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**IEEE P802.11  
Wireless LANs**

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**Tentative Minutes of the IEEE P802.11 Full Working Group**

**Hyatt Regency Hotel, Koloa, Kauai, HI**

**8-12 November 1999**

**Monday, 8 November Opening Session IEEE P802.11**

**1 Opening of Session**

Meeting called to order by Vic Hayes in the Chair at 1310 hrs. Agenda of 59<sup>th</sup> session of 802.11 is in doc.: IEEE P802.11-99/243-r1 (archive file 9243r18W-Tentative-Agenda-Nov99.ppt).

**Objectives for this meeting:**

- Draft text for 802.11d
- Draft PAR and 5 Criteria for SG MAC Enhancements
- Send letters to liaison groups and to regulatory agencies as needed, for example:
  - FCC NPRM ET Docket No. 99-231
  - FCC NPRM ET Docket No. 99-42
  - WRC 2000/2002

**1.0 Secretary, Document Officer, Attendance Book Officer**

David Skellern, Secretary<sup>1)</sup> is present and ready to take the minutes.

Harry Worstel, Document Officer

Tim Godfrey, Attendance Book Officer

**1.1 Roll Call**

The 50 people in the room introduced themselves.

**1.2 Voting Rights**

Vic Hayes summarised the regulations regarding voting rights.

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- (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
  - In study groups all attendees have voting rights.
- (b) To become a voting member and to maintain voting member status:
  - 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
- (c) All members have voting rights at task group meetings
- (d) Voting rights may be lost:
  - After failing to pay the conference fee
  - After missing two out of three consecutive letter ballots
- (e) Current member status:
  - Voting members 92 at the beginning of this meeting
  - Nearly voting members 17
  - Aspiring voting members 63

### 1.3 Attendance List; Registration

- Attendance List: The attendance list has to be recorded for voting membership registration. It was circulated with Tim Godfrey supervising.

### 1.4 Logistics

- (a) Breaks: Coffee breaks are listed in the Agenda for 1000 and 1500. There is continental breakfast free for registered attendees. Lunches at members own expense from 1200-1300.
- (b) Document copying, submission and distribution:
  - Printing is available through the IEEE office.
  - Document distribution: Dissemination of documentation is via electronic file distribution. Two mediums only will be used. They are 1) 802.11 network and 2) flash memory cards.
  - All files must use the IEEE P802.11 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.
  - Documents must be available before the agenda item is presented.

### 1.5 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 or patent applications applicable to the Published standards or draft standard and for patent holders to submit the requested statement. The Chair will write to the patent holders or submitters asking for their position on use of the patent.

### 1.6 Individual Representation

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

### 1.7 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.

### 1.8 Copyrights

If you know of copyrighted or proprietary material that is in the standard as we have drafts now, please let the group know so the Chair has the opportunity to request release.

Standards Publication shall constitute a "work made for hire" as defined by the Copyright Act. IEEE owns the copyright of the standards publication.

**1.9 Other Announcements**

- 1.9.1 Richard Paine & Dennis Kuwahara volunteered to help with Thursday night mailing.
- 1.9.2 Register for 802.15 ballot pool
- 802.15 is forming a ballot group for their first standard shortly
  - will be sent to members of the 802.15 ballot pool (as well as all participants in recent 802.x sponsor ballots)
  - if you want to join the ballot group, you need to be an IEEE and SA member **or** pay US\$ 200.--
- 1.9.3 Vic Hayes advised that IEEE Std 802.11b seems to have a problem with the MIB that was not caught by the balloters. This may cause the termination of the publication. We will start to deal with this at this meeting.
- 1.9.4 Naftali Chayat made several announcements. He
- thanked, as Chair of TGa, everyone for their hard work on 802.11a
  - reminded members about the next meeting in Tel Aviv
  - said that he would present an OFDM proposal for the PHY in 802.16 on Tuesday morning
  - noted that he will present a report on the last ETSI BRAN HIPERLAN meeting, held in Eindhoven
- 1.9.5 A straw poll of the group on use of Office97/Office2000 was 21/10.

**2 Approval of the minutes of past meetings****2.1 Montreal meeting minutes 11-99/151**

Motion 99/59P01 (117)	To approve doc.: 99/151 Montreal minutes of previous meeting.
Moved:	Al Petrick
Seconded:	Stuart Kerry

Discussion: none**Motion passes 11-0-7****2.2 Santa Rosa meeting minutes 11-99/211**

Motion 99/59P02 (118)	To approve doc.: 99/211 Santa Rosa minutes of previous meeting.
Moved:	Harry Worstel
Seconded:	Richard Paine

Discussion: none**Motion passes 11-0-6****2.3 Matters Arising from the Minutes**

There were no matters arising immediately from either of the approved minutes.

