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**IEEE P802.11  
Wireless LANs**

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**Tentative Minutes of Task Group B**

**Date:** March 8-12, 1999

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**IEEE 802.11 – Task Group B Minutes**

**March 8-12, 1999 – Austin Texas**

**Monday – March 8, 1999**

Chair: John Fakatselis

Secretary: Stan Reible

**Session Called to Order at 8.35 am.**

**Approval of Agenda**

Chair reviewed agenda.

No objections voiced to agenda. Agenda approved as presented.

**Procedural Issues**

Parliamentarian Appointments: Vic Hayes, Stuart Kerry, and Bob O'Hara

Chair reviewed Robert's Rules of Order:

- Point of Order
- Improper Motions
- Point of Information

We may be able to accelerate the schedule by including the approval for submittal to Sponsor Ballot as part of this March meeting rather than wait until the May Interim meeting.

Editor reported that we received 52 comments from the default circulation ballot.

Chair reviewed resolution process to be followed in resolving the remaining three "No" votes

No objection was voiced to following the procedural rules used for comment resolution in previous 802.11 meetings.

The chair will divide the comments in several technical groups according to their technical and editorial content.

Editor pointed out that in light of comments submitted the group categories should be defined differently.

Chair reviewed plans/needs FCC teleconference scheduled for Tuesday. Group needs to formulate presentation to FCC. John Fakatselis, Carl Andren, and Matthew Shoemake volunteered to provide input and to participate in FCC teleconference. The last teleconference with the FCC was held November 1999. It was pointed out that Vic wants the teleconference to be reviewed in the plenary meeting, and therefore, that information needs to be prepared before the Plenary scheduled for 3:45 this afternoon. One member felt that the teleconference should be delayed until Wednesday to allow more time for preparation of material.

No further questions or comments on FCC teleconference.

No objections were voiced to the committee working independently of Task Group B.

Call for Papers

Coupling of clocks doc. 99-61; 15 min. by Jan Boer

Presentation of Paper

Doc. 99-61, Jan Boer.

If the LO clock and sampling clock are not coupled, performance for suffer relative to a system where they are coupled. Zero crossings become noisy and performance suffers for delay spreads of greater than 50 nS.

Questions related to presentation:

The most serious problems occur when the receiver assumes the clocks are coupled and they are not.

It was proposed that the IEEE802 HR Standard specifies that the clocks be coupled. It was noted that there was at least one objection to the coupling of the clocks. Boer thought that it should be possible for the receiver to switch between 1x and 2x clock rates, depending upon the received preamble.

Most prefer to have coupled clocks. It is suggested that receiver through the service field be notified that the clocks are coupled. Normally it would be assumed that the clocks are coupled.

Meeting will be recessed to allow for division of comments into groups.

Chair asks for show of hands by members present who responded with no vote: 1 responded.

No objection voiced to adjournment.

**Meeting Adjourned at 9:47**

## Tuesday Morning – March 9, 1999

### Meeting Called to Order at 10:15

Doc. 90367 - Comments from LB17.

Members requested that comments document be made available on flash cards and server.

Comments by Bob O'Hara.

Discuss ensued on the requirement to preset the scrambler at the long preamble.

Moved by Boer to delete the preset requirement. No second. No motion.

Moved by group to remove comment to delete the scrambler preset requirement.  
No objection voiced. Comment rejected.

Comment resolution proposed by Boer to define in the service field whether or not the clocks are locked.

No objection voiced to resolution. Resolution accepted.

Comments by O'Hara.

Eliminate the instruction to remove references to a MPDUDuration Fact or

Editor with change paragraph to only remove this factor from high rate capable equipment.

Clause 14.10: Adding functionality to existing PHYs, and thereby breaking all existing implementations is not within the scope of the par to develop a higher speed extension.

Delete this instruction from section 14; leave in section 18.

No objections voiced to this change. Change accepted.

Clause 15: Elimination of reference to MPOUDurationFactor.

Proposal accepted.

Clause 15.3.4: DS TXT Time Calculation.

Proposal to eliminate accepted. No objections voiced.

