

Aug '95 MAC group Report

LLC

MAC

PHY

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Aug Goals from July 95

- Process D2.0 LB comments (if any...)
- Complete work on Section 8.
- Outline Conformance Statements to correspond to D2.0, flesh out to match D2.0.

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Misc Subjects

- July MAC minutes approved
- Carolyn took minutes this week

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This Week's Work Summary.

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Papers (numerical order)

- 137R1 - ad hoc pwr mgt (improved)
- 182 - rts/cts authors not present at mtg - univ Berlin
- 183 - modified backoff algs - univ Berlin
- 187 bumps on road to privacy - mike F
- 188 how far should an ESS extend - mike f
 - not presented

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Full MAC group actions

- No official votes due to pending LB
- Many recs in small papers to be avail ASAP for reference in LB comments.

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IBSS pwr mgt

- **Consensus is for this feature, details of mechanism to be in 95/137R2 from Rick White.**

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MAC Conformance stmts.

- **Simon to create straw man, mike F to help.**
- **Doc 95/202 will be avail before Nov mtg.**
- **Not expected before LB closes.**

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6.2.5 Back off times

- **Straw vote to change D2 text to CWmin = 7, CWmax = 255**
 - zero relative values
 - Values required not suggestions
 - vote: 11, 1, 2
- **Tom B will create doc 95/207 and dist for LB reference.**
- **Mike F; ref to <ftp://ftp.cs.toronto.edu/csri-technical-reports/298>**
 - this is enet capture effect paper

802.11 decisions made but not edited into D2.

- **Connection mgt stuff hanging around**
 - Mike F will email as 95/212 for LB comment reference.
- **WEP MSDU vs MPDU**
 - WEP IV drawing edit correction also in 95/212.
 - Superseded by 95/196 (WEP MSDU vs MPDU)
- **Format & figures in Clause 4**
 - TIM diagram out of date (4.3.2.1)

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6.2.6.3 retry limits

- 6.2.6.3 modified to correct motivation for mib vars in sec 8 re retry limits.
- 95/201 will be this proposed text for LB comment.
 - (bob Ohara, TOm B)

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frag vs dwell boundary

- Worth doing frag adjustment to fit remaining dwell time?
- Rec: Use fixed frag size of `A_fragmentation_threshold` per MSDU (except for last frag).
- straw poll:
 - accept rec: 11
 - leave D2 as is: 3
- Mike F will write up in doc 95/206 people can cite if they like in LB comments.

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state machine known limitations

- text vs state machine.
- group drafts Mike and Johnny
- 95/199 will be further updated state machines
- avail before LB closes (9/10 prob)

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Multi-rate desc inadequate.

- probs identified:
 - unclear language re unicast data and/or mgt frames at any rate in last para sec 6.6.
 - state transition R41b - plcp header is ok, but rate indicated is not one the phy supports, what to do?
- no consensus, people to consider and make LB comments.

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WEP: MSDU vs MPDU revisited

- **Rec: to reconsider MPDU decision and change back to MSDU.**
 - several strong MSDU supporters and a couple fence sitters, no strong MPDU supporters
- **DB to include in 95/196 for LB reference.**
 - Will ref paper 95/187 for background, new paper will be changed text only.

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WEP: ICV alg

- **Probable rec: change back to CRC-16 from CRC-32**
- **DB: to put in 95/197 for LB reference.**
 - will ref mike's' paper 95/187 for background, new paper will be changed text only.
- **late breaking consideration: San Jose 95/06 minutes: Kerry Lynn says 32 bits is shortest ICV that govt will accept for export**
- **This may nullify rec above.**
 - DB to check with Kerry Lynn.

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WEP: Non-accept of non-WEP Data frames MIB toggle

- **Mike F to create 95/198 for LB reference.**
 - will ref paper 95/187 for background, new paper will be changed text only.

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WEP: Multiple default key support

- **95/187 prob 4 for background info**
- **straw poll support to ask Mike F to write up text for people to review - Doc 95/211 for LB reference**
- **straw vote: 8, 1**

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Spec when to set To-DS bit.

