
**IEEE P802.11
Wireless LANs**

Tentative Minutes of the IEEE P802.11 Full Working Group

**Interim Meeting
Makuhari Prince Hotel, Chiba, JAPAN**

3-7 May 1999 and 28 May, 1999

Monday, 3 May Opening Session IEEE 802.11

1 Opening of Session

Meeting called to order by Vic Hayes in the Chair at 0847 hrs. The Chair thanked the hosts for the impressive organisation and getting so many people to the meeting. Agenda of 56th session of 802.11 is in doc.:IEEE P802.11-99/103 (archive file 91038W-Tent-agenda-Chiba-May-99.pdf).

Objectives for this meeting:

- To resolve comments from Sponsor Ballot for TGa and TGb
- To start work of TGd (Regulatory domains)
- To facilitate the management preparation meeting for 802.15 WPAN

1.1 Secretary

David Skellern acting, for George Fishel, Secretary¹⁾, is present and ready to take the minutes.

1.2 Roll Call

The 39 people in the room introduced themselves.

1.3 Voting Rights

Vic Hayes summarised the regulations regarding voting rights.

- (a) Participation in debates, moving and seconding, is only permitted by voting members, in all 802.11 meetings (at all levels of Plenary and Working Group).
 - Chairs may permit observers to participate in debate
- (b) [In study groups all attendees have voting rights.
- (c) To become a voting member and to maintain voting member status:

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- Participate in at least 2 out of 4 consecutive plenary meetings. An initial non-voting member obtains voting rights at the third meeting.
 - One interim may be substituted for a plenary
 - Participation in at least 75% of each meeting, in the room
 - Voting members will get a token to be used at votes
- (d) All members have voting rights at task group meetings
- (e) Voting rights may be lost:
- After failing to pay the conference fee
 - After missing two out of three consecutive letter ballots
- (f) Current member status:
- Voting members 97 at the beginning of this meeting
 - Nearly voting members 19
 - Aspiring voting members 68

1.4 Attendance List; Registration

- (a) Attendance List: The attendance list has to be recorded for voting membership registration. It was circulated with Jan Boer supervising. The process is as follows:
- Jan signs for chair and / or presenter
 - Hands it to the first person attending and waits to see that the person signs quickly (on his own spot) and verifies that he hands it to the person's neighbour
 - That person is then responsible for the next person signing quickly (on his own spot) and verifying that he hands it to that person's neighbour
 - The last person hands the book back to Jan or to the chair of the meeting
- (b) Rules for Signing
- Only sign when you attend at least 90 % of the meeting for which you sign; (i.e. AM or PM or Eve(ning) part of the session)
 - Sign with your initials (no cross etc). Do not underline. Circle the letter corresponding to the meeting you attended when signing (F=full 802.11, P=PHY group, M=MAC group)
 - Only sign in the box designated with the applicable day and part of the day, AM/PM/Eve
 - Never sign ahead
- (c) Check e-mail addresses
- some addresses have been struck, or have a \$-sign added to the right; those received complaints from the reflector
 - please strike your e-mail address if you do not use it
 - if you use an e-mail address, please advise Vic Hayes
 - if you do not disagree to receiving very long files, mark bulk e-mail with yes
- (d) Copies of the attendance list are handed out before the end of each meeting.
- (e) Registration:
- The meeting fee (40,000¥) has to be paid through the registration desk.
 - Failure to pay causes loss of credit for voting rights and letters to be sent.

1.5 Logistics

- (a) Breaks: Coffee breaks are listed in the Agenda for 10:15 and 3:15. Attendees should have received vouchers for breakfast and lunch.
- (b) Booked Room Use: The booked rooms were allocated to allow the management meeting for 802.15 WPAN to continue throughout the 802.11 meeting.
- (c) Document copying, submission and distribution:
- It was decided at the last meeting that there would be no more paper copying of submissions. However, printing is available through the WLAN server and in the office.
 - Harry Worstel will manage document numbers, copying and collection of files until Thursday. Peter Ecclesine will do Friday AM. Harry has files on Flash PCMCIA card. Before a submission is presented, a document number must be assigned by Harry.
 - Document distribution: The primary dissemination of documentation is via electronic file distribution. Two mediums only will be used. They are: 1) 802.11 network and 2) flash, memory card.
 - All files must use the IEEE802.11 templates for word documents and PowerPoint. Vic Hayes explained how to properly name and enter information into the documents including the document information, headers and footers. For presentations it is necessary to view header and footer, and slide master and update the date, name and document number.