**3 Reports****3.1 Monday ExCom Meeting**

Vic Hayes reported:

- IPF Fee
  - This is the Fee to contribute to the US funded secretariats for ISO/IEC JTC1 and SC6
  - 802.11 has supported continuation in the past
  - 802.1 has challenged the continuation
    - Value: US\$ 100.-- per Plenary attendee
- Free Distribution of standards
  - 802.1 proposes to make 802 standards free or for low cost, subsidized by 802
  - IEEE-SA proposal to make PDF files available for US\$ 25.00, normal price for paper copies
  - Disagreement, further discussions in SEC, 1-3 PM
  - Tutorial and discussion for Tuesday 8-9:30 PM
- Electronic LMSC ballots
  - Wednesday 8 AM to write a letter to ask IEEE Std Dept to make all ballots electronic
  - Will include wishlist – 802.11 has used beta version and will give feedback
  - Vic will ask Bob Love to find out what has been updated already in the new version
- Monday Schedule at 802 Plenaries. Straw poll result:
  - Do we want to have the same Monday AM schedule for March meeting? Yes: 22 No: 0

- 20<sup>th</sup> anniversary of 802
  - First meeting was Feb 1980 in San Francisco
  - Special tutorials and Speakers, pins, T-shirts
  - Help organize the event: volunteers requested, meeting on Wednesday 10-11 AM

### 3.2 Financial report of the Santa Rosa meeting

Vic presented the summary financial report. The total cost for the meeting was \$18,936.70. Receipts were \$20,670, giving a surplus of \$1733.30. Additional details were needed before approval, which would be given on Wednesday.

### 3.3 Letter Ballots

- FCC on rule changes. Approved.
- FCC re direct sequence testing. Approved.
- Fold into one letter if both approved. Approved. Filed on 2 October.

### 3.4 BRAN Liaison

A liaison letter from BRAN is on the server doc.: 802.11-99/246. Please keep this within WG. This is in reply to our Liaison re adoption of 802.11a as part of the HIPERLAN family of standards in order to be able to operate in the European 5 GHz bands. There is not much sympathy for our request in the HIPERLAN group. The ETSI Board is considering the request. Vic noted that the UK-RA wants to change the rules in Europe so that the band will be available for competitive devices.

## 4 Review of contributions

Vic Hayes reviewed the list of document submissions from 243 to 246.

## 5 Adoption of the agenda 11-99/243-r1

### Schedule Changes:

New items 7.4 to 7.8 were added. Item 7.7 on the Santa Rosa budget will be deferred until Wednesday. Vic drew attention to the schedule table in the Agenda document doc.: 802.11-99/243.

Motion 99/59P03(119) To approve the amended Meeting Agenda  
 Moved: Al Petrick  
 Seconded: John Fakatselis

Discussion: none

**Motion passes: 23-0-1**

A further item 7.9 Update on ETSI BRAN Standard (foreshadowed in announcements item 1.9.4) was subsequently added without objection.

The meeting continued with the approved agenda.

## 6 Unfinished Business

### 6.1 TGd

No unfinished business. Will work on TGd text today.

### 6.2 Regulation of RF Lighting Devices

Jim Zyren will not attend this meeting. The ad hoc group on regulations was asked to review this matter and report to the WG.

### 6.3 Regulations: Change of SS rules

The ad hoc regulatory group was asked to look at whether there was a need to file reply comments. Comments are open until November 19.

### 6.4 Regulations: WRC 2000 and WRC 2002 activities

The ad hoc regulatory group was asked to look at Richard Paine's contribution and come back with a recommendation.

**7 New Business****7.1 Submission of new standards to ISO/IEC**

We have been asked to submit 802.11a and 802.11b for fast track standardisation in ISO/IEC.

Motion 99/59P04 (120) to support the ISO/IEC fast track procedure for 802.11a and 802.11b

Moved: John Fakatselis

Seconded: Al Petrick

Discussion: 802 has "Liaison Status A" in SC6 so can now directly put standards in the fast track procedure. There is merit for ISO/IEC approval in Europe and in Japan since it lowers the barrier to uptake.