Clause 18.4.6.7: and all subclasses. All references to frequency hopping were to be deleted.

Clause 30: Elimination of MPDUDurationFactor.

No objections voiced to removing reference.

Clause 7.3.1.4 lines 29 and 44

Editor will work with bob O'Hare to make changes as recommended.

No objections voiced to changes.

Clause 9.2 pages 9 line 1: Undelete "shall," remove "must".

No objections voiced to changes.

Clause 18.2.5: Change Fig. 11

No objections voiced to change. Comments accepted.

Clause 18.2.6 Fig. 17: Correct state machine. No start statement.

Correction accepted.

Clause 18.4.5: Comment: MAC does not speak to human connection.

No objection voiced to accepting comments.

Clause 18.4.6.12 line 11:

No objection voiced to accepting comments.

Clause 18.4.7.7, Fig. 31: Remove power exclusion (overshoot) above max. Transmit power line.

No objections voiced. Resolution accepted.

Page 90, line 29 gives this item a number of its own.

Editor will fix.

No objections voiced to accepting comment.

All further editorial suggestions from Bob O'Hara will be dealt with editor offline.

The remaining Commenters are not present:

David Bagby: No Vote

Allen Heberling: No Vote

Kevin Karcz:

Stanley Ling: Only editorial comments.

No objection voiced to first Heberling comment, change already made as a result of O'Hara's comments.

Fig. 7: Format change suggested. Figure already reviewed

Editor will make figure go vertically so that comments in text can be better added to the figure.

No objections voiced to accepting comment.

Clause 18.3.5: Vector description is overly terse and out of place.

Comment rejected

No objection voiced to rejecting comment.

Clause 10.03.10.12: TU (time unit) k users. Poor notation.

Comments accepted.

No objections voiced to accepting comments.

Clause 18.2.3.4: Since these are dBits please change to b.

Change Accepted. No objections were voiced.

Table 2-Example of length calculations.

Clause 18.2.3.5: Comment rejected, editor will explain process to commenter.

Reviewed comments from David Bagby.

The comments are the same as submitted with LB16.

Simon Black will generate a response to Bagby before the end the week.

Kevin K. submitted No vote without comments.

Next time we meet, Editor will start work on revised draft.

Group working on FCC teleconference will meet in this room at 1:30 this afternoon.

No objection was voiced to adjournment.

**Meeting adjourned at 11:47 am.**

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**Tuesday Afternoon – March 9, 1999****Call to Order at 3:30 pm.**

Chair reviewed agenda.

No objections voiced to agenda.

Chair reported on short FCC teleconference.

The FCC reviewed the latest 802.11 b draft and issue with specified tests which specified 30 kHz video BW when a 100 kHz video BW should be specified.

The FCC is going to redefine the processing gain test. It will take about 1 year to complete the revision of the processing gain test.

**Continuation with Comment Resolution Process**

The following TGb members have standing No votes, which the group will attempt to be resolved with teleconferences with those absent and direct contacts with those, present:

David Bagby  
Allen Heberling  
John Cafarella

Simon Black called D. Bagby to further discuss his reasons for a No vote.

David Bagby stated that he would hold to his No vote because he feels that TGb did not adhere to a single PHY as called for in the PAR.

Simon Black drafted a follow-up response to D. Bagby's opinions. This will become part of the comment resolution's document.

Resolution process with regards to Allen Heberling's comments.

The editor reviewed the changes that are going to be made as a result of his comments and also the reasons for rejections of some of his comments.

Allen Heberling requested that further discussion on his issues be resolved in a small group consisting of Tom Tsoulogiannis, the Editor, and himself. Chair agreed.

Clause 18.3.5 Comments rejected by editor as making text inconsistent with rest of document.

A teleconference will be set up with John Cafarella tomorrow morning.

Vic Hayes reviewed the requirements for a 15-day recirculation ballot for approval of this week's change to the standard. There will be a need to attempt to resolve any new "No" votes from the recirculation ballot.

Vic Hayes reviewed the procedure for conditional approval to forward a draft standard.

