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**IEEE P802.11**  
**Wireless LANs**

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**Tentative Minutes for the 55<sup>th</sup> Meeting of the IEEE P802.11****Full Working Group**  
**IEEE 802.11 Meeting**  
**Hyatt Regency Town Lake, Austin, Texas****8 to 12 March, 1999****Monday, 8 March 16:15 Opening Plenary IEEE 802.11**

- 1 Opening Meeting called to order by:** Vic Hayes at 16:15 opened the meeting with the agenda of 55<sup>nd</sup> session of 802.11 is in doc.:IEEE P802.11-99/1. George Fishel, Secretary is present and ready to take the notes.
- 2 Objectives for this meeting:**
- 3 Roll Call:** People in the room were invited to introduce themselves by name and company. There were 69 people in the room at the opening of the meeting.
- 4 Voting rights:**
  - 4.1 Participation in debates moving and seconding is only permitted by voting members, in all 802.11 meetings (at all levels). The subgroup chairs may permit observers to participate in debates.
  - 4.2 Voting at the working group level is by voting members only. Chair may permit observers to participate in debate. In study groups all in attendance have voting rights.
    - 4.2.1 To become a voting member:
      - 4.2.1.1 Participate in at least 2 out of 4 consecutive plenary meetings. Voting rights start at third meeting.
      - 4.2.1.2 Participation in at least 75% in meetings, in the room
        - One interim may be exchanged for a plenary
        - Voting members will get a token to be used at votes
      - 4.2.1.3 All members have voting rights at task group meetings
    - 4.2.2 Voting rights can be maintained:
      - 4.2.2.1 By participation in 2 plenary meetings within 4 consecutive plenary meetings
      - 4.2.2.2 One interim may be substituted for a plenary
    - 4.2.3 Voting rights may be lost:
      - 4.2.3.1 After failing to pay the conference fee
      - 4.2.3.2 After missing two out of three consecutive letter ballots
  - 4.3 Current state of member status:
    - 4.3.1 Voting members ( ) at the beginning of this meeting
    - 4.3.2 Aspiring voting members ( )
    - 4.3.3 Nearly voting members ( )
  - 4.4 Attendance List, Registration
    - 4.4.1 Administration: The attendance list was circulated, Peter Muray supervising - 75% attendance according to the attendance list is required to qualify for participating in the meeting as a whole, so

make sure to sign the book. Copies of the attendance list are handed out before the end of each meeting.

4.4.1.1 Important for administration of voting rights that the attendance book is used properly.

4.4.1.2 Sign per meeting (morning, afternoon, evening). Do not sign ahead.

4.4.1.3 Place initials. Do not cross or underline. You must attend the session after signing.

4.4.1.4 Circle the letter corresponding to the meeting you attend when signing (F=full 802.11, P=PHY, M=MAC group).

**5 Registration:** The shared meeting fee to attend this meeting is \$275 US if your are pre registered or \$300 on location. to cover the cost of coffee breaks, equipment and meeting rooms for the week.. Please pay the fee at the 802 registration desk. You must pay the fee even if you only attend 1/2 hour of any meeting. Failure to pay will cause your name to be added to the deadbeat list. You will lose your voting rights until the fee is paid.

**6 Check E-mail addresses in the book:**

6.1 Some addresses have been struck, or have a \$-sign added to the right - those received complaints from the reflector

6.2 Please strike your e-mail address if you do not use it. Mark bulk e-mail with YES if your email server allows long email files and you want to receive meeting documentation in this manner.

**7 Logistics:** Electronic distribution is the method of making documents available.

7.1 The software used for submissions is Office 97(Word 7.0, Power Point 97 or Excel 97) submitted using the 802.11 templates for record and distribution are available on the server.

7.2 Document distribution: The primary dissemination of documentation is via electronic file distribution. However two (2) mediums will be used. They are: a) 802.11 network b) flash, memory card.

7.3 All files must use the IEEE802.11 templates for word documents and PowerPoint. Vic Hayes updated the template for PowerPoint files.