**Motion to amend by splitting into two motions**

No objections were voiced.

Motion 99/59P04 (120) to support the ISO/IEC fast track procedure for 802.11a.

Moved: John Fakatselis

Seconded: Al Petrick

Discussion: none

**Motion passes: 19-0-3**

Motion 99/59P05 (120) to support the ISO/IEC fast track procedure for 802.11b

Moved: John Fakatselis

Seconded: Al Petrick

Discussion: Members wanted more information on the problems with the 802.11b draft before consideration of this motion.

**Motion to Postpone**

Motion 99/59P07 (121) to postpone motion on ISO/IEC fast track procedure for 802.11b until after the in-depth discussion of Agenda item 7.4 of Hawaii meeting.

Moved: David Skellern

Seconded: Richard Paine

Discussion: none

**Motion passes: 19-0-2**

**7.2 Secretary Election**

Motion 99/59P08 (122) to elect David Skellern the 802.11 Secretary

Moved: Stuart Kerry

Seconded: Al Petrick

Discussion: none

**Motion approved by acclamation.**

**7.3 Volunteer to be secretary at Tel Aviv meeting**

Tim Godfrey volunteered to act as secretary.

**7.4 802.11b issue**

Bob O'Hara explained that there are two problems with the approved 802.11b D7.0 text that make it impossible to compile the MIB properly to build a compliant implementation:

- ❑ Two attributes, HRDSSS Entry 6 and 7, are described in the new MIB but they do not exist. Two possible fixes were noted: either change the spelling so that they belong to the DSS table or add the new table entries.
- ❑ A new compliance group for the high rate PHY was added but there is no description of what constitutes compliance. This description needs to be added.

It was reported that the IEEE SB will not allow a simple editorial change and that a PAR is needed, which will require at least 60 days for approval.

Bob agreed to make a submission about what has to be replaced and draft a PAR that limits the correction to exactly these matters. He estimated that it was probably going to be a few pages of MIB text to correct these problems.

Motion 99/59P09 (123) Move to draft the text changes needed for 802.11b along with a PAR that is limited to the text changes.

Moved: John Kowalski

Seconded: Peter Ecclesine

Discussion: Recall that the MIB should be compiled to check the validity of the changes. The status of the 802.11b standard was questioned. Does availability of an electronic version constitute publication?

**Motion to postpone the motion:**

Motion 99/59P10 (124) Move to postpone motion (ID 123) until the Wednesday plenary and ask the chair to learn the procedural route to resolve this issue.

Moved: Naftali Chayat

Seconded: Stuart Kerry

Discussion: It was explained that the process being proposed is that recommended by IEEE. The procedural route is known. 802.11b is currently being sold as an unapproved standard; however, it is approved. The real issue is that someone implementing according to D7.0 will not be interoperable with someone with the new version that would arise from the proposed fixes. It was explained that the various routes have been discussed with IEEE.

**Move to call the question:**

Moved: Bob O'Hara

Seconded: John Kowalski

**Motion to postpone fails 7-11-6**

**Motion 99/59P09 (123) put:**

**Motion passes 14-1-12**

**Return to Motion 99/59P05 (120) - to support the ISO/IEC fast track procedure for 802.11b**

Discussion: Since there is no version of the standard with the corrections in it, this motion would not apply to the corrected standard. The general view was that we should focus on a fast track procedure within IEEE. This is not ready for a fast track in ISO and would damage our credibility.

**Motion fails 0-18-4.**

There was renewed discussion about whether every avenue in IEEE has been exhausted. The problems with 802.11b D7.0 were clearly editorial oversights and the proposed resolution would seem to unduly delay publication of the standard. The Chair was called upon to talk with the Chair of RevCom and sort out a better solution.

The Chair agreed to update the WG on Wednesday after discussion with the relevant IEEE officers.

**7.5 Regulations: UK-RA Consultation document**

All ok on UK-RA – asked ad hoc reg to bring a recommendation to us

**7.6 Review of rules for sending letters to Administrations**

This item is informative only and an action item for the WG Chair. The need is to confirm rules with Chair 802 to prevent problems in the future.

**7.7 Expenditure of Santa Rosa Balance**

Postponed until Wednesday when more information will be available.

**7.8 Working Group Rules**

A draft of the WG Rules would be brought on Wednesday. There is a requirement to document and publish the way we are operating. WG 802.15 wants to align their rules with ours.