Chair asked if group would be willing to let it up to TGb and 802.11 chairs to handle any new votes.

In the event of any new “No” votes during recirculation ballot, the chair should take the following steps:

- A. Publish the new “No” comments to the 802.11 reflector.
- B. Set up and announce a Teleconference on the reflector as soon as the next day.
- C. Discuss, vote, and approve the request to SEC during the teleconference.
- D. No quorum requirement is necessary, but voting procedure applied otherwise.

**# 1 Motion:** Moved to follow the following process during recirculation ballot in the event of new “No” votes/Al Petrick/Vic Hayes.

**# 2 Motion Passed 20/0/1.**

Chair opened floor to questions.

New meeting Wednesday pm at scheduled time.

No objections voiced to adjournment.

**Meeting Adjourned at 4:52 pm.**

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**Wednesday – March 10, 1999****Call to Order at 5:05 pm.**

Editor's report presented on editorial changes to 802.11b HR Extension.

Motion to approve comment resolution document 99xx for letter ballot 17 802.11b.

Motion to submit the TGb draft for sponsor ballot after the editor incorporates the resolutions to the comments of letter ballot 17 as approved in document 99xx.

TGb needs to respond to the comments of the following list of No voters.

David Bagby  
John Cafarella  
Jeff Fischer  
Allan Heberling  
Bob O' Hara  
Michael Rothenburg (no longer a voter)

It was questioned what happens when No voters do not respond to default recirculation ballots.

Vic indicated that we need to respond to their comments and communicate to the No voter the reasons for TGb's rejection of their comments.

Chair requested that editor insert the comments from Bagby, Cafarella, and Fischer and the associated 802.11b rebuttals into a single document and forward to Cafarella and Fischer before calling. David Bagby has already been contacted.

Group reviewed Jeff Fischer's comment (from 2<sup>nd</sup> recirculation ballot) and task group's rebuttal.

Group reviewed John Cafarella's comment.

No objection voiced to final revised responses to comments.

Sponsor Ballot request to Excom. Draft resolution 84. Comment resolution 85.

No objection voiced to approving minutes of Jan99 meeting.

**#2 Motion:** Moved to accept comment resolution doc. 99/85 for Letter Ballot 17 802.11b/Bob O'Hara/Al Petrick.

**#2 Motion Passed 17/0/2.**

**#3 Motion:** Moved to submit documents to ExCom, the request for submitting to Sponsor's Ballot revised standard, doc. 99/85 Comments Resolution, and doc. 99/87 listing remaining "No" votes/Tom Tsoulogiannis/Matthew Shoemaker.

**# 3 Motion Passed 17/0/1.**

No objection voiced to editor changing comment document in response to change from any No voters to "Yes" vote.

No objection voiced to reconsidering motion for submitting to sponsor's Ballot.

**#4 Motion:** Moved to resubmit the TGb draft 3.last to WG recirculation ballot after the editor incorporates the resolutions to the comments of Letter Ballot 17 as approved in document 99-85, and if successful to submit for sponsor Ballot draft 4.0, or subsequent draft. Submit document 99-87 to ExCom with the responses to the remaining "No" vote comments and for the WG chair to request conditional approval/Bob O'Hara/Tom Tsoulogiannis.

**# 4 Motion Passed 14/0/2.**

Editor to modify as necessary document 99-87 given any vote changes from the remaining "No" Votes.

Editor and Chair to arrange for teleconferences to seek vote reversals.

Chair to determine the final vote after any vote reversals.

By closing TGb session early, TGa will have additional time to complete their work.

No objection voiced to adjournment.

**Session Adjourned at 6:05.**

### **Attendance List**

See minutes of the full working group.

### **Future Meetings**

See minutes of the full working group.

**Acton Items**

- 1) Editor needs to modify as necessary document 99-87 given any votes changes from the remaining "No" votes.
- 2) Editor and Chair are to arrange for teleconferences to seek vote reversals.
- 3) Chair to determine the final vote after any vote reversals.
- 4) Chair need's to provide to 802.11 chair results of comment resolution process.
- 5) Final vote tally needs to be provided to 802.11 chair.