7.4 Coffee breaks at 10 AM and 3 PM. Noon to 1:00 PM lunch, printing is available in the hotel 802.11 office.

**8 IEEE Patent Policy** Vic Hayes, 802.11 chair explained the IEEE Patent Policy as per Clause 5 of the IEEE Standards Bylaws and per Clause 6.3 of the IEEE Standards Operations Manual. He specifically asked for notification from members of patents applicable to the Published standards or draft standard and patent holders submit the requested statement.

**9 Individual Representation:** All attendees are representing themselves as individuals and not companies and/or any special organization.

**10 Anti-Trust Laws** Discussion of price is disallowed in 802.11 sessions due to the threat of price fixing. Price fixing discussions are governed by Anti-Trust Laws and are illegal.

**11 Other announcements**

**12 Approval of the minutes of previous meetings:**

<p><b>Motion #99/55P01: To approve the minutes of the Albuquerque meeting. Motion By: Michael Fischer and Seconded By: Johnny Zweig.</b></p>
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**Motion #99/55P01 to the floor for vote.**  
**Motion passes 42/0/3**

**13 Objectives for this session**

**13.1**To submit a PAR for the extension 802.11 for the extension of regulatory domains

**13.2**To resolve comments on ballots of draft 802.11a and draft 802.11b

**13.3**To submit the drafts to Sponsor Ballot

**13.4**To submit WPAN's PAR and 5 Criteria to ExCom for submission to NesCom

**14** Review of contributions

**15** Approval of agenda.

**Motion #99/55P02: To adopt the modified agenda. Motion by John Fakatselis and Seconded by: Harry Worstel.**

**Motion #99/55P02 to the floor for a vote.**

**Motion passes 42/0/0**

**16** Old Business

**16.1** RF Lighting Presentation 99068a by Jim Zyren from Harris. Would like to propose a vote on the proposed limits for radiation for lighting.

**17** New Business

**17.1**RFID Coexistence

**17.25** Ghz Globalization.

**17.3**Teleconference with the FCC

**17.3.1** A teleconference will be conducted tomorrow.

**17.3.2** Vic has arranged a room. Anyone interested in the meeting with the FCC attend.

**17.3.3** John Fakatselis proposed some item for discussion.

**Motion #99/55P03: to approve the modified presentation from John Fakatselis to be sent to the FCC. Motion by: John Fakatselis and Seconded by Johnny Zweig.**

**Discussion followed**

**Motion #99/55P04: to call the question Motion by: Phil Belanger and seconded by: Carl Andren**

**Motion #99/55P04 to the floor for a vote.**

**Motion #99/55P04: Motion to call the question passes 20/8/5**

**Motion #99/55P03 to the floor for a vote:**

**Motion carries 36/3/1**

**After the motion passed another motion was proposes.**

**Motion #99/55P05: to reconsider Motion #99/55P03. Motion by Bob O'Hara and seconded by: Jim Zyren.**

**Voice vote motion carries by unanimous consent.**

**Vic Hayes requested the reconsideration be carried off line to allow the presentation by Naftali Chayat**

**Motion #99/55P06: to approve the modified presentation as presented by Naftali Chayat. Motion by: Naftali Chayat and seconded by Jim Zyren.**

**Motion #99/55P07: to ammend Motion #99/55P06 by removing slide #14. Motion by: Tom Tsoulogiannis and seconded by: John Fakatselis**

**Motion #99/55P07 to the floor for a vote.**

Motion carries with a voice vote

Motion #99/55P08 to call the question on the amended motion #99/55P06: Motion by Bob O’Hara and seconded by John Fakatselis.

Voice vote question called by unanimous voice vote

Amended motion #99/55P06 to the floor for vote.

Motion passes 28/0/1

Re consideration of motion #99/55P03

Motion #99/55P09: move to amend motion #99/55P03 Motion by: JimZyern and seconded by: Mat Shoemake.

Motion #99/55P09 to floor for voice vote.

Motion carries by unanimous consent.

10 minute recess to modify the presentation by John Fakatselis.