- **Summary:** When bit set not speced.
- **Issues:**
 - Try direct first vs. try AP first; mandate or not?
 - some want speced, some do not.
 - TO-DS bit definition not the issue, when to invoke is.
- **no consensus after three attempts.**

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Uncompress TIM?

- **Straw poll:**
 - Wim's proposal uncompress and delete trailing zeros: 5
 - » doc 95/208 for LB reference
 - Johnny's modification - delete leading and trailing zeros: 6
 - » doc 95/209R1 for LB reference
 - Leave D2 alone: 0
- **Note, side discussion:** people also concerned re interaction with SID allocation strategy (not speced in D2).

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How are beacon interval times coordinated in an ad-hoc net?

- Done as side effect of ad-hoc pwr mgt paper see 95/137R2 for LB reference.

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Assoc / Reassoc relation

- DB will correct in 95/203 for LB reference

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Combine auth and assoc functions?

- **Proposal: Combine Auth frame contents into Assoc and Reassoc frames, leave auth frames.**
- **Straw poll:**
 - For proposal: 2
 - Leave D2 as is: 10

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Association - different states between stations.

- **REC: add sentence:**
 - If STA 1 receives a class 3 frame from STA 2 which is not associated with the STA 1, STA 1 shall send a Disassociation frame to STA 2.
- **Straw poll to adopt: 7, 0, 0**
- **DB to put in paper 95/210 for LB reference.**

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TSF timer alg problem

- Much discussion.
- NO consensus.
- Beacon / Scanning / BSS joining / BSS creation
- Problem with PHY specs re time reference.
 - ref 11.3.3.1.2
- more research needed, ripe area for LB comments.

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multi-MSDU handling

- should min req for multi simul MSDUs be > for APs than STAs?
 - Straw poll
 - For reducing to < 6: 1
 - For leaving as is: 12
- what happens if implemented limit exceeded?
- need to spec behavior:
 - straw: Need to spec behavior:
 - » first straw: 8, 3
 - » 2nd straw: 4, 6,
- diverging consensus
- left for indiv LB comments

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What to do if data frame not recv in time after poll?

- much discussion....
- noting useful to capture from this discussion.

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State machine known limitations

- Clause text vs state machine.
- Group drafts Mike and Simon and Johnny
- 95/199 will be further updated state machines
- avail before LB closes (9/10 prob)

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Status code fill in

- Tom B started effort.
- Will be in 95/213 for LB reference.

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LB reference papers summary

- 95/137R2 - IBSS pwr mgt
 - Simon
 - avail later today
- 95/196 - WEP: MSDU vs MPDU revisited
 - Dave B
 - done
- 95/197 - WEP: ICV alg
 - Dave B
 - sometime next week
- 95/198 - WEP: Non-accept of non-WEP Data frames MIB toggle
 - Mike F
 - today

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LB reference papers summary

- **95/199 - state machine known limitations removal**
 - Mike F
 - Hopefully avail before LB closes, prob not until 9/10
- **95/201 - 6.2.6.3 retry limits**
 - Bob Ohara, Tom B
 - already distributed
- **95/202 - MAC Conformance stmts.**
 - Simon, Mike F
 - Not expected before LB closes.
- **95/203 - Assoc / Reassoc relation correction**
 - Dave B
 - done

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LB reference papers summary

- **95/206 - frag vs dwell boundary**
 - Mike F
 - distributed
- **95/207 - 6.2.5 Back off times**
 - Tom B
 - done
- **95/208 - Uncompress TIM / trailing zeros.**
 - Wim
 - done
- **95/209R1 - Uncompress Tim / trailing & leading zeros.**
 - Johnny Z
 - done

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LB reference papers summary

- **95/210 - Association: different states between stations.**
 - Dave B
 - done
- **95/211 - WEP: Multiple default key support**
 - Mike F
 - later today
- **95/212 - Connection mgt stuff hanging around in D2.**
 - Mike F
 - done
- **95/213 - Status code fill in**
 - Tom B
 - Tom will let vic know

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Goals for Nov 95

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

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- That's all for now...

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