

**IEEE P802.11  
Wireless LANs**

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**Tentative Minutes of Task /group B**

May 4, 1998

Meeting in Utrecht, the Netherlands

**Secretary:**

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**Monday, AM**

Kent Rollins, temporary secretary, and Carl Andren being secretary the remainder of the week, tentative minutes edited by John Fakatselis and Vic Hayes.

John Fakatselis, Chair

Stuart Kerry and Vic Hayes will act as parliamentarians.

**Review of the agenda.**

Presentations on Tuesday, Wednesday evening.

Wednesday matrix overview, panel discussion, voting.

Voting is not elimination in this round, select the best this time.

A total of 1.5 hours are provided to each proposer.

There were some doubts about the timing of the votes and the actual voting process in relation to what falls off, and when the selection is made.

***Table the agenda approval until the selection process is discussed.***

**Selection process overview.**

Reviewed the selection steps.

Discussion of the final proposal selection process: Group that defined the process intended to avoid multiple rounds by voting for the favourite and the leader wins. The final selection should be at least 50%, But not defined.

The Chair. recommends for step 14. Vote is for favourite. Eliminate the lowest voters. A least two proposals must be in the final round.

How are the final two chosen?

Members wondered why TGb would need just 50 % whereas the plenary has to get 75 % for adoption, how compromises would be considered where we currently only have an entire proposal to vote on and whether the final round would be at least 2 or just 2 proposals to vote on or whether the process would stop if one

proposal reached the majority. The current selection process (98/54, approved at the plenary meeting in March as motion 10) calls for a majority to bring a selected proposal to the plenary. Compromise proposals in the past were made off-line, none have been brought to this meeting, one possibility could be to move for a recess between votes to prepare a compromise.

After a long discussion, the interpretation of the rules were summarised as multiple voting on the favourite of the available proposals, none and abstain; one tick per ballot form, that abstains are not counted, that the voting would stop if one proposal reached majority, that the lowest one would be removed from the list. Once voting begins, the rounds would follow each other without repetition of presentations or panels. The Chair asked for any objection to voting for the favourite proposal? There were None.

The Chair then reviewed background of the PAR. By asking a member to write down letters A-E on pieces paper with hidden names of the proposals, he defined the order of presentations.

A Raytheon  
B Micrilor  
C Lucent  
D Harris  
E Alantro

Random selection for the second data presentations.

A Alantro  
B Harris  
C Raytheon  
D Micrilor  
E Lucent

#### Motion

to add the following clarifications to document 98/54 selection step 14.

■ Selection of the Final proposal with most votes at the task group level.

*A secret vote will take place to eventually choose the proposal with the most votes.*

*There will be multiple more rounds of voting eliminating the proposal with the least votes at each round,*

*until one proposal receives more than 50% of the votes.*

*The ballot will ask for the best proposal (only one vote) in addition a none of the above category will be included.*

*The first round of balloting will take place after the first round of presentations and the result will be announced.*

*The final selection will be presented as the recommendation of the task group to IEEE802.11 for approval.*

Mover/Seconder: Bob O'Hara/ Anil

**Motion to amend:** *final selection will be voted on by the group before going to plenary. With a 75% vote required.*

Mover/seconder: Chris Heegard/ unknown.

After some discussion, the **Question is called** by Bob O'Hara, second by Johnny Zweig

Call for the question: 44/0/0, **question is called**

Result of vote on motion: 7/31/4, **the motion to amend fails**

**. The main motion passes.**

Back on the adoption of the agenda

**Motion:** *Tuesday voting to eliminate one proposal. Wednesday voting to get to one proposal.*

Mover/Seconder: Unknown/unknown

Result of vote on motion: 41-0-0. **Motion passes**

John F. Presented final agenda.