1.6 IEEE Patent Policy

Vic Hayes, 802.11 chair explained the IEEE Patent Policy as per Clause 5 of the IEEE Standards Board 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 for patent holders to submit the requested statement.

1.7 Individual Representation

All attendees are representing themselves as individuals and not companies and/or any special organization.

1.8 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.

1.9 Other Announcements

1.9.1 The editor assigned to the Committee by IEEE had recently passed away. The Chair will send a letter of condolence to her mother this week. A new editor has been appointed. Vic Hayes reported briefly on the status of publication of 802.11rev:

- Annex C, State Diagrams, is still not available
- Annex C is required in the checklist to RevCom
- in RevCom: 1 negative vote, 2 positive subject to availability of Annex C
- volunteer found from Eastman Kodak for Updating Annex C
- plan to have available first week of October
- will include editorials found causing compiler errors

1.9.2 Attacks on spectrum in 5 GHz globally

- Lower part of the band is also allocated globally to the Mobile Satellite Service for Earth- to-space links
- Long ago, ETSI did approve the co-existence of MSS in the lower 5 GHz band based on calculation
- Now the MSS industry is requiring regulatory agencies to reduce the RLAN allocations effectively eliminating RLAN from the 5150-5250 MHz band
- 10 mW e.i.r.p. and AC operation (*i.e.* not on battery operated equipment)
- Lead player is ICO Global Communications, an INMARSAT spin-off, with Globalstar, in the background
- Main battlefield is in CEPT Project Team SE28
- UK Radio Communications now supports the MSS claims
- Lobbying is also taking place in Japan, US and Canada
- Jan Kruys (Chair of ETSI BRAN) is the single advocate for the RLAN industry. Please assist him by:
 - being active either directly or via the national bodies for preparing CEPT and ITU-R decisions. All CEPT members have influence on the results
 - attending the meetings off CEPT SE and its Project Team SE28 as well as the ITU-R JRG 8A/9B, WP 8D and others involved in this subject.
 - promoting the usage of the band for RLANs shared with the MSS in Japan MPT, USA-FCC and Industry Canada – these countries are (re-)considering regulations for RLANs.

1.9.3 There were no announcements from the floor.

2 Approval of the minutes of the March meeting

2.1 Austin meeting 11-99/93

There being no quorum, the approval of the minutes of the Austin meeting was deferred to the next meeting.

2.2 Matters Arising from the Minutes

There were no matters arising immediately from the minutes.

3 Reports**3.1 Sponsor ballots**

- ❑ Vic Hayes reported the status of responses to date. Both TGa and TGb ballots were approved but there are NO votes.
- ❑ The ballot closes 8 May, at midnight Piscataway time.
- ❑ Consideration of the responses was the major task of this meeting. Vic Hayes stated the use of letters for the response status: O-open to W-written then comment status is Accept or Reject then C-closed; U-unsatisfied or Z-withdrawn.
- ❑ Editors need the latest version of Microsoft Access on their machines to process comments.
- ❑ Comments to date are in files in the folder \Meeting Docs\May 1999\Pre-May-Meeting\
 - for TGa - 91128A-Preliminary-Comments.pdf
 - for TGb - 91138B-Preliminary-Comments.pdf

3.2 March ExCom meeting

LMSC Resolutions were reported.

- ❑ 802.15 WPAN formation was approved. Vic Hayes reported that he voted against formation of 802.15
- ❑ Bob Heile was appointed as chair of 802.15

3.3 Financial report of the Waltham meeting

Not available for consideration.

3.4 Financial report of the Lake Buena Vista meeting

Deferred until Wednesday plenary.