Amended motion #99/55P03 to approve the modified presentation from John Fakatselis to be sent to the FCC carries

Vote on amended motion #99/55P03

Motion passes 27/0/3

Motion #99/55P10: to adjourn for the day Motion by Johnny Zweig and seconded by John Fakatselis

Motion #99/55P10 passes 24/1/3

16 Meeting adjourned at 19:10.

### Wednesday, 10 March 13:00 Afternoon Plenary IEEE 802.11

17 Role Call 53 people in the room.

18 Documents updated by Harry Worstel

19 Reviewed Agenda by Vic Hayes

19.1 No comments as modified proposed Agenda

Motion #99/55P11 to approve the agenda, Motion by Stuart Kerry and seconded by Matt Shoemake

Motion #99/55P11 passes 39/0/0

#### 20 Announcements:

20.1.1 Venue for May meeting is 99/90 May3-7.

20.1.2 Cut-off data is March 29<sup>th</sup>.

20.1.3 The rooms are 25,200 Yen - US\$250,

20.1.4 The conference fee is 65,000 Yen - US\$550.

20.1.5 MMAC plans to meet on May 7, 1999 hosting a WLAN seminar. All chairs of 802.11 will present developments from their respective task groups. Exhibition of products are welcomed. Details for MMAC are in document 99/46-r2

20.1.6 Teleconference call schedule to resolve resolution ballots March 31 10AM eastern time TGA will have 8 people, and Tgb will have 8 people on the call.

20.1.7 Comments on the Lake Buena Vista Meeting Minutes?

Motion #99/55P12 to approve the minutes of the Lake Buena Vista Meeting, Motion by Bob Heile, seconded by Stuart Kerry

No discussion

Motion #99/55P12 passes 35/0/1

No matters rising from the minutes

**Motion #99/55P13 to submit 99/34 to SEC with the recommendation moved by Bob O'Hara, seconded by Carl Andren.**

No discussion

**Motion #99/55P13 passes 39/0/0**

**Motion #99/55P14 to recommend the chair to submit the contents of 99/69 to Revcom to complete the submittal package of 802.11rev, Moved by Bob OHara, seconded by Simon Black**

No discussion

**Motion #99/55P14 passes 33/4/0**

**Motion #99/55P15 That IEEE802.11 endorse the limit as mentioned in doc.99/68 moved by Jim Zyren, seconded by Steve Gray**

No discussion

**Motion #99/55P15 passes 49/0/0**

**20 FCC teleconference call update by Vic Hayes**

A short teleconference was held with the FCC. The meeting was shortened due to bad weather in the Wash DC area. Vic Hayes sent in the latest draft to the FCC by email 2 weeks prior to the teleconference. The FCC reported some minor editorial issues for testing the spectrum mask for both TGa and TGb. A NRPM is scheduled for release on March 31, 1999. The FCC will have 70 days to receive comments on the NPRM from industry and 30 days for the FCC to respond to the industry. Then it will take 2-4 months for report and order. The total process is approximately 1 year.

**21 TGa status report on comment processing, good process.**

**22 TGb status report on comment processing,**

**22.1 all comments addressed.**

**22.2 2 No voters at the meeting, to change their vote to Yes.**

**22.3 1 No vote not at the meeting, was contacted by email – still waiting a response.**

**23 WPAN status update see document 99/056, Bob Heile reported he was an IEEE and SA member. This is for the record because WPAN has made edits to the scope of the PAR and recommending that WPAN forms its own working group independent of 802.11**

**23.1 Recess for 10 minutes moved by the Chair.**

**Motion #99/55P16 to approve the WPAN Par “Rev 9” doc 98/162r9, moved by Bob Heile, seconded by Tom Siep**

**Discussion on the motion**

**Motion #99/55P17 to amend the WPAN PAR to replace all occurrences indicating the formation of a working group with those forming a TG of 802.11, moved by Bob O'Hara, seconded by Naftali Chayat**

**More discussion on the Motion**

**Call the question on Motion 99/55P17, by Dean Kawaguchi, seconded by Mike Fischer, Question called by unanimous consent.**