**IEEE802.11 TASK GROUP B  
MAY 4-8 1998 , UTRECHT , the NETHERLANDS  
AGENDA**

**MONDAY**

- **CALL TO ORDER**
  - **SECRETARY APPOINTMENT**
- **PROCEDURAL**
  - **PARLIAMENTARIAN APPOINTMENT**
  - **COMPARISSON MATRIX TEAM**
- **APPROVAL OF AGENDA.**
- **APPROVAL OF MARCH 1998 MINUTES.**
- **BACKGROUND**
- **SELECTION PROCESS OVERVIEW.**
- **CALL FOR PAPERS**
  - **PROPOSERS (submissions estimate)**
    - **ALANTRO 3 submissions**
    - **HARRIS 6 submissions**
    - **LUCENT 8 submissions**
    - **MICRILOR 6 submissions**
    - **RAYTHEON 3 submissions**
  - **OTHERS**
    - **Symbol 1 submission**
    - **STI 1 submission/presentation**
- **ORDER OF PRESENTATIONS (BY PROPOSAL)**
- **ADJURN**

**TUESDAY**

- **PRESENTATIONS BY PROPOSERS**
  - **8:15 - 9:00 A. Raytheon**
  - **9:00 - 9:45 B. Micrilor**
  - **9:45 - 10:30 C. Lucent**

- 10:30 - 10 :45 BREAK
- 10:45 - 11:30 D. Harris
- 11:30 - 12:15 E. Alantro

- First round of voting
- Announcement of voting results

WEDNSDAY

■ PROPOSAL PRESENTATIONS

- 8:15 - 9:00 A
- 9:00 - 9:45 B
- 9:45 - 10:30 C
- 10:30 - 10 :45 BREAK
- 10:45 - 11:30 D
- 11:30 - 12:15 GENERAL PAPERS PRESENTATIONS

WEDNSDAY AFTERNOON AND/OR EVENING.

- MATRIX OVERVIEW
- PANEL DISCUSSION
- CLOSING ARGUMENTS
- FINAL VOTING ROUNDS
- ADJURN

**Motion to approve the agenda Roy/ Dean 34-0-6**

Counted the number of submissions:

Alantro 3, Harris 6, Lucent 8, Micrilor 6, Raytheon 3, Symbol 1

There was one general presentation

Agenda approved.

Meeting adjourned

Tuesday, April 5, 1998, AM

## Presentations by all participants

### ***Raytheon,***

Wes Brodsky presented document 98/177, highlighting Amplifier back off, AM/PM conversion, Compare offset to non offset, Sidelobe levels for ACI specification

### ***Micrilor,***

John Cafarella presented Method of Including Effects in Throughput Modelling 98/207  
His second presentation: System Capacity with Channelization 98/208

### ***Lucent***

Ad Kamerman presented Impact of delay spread robustness on coverage range. 98/179.  
Bruce Tuch presented: Element of a Successful Standard 08/198

### ***Announcement***

Bob O'Hara announced the Tgrev is working on comments from ballot LMSC. Meeting in room 225 for 802.11 rev.

### ***Voting procedures reviewed.***

The Chair showed the ballot form and responded to questions that this format was changed to make counting more easy and that percentages are only counted from votes on proposals and on none, not on abstentions

### ***Harris***

Michael Marsanu, Aironet,. presented doc.: 98/209 FCC grants approval to Aironet  
Carl Andren, Harris, presents doc.:98/116r1 Harris Proposal  
Mark Webster, Harris, presents doc.: 98/200a, Review equaliser.

### ***Alantro,***

Chris Heegard presents Alantro FCC Correspondence as given in doc.: 98/185

### ***voting***

Chair will rule on the process for selection. Clarification to the original document 98/58.  
Clarified 50% rule for ending rounds. Basically, If any proposal gets over 50%, that ends voting and goes to the whole group. If no proposal gets 50%, the proposal with the least votes is dropped and the voting process continued.  
Motion needed to adopt choice, abstain vote does not count.

On a question what happens if there would be a tie on the last place, the chair responds that the rules allow only one to be eliminated.

#### ***Motion to adopt one of the following;***

Mover/Second: Stuart Kerry/Al Petrick

Vote on the motion **56-0-1. Motion passes**

Group will resume at 1250 vote announced at 1255.

