# IEEE 802.11 Wireless Access Method and Physical Layer Specifications

Title: Minutes of Sponsor Recirculation Ballot Comment-Resolution

Meeting (AMD, Sunnyvale, CA, 7-9 May 1997)

**Abstract:** This document contains the minutes describing actions taking

place at the Recirculation-Ballot Comment Resolution Meeting in Sunnyvale. Most of the work resulted in a revised comment file with the disposition of the comments - see that file for results.

## Opening Session (Wednesday AM)

Discussed procedure and decided to attempt to resolve the comments associated with No-votes first. Morning spent reviewing recirculation ballot comments.

NOTE: The decisions are documented in document 97/37-R1.

## Wednesday PM Session

Continued reviewing re-recirculation ballot comments. Included many of the submitted editorial comments.

#### Thursday AM Session

Begin by going over our responses to remaining unresolved Technical comments associated with Novotes. This will become document 97/38.

#### Thursday PM Session

Fax and conference-call to Rich Seifert to determine whether the resolutions to his comments we produced yesterday are acceptable. Resolution to the comments on the following sections are complete:

rsC28: p. ii line 5

rsC17: 5.3.3 (second comment)

rsC 19: 5.5 rsC20: 5.7.1 rsC22: 6.1.3 rsC25: 8.1 rsC26: 9.1.2

rsC23: The group worked on a rewording of 7.1.1 to make it absolutely clear what order the bits/octets in MAC frames described in Clause 7 are transferred across the MAC/PLCP boundary. Lengthy review of bit-ordering, significance, grouping, and typographical conventions. The new text was faxed to Rich to see whether it resolves his comment rsC23.

### Friday AM Session

First task is to finish up document processing, download files via modem and so forth.

After discussing the status of rsC23 with Rich, Clause 7.1.1 was reworded again so that it is clearer what order the bits/octets in all fields are sent.

The corrected formal description from Michael will be reviewed later in the day to make sure that all editorial changes were made correctly (as soon as files are transferred).

Called Rich, and he needs to review Clause 7 before accepting our resolution to rsC23, and won't be ready with that review until tomorrow. For now, he said he tentatively approves the resolution. He approves of the resolution rsC21 regarding broadcast & Deauthenticate frames, as well as the resolutions to editorial comments rsC29, rsC4, rsC6, rsC8, rsC10, rsC12, rsC13, rsC14, rsC15, rsC16, rsC18.

# Friday PM Session

gotC3 and Rich Seifert's original comment on Clause 9 regarding making the English prose informative and providing a normative, formalized presentation of the MAC were discussed. Having added the formal normative description of the MAC and given it equal precedence to the prose definitions, the group does not feel that new substantive arguments have been provided in favor of changing the position arrived at in January. The group does not accept that arbitrarily declaring the formal description correct in the event a discrepancy is discovered is the right thing to do — since we have reviewed the document and do not know of any discrepancy, a discrepancy could only involve an error in one or the other of the descriptions. There is no way to know in advance that the error lies in the English prose, so declaring that the formal description must be correct does not make the standard any more likely to convey correct information. The comment remains unresolved, in the same state as it was when the recirculation ballot took place. Group reviewed status of comment-processing. All the changes made to the draft this week are editorial. Review of unresolved comments showed that the remaining unresolved comments associated with Novotes are all from the original round of sponsor ballot voting or (in one instance) was an invalid recirculation comment as it referred to text which had not changed for the recirculation (though in a good faith effort, the group reviewed the issue anyhow).

Therefore there are no new technical changes to the draft resulting from recirculation, and no new technical comments that are unresolved. Vic determined that a second recirculation ballot would be unnecessary, and the draft as edited, together with the unresolved comments document, should go to the 802 Executive Committee for processing.

The group called Pat Thaler for a 3<sup>rd</sup> opinion re whether we have satisfactorily processed the recirculation comments, and whether 802.11 needs another recirculation ballot. She agreed that if no technical changes to the draft are made a second recirculation is not necessary, and wants all unresolved comments to be communicated to the 802 Executive Committee for them to make a decision regarding forwarding p802.11 D6.1 to the Standards Board for approval. The comments that are not part of No-votes do not need to be circulated to ExComm with the draft.

Pat said that the 802 Review Committee will not approve of having no recirculation of a draft containing technical changes. So the group promised to review changes again to determine whether they were technical.

Pat did say that she feels that almost any change to the formal description is a technical change, since the text did not have precedence in D5.3.

This position was discussed after the call, and the group reviewed the changes made again to see if they felt this was applicable. After review and discussion, Vic ruled that such changes are editorial, since (theoretically) conflicting normative requirements could not have been implemented so eliminating a conflict could not make conforming implementations non-interoperable.

802.11 is in an non-traditional position, in that having both normative prose and a normative formal description of the MAC means that some requirements are stated in one place but not the other, and other requirements are stated in both places. IT was noted that the PICs (which determines conformance requirements) explicitly refers to both document parts. This is significantly different from standards where the PICs might only refer to a formal description. The group believes that copying a requirement from the prose to the formal description does not constitute a technical change, since it does not impose any additional/lower/different requirement on a conformant implementation, but rather merely duplicates a requirement in a different language (English or SDL).

Vic to contact Geoff Thompson next week to discuss gotC3, since it is still unresolved.

The group reviewed the state machine files from Michael Fischer for consistency with the editorial changes agreed upon yesterday. One formatting printing formatting problem was found and corrected.

Output documents from the meeting include: revised recirculation comment table with comment resolutions included; a paper describing the unresolved no votes and the working groups position to accompany the draft.

Meeting adjourned at 7:30 Friday evening.

# Appendix 1

# **Attendance list**

Title and first name	Last name	status	Company	communications
Mr. Keith B.	Amundsen	voter	Raytheon Company keith_b_amundsen@raytheon.com	+1 508 470 9483 m
Mr. David	Bagby	voter	Advanced Micro Devices david.bagby@amd.com	+1 408 749 5425
Mr. Ken	Clements	voter	Innovation on Demand Ken@InnovationOnDmnd.com	+1 408 353 5027
Mr. Matthew	Fischer	voter	Advanced Micro Devices ablmatt@brahms.amd.com	+1 408 749 5403
Mr. Victor	Hayes	voter	Lucent Technologies WCND vichayes@lucent.com	+31 30 609 7528
Mr. Stuart J.	Kerry	voter	kerrysj@aol.com	+1 408 267 4680
Mr. Bob	O'Hara	voter	Informed Technology Inc. bob@informed-technology.com	+1 212 463 7937
Mr. Chandos	Rypinski	voter	LACE Inc. rypinski@microweb.com	+1 415 389 6659
Mr. Anil K.	Sanwalka	voter	Neesus Datacom Consultants anil@interlog.com	+1 416 754 8007
Mr. Mike	Shiba		Symbol Technologies Inc. mikes@symbol.com	+1 408 369 2695
Mr. Tom	Tsoulogiannis	voter	Neesus Datacom Consultants tomt@interlog.com	+1 416 754 8007
Mr. Johnny	Zweig	voter	Netwave Technologies Inc. zweig@netwave-wireless.com	+1 510 737 1600