4 Review of contributions

- (a) The Chair reported he had allowed by email that Naftali Chayat should send liaison letters as approved at the March meeting.
- (b) Bob O'Hara has a request that annex E be changed since E already lists. It was agreed to leave it to editors to sort out. Maybe G is the right number (F for A, G for B).
- (c) The list of document submissions was reviewed by Vic Hayes.

5 Adoption of the agenda 11-99/103**5.1 New agenda item:**

Item 7.1 Comment resolution meeting teleconference was added.

5.2 Schedule Changes:

- (a) Straw poll showed good interest in TGd. There is no skeleton agenda for TGd meetings as per the existing agenda. It was agreed that a TGd meeting would be held Wednesday in the main meeting room after the Plenary. The Agenda was changed to Full WG/d and TGd/a for the Wednesday afternoon slots 1300-1500 and 1530-1730
- (b) All other TGd sessions were cancelled.
- (c) A new Agenda item on Wednesday evening is a Social Meeting hosted by NTT for 1900-2100.
- (d) There was no identified need for evening meetings at this time.
- (e) The closing plenary will start at 0800 with the intention of completing by 1000.

Motion 99/56P01	To approve the Meeting Agenda as modified.
Moved:	Harry Worstel
Seconded:	John Fakatelis

Discussion: none

Motion passes: 25-0-0

The meeting continued with the revised agenda.

6 Unfinished Business**6.1 TGa**

Main course of work is to resolve the comments. At least some will involve some cross group discussion on headers etc and there is an opportunity to align things. This probably will be done in the WG context as part of the meeting, rather than off-line. Sheets on comments from ETSI are available.

6.2 TGb

Will concentrate on resolution of comments. There are only 5 strong controversial comments. John F asked for teleconference facilities to help resolve these comments but noted that time differences may be insurmountable.

6.3 TGd

Bob O'Hara asked members to call home or send email to get technical information together for Wednesday afternoon's TGd session.

Vic Hayes asked Bob O to clarify the situation regarding rumours of 2.4 GHz ISM band problems in the UK. According to sources in the Radio Communications Agency of the UK asked by Vic, there was no decision made yet regarding the notice to auction the band.

7 New Business**7.1 Comment resolution meeting teleconference**

The closing of the ballot at midnight on 8 May means that not all comments may be considered at this meeting. A teleconference interim meeting was therefore proposed to expedite response processing and thereby help maintain the standard development schedule. It is proposed to not adjourn the meeting on Friday. Rather the meeting would adjourn after the teleconference.

It was proposed to empower the interim teleconference meeting in May 1999 to process any comments resulting from either sponsor or WG letter ballots, create new drafts to 802.11a & 802.11b, & issue those drafts to the appropriate letter ballot.

Discussion

Concern about the potentially small number of members involved in the teleconference was discussed. It was noted that late comments would put on the web soon after the ballot close for all to review. Anyone could attend the teleconf. While not perfect, there was consensus that it was a fair process. The recirculation ballot will be 10 days. This can have comments only on the technical parts that have been changed.

A motion was deferred until the Wednesday plenary session. Vic Hayes will look in his agenda, find a suitable date and come back on Wednesday with a schedule.

8 Adjourn for subgroups

The Plenary meeting adjourned at 1030.

Wednesday, 5 May 1999 Full WG IEEE 802.11

Scheduled: 1:00pm – 3:00pm

9 Opening

Meeting called to order by Vic Hayes at 1:05 PM and David Skellern, acting for George Fishel, Secretary was ready to take the meeting notes.

9.1 Roll Call

All present introduced themselves. A total of 36 people were present.

9.2 Document List Update

9.2.1 Vic Hayes reported on the documents on the server.

- Changes on Tuesday: 91122 and 91123 and removed 9107 from Monday (pre-meeting)
- New TGb comments should have numbers: copy from 91131
- Bulletin board directory was added
- John Deane's vote and comments are in the bulletin board directory

9.2.2 Harry Worstel will sponsor John Deane's and David Skellern's comments.

9.3 Agenda Update

The agenda set at the Monday Plenary was confirmed with the addition of a meeting of subgroups of TGb and TGa added to the schedule for 9pm-12pm Wednesday.