Voters 57 leaving room

non-voters 14 leaving room  
 ballots 57  
 invalid 1  
 total 56

Company	number	%
Harris	25	43
Lucent	14	24
Micrilor	12	21
Raytheon	3	5
Alantro	1	1.7
None	1	1.7
Invalid	1	1.7
Abstain	0	0
total valid	56	

Therefore, at this time, the Alantro Proposal is removed.  
 The meeting is adjourned at about 13:15 for a late lunch.

### Wednesday, May 6, 98, AM

Meeting opened by John Fakatselis  
 Continue with presentations

#### **Lucent**

Jan Boer provides a description of BCPM (doc.: 98/175)  
 Ad Kammerman gives a presentation of doc.: 98/180.

#### **Raytheon.**

Wes Brodsky presents but has no slides.

#### **Micrilor**

Mass Mori presents the advantages of code channelization along Doc.: 98/143  
 John Caferella continues the presentation.

#### **Harris**

Mark Webster, makes a summary of Harris' advantages  
 Carl Andren, describes the short preamble along with IP position versus the other proposals.

#### **General presentations**

The next item in the agenda called for presentations of general papers not linked directly to any of the proposals. The chair asked representatives of each proposal to review the general paper submissions and determine if they indeed were general. The review team responded unanimously that 98/214 was a general paper, but there were 2 objections to 98/204.

The paper doc.: 98/204 by Greg Rawlins titled "Comparison for 3 frequency vs. 2 frequency plans" was dropped. This paper was considered to favor directly the 2 channel approaches by the Chair common to Harris and Lucent and it was suggested by the Chair that Harris or Lucent accept it as part of their allocated time for presentation. Paper 98/214 by Jeff Abramowitz qualified for presentation with unanimous consent of the reviewers.

**Jeff Abromiwitz, 3-COM**

Presented Paper 98/214 giving a prospective of what is important for the 802.11 high rate WLAN market

The Chair reviewed the remaining part of the agenda for the week. Chris H. requested a presentation in the afternoon.

Meeting adjourned.

**Wednesday, May 6, 98, 1:20 PM**

Full group meeting moved to Thursday morning and TGb moved to here.

Comparison matrix, William Roberts from AMI will not be attending.  
Karl Hannestad will take the lead for discussing the matrix.

**Karl Hannestad, Netwave**

Review of the filled in comparison matrix.

Discussion of the agenda by John Fakatselis.

**Panel discussion**

Carl Andren  
John Cafferella  
Bruce Tuch  
Wes Brodsky

**Closing Statements**

**Mark Webster, Harris**

Semi company, working on high rate for last 2 years. Low complexity, backwards compatability, regulatory compliance, no license, no fee  
Non complex, based on textbook techniques.  
Working silicon in the lab  
responsive to concerns.

**Keith Amundsen, Raytheon**

QPSK yields a power efficiency advantage, especially over Lucent  
3 channels is needed, the Harris proposal is the most likely to consider incorporating our ideas.

**Bruce Tuch, Lucent**

Lucent is not a chip provider, 10 MBps with low complexity without pulling back in rate, Holistic approach.  
In very bad environment will be more robust, we are not in the business, we will supply the SPW code. Lucent will help you to become a successful wireless provider.  
Lets make a standard we can be proud of.

**John Caferella, Micrilor**

The issue of IP is that our requirements are benign.

MasS Mori: we have a chip supplier we have instructed to license the chips to anyone if the standard is made on our product. In Japan the boundary for 2.4 GHz may expand. We learned from Lucent, we needed a channel matched filter.

John, If 3 channels are needed, we have the half rate option. This will give 5 or 9 MBps and 3 channels. If you want the ability to put everybody on the same code, you can do it. When you do not have a sys admin to set up channels, you can do it.

**Voting process, ballot 2**

Proposal	number	%
Harris	26	44.8
Lucent	15	25.8
Micrilor	15	25.8
Raytheon	1	1.72
None	1	1.72
Abstain	0	0
Total	58	100

58 ballots  
 Raytheon removed  
 next round,

Ballot 3 was discarded as the form still contained Raytheon by mistake.

