

## Tentative MAC Minutes Tuesday, November 7, 1995

The meeting was called to order by chairman Dave Bagby at 8:30 AM. Carolyn Heide secretary.

Agreed to consider Monday AM interim as part of this meeting for reporting process. The minutes for that meeting are P802.11-95/245.

### Administration:

**Motion #17:**                    **Approve the September minutes.**

Moved by:                    Tom Baumgartner  
Seconded by:                 Simon Black

**Motion 17 Discussion:** none

No objections

*Motion #17 passes*

Michael Fischer will not be here. Subgroups particularly pay attention to document 95/222. Document 95/206 was postponed until Michael gets here, so ...

**Motion 18:**                    **To reconsider document 95/206.**

Moved by:                    Tom Baumgartner  
Seconded by:                 Simon Black

**Motion 18 Discussion:** none

No Objections

*Motion #18 passes*

**Motion #6:**                    **To adopt the text from document P802.11-95/206.**  
**amended by motion 19:** **To adopt the text from document P802.11-95/206,**  
**without the change to delete the deleted paragraph.**

**Motion #19:**                    **To amend to not delete the deleted paragraph.**

Moved by:                    Tom Baumgartner  
Seconded by:                 Tom Tsoulogiannis

**Motion 19 Discussion:**

Against: removing this sentence removes the need for MAC to know what PHY is under it, and removes the need for the MAC to do a lot of work after it acquires the medium in order to transmit. Deleting the sentence is a major simplification at minor cost.

In favor: consuming the medium for garbage has ramifications on all stations. Creates bleed through from one channel to another if someone is transmitting during a hop.

Approved: 9                    Opposed: 7                    Abstain: 5                    *Motion #19 passes*

**Motion #20:**                    **To change aFrament\_Payload to aFrament\_Threshold.**

Moved by:                    Wim Diepstraten  
Seconded by:                 Carolyn Heide

**Motion 20 Discussion:** none

Approved: 16                    Opposed: 0                    Abstain: 1                    *Motion #20 passes*

Approved: 12      Opposed: 3      Abstain: 5      *Motion #6 passes*

Break into small groups at 9 AM, meet again as full group at 1:07 PM.

**Clause 1**

All resolved but one which refers to the need for a MAC PICS Proforma. Doc 95/202 is one. Comments and draft section are available electronically as of Tuesday 1 PM for anyone who wants them.

**Clause 2**

All comments resolved except:

(1) Comments 81, 107 re restricting ESS to MAC layer components and creating a MESS.

**Motion #21:**                      **Do not adopt comment 81 & 107 proposals.**

Moved by:                      Tom Baumgartner  
Seconded by:                      Phil Belanger

**Motion 21 Discussion:** none

Approved: 11      Opposed: 0      Abstain: 7      *Motion #21 passes*

(2) Comments 119, 140 re defining IAPP (inter AP protocols)

**Motion #22:**                      **Do not adopt comment 119 proposals.**

Moved by:                      Tom Baumgartner  
Seconded by:                      Phil Belanger

**Motion 22 Discussion:** none

Approved: 9      Opposed: 0      Abstain: 7      *Motion #22 passes*

(3) Comments 238-241 which deal with the layer model picture. There ensued a discussion of what SAPs are required upwards for the data and management paths to the LLC. If the management layer stretches all the way up the side of all the layers, then there is no management SAP required.

Unanimous vote to have a data SAP to the top of the "MAC or MAC Sublayer" box, and a line across the top of MAC Layer Management Entity

**Clause 3:** Easy stuff done. Primary comments on MSDU primitive specification.

**Clause 4:** Mostly accepted all. 2 have been deferred but don't want to do yet.

**Clause 5:** Many comments processed. Text from papers to be incorporated.

**Clause 6:** Probably can't be done.

**Clause 7:** Not Done.

**Clause 8:** 70 of 180 done. Nothing deferred.

Small groups will meet into this evening.

**Meeting adjourned: 2 PM**

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**Wednesday PM, November 8, 1995**

The meeting was called to order by chairman Dave Bagby at 3:35 PM. Carolyn Heide secretary.