**Motion #99/55P18 Request for role call vote on motion #99/55P17 by Stuart Kerry, seconded by Naftali Chayat**

**Motion #99/55P18 for a role call vote passes unanimous consent.**

No discussion

**Role call vote on motion #99/55P17**

**Motion #99/55P17 passes 33/8/5 80%**

**Vote on amended Motion #99/55P16**

**Motion #99/55P16 passes 31/9/4**

**Motion #99/55P19 to request for the excom for an interpretation that allows for significantly different multiple MACs in the working group, moved by Dean Kawaguchi, seconded Tom Siep**

**Discussion on the motion**

**Motion #99/55P20 to call the question on motion #99/55P19 moved by Tim Siep, seconded by Pat Kinny**

**Recount the vote**

**Calling the question fails 18/12/9 needed 2/3's to pass**

**Tgb chair requested for the plenary Chairs ruling when to start the TGb's meeting. The working group agreed to adjourn the plenary at 17:00.**

**Motion #99/55P21 - to amend motion #99/55P19 request from the executive committee a ruling that allows for multiple MACs within the working group if required instead of the original motion, moved Tom Siep, seconded by Pat Kinney.**

**Discussion on the amendment**

**Motion #99/55P22 call question motion #99/55P21 by Natali Chayat and seconded by Dean Kawaguchi**

**Motion #99/55P22 question called by voice vote**

**Motion #99/55P21 to amend passes 13/10/14**

**Motion #99/55P23 to call for the question on motion #99/55P19 by Nafali Chayat, seconded by: Jan Boer**

**Voice vote on motion #99/55P23 questioned called**

**vote on amended motion #99/55P19 fails 11/13/14**

**Motion #99/55P24, move that the 802.11 WLAN working group recommends that the executive committee of 802 submit the WPAN PAR "REV 9" - 98/162r/9 amended to Nes COM for approval, moved by Bob Heile seconded Greg Ennis.**

**Motion #99/55P24 passes 36/0/7**

**Motion #99/55P25, move that WLAN Group recommends that Excom of 802 establish a new working group for Wireless Personal Area Network. By Bob Heile**

**Motion #99/55P25 withdrawn by maker.**

**Motion #99/55P26, 802.11 working group to formally adopt the MS Office 97 or Office 98(MAC) formats for documentation and Adobe Acrobat PDF, moved by Stuart Kerry and Harry Worstel.**

**Motion #99/55P26 passes 34/2/1**

**Meeting adjourned for the day 17:00.**

### **Thursday, 11 March 1:00 Afternoon Closing Plenary IEEE 802.11**

**24 Meeting called to order by the Chair Vic Hayes and George Fishel, Secretary, standing by to take notes.**

**25 Objectives of the meeting.**

**26 Announcements**

**27 Introduction of members present. A total of 63 persons were present.**

**28 Update of Document List.**

**29 Agenda for the day**

**Motion #99/55P27 to approve the agenda as modified by: Stan R and seconded by: Matt Shoemake**

**Motion #99/55P27 is approved as modified 39/0/0**

**30 Report by TGb by John Fakatselis:**

**Motion #99/55P28 to Submit the TGb draft 3.last to WG recalculation 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. In addition submit for John Fakatselis and Michael Fischer**

**Motion #99/55P28 passes 38/0/2**

- Motion #99/55P29 Motion to follow the following process during recirculation in the event of new “no” votes.
  - In the event of any new “no” votes during recirculation the chair should take the following steps:
  - A. Publish the new “no” comments to the 802.11 reflector.
  - B. Announce a Teleconference at the March Plenary with a cancellation clause if there will be no need for the Teleconference thorough the 802.11 reflector.
  - C. Discuss , vote and approve the request to SEC during the teleconference.
  - D. No quorum requirement is necessary but voting procedure applies otherwise.
- by: John Fakatselis and seconded by: Naftali Chayat

Motion #99/55P29 passes 34/0/3

31 Report on TGa by Naftali Chayat

Motion #99/55P30 To approve a list of changes approved by TGa:

- 1) Tx frequency and symbol clock linkage
- 2) Scrambling of pilot subcarriers
- 3) Align BPSK constellation with I arm
- 4) To increase SIFS to 16 microseconds
- 5) To define channel numbering method
- 6) To introduce MIB attribute for band management
- 7) Interleaver MSB/LSB swapping

By: Naftali Chayat and seconded by: Hitoshi T.