**Voting process, ballot 4**

Proposal	number	%
Harris	24	41
Lucent	16	28
Micrilor	17	29
None	1	2
Abstain	0	0
Total	58	100

**Voting process, ballot 5**

Proposal	number	%
Harris	28	48
Micrilor	29	50
None	1	2
Abstain	0	0
Total	58	100

Since no one got >50%, a quandary is on hand. On one hand Harris is eliminated, but Micrilor did not get over 50% of the vote.

Much argument on whether or not Harris was eliminated by this round. General consensus with the chairs agreement is that Harris is eliminated and the next vote would normally be: Micrilor or None.

**Motion**            *to postpone the ballot process to the Friday TGb meeting because it looks like there is no clear direction and ask the interested parties of their willingness to work on a compromise through the start of the Friday TGb meeting.*

**Mover/seconders:** Keith/Bruce

Chair rules this motion valid.

**Appeal the chair: the motion is out of order**

**Appealer/seconded:** by Johnny/Simon

**Call for the question** by Chris/Keith. Vote result **51/0/4** The question is called.

Vote on **appeal** is: **16/30/5** , therefore the **motion is out of order**.

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Jeff Abromowitz: **Point of Order:** *I question the validity of the voting due to voting irregularities that would be explained by 'block voting'. In this case, I believe that the 802 voting rules change to one vote per company.*

Vic: there is no proof of block voting, so there is no way to apply that rule.

Keith: What is the actual wording and how does it apply when there was a secret vote

Vote to adjourn until 9PM to let the parliamentarians solve the question about block voting.

After re-convening,, the chair did a review of any Block Voting references that himself and the parliamentarians were able to surface during the recess. The following references were presented to the group.

#### **Standards companion**

**It is also the chair's responsibility to ensure that the working group knows they represent only themselves, not their company or another interest.**

#### **LMSC Operating rules**

##### **ExCom**

##### **3.4.1 Voting Guidance**

It is expected that LMSC Executive Committee members will vote as both professionals and as individual experts, except under the Directed Position provisions of Procedure 8, and not as a member of any affiliate block (organization, alliance, company, consortium, special interest group, etc.). If substantive evidence is presented to the LMSC Chair that this provision is violated, the LMSC Executive Committee will meet to consider what, if any, action to take on the presented evidence. Such action may include any action up to and including a recommendation for removal from office.

#### **Working group**

##### **5.1.4.4 Working Group Chair's Authority**

To carry out the responsibilities cited in 0 5.1.4.3 Working Group Chair's Responsibilities, the Working Group Chair has the authority to:

- a) Call meetings and issue meeting minutes.
- b) Decide which issues are technical and which are procedural.
- c) Establish Working Group rules beyond the Working Group rules set down by the Executive Committee. These rules must be written and all Working Group members must be aware of them.
- d) Assign/unassign subtasks and task leaders or executors, e.g. secretary, subgroup chair, etc.
- e) Determine if the Working Group is dominated by an organization, and, if so, treat that organizations' vote as one (with the approval of the Executive Committee).
- f) Make final determination if and how negative letter ballots are to be resolved when a draft standard, recommended practice, or guideline, is to be sent to the Executive Committee for approval for Sponsor Ballot Group voting.
- g) Collect fees to meet Working Group expenses.

Parliamentarians and chair could find no clear path of how the Task group could resolve even if true. The Chairman asked for a straw poll to determine who in the room "thought that improper voting had transpired". Some members stated that they would be reluctant to state this in the open. The chair asked to have the attendees return their opinion anonymously on a piece of paper indicating Yes (if suspecting impropriety) or No.

After the count of the straw poll by the chair and the parliamentarians, the chair stated that there is a significant number (12Y, 21N) of members that believe that there was a problem. There were a few votes voided as unreadable and nearly half of the attendees abstained by not returning a vote. Following the

discussion and the straw poll:

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**The chair rules to submit to the executive committee the concern of block voting expressed via a "point of order" for resolution and direction.**

**Appeal** of the chair's ruling by Wes Brodsky/Jeff fisher.

In the debate on the appeal members repeatedly said there was no evidence of any group dominating the organization and that the group should not cease work. Rather have the ExCom rule on this. The appealing members argued that the matter should remain within the working group rather than being escalated to the ExCom.