**Clause 1**

**Motion #23:** To adopt the set of work done for clause 1.

Moved by: Tom Baumgartner  
Seconded by: Leon Scaldeferri

**Motion 23 Discussion:** none

Approved: 10      Opposed: 0      Abstain: 2      *Motion #23 passes*

**Clause 2**

**Motion #24:** To adopt the set of work done for clause 2.

Moved by: Leon Scaldeferri  
Seconded by: Tom Baumgartner

**Motion 24 Discussion:** none

Approved: 9      Opposed: 0      Abstain: 4      *Motion #24 passes*

**Clause 3**

**Motion #25:** To adopt the set of work done for clause 3.

Moved by: Bob O'Hara  
Seconded by: Tom Baumgartner

**Motion 25 Discussion:** none

Approved: 9      Opposed: 0      Abstain: 6      *Motion #25 passes*

**Clause 4:** still in progress

**Clause 5:**

**Motion #26:** To adopt the set of work done for clause 5, all but resolution related to 95/248.

Moved by: Leon Scaldeferri  
Seconded by: Bob O'Hara

**Motion 26 Discussion:** none

Approved: 13      Opposed: 0      Abstain: 4      *Motion #26 passes*

**Clause 6:** still in progress

**Clause 7:** all changes editorial, no approval needed.

**Clause 8:** still in progress

**Motion #27:** To adopt the set of work done for clause 8.

Moved by: Bob O'Hara  
Seconded by: Sarosh Vesuna

**Motion 27 Discussion:** none

Approved: 12

Opposed: 0

Abstain: 2

*Motion #27 passes*

Meeting adjourned: 4:10 PM

## Thursday AM, November 9, 1995

The meeting was called to order by chairman Dave Bagby at 9 AM. Carolyn Heide secretary.

### Clause 4

**Motion #28:** To delete subclause 1.5 (the bit ordering convention).

Moved by: Jon Rosdahl

Seconded by: Tom Baumgartner

**Motion 28 Discussion:**

Moving it from 1 to 4 would be good, editors can take care of that

Approved: 10

Opposed: 1

Abstain: 5

*Motion #28 passes*

**Motion #29:** To adopt clause 4 comment and draft text files.

Moved by: Simon Black

Seconded by: Tom Baumgartner

**Motion 29 Discussion:**

Approved: 16

Opposed: 0

Abstain: 2

*Motion #29 passes*

### Clause 5

Issue: whether or not to adopt recommendations from P802.11- 95/248 "Authentication Letter Ballot Comments" by Wim Diepstraten.

**Discussion:**

Privacy is not the same as authentication. Privacy is protecting your information. Authentication is making sure that only the right people can get in - once in, it means nothing about encryption. You want to use privacy for your authentication, but once authenticated, privacy may or may not be used. As it stands now, authentication and encryption can be mixed and matched to allow system designers to protect themselves in whatever manner they wish.

What is the purpose of authentication purpose if it is not prevent mascarders? This can only be accomplished by combining authentication and privacy.

**Motion #30:** To adopt the clause 5 recommendation, which is to decline the text in 95/248.

Moved by: Dave Bagby

Seconded by: Tom Baumgartner

**Motion 30 Discussion:**

What 95/248 proposes can be done with things as they stand now, by setting the right combination of things. The paper restricts functionality, without adding anything new.

Perhaps some clarifying text to the standard might be helpful, so people would understand what is available to them.

The goal of the proposal in the paper is to provide a way of authentication\privacy that is about as difficult as attaching to your physical wire.

**Motion #31:**                    **To amend motion 30:  
by breaking recommendation into two separate decisions.**

Moved by:                    Tom Baumgartner  
Seconded by:                Wim Diepstraten

**Motion 31 Discussion:**

Against: Are these two things of value independently? The second requires combination of association and authentication frames which has been rejected many times by the group. This says that in ad hoc no authentication is the same as automatic authentication, which is not true. Wim says that the recommendation does not include the combination of association and authentication. It deletes the need of authentication for station to station traffic.

Approved: 3                Opposed: 6                Abstain: 8                    **Motion #31 fails**

**Motion 30 Discussion (cont.)**

Call the question: Tom Baumgartner, seconded by Simon Black (no nays)

Approved: 8                Opposed: 2                Abstain: 9                    **Motion #30 passes**

**Clause 6**

Comment #49, the second hand word of what the author says is that this is a personal comment. He personally cannot offer an opinion as to whether there is a patent problem. He has no opinion on what Apple will do. He thinks that RTS/CTS use are not needed.

