

Nov '95 MAC group Report

LLC

MAC

PHY

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

Aug '95 Goals for Nov '95 mtg

- Quick votes on LB reference papers
 - No extended discussion, < 5 min each subject.
- Process all D2 LB comments.
- Review initial MAC PICS Proforma

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

Misc Subjects

- August MAC minutes approved unan

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

This Week's Work Summary.

- Really good progress on LB comments!
- The MAC chair would like to personally thank all involved for the long hours and extra effort that enabled us to accomplish this -

Everyone did a Great Job!

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

This Week's Work Summary.

- **Alas, despite the best laid plan of mice and men...**
We do have a few (<6) unresolved comments.

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB reference papers summary

- **The MAC group will not be asking the plenary to approve each paper individually.**
- **The papers have been incorporated into the revised draft clauses.**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/137R2 - IBSS pwr mgt

- Motion: To approve with correction by simon: his LB comment re sec 8.2.2.4G "beacon -> atim window (typo).
- MAC vote: 10, 0, 4

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/196 - WEP: MSDU vs MPDU revisited

- Motion: to adopt 95/196
- MAC vote: 1, 6, 8
- Paper NOT adopted
 - Decision is to apply WEP to MPDU.
 - Therefore, text in clauses has been corrected to indicate WEP on MPDU.

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/198 - WEP: rejection of plain text Data frames MIB toggle

- Motion: to adopt 95/198
- MAC vote: 6, 0, 9

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/201 - 6.2.6.3 retry limits

- Motion: to adopt 95/201
- MAC vote: 12, 0, 3

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/203 - Assoc / Reassoc relation correction

- **Motion: to adopt 95/203**
- **MAC vote: 11, 0, 4**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/206 - frag vs dwell boundary

- **Motion: to adopt 95/206**
- **amend to not del last deleted para on pg 2 of 206.**
 - amend vote: 9, 7, 5
- **amend: name mib var to match sec 8 (“frag threshold vs frag payload”)**
 - amend vote: 16, 0, 1
- **main motion vote: 12, 3, 5**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/207 - 6.2.5 Back off times

- **Motion: to adopt 95/207**
- **MAC vote: 10, 1, 8**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

Uncompress TIM papers

- **95/208 - Uncompress TIM / trailing zeros.**
- **95/209R1 - Uncompress Tim / trailing & leading zeros.**
- **Motion: to adopt either 208 or 209R1**
 - Vote: 6,5,6
- **Motion: vote for one:**
 - adopt 208: 1
 - adopt 209R1: 7
 - abstain: 5
- **result: 95/209R1 adopted.**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/210 - Association: different states between stations.

- Motion: to adopt 95/210
- MAC vote: 14, 0, 4

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/211 - WEP: Multiple default key support

- Motion to adopt 95/211
- MAC vote: 5, 1, 11

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/212 - Connection mgt stuff hanging around in D2.

- Motion to adopt 95/212
- MAC vote: 12, 1, 5

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

95/213 - Status code fill in

- Motion to adopt 95/213:
- wim: move to change reason 13 to "Association denied because the requesting STA is not authenticated:
 - 11, 0, 6
- Motion: refer to mac sub-grp working thru sec 4 comments.
 - unan.

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

D2 Letter Ballot Comment Resolutions

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 1

- **Total comments: 122**
- **Technical comments: 32**
- **Unresolved subjects: 2**
- **Highlights:**
 - Missing pics proforma
 - References to other standards
- **Comment and Draft text files available**
 - c1cmts.doc
 - c1draft.doc
- **Motion to adopt Comment and Draft text files:**
 - MAC vote: 10, 0, 2
 - Plenary vote: 31, 0, 1

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 2

- **Total comments: 241**
- **Technical comments: 58**
- **Unresolved subjects: 0**
- **Highlights:**
 - **Comment 81, 107 re restricting ESS to MAC layer components and creating a MESS.**
 - » **moved to not adopt comment 81/107 proposals:**
 - » **vote: 11, 0, 7**
 - **Comment 119, 140 re must define IAPP**
 - » **moved to not adopt comment 119 & 140:**
 - » **vote: 9, 0, 7**
 - **Comments 238-241 - Layer model incorrect, needs updating (missing top. multiple same name SAPs).**
 - » **Instructions from MAC grp re add data sap etc.**
 - » **vote: unan**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 2

- **Comment and Draft text files available**
 - **c2cmts.doc**
 - **c2draft.doc**
- **Motion to adopt Comment and Draft text files:**
 - **MAC vote: 9, 0, 4**
 - **Plenary vote: 34, 0, 1**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 3

- **Total comments: 61**
- **Technical comments: 29**
- **Unresolved subjects: 0**
- **Highlights:**
 - Service primitives corrected to match 802.2 1994.
 - Declined: Include encapsulated LLC info, declined by sec 4 group as not needed.
- **Comment and Draft text files available**
 - c3cmts.doc
 - c3draft.doc
- **Motion to adopt Comment and Draft text files:**
 - MAC vote: 9, 0, 6
 - Plenary vote: 29, 0, 1

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 4

- **Total comments: 244**
- **Technical comments: 153**
- **Unresolved subjects: 1**
 - how to encode duration info for multirate
 - » Using Plenary guidance from Wed.
 - » Text did not get incorporated due to lack of time.
- **Editor referral:**
 - MAC vote 10,1,5 to remove clause 1.5 - editors to accomplish after meeting.
 -
 - Figures need editing by someone who has visio to complete text edits.