Motion 99/56P02	To approve the agenda as modified.
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Moved:	Matt Shoemake
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Seconded:	Hitoshi
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Discussion: none

Motion passes: 19-0-0

9.4 Announcements

9.4.1 Flow Chart for Ballots

Vic Hayes explained the process for considering votes and comments.

9.4.2 Plan for Finalization of Ballot

Vic Hayes presented a draft plan for finalizing the ballot. The normal 10-day reconfirmation ballot will be 12 days. The delay between the closure of the ballot and the teleconference is to allow for resolution of some comments that need simulations done. All comments will be available on the reflector and can be discussed before the teleconference. The teleconference was rescheduled for 1 June 1999.

9.4.3 Outline of Santa Rosa Meeting

Matt Shoemake briefed the meeting on the September 13-17 meeting in Santa Rosa. doc:110 available.

Cost \$99 per night per room independent of number of people. Must make reservations by Wednesday 28 July as we lose block booking by then.

10 Old Business**10.1 TGa**

Naftali Chayat reported that there were 67 comments and 3 NO votes.

The major changes agreed were:

- The short training preamble was changed to that proposed by BRAN.
- Moved RATE to start of signal field.
- Rejected change to invert the last short symbol
- Include an informative annex to the draft standard based on Document 99/107.

Motion 99/56P04	To include in the draft standard an informative annex based on doc 99/107
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Moved:	Naftali Chayat
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Seconded:	Hitoshi
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Discussion: none

Motion passes: 20-0-3

The draft is almost updated including editorial comments. We should have an updated document by the end of this week. An issue tabled until the teleconference interim meeting in late May is the length of the training sequence to enable diversity antenna selection.

Action Item: For Vic Hayes The question of who to list on the 802.11 working group will be resolved by the Chair. The IEEE editor will separately list those on the ballot roster.

10.2 TGb

John Fakatelis reported that there was steady progress on resolving comments. Non-attending NO-voters were being contacted and people will work off-line to address comments in teams tonight. TGb was on track to resolve comments by Thursday evening.

10.3 Financial plan Buena Vista

Al Petrick reported on the January 1999 interim meeting financial meeting. Harris Semiconductor picked up the social dinner cost of \$5,702. Al will submit receipts.

Motion99/56P03 **To approve the January 99 Interim meeting financial statement document 99/129**
 Moved: Matt Shoemake
 Seconded: John Fakatelis

Discussion: none

Motion passes: 23-0-0

The meeting thanked Al Petric and his sponsor for hosting the January meeting.

11 New Business

11.1 Patents

There should be some mechanism, once we make a liaison with a body and agree to produce a coordinated standard, we need a mechanism to coordinate IP statements so that reasonable terms non-discriminatory access are shared. If we make a change due to one

The patent situation is clear. BRAN would like harmonization of pilot scrambling and interleaving.

Action: for Vic Hayes To consider writing again a letter to all floating individuals asking them to respond whether they have IP and relevant licence requirements. Will they grant the licence to IEEE, MMAC and ETSI.

11.2 Social meeting

Arrangements were confirmed.

12 Adjourn to Subgroups

The meeting adjourned at 2:05pm and agreed to reconvene in 10 minutes for the TGd session.

Friday, 7 May 1999 Full WG Closing Plenary of IEEE 802.11

Scheduled: 8:00 AM - 10:00 AM

13 Opening

The closing plenary was opened by Vic Hayes at 0813 AM and David Skellern for George Fishel, Secretary was ready to take notes.

The Agenda numbering is erroneous at this point and is corrected in these minutes.

14 Announcements**14.1 NPRM status**

Al Petrick reported that the NPRM had about a 30 day delay. Please report any new information if you obtain it.

14.2 Summary reports from TG chairs

Vic Hayes noted that he needs summary reports before Friday evening for the web.

