

b). Duration field/multi-rate.

Dean summarised the position as:-

leave it alone,
get rid of it
modify it as per Johnny's suggestion
modify it to start at high rate, and to fall back if required.

Jan Boer suggested that moving the duration field into the PLCP header allowed greater flexibility in future. Wayne Moyers felt that there were advantages in adopting the proposal: Peter Chadwick disagreed, on the basis that the requirement assumes multiple rates in one network, but had no advantage in preventing interference between networks. Dean Kawaguchi commented that he felt that there was little performance improvement to be gained from the proposal. He said that the proposal degrades the bias suppression by a few dB, and degrades the probability of success under low C/N conditions. Jim Renfro felt that there was insufficient advantage to be gained from its adoption. Mack Sullivan commented that an assumption could be made for a multi-rate network. However, the question was asked if such a network actually has an overall throughput advantage over a single rate network. Wayne Moyers pointed out that any advantage gained depended upon packet length.

Discussion followed on the effective dB loss incurred, but the statistical effects were not considered to be available.

A straw poll was proposed by Mack Sullivan for the placing of the Duration field in the PLCP header. In favour: 5
Against: 2 Abstentions: 1

Adjourned until 1330PST

On resumption,

Dean Kawaguchi reported that he had been unable to get hold of Ed Geiger to discuss the MIB matters. He suggested that the MIB discussion be adjourned until Wednesday: this was accepted. The absence of Naftali Chayat and Mike Rothenburg (assumed to be because of weather conditions on the east coast of the US) prevented discussion of the 3Mbps matter. Dean suggested that the service primitives be discussed.

These items are covered in Section 8 of the draft Standard.

Proposed by Wayne Moyers that Dean Kawaguchi be empowered to add PHY_TXSTART, PHY_TXEND and PHY_CCARST "confirm" to the list of primitives. Sec: Peter Chadwick. Peter Chadwick called the question, sec. Jim Renfro. On a vote, passed unanimously.

Jan Boer commented on the vector description of the length parameter in 9.3.4.4. He commented that the value is PHY dependent, and so no value should appear here. Jan moved to change from "value of 0 to 2047" to "value is PHY dependent". Seconded Mike Trompower. On a vote, passed unanimously.

Discussion on the comment by Wim Diepstraten re 9.3 on exact timing concluded that requirements are met, but timing relationships in the terms suggested are not possible. Dean volunteered to produce suitable text. Accepted unanimously by acclamation.

Discussion on the comment by Wim Diepstraten re 9.3 on channel change timing concluded that the comment affected the MIB, and was already covered, rather than in Chapter 9. Response accepted unanimously by acclamation.

Discussion on the comment by Wim Diepstraten re 9.3 re PLME interface and its common functions concluded that this applied to Chapter 10. Response accepted unanimously by acclamation.

Discussion on the comment by Michael Fischer on the TXERROR primitives concluded that these would be dealt with when the other error conditions were so treated. Response accepted unanimously by acclamation.

Discussion on the comment by Michael Fischer on 9.3.5.1.5.4 resolved the comment as rejected, except for the changes from "will" to "shall". For the FH, the PHY requires up to 4 octets at a time (8 octets at 2Mbps) to the Bias Suppression Encoding state. The timing is predictable if desired, but does not follow the proposed text because of this block processing. This response was accepted unanimously by acclamation.

Discussion on the comment by Michael Fischer on 9.3.5.2.3 . Motion from Wayne Moyers to reject, pending clarification. Friendly amendment from Jim Renfro to accept. Amendment not accepted. Wayne's motion not seconded. Jim Renfro proposes, Jan Boers seconds, to accept the proposal. On a vote, 2, 2, 3. Dean Kawaguchi as Chair, votes to accept the proposal. To be referred to full working group.

ACTION DEAN KAWAGUCHI

Discussion on the comment by Michael Fischer on 9.3.5.3.3. Comment accepted unanimously by acclamation.

Discussion on the comment by Wim Diepstraten re 9.3.5.6.3. Response that this had been discussed in the MAC/PHY group.

Discussion on the comment by Wim Diepstraten re 9.3.5.7. Accepted unanimously. Dean Kawaguchi to generate text.

ACTION DEAN KAWAGUCHI

Discussion on the comment by Michael Fischer on 9.3.5.8.3. clarifying that a good PLCP header had to be received. Accepted unanimously.

Discussion on the comment by Michael Fischer on 9.3.5.8.3 on receipt of unsupported PHY data rates. Tabled until after resolution of duration field issue by unanimous acclamation.

Discussion on the comment by Michael Fischer on 9.3.5.9.2. Accepted unanimously.

Discussion on the comment by Michael Fischer on 9.3.5.9.3. Rejected, unanimously as allowing continuation of reception provides for beneficial use of capture effect.

Meeting adjourned at 1642PST.

Meeting reconvened at 10.22 PST Jan 10.