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 4

- **Highlights:**
 - Declined proposal to encapsulate non-802 link layer info
 - Split Pwr Field into pwr bit / more bit
 - Kept Existing to/from DS bits
 - Removed vestiges of connection mgt
 - Changed IBSS BSSID from MAC adr to TSF derived BSSID
 - Clarified bit & octet ordering
 - Incorporated 95/137R1 (IBSS pwr mgt)
 - Incorporated 95/209R1 (tim compression)
 - Removed regulatory domain field
 - Specified status and reason codes
 - Updated and clarified fame sequences

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 4

- **Comment and Draft text files available**
 - c4cmts.doc
 - c4draft.doc
- **Motion to adopt Comment and Draft text files:**
 - MAC vote: 16, 0, 2
 - Plenary vote: 30, 2, 2

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 5

- **Total comments: 93**
- **Technical comments: 42**
- **Unresolved subjects: 0**
- **Highlights:**
 - **Incorporated papers:**
 - » 196 (WEP on MPDU)
 - » 198 (exclude unencrypted MPDU)
 - » 211 (Key ID field)
 - » 212 (WEP edits missed from D2)

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 5

- **Highlights**
 - **Declined:**
 - » **Make WEP mandatory**
 - » **WEP CRC 32->16**
 - » **Combine Reassoc and Auth**
 - » **Proposed deletion of shared key authentication.**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 5

- **Comment and Draft text files available**
 - c5cmts.doc
 - c5draft.doc
- **Motion to adopt Comment and Draft text files:**
 - **MAC votes:**
 - » **Adopt all but resolution related to 95/248:**
 - » **MAC vote: 13, 0, 4**
 - » **Adopt 95/248 recommendation (to decline 95/248):**
 - » **MAC vote: 8, 2, 9**
 - **Plenary vote: 27, 1, 1**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 6

- **Total comments: 335**
- **Technical comments: 203**
- **Unresolved subjects:**
 - one deferred

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 6

- **Highlights:**
 - Approved documents included: 201, 206, 207 & 174 & 196
 - Excepting the above papers, no functionality has been changed by the comments resolved. The text has been changed/clarified to reflect the current function.
 - Deleted subclause 6.1.5 (suggested by many comments) which repeated Data Service information
 - Pretty much re-wrote wording of subclause 6.2 because of many comments
 - Specifying references to MIB variables a lot.
 - Clarified NAV setting and clearing (not changed, just clarified)
 - Bounded CF period for max length

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 6

- **Referred to MAC group:**
 - #197 - Matt, increasing the reliability of broadcast
 - » motion to decline adoption of clause 6 comment 198:
 - » move to lay motion on table: 6, 4, 4 - tabled
 - #49 - Apple patent issue - defer to Vic
 - » Apple patent comment from Ed Geiger.
 - » Motion to decline comment to remove RTS/CTS or approach apple for patent license.
 - » vote: 11, 2, 3

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 6

- **Clause 6 editing not quite completed:**
 - 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 fic 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.

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 6

- **Comment and Draft text files available**
 - c6cmts.doc
 - c6draft.doc
- **Motion to adopt Comment and Draft text files:**
 - MAC vote: 12, 0, 2
 - Plenary vote: 28, 1, 0

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 7

- **Total comments: 6**
- **Technical comments: 2**
- **Unresolved subjects: none**
- **Highlights:**
 - All change editorial
 - Both tech comments withdrawn by authors.
- **Comment and Draft text files available**
 - c7cmts.doc
 - c7draft.doc
- **Motion to adopt Comment and Draft text files:**
 - vote: none needed as all changes editorial in this section.

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

LB Resolution: Clause 8

- **Total comments: 184**
- **Technical comments: 107**
- **Unresolved subjects: none**
- **Highlights:**
 - Mostly minor clarifications
 - Consistency updates to support other clauses
 - Pwr mgt for PCF improved
- **Comment and Draft text files available**
 - c8cmts.doc
 - c8draft.doc
- **Motion to adopt Comment and Draft text files:**
 - MAC vote: 12, 0, 2
 - Plenary vote: 31, 0, 1

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

Plenary motions:

- **Moved:** That the resolution of D2 LB comments adopted during this week be reflected in the contents of Draft D2.1 (with change bars).
- **MAC vote:** 13, 0, 2
- **Plenary vote:** 31, 1, 1

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

Goals for Jan 96

- **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.**
 - **General comments - did anyone process these?**

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

Goals for Jan 96

- Complete D2 draft editing using D2.1 as base.
- Use output of Nov mtg (D2.1) to complete D2 LB comment processing resulting in D2.2 (D3.0?).

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby

MAC group report

- That's all for now...

IEEE 802.11 MAC report Nov 1995

Doc 95/241

David Bagby