14.3 TGa status

- new votes: 1 approve (Eckard), 1 disapprove (John Deane)
- changed votes: 1 to approve (Webster), announcement by Trompower
- 15 new comments from John Deane and 1 from Takanashi
- 3 confirmations (17 sent)

Naftali Chayat has spoken with Jeff Fisher and he has declined to change his vote to Yes. We did not address his text specifically and did not comment on it.

14.4 TGb Ballot status

- New votes: 1 new (Eckard)
- Changed votes: 1 changed (Webster)
- No new comments
- 4 confirmations (12 sent)

14.5 Schedule for sponsor ballot

Vic confirmed a revised schedule for the sponsor ballot.

- Drafts and new vote report available on or before Monday, May 17
- Comment resolution meeting (teleconference) on Friday, May 28
- Drafts available on June 7,
- Start of Reconfirmation Ballot on June 8,
- Close of Reconfirmation Ballot on June 20,
- Report available on June 25. (action Vic)

14.6 Document list update

New numbers were allocated for reports from groups.

14.7 Agenda adjustments

The agenda was revised.

Motion 99/56P05:	To approve the amended agenda.
Moved:	Naftali Chayat
Seconded:	Jan Boer

Discussion: none

Motion Passes: 15-0-0

15 Reports from subgroups**15.1 TGa**

Naftali Chayat, TGa chair, reported that the group worked on results of ballot. Some 67 comments plus additional comments by Jeff Fisher & John Deane. Several changes were made and were incorporated into the draft including:

- changed short training sequence
- location of bit fields in signal field

At this point all comments before us were responded to.

The end result is two open NO votes.

Motion 99/56P06: **To approve resolutions given in document doc:99/112r1 and to empower the comment resolution teleconference planned for May 28, 1999 to resolve any additional TGa comments from balloter's that have not yet submitted their votes, and to readdress comment number 67 by Jeff Fischer.**

Moved: Naftali Chayat

Seconded: Bob O'Hara

Discussion:

Reservations about the teleconference were debated. The plenary session at the last meeting empowered the teleconference to resolve the issues in the meeting, through delaying the adjournment of this meeting until after the teleconference. There is a need to trust the people who participate in the conference call. Also remember that everyone who participated in the ballot can change their vote in the reconfirmation ballot. So there is complete power to undo any problems created in the teleconference. Anyone with issues should attend the teleconference. The process is open, non-exclusive, legal and fair. It eliminates the potential of wrong doing and expedites the completion of the standard on schedule.

Motion passes: 16-0-2

Motion 99/56P07: **To submit the draft 802.11a D5.5 to sponsor recirculation ballot after incorporating the comment resolutions in doc:99/12r1 and any changes decided upon by the comment resolution teleconference planned for May 28, 1999. This is subject to approval by the participants of the teleconference WG members. There is no quorum required. The comment resolution teleconference shall only resolve any additional comments from balloters that have not submitted their votes and comment 67 by Jeff Fischer.**

Moved: Naftali Chayat

Seconded: Hitoshi

Discussion:

Numbering of drafts versions was decided:

- Draft 5.5 Output of this meeting = the output after the teleconference of May 28
- Draft 5.3 Editors draft
- Draft 5.4 reserved

Motion Passes: 21-0-1

Motion 99/56P08: **To forward liaison document 99/104r1 to BRAN**

Moved: Naftali Chayat

Seconded: Hitoshi

Discussion:

Naftali explained that one of the ways we can have access to the 5 GHz band in Europe is to have membership of ETSI. This is a letter to sponsor within ETSI the incorporation of our standard in the HIPERLAN suits of standards. The letter notes the high degree of compatibility between ours and BRAN and notes closeness also with Japanese developments.

Motion passes: 18-0-3

Motion 99/56P09: **To forward liaison document 99/105r1 to BRAN and to MMAC , with a change stating that D5.2 is attached and D5.3 will be provided soon.**

Moved: Naftali on behalf of the group

Discussion:

Notes also that changes do not involve any known new IP.

Motion passes: 22-0-0

15.2 TGb

John Faketalis gave his report which is lodged in written form in doc:99/131.