**7.9 Update on ETSI BRAN standard**

Naftali Chayat reported.

ETSI HIPERLAN/2 PHY has gone to publication. Puncturing is a significant difference to 802.11a. The issue of adoption of 802.11a as one of the HIPERLAN family was not well received. 802.11a is seen as having a functionality that is included in HIPERLAN/2. The question has been raised at the ETSI Board. Two essential technical issues relating to allocation of the spectrum in Europe are requirements for transmit power control (TPC) and for dynamic frequency selection (DFS) for interference evasion and uniform distribution of interference. These are requirements met by HIPERLAN/2. 802.11a does not require them.

**8 Adjourn for subgroups**

The Plenary meeting adjourned at 1548 hrs.

**Wednesday, 10 November 1999 Meeting of IEEE P802.11**

Scheduled: 3:30pm – 5:30pm

**9 Opening**

Meeting called to order by Vic Hayes at 3:48PM and David Skellern, Secretary 802.11 was ready to take the meeting notes.

**9.1 Agenda Update**

Vic Hayes presented the updated agenda.

Motion 99/59P11 (136)	To approve the agenda as presented.
Moved	John Kowalski
Seconded	Chris Zegelin

Discussion: none

Motion passes 29-0-0

**10 Reports from Subgroups****10.1 TGd**

Bob O'Hara reported that TGd has been meeting to create a draft. Chris Zegelin had presented to the subgroup and Bob O'Hara had presented a draft that has been worked on by the subgroup. Aim is to get a draft this week in order to meet our goal of a July approval by the SB.

**11 New Business****11.1 802.11b Issue**

It was reported that a more satisfactory resolution to this issue had been negotiated with IEEE. The MIB (Appendix D) will not be published but the remainder of 802.11b D7.0 will go forward to publication. A reference will be made to the availability of a MIB on the web site.

Motion 99/59P12 (137)	to approve a PAR for Corrigenda to correct the errors in the MIB of 802.11b.
Moved:	Bob O'Hara
Seconded:	John Fakatselis

Discussion: Bob O'Hara read through the proposed Corrigenda PAR to be submitted. The PAR is limited to the Corrigenda. Bob also went through a first pass at the necessary corrections. What was missing was what are the pieces of the MIB that was necessary for performance. Vic suggested we propose the name 802.11b(Cor).

**Motion passes: 35-0-1**

**12 There is no item 12.****13 Adjournment**

There being no other business, the Meeting adjourned at 1609 hrs.

**Wednesday, 10 November 1999 Joint Meeting of IEEE P802.11 and P802.15**

Scheduled: 1:00pm – 3:00pm

The minutes of the joint meeting are recorded separately in doc: IEEE P802.11-99/272.

Motions of the P802.11 WG recorded in that meeting include those numbered 99/59 P13 to 99/59 P18.

## Thursday, 11 November 1999 Full WG Closing Plenary of IEEE 802.11

Scheduled: 3:30 PM - 5:00 PM

### 14 Opening

The closing plenary was opened by Vic Hayes at 3:32 PM and David Skellern, Secretary was ready to take notes.

#### 14.1 Announcements

There were no announcements.

#### 14.2 Document List Update

The document list was reviewed. New documents since the Monday WG plenary are docs: 802.11-99/247-276. Dennis Kuwahara was allocated 277 for the report of the regulatory ad hoc group.

#### 14.3 Agenda Adjustments

A revised agenda was reviewed.

Motion 99/59P19 (no database ID allocated due to computer trouble) To approve the amended Meeting Agenda  
 Moved: Stuart Kerry  
 Seconded: David Skellern

Discussion: none

**Motion passes, hearing no objection, by unanimous consent.**

### 15 Reports and Actions from Subgroups

#### 15.1 TGd

Bob O'Hara reported on TGd. The detailed report is doc. 99/249.

- Submission from Bob O'Hara: 99/244 Communication of PHY Specific Information
- Submission from Chris Zegelin: 99/257 International Roaming
- The following motion, which passed unanimously in the TG, was submitted.

Motion 99/59P20 (138) To issue TGd draft 0.2 contained in document P802.11d Draft0.2.doc to working group letter ballot.  
 Moved: Bob O'Hara  
 Seconded: Keith Amundsen

Discussion: There was the usual debate about Framemaker format – needed by IEEE. WG LB format will be Word. The LB will ask for approval to go to Sponsor Ballot.