The chair clarified the ruling to add that the work in the task group will continue if the ruling is sustained.

The next step would be the vote of Micrilor vs. None.

The chair asked several times if the member that placed the point of order would withdraw his point without success. A big factor was the fact that the term "block voting" is not clearly defined.

**Call the question** by Al Petrick, seconder unknown. (26/5/3) **the question is called.**

On the question of **appealing** the chair (19/29/7)

**Motion to adjourn** Al Petrick/Naftali Chayat (23/19/11) **The meeting is adjourned at about 22:15 h.**

Note from Vic: the point of order was still not solved.

## Friday, May 8, 98 AM

There was a talk by Vic on the proper way to do secretarial minutes and notes on patents. This is from the 'IEEE Standards Companion'.

A discussion started on whether the patent holder should disclose what was protected by IP, whether the technical details could be discussed and whether more was needed than the IP statement as given by the holder. No conclusion was reached.

### **Meeting opened with Voter count**

48 voting members, we need 42.5 for a quorum.

### **Status summary**

We are in the middle of discussing the changing the rules to insure that the TG will have a 75% vote in plenary. The floor is opened to combinations of the proposals.

### **Discussion and clarification of Plenary direction to the group (how do we move on)**

The Plenary Directs TGb:

1. To change the voting process of TGb as defined in step 14 of doc 98/54 to change a secret vote to a standard technical vote and to change the requirement from >50% to be 75% or greater than 75 % in order to be brought to the plenary.
2. To halt the current voting process, to discard the results of voting this week, to allow the presentation of merged proposals and to instruct the TGb to find a consensus proposal.

Interpretation by Vic: (5 proposals plus merged ones, based on at least 2. Of course proposer can withdraw.)

Concern was expressed regarding the definition of a merged proposal versus new proposals, whether somebody may make a merger of two proposals, not being either of the base proposers and how far the merged proposal may contain new elements. For instance, the merged proposals should replace the original proposals.

Anil: The interpretation is that we need new proposals from the proposers

This can be synthesised as:

1. can we propose a new proposal
2. who can present a proposal

3. what is a merged proposal
  4. is it two existing ones combined
  5. can they be substantially different
6. can an original be a modified, not merged proposal

,the following motion was made:

**Motion:**            **Accept the following text**

*Acceptable proposals are the existing 5 proposals, possibly modified (but not to the extent that it makes them new proposals as determined by TGb) by the original proposer; and any proposal which combines substantial elements of two or more of 5 existing proposals, with the addition of any required additional elements to render the merged proposal viable, and are presented willingly and jointly by the original proposers of the proposals being merged.*

Mover/second: Carl/Anil

**Motion Passes with 29/1/7**

### **Schedule for TGb**

July 98, Final proposal selection

Sept, 98, Draft complete, submit working group ballot.

Bob O'Hara: since we don't know what proposals are going to be shown, we need to allow more time and not publish a schedule. So don't make any changes to the published schedule.

Jeff Fisher: We have heard estimates of 1 to 3 more meetings needed to come to consensus. Lets leave it up to the chair to change the published schedule.

### **Next meeting agenda**

Bob O'Hara: Make the meetings more productive by having the presentations published 1 week before the meeting by making the presentations dependent on who has met the distribution schedule by putting them on the web site. Agenda time will be granted in preference to those who have delivered their papers. If there is no agenda time for some late papers, they will not be presented.

1. Present papers with priority given to papers available on the web a week prior to the meeting. Proposals need to be available at the beginning of the meeting.
2. Discuss the selection process
3. define activity between meetings

### **discussion of patent policy**

No time for discussion.

Adjourned at 12:05

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### **Attendance list**

see the minutes of the plenary meeting, 98/223

### **Future meetings**

see the minutes of the plenary meeting, 98/223