Motion 99/56P10: **To approve resolutions given in document doc:99/130r1 and to empower the comment resolution teleconference planned for May 28,1999 to resolve any additional comments from balloter's that have not yet submitted their votes.**

Moved: John Fakatselis on behalf of the task group

Discussion: none

Motion passes: 20-0-2

Motion 99/56P11: **To submit the draft 802.11b to sponsor re-circulation ballot after incorporating the comment resolutions in doc:99/130r1 any changes decided upon by the comment resolution teleconference planned for May 28,1999. This is subject to approval by the participants of the teleconference WG members. There is no quorum required. The comment resolution teleconference shall only resolve any additional comments from balloter's that have not submitted their votes.**

Moved: John Faketalis on behalf of the task group

Discussion: none

Motion passes: 19-0-3

There were no new NO votes expected from TGb. Two NO voters in the meting were expected to change their votes to YES.

15.3 TGd

- (a) Bob O'Hara reported to allow adoption of 802.11 compliant equipment in areas of the world where the standard is not yet adopted.
- (b) The report is in 99/128. The PAR has yet to be approved and will be considered by NeSCom at their June meeting. The anticipated completion date is July 2000. Work can consider new regulatory domains for any PHY in the 802.11 suite.
- (c) While specific new domains will be addressed (see report) there is a wish to design and encourage super domains encompassing large geographical regions.
- (d) The report summarises the group's discussion on methods, particularly for FH. Dean K, Naftali C and Darwin will present information at the next meeting.

Motion 99/56P12: **To approve the nomination of the officers for TGd. They are; Bob O'Hara as Chairman and Harry Worstell as Vice-Chair.**

Moved: BobO on behalf of the task group

Discussion: none

Motion passes: 20-0-0

16 Unfinished Business

16.1 Output documents

TGa 11a/D5.2, 99112-r1(r2), 104r1, 105r1,124

TGb 11b/D5.2, 99130-r1, 131,

16.2 Next meeting

- (a) Objectives for next 802.11 meeting
 - Resolve reconfirmation ballot results for TGa and TGb
 - Work on TGd
- (b) Vic Hayes proposed an agenda for the July meeting. This was adopted as the draft for the July meeting.
- (c) Mailing dates as soon as possible, weekly uploads, as the need arises in diskette format for those that asked.
- (d) Naftali Chayat proposed that we send a liaison letter to 802.16 regarding adoption of 802.11a for broadband wireless access.. He will bring a proposal letter for consideration at the July meeting. Peter Ecclesine reminded that liaisons go both ways. We attend their meetings and they attend ours.

16.3 Other interim meetings required

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 10-14 - 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

17 New Business

17.1 Sympathy Cards and Donations

Al Petrick gave address for sending sympathy cards to Valerie Zelente and donations to a charity in her memory. He also read a draft letter from the Committee and members signed an accompanying sheet.

18 Adjournment

Motion 99/56P13: **To adjourn the Friday plenary for the comment resolution meeting on May 28,1999.**

Moved: Bob O'Hara

Secondd: John Faketelis

Discussion: none

Motion passes: 16-0-0

The meeting adjourned at 9:50 AM. The session is not adjourned.

1 Meeting called to Order: by Vic Hayes - Chair held at 10:00AM eastern time.

Roll call: The following people called in: Al Petrick, Vic Hayes, Richard Nee, Tal Kaitz, John Kowalski, Mat Shoemake, Dean Kawaguchi, Hitoshi Takanashi, Bob O'Hara, John Fakatselis, Carl Andren.

2 **Secretary and agenda approval:** Al Petrick acting as secretary for the meeting. Vic Hayes reviewed objectives for the teleconference as written in doc: IEEE 802.11-99/137

3 **TGb:** Discussions chaired by John Fakatselis. No outstanding issues.