**Motion passes: 29-0-0**

- The following motion, which also passed unanimously in the TG, was submitted.

Motion 99/59P21 (139) To empower the January interim meeting to process comments on the TGd letter ballot and to issue a new draft to working group letter ballot.  
 Moved: Bob O'Hara for TGd

Discussion: none

**Motion passes: 28-0-1**

- Bob O'Hara noted that the SDL needs to be edited. Alan Heberling will be contacting Telelogic about issuing editor licenses to those volunteering to do the edit.
- Bob O'Hara will not be at the January meeting. Acting Chair is needed to handle the LB responses.

#### 15.2 Regulations

Dennis Kuwahara gave an update on discussions, letters and letter revisions since the Wednesday report. The written report is doc.: IEEE 802.11-99/277.

- The draft letter to FCC on modifying the rules for 2.4 GHz spread spectrum devices (doc. 99/265r1) was discussed.
- Straw poll of voting members in favor of submitting to FCC: 18-0-7.

Motion 99/59P22 (140) To accept 99/265r1 as written, and to submit to the FCC, via ExCom  
 Moved: Richard Paine  
 Seconded: Don Johnson

Discussion: none

**Motion passes: 25-0-1**

- ❑ Draft letter for 5 GHz Coexistence Worldwide. This document will be submitted by Boeing to SG8 if approved. The endorsement of IEEE802 will be noted in the letter. The lengthy draft letter, doc.: 99/264, was reviewed partially by the group.

Motion 99/59P23 (141) To empower a group under the leadership of Richard Paine and including Peter Ecclesine, Dennis Kuwahara and Vic Hayes, to complete the final document for submission to ITU-R SG8a/9b via ExCom and then an appropriate administration.

Moved: Richard Paine

Seconded: Peter Ecclesine

Discussion: none

**Motion passes: 27-0-0**

- ❑ Draft letter to UK-RA, doc.:99/263r1

Motion 99/59P24 (142) To submit doc.: 99/263r1 to the UK-RA, via ExCom.

Moved: Richard Paine

Seconded: Peter Ecclesine

Discussion: none

**Motion passes: 25-0-1**

Motion 99/59P25 (143) To empower the members of the Ad Hoc regulatory group, under the leadership of Dennis Kuwahara, to respond to regulatory events or other needs, until the next plenary.

Moved: Stuart Kerry

Seconded: Richard Paine

Discussion: none

**Motion passes: 26-0-0**

### 15.3 Study Group Enhanced MAC

John Fakatselis reported that the PAR draft has been completed. He brought forward several motions that were approved by the SG.

Motion 99/59P26 (144) To request extension of the MAC enhancement SG until March 2000 Plenary.

Moved: John Fakatselis for SG

Discussion: Although the SG timetable spans this date, such extension requests are a necessary IEEE formality.

**Motion passes: 27-0-0**

Motion 99/59P27 (145) To ask the WG to send out a WG Letter Ballot on the MAC enhancements PAR Draft. If the Letter Ballot has 75% approval, the January 2000 Interim will be authorised to resolve all comments and submit the PAR to the ExCom. If the Letter Ballot has under 75% approval, the January 2000 Interim will resolve comments, and start a recirculation ballot.

Moved: John Fakatselis for SG

Discussion: This process was thought to be too complicated and a simpler process was proposed.

#### Motion to amend

Motion 99/59P28 (146) To approve MAC enhancements PAR and send to SEC and then to NesCOM.

Moved: Bob O'Hara

Seconded: Tim Godfrey

Discussion: none

**Motion to amend passes: 18-5-6**

The motion itself was then put without renumbering.

**Motion passes: 22-1-4**

It was agreed that Dave Bagby would seek input from MAC experts regarding the PAR.

Motion 99/59P29 (147) To ask the WG to send out a WG Letter Ballot on the IAPP PAR Draft, which is document 99/275. If the Letter Ballot has 75% approval, the January 2000 Interim will be authorised to resolve all comments and submit the PAR to the ExCom. If the Letter Ballot has under 75% approval, the January 2000 Interim will resolve comments, and start a recirculation ballot.

Moved: John Fakatselis for SG

Discussion: Again a simpler process was proposed.

#### **Motion to amend.**

Motion 99/59P30 (148) To amend 147 to read: To approve the IAPP PAR and forward to SEC and then to NesCOM.

Moved: Bob O'Hara

Seconded: Jan Boer

Discussion: none

**Motion to amend passes: 20-1-7**

Motion 99/59P31 (149) To approve the IAPP PAR and forward to SEC and then to NesCOM.