Extension of Sect 9.3.4 - Basic Service and Options

The addition of a table of Parameters and Tx/Rx vectors in 9.3.4.4 was discussed, but no action resulted.

Consideration of the MIB Table

This table was discussed, and some changes made and agreed.

It was AGREED that the DS "Radio Type" become "Temp Type" to provide commonality with the FH, and move into the general PHY area.

Consideration of outstanding Sect 10 comments

- 10.1.2 from Wim Diepstraten on Tx-Rx turn round. Rejected because it is already implicitly defined
- 10.1.4.10, 12, 13, 15 from Michael Fischer on time units - accepted.
- 10.1.4.14 from Michael Fischer on MAC processing time. Tabled.
- 10 from Tom Baumgartner on a_dwell_offset - not defined. Comment rejected, as parameter has been deleted.
- 10 from Wim Diepstraten commenting on lack of definition of SIFS and slot time. Rejected, as considered in the parameter a_SIFS
- 10.1.4.4 from Carolyn Heide regarding air propagation time. This was accepted by the full working group several meetings ago as representing a 500 foot round trip.
- 10.1.4.6 from Carolyn Heide on timing units. Rejected as it has been agreed to use 1 μ s as the basic time unit.
- 10.1.4.14 from Michael Fischer on MAC delay. Accepted.
- 10 from Wim Diepstraten on total on air duration accepted. New text required

ACTION DEAN KAWAGUCHI & JIM RENFRO

Meeting adjourned 1200PST

Meeting reconvened 1108PST 11Jan 1996.

DS Group Report

Jan Boer reported that Section 12 had been reviewed to bring it into line with Sects 9 and 10. It is issued as doc. 95/243a.

Moved to accept the changes made at the January 1996 meeting to clause 12 of the DS-PHY as documented in the distributed draft text, for inclusion in D3.0.

Moved Jan Boer, Sec. John Fakatselis., voted 5,0,0

The PICS Proforma for Sect 12 had been finalised, and is available in doc 96/13.

Moved by Jan Boer to accept the changes in 96/13 for clause 12 PICS Proforma.
Seconded John Fakatselis, Voted 5,0,0.

Outline Conformance Test Specification for the DS section will be available at the next meeting. Comment processing of the next ballot will also take place at this meeting.

The minutes of the DS Group are available as doc 96/12.

FH Group Report

Peter Chadwick appointed Vice Chair.

Jim McDonald raised the problem of congestion after hopping: this was referred to the MAC group.

The PICS proforma was revised. Discussion followed as to mandatory v. optional service primitive support in the PICS proforma, and as to the validity thereof. After discussion, moved by Dean Kawaguchi, that the question of service primitives be tabled until the PHY March meeting. Seconded Jan Boer. Passed 6 - 0 - 2.

Sect 11 changes voted in November did not appear in the D2.1 draft. These were distributed. The "CCA Busy during hop" matter was accepted in the FH Group (for details, see the FH Minutes) and was accepted in the PHY Group. on a vote 6 - 0 - 1.

Various MIB additions and changes were proposed in the FH Group.

The major change was to insert the parameter aPref_Max_MPPDU_LENGTH with a static default value of 400 octets. Moved Dean Kawaguchi, sec Ron Mahaney, 3 - 0 - 3.

Moved by Dean Kawaguchi, seconded by Peter Chadwick, to accept the changes made at the January 1996 meeting to clause 11 of the FH-PHY on the edited text from the November 1995 meeting as documented in the distributed draft text, for inclusion in D3.0.

Passed 8 - 0 - 0

PHY Report

For details, see the report.

from the presented report:-

Discussion on the Duration Field vote had led to straw poll vote 5,2,1 in favour.

Moved that the changes into clause 9 PHY Service Primitives as documented in the distributed draft text and comments resolution file for inclusion in D3.0

Moved Dean Kawaguchi, sec Jan Boer, voted 6 - 0 - 2.

Discussions on MIB Table led to reinstatement of the aSYN_LOCK parameter for the DS group.

Moved to accept the changes to clause 10, PHY MIB as documented in the draft text and comments resolution file for inclusion in D3.0 Authorise Editor to add descriptive text paragraphs for the accepted parameters where applicable. Moved Dean Kawaguchi, Sec Jan Boer. 7 - 0 - 1.

New Busines.

3 Mbps presentation postponed to the March Meeting.

FCC wish list postponed to the March Meeting.

IR Report

PICS Proforma completed.

Moved by Tom Baumgartner, sec Wayne Moyers to accept the IR PICS Proforma.
7 - 0 - 0

Agenda for March

1. Apologies for Absence
2. Minutes of previous meeting
3. Resolution of D3.0 Letter ballot comments
4. Conformance testing
5. 3 Mbps informational presentation
6. FCC wish list
7. Any Other Business

Adjourned at 1217PST