximum fragment length the MAC will use when fragmenting a packet. This variable can be modified by the LME.

Move that MPDU_Max_Lngth be 2047 octets for the FH Phy.

12/4/0 passes FH group

Jim/Nathan

19/0/2 passes Full Phy

Move that Pref _MAX_MPDU_Frgmnt_Lngth be set to 400 Octets for FH Phy.

6/2/5 passes FH Phy

Jim/Jerry

19/0/2 passes Full Phy

Motion: The preferred fragment length, that the MAC will use, when fragmenting a frame has a default value of 400 Octets. This variable can be modified by the LME. (Dynamic variable)

10/0/5 passes FH Phy Group

Discussion of dynamic variable

Editorial Change to the following:

Motion: The preferred fragment length when fragmenting a frame has a default value of 400 Octets. This variable can be modified by the LME. (Dynamic variable)

Yan calls question/Nathan

19/0/2 passes by FullPhy

DS PHY Motions for MIB Variables

Move that MPDU_Max_Lngth be (2^16-1) octets for the DS Phy.

Move that Pref _MAX_MPDU_Frgmnt_Lngth be set to 2400 Octets for DS Phy.

Yan/John

13/0/7 passes Full Phy

Review Report to plenary

Motion to adjourn.