Moved: John Fakatselis for SG

Discussion: none

**Motion passes: 22-0-6**

Motion 99/59P32 (150) To empower the SG to consider comments and amend the two PARs, at the January 2000 interim meeting.

Moved: John Fakatselis

Seconded: Tim Godfrey

Discussion: A view was formed that this ability to amend the PARs was not legal. The SG has completed its work and the present PARs are the outcome.

**Motion withdrawn.**

There will be work in January in anticipation of the approval of the PAR. It was believed that starting to entertain more technical work and beginning a requirements document was valid work for the SG.

#### **15.4 TGb**

Motion 99/59P33 (151) To empower Chair to form Sponsor Ballot Group as soon as PAR has been approved.

Moved: John Fakatselis

Seconded: Bob O'Hara

Discussion: none.

**Motion passes 26-0-0.**

Motion 99/59P34 (152) To empower WG Chair to start WG Letter Ballot so that Sponsor Ballot can start from the March meeting

Moved: Bob O'Hara

Seconded: John Fakatselis

Discussion: none.

**Motion passes 27-0-0.**

#### **15.5 Other Interim Meetings Required**

None identified at this time.

### **16 Unfinished Business**

#### **16.1 Output documents**

- |  |        |
|--|--------|
| <input type="checkbox"/> PAR 802.11b COR                 | 99/267 |
| <input type="checkbox"/> Letter to UK-RA re Consultation | 99/263 |
| <input type="checkbox"/> Letter to FCC re 99-231         | 99/265 |
| <input type="checkbox"/> Letter to ITU-R                 | 99/264 |
| <input type="checkbox"/> Extension for SG MAC enhance.   | 99/    |
| <input type="checkbox"/> Extension for SG IAPP           | 99/    |
| <input type="checkbox"/> Draft PAR MAC enhance.          | 99/273 |

**16.2 Next meeting**

Objectives for next meeting

- To resolve LB results of TGD
- To start looking at the technical material for MAC enhancements and IAPP
- To resolve LB results of TGB
- To respond to Regulatory events and needs

**17 New Business****17.1 Issue of Plaque and Awards for work on 802.11rev.**

Vic Hayes presented plaques to the following WG members:

Alan Heberling

Bob O'Hara

Ron Brockmann

Henri Moelard (accepted by Jan Boer)

Johnny Zweig (accepted by Bob O'Hara)

Darwin Engwer (accepted by Bob O'Hara)

Rick Ozer (accepted by Stuart Kerry)

**17.2 Thanks to meeting organisers**

Motion 99/59P35 (153) To commend the meeting organisers for a fine meeting. Thanks!

Moved: Bob O'Hara

Seconded: Stuart Kerry

Discussion: none

**Motion approved by acclamation.**

**18 Closure**

Meeting adjourned at 17:41.

*Attendance list for the meeting held at*  
**The Hyatt Regency Kauai, Kauai, HI**

<i>Full name</i>	<i>statu</i>	<i>att.</i>	<i>phone</i>	<i>company</i>	<i>e_mail</i>
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<i>Full name</i>	<i>statu</i>	<i>att.</i>	<i>phone</i>	<i>company</i>	<i>e_mail</i>
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## Tentative meeting schedule

<b>Date</b>	<b>Place</b>	<b>Hotel</b>	<b>Type</b>	<b>Host</b>
January 10-14, 2000	Tel Aviv, Israel		Interim	Breezecom
March 6-10, 2000	Albuquerque, NM	Hyatt Regency	Plenary	
May 8-12, 2000	Seattle, WA	Renaissance Madison Hotel	Interim	Boeing
July 10-14, 2000	La Jolla (San Diego), CA	Hyatt Regency	Plenary	
?September 18-22, 2000		Memphis, TN	Interim	FedEx
November 6-10, 2000	Tampa, FL	Hyatt Regency	Plenary	
March 12-16, 2001	Hilton Head	Hyatt Regency	Plenary	
July 9-13, 2000	Portland, OR	Portland Marriott	Plenary	
November 12-16, 2001	Austin, TX	Hyatt Regency Town Lake	Plenary	
March 11-16, 2002	?	?	Plenary	
July 8-12, 2002	Vancouver, BC	Hyatt Regency	Plenary	
November 11-15, 2002	Montreal, PQ	Queen Elizabeth	Plenary	