

**IEEE 802.11
Wireless Access Method and Physical Specification**

Title: **Report of the IEEE802.11 PHY Sub-Group Meeting
Enschede, Netherlands, July 8 - 11 1996**

Date: July 11, 1996

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Secretary - George Fishel

Approval of minutes - Naftali/Jan B, passed by unanimous consent

Set agenda

Process comments

Japanese call sign

Conformance testing

Supernet proposal/ 5 GHz PHY

Ad Hoc group reports

Processed comments

Clause 10.4 PLME Service Access Point Interface

No comments

Clause 12 Physical Service Specification

3 comments - accepted 2, rejected 1

Clause 13 Physical Layer Management (MIB)

4 comments - accepted 3, rejected 1

Motion in full WG to resolve comment #3/111

Add aCWmin and aCWmax to the PHY MIB, FH, DS, and IR. FH: aCWmin=15,
aCWmax=1024. Motion of the full WG.

Clause 14 FH PHY

21 comments - accepted 14, rejected 6, withdrawn 1

1 technical NO comment - rejected, resolution affirmed by WG 7/10/96

1 additional technical NO comment was changed to YES before meeting;
comment was addressed and rejected.

Clause 15 DS PHY

7 comments - all editorial

Clause 16 IR PHY

2 comments - processed in full PHY

Annex A PICS Proforma

FH section will be revised per WG motion 7/10/96, comments were not addressed
otherwise.

DS section revised - 2 comments

Annex D ASN.1 MIB Definitions

Reviewed and edited all PHY MIB parameters

**Motion: Accept the text changes and comment resolutions to sections 12, 13, 16, and
Appendix D.**

Full WG vote: Dean/Jan 20,0,0 Motion passes

Japanese call sign

No members, no report.

Agenda for next meeting

Process ballot comments

Conformance testing

Supernet/5 GHz

**Report of the IEEE802.11 DS-PHY Ad Hoc Group Meeting
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No technical NO votes.

Processed all comments related to clause 15 and Annex A.4 (DS PICS). All changes were editorial. Text changes completed and submitted.

Move to accept changes to clause 15 and Annex A (DS section); all changes were editorial.

PHY vote: Jan for DS/Mike. 10,0,1 Motion passes

Plenary vote: PHY group/Jan (#25) 23,0,0 Motion passes

Report of the IEEE802.11 FH-PHY Ad Hoc Group Meeting
Enschede, Netherlands, July 8 - 11 1996

Secretary - George Fishel
Approval of Minutes - Stuart/Naftali Unanimous
Set agenda
Process comments
HSFH study group
Japanese regulatory
Agenda for next meeting

Process comments. Summary of significant changes.

#6 VH Supported data rate PHY MIB parameters changed to octet value representing 0 to 25.5 Mbit/s in 100 Kbps increments.

#9 ES Rejected comment to eliminate existing FH data rates and mod types. Only remaining NO vote comments. Commenter declines resolution and still votes NO. Resolution is as follows:

Comment rejected. Committee addressed the trade of spectrum efficiency; implementation complexity, cost, and power consumption; and performance in multipath and interference environments. We compared several modulation methods with extensive analyses and simulations and chose FSK. More complex modulations may be used for future higher rate extensions of the FH PHY, but deleting the existing base modulations and rates throws away 5 years of work by P802.11 and member companies that are preparing compliant products.

Although this comment did not meet the requirements for a valid NO comment by not suggesting an alternative, we chose to address it.

FH vote: Naftali/Nathan 8,0,0

WG vote 7/10/96

Dean/Nathan 20,0,0

#11 SAB Added clarification that time reference is end of last bit of previous packet on the air. Refers to MAC contention backoff slots. Change CCAAsmntTime to 27 us.

#14 SAB PHY_CCARST is used within the MAC state machine which have been moved into an informative annex.

Move in WG that the MAC group generate a PHY_CCARST when the NAV becomes zero as previously contained in the MAC state machine.

Full WG vote: Dean/Michael 20,0,0

#21 AL Completely reworded spectral mask requirement paragraph to clear up significant confusion.

#25 SAB Deleted SIFS tolerance from PHY MIB. Changes the tolerance from +2/-3 us previously in FH to +/- 5 us (10% of slot time).

#?? RM Rejected comment to change FH PLCP header rate field to 2 bits for 1,2,3,and 4 Mbit/s. 0.5 Mbps may be useful in the future, and 3 bits provided sufficient room for growth given the modulation type and bandwidth limitations. This was a hard fought compromise reached between the FH and MAC groups for support of multirate CCA.
Naftali/Mack 8,0,2

Move to accept changes to clause 14 and Annex A (FH section) and all comment resolutions (14 accepts, 6 rejects, 1 withdrawn).

PHY vote: Naftali/Jeff. 10,0,0 Motion passes.

Plenary vote: PHY group/Stuart 21,0,0 Motion passes.

HSFH study group - 3 Mbps 8FSK presented to FH group for consideration for inclusion in future versions of the standard.

Japanese regulatory

No members, no report.

Agenda for next meeting

Ballot comment processing

3 Mbps PMD

**Report of the IEEE802.11 IR-PHY Ad Hoc Group Meeting
Enschede, Netherlands, July 8 - 11 1996**

No active IR group members present at this meeting. Two comments processed by the full PHY meeting.