Motion #99/55P30 passes 36/0/1

Motion #99/55P31 to forward the TGa draft 3.3 after the incorporation of the changes by the editor to a recalculation ballot and request SEC for a conditional approval to send to sponsor ballot Naftali Chayat seconded Hitoshi T.

Motion #99/55P31 passes 31/0/3

Motion #99/55P32 to Submit the TGa draft 3.last to WG recalculation 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. In addition submit for by Naftali Chayat John Fakatselis.

Motion #99/55P32 passes 32/0/4

Motion #99/55P33 That 802.11 issue a letter to ETSI BRAN to transfer our draft for information and for consideration to adopt our Standard as a member of their HIPERLAN family of standards. Naftali Chayat and seconded by: Hitoshi T.

Motion #99/55P33 passes 36/0/3

Motion #99/55P34 Than 802.11 issue letters to ETSI BRAN and to MMAC-PC groups in order to update them on the progress done in 802.11 and to ask them to accept the relevant changes made in the 802.11a draft. Naftali Chayat and seconded by: Hitoshi T.

Motion #99/55P34 passes 28/0/3

## 32 Old Business

Motion #99/55P35 To accept at the discretion of the chair, the final balances of the Westford, MA. & Seattle, WA., meeting financial statements in lieu of official statements, from the sponsor companies. Stuart Kerry and Harry Worstel

Motion #99/55P35 passes 23/0/6

## 33 Next Meeting

33.1 May 3-7 - Makuhari Prince Hotel, Tokyo, Japan, Interim (NTT, Clarion, NEC

## 34 New Business

34.1 TGb draft document error

Motion #99/55P36 Move that the editor change the Annex F. from informative to normative to be consistent with the resolution of letter ballot comments - "To replace all after annex F into "to replace with appropriate tense the words shall to insert clause 18.4.6.7. titled frequency channel agility that would include the optional requirement that the high rate PHY be frequency channel agile and point to annex F. for the description of the behavior when the option is used. Bob O'Hara and seconded by Dean Kawaguchi

Motion #99/55P37: Move that the editor change the Annex F to replace with appropriate tense the words shall to should. To insert clause 18.4.6.7 titled "channel agility" including the optional requirement that the hi rate phy be channel agile and point to annex F for the description of the behavior when the option is used. Dean Kawaguchi and seconded by Carl Andren

Discussion on the amendment

Question called on Motion #99/55P37 by John F and seconded by Dean Kawaguchi 25/1/2 question called.

Vote on motion #99/55P37 to amend motion #99/55P36 passes 22/2/6

Discussion follows.

Question called on modified motion #99/55P36 by Dean K and seconded Bob O'Hara with one objection.

Vote on original motion #99/55P36

Vote on amended motion #99/55P36 Passes 24/2/3

Motion #99/55P38 To empower the interm meeting in May 1999 to process any comments resulting from either sponsor or WG letter ballot Bob O'Hara and Naftali Chayat

Motion #99/55P38 passes 24/0/2

Motion #99/55P39 to adjourn the meeting Matt S. and seconded by: /Simon Black.

voice vote motion #99/55P39 to adjourn passes

35 Meeting adjourned at 18:45



**Tentative future meeting schedule**

1999

May 3-7 - Makuhari Prince Hotel, Chiba (Tokyo), Japan, Interim (NTT, Clarion, NEC)

July 5-9 - Queen Elizabeth, Montreal, PQ

Sept 13-17 - Hilton, Santa Rosa, CA, Interim (Alantro)

November 8-12 - Hyatt Regency, Kauai, Koloa, HI, Plenary

2000

January TBD - Israel?, Interim (Breezecom)

March 6-10 - Hyatt Regency, Albuquerque, NM, Plenary

July 10-14 - Hyatt Regency La Jolla, San Diego, CA, Plenary

November 6-10 - Hyatt Regency, Tampa, FL

*Attendance list for* Austin, TX

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