**Motion #32:**                    **Decline Ed Geiger's comment.**

Moved by:                    Bob O'Hara  
Seconded by:                Carolyn Heide

**Motion 32 Discussion:**

Why wait, let's solve the problem now. Someone has to get a legal expert to handle this, let's bite the bullet now. It is not making progress to just push things aside.

Rejecting the comment does not stop us from addressing the issue. Some people believe there is no patent issue here.

Call the question: Bob O'Hara, second by Anil Sanwalka (no nays)

Approved: 11                Opposed: 2                Abstain: 3                    **Motion #32 passes**

There is a sentiment expressed that simulations have shown that you get an improvement in throughput by discarding use of RTS/CTS.

Comment #198 offers a choice of suggestions for how to make broadcast/multicast more reliable because it maintains the standard is broken because of this unreliability.

**Motion #33:**                    **To decline adoption of clause 6 comment #198.**

Moved by:                    Carolyn Heide  
Seconded by:                Anil Sanwalka

**Motion 33 Discussion:**

Against: Minimum functionality should be added to prove the standard works without relying on implementers to have to figure out ways to make it work. Something should be specified - the implementer shouldn't be always having to figure out devious ways to make the standard work well.

In favor: That minimum functionality is there already. Suggestion that by having the AP create a CF period, send broadcast, then send CF-End would create a CF just for broadcast. Or you could use Matt's second suggestion. These are ways to increase reliability without change. Because CWmin is too low, the probability of collision is too high - this is the real problem.

**Motion #34: Move to lay the main motion on the table.**

Moved by: Tom Baumgartner  
Seconded by: Simon Black

**Motion 34 Discussion:**

Against: This an attempt to not finish the work we have to do. We could close this issue and it would be addressed again in the next round of comments, and the author could suggest text to recommend to implement.

In favor: avoid rash decisions.

Approved: 6      Opposed: 4      Abstain: 4      *Motion #34 passes*

Approved:      Opposed:      Abstain:      *Motion #32 Tabled*

**Motion #35: That management frames shall not be fragmented.**

Moved by: Chris Zegelin  
Seconded by: Simon Black

**Motion 35 Discussion:**

There is some discussion of whether there are frames other than those with a TIM in them that are effected by this. Maybe not, maybe. There are a lot of opinions on both sides of this issue. Some people think that the issue is covered by the text as it is now (modified by other comments). Others believe that without fixing this can get you into a spot where you cannot send a management frame.

**Motion #36: To table the main motion.**

Moved by: Johnny Zweig  
Seconded by: Greg Ennis

**Motion 36 Discussion:**

Comment that with all the edits that have been made this week, we don't really know what we are talking about anymore. We need to see a clean draft to discuss this more, table the motion or defeat it and comment on the new draft - doesn't matter.

Approved: 4      Opposed: 6      Abstain: 7      *Motion #36 fails*

Approved: 5      Opposed: 0      Abstain: 3      *Motion #35 fails*

**Motion #37: To adopt clause 4 comment and draft text files.**

Moved by: Carolyn Heide  
Seconded by: Joe Kubler

**Motion 37 Discussion: none**

Approved: 12      Opposed: 0      Abstain: 2      *Motion #37 passes*

**LB Comment Processing**

**Motion #38:**                   **That the resolution of D2 LB comments adopted during this week be reflected in the contents of draft d2.1 (with change bars)**

Moved by:                   Anil Sanwalka  
Seconded by:               Simon Black

**Motion 38 Discussion:** none

Approved: 13           Opposed: 0           Abstain: 2                   **Motion #38 passes**

**Goals for January Meeting**

Complete unresolved LB comments:

Clause 1: Finish MAC PICS Proforma

Clause 4: How to encode duration info for multirate editing

Clause 6:

- tabled clause 6 comment 197
- 95/247 motion from wed plenary "duration into PLCP header" text not edited to reflect this action.
- clause 6.7 re correcting state machine errors, comments to fix accepted, but text not edited yet.
- impact of sec 4 change of last frag to more fragments causes ripple edit in state machines.
- Figure 6.3 edit needed due to lack of visio.

Complete D2 draft editing using D2.1 as base.

Use output of this meeting (D2.1) to complete D2 LB comment processing resulting in D2.2 (D3.0?).

**New Business**

Fact - we have not completed processing the D2 letter ballot comments. That is all that we as the MAC group know about draft release.

Drawings in the draft are different packages, this has created an editing problem this week. We agree to use PowerPoint V4.0 .

**Meeting adjourned:** 11:30 AM