3.0 **Lastest Information from commenters:** *Some discussion*

3.1 **Comments received after TGb adjournment:** *None Some discussion*

3.2 Motion to approve Re-circulation Ballot

MOTION: To approve re-circulation ballot: to submit 802.11b/D5.3 for Sponsor re-circulation ballot with bookmarks as document 802.11b/D5.5 for Sponsor re-circulation ballot.
Moved by John Fakatselis, seconded by Carl Andren

No discussion

Role call vote: Approved by: Al Petrick, Richard Nee, Tal Kaitz, John Kowalski, Mat Shoemake, Dean Kawaguchi, Hitoshi Takanashi, Bob O'Hara, John Fakatselis, Carl Andren

Motion passes 10/0/0

3.3 Any other business: *NO new business*

4 **TGa:** Discussions chaired by Tal Kaitz, on behalf of Naftali Chayat's absence.

Teleconference group reviewed outstanding comments and resolutions.

4.1 **Latest information from commenters:** *Some discussion*

4.2 **Comments received after TGa adjournment:** *Those from John Deane. John and Naftali (see e-mail below) had seen that most of John's comments were already dealt with by other commenters. One resolution has not received John's approval and will be posted in the unresolved comments file.*

4.3 **Comment Resolution :** *63,75,76,26,24,78,79,80,67 Valerie's point in 63 will be applied as the difference of the title from the PAR is within the span the IEEE editor's can handle.*

MOTION: To make the change proposed by Naftali Chayat on email May 28, 1999 0205 regarding comment 67.

Moved by Richard Nee, Seconded by Hitoshi Takanashi

No Discussion

Role Call vote Approved by: Al Petrick, Richard Nee, Tal Kaitz, John Kowalski, Dean Kawaguchi, Hitoshi Takanashi, Bob O'Hara, Carl Andren

Motion passes 8/0/0

. All other comments implied addition of references to other comments

4.4 Motion to approve Re-circulation Ballot

MOTION: To make the changes to 802.11a/D5.3 as agreed to comments 63, 67 and to submit 802.11a/D5.5 for Sponsor re-circulation ballot.
Moved by Hitochi Takanashi, Seconded by, Richard Nee

No discussion

Role Call vote Approved by: Al Petrick, Richard Nee, Tal Kaitz, John Kowalski, Mat Shoemake, Dean Kawaguchi, Hitoshi Takanashi, Bob O'Hara, John Fakatselis, Carl Andren

Motion passes 10/0/0

Bob Ward joins the conference

Meeting and May 1999 session adjourned until meeting in IEEE 802 Montreal, Canada week of July 5th, 1999.

E-mail From: Naftali Chayat <naftalic@breezecom.co.il>

Subject: Preparation for TGa Teleconf.

Date: Fri, 28 May 1999 03:05:42 +0300

63: Regretfully we do not have Valerie to come back to. I propose to implement her suggestion, and if IEEE staff decides otherwise, it will be corrected then by them.

75,76: This comments by John Deane replicate a comment by David Skellern (7), which we already addressed by moving the RATE bits to the front of SIGNAL field. This issue was already resolved (see cmmts 7,8); just copy the resolution.

24,26: Those are replicas of comment 25 which we did resolve. Therefore, just copy the resolution of 25. (There is a pending request by Masahiro to BRAN to accept a certain change to the short training sequence. However, the BRAN13.5 meeting did not make any decisions on that. Depending on further discussion with BRAN, we may readress this issue in the reconfirmation ballot, but not now).

78: This comment is related to comments we processed already (David Skellern(32), Bob Ward (31)); copy the response.

79,80: This comment is related to few we processed already (David Skellern, Bob Ward, RvN, Kazu - 36, 38, 39, 40); copy the response.

67: The comment addresses the sentences:

"The outer channels may have to be amplified by an HPA (High Power Amplifier) which has more backoff than the inner channels. This issue depends on the local regulations and HPA characteristics."

As worded, it implies different power amplifiers for the outer and the inner channels. An improved wording is proposed:

"The outer channels may require setting the HPA (High Power Amplifier) backoff to a higher value than for the inner channels in order to pass the local regulations. This issue depends on the local regulations and HPA characteristics."

Attendance list for Chiba, Japan, May 3-7, 1999

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Attendance list for Tele-Conference of May 28, 1999

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