

Tentative Minutes of IR PHY Sub-Group

**Lake Tahoe, Nevada
November 8-9, 1994**

Chairman Roger Samdahl (Photonics) was not able to attend. Barry Dobyms (Photonics) accepted the chair in his absence. Tom Baumgartner (Spectrix) took the minutes.

Others attending: Adriano Moreira (Univ. of Aveiro), Manuel Betancor (Univ. Las Palmas), F. J. Lopez-Hernandez (Univ. Polytech. Madrid), Hiro Wakai (Sharp).

Agenda: Hear 2 papers from U. of Aveiro, hear undistributed paper from Tom Baumgartner with list of questions on standard, assign people to write prose needed for completing the draft. We will reconvene to review the written changes Wednesday morning. Agenda accepted unanimously.

Barry: Some of the prose that is needed: introduction to diffuse IR, describe how to partition octets that PHY SAP presents, need to modify primitives to correspond to MAC section primitive changes.

Tom: Questioned if there is enough detail on physical parameters to allow someone to build an inter-operable device.

Barry: The philosophy is to maintain looseness; just specify enough to ensure inter-operability. We don't want to inhibit different implementations for different purposes. For example the Photonics detector is lower sensitivity at lower cost; Univ. of Aveiro has more costly and more sensitive receiver. The problem created is asymmetrical distance between units from different vendors.

Tom: I don't think large asymmetrical distance meets inter-operability requirement.

Barry: But all we can do is change the amount of asymmetry by tighter specification, it won't be eliminated.

Tom: Then we should state some distance over which inter-operability must be achieved.

Many: Too difficult to state the conditions that would be used in conformance test of distance. Missing from spec. is an annex describing conformance tests.

PAPERS 94/256 and 94/267

Presentation produced much discussion on emitter radiation pattern wording and intent.

Conclusion: It was agreed that the present emitter radiation standard is sufficient only for one particular application. We need to also have emitter radiation patterns for other applications with more directed (less azimuth) emissions, but we don't have time to specify them properly before the draft is sent to letter ballot. Members will have to write the other radiation masks as an objection to the letter ballot.

Motion #1: Resolved that the proposed text changes in 11-94/256 be incorporated into the draft standard IEEE P802.11-93/20b3, in its next revision by the editors.

Moved by: Adriano Moreira
Seconded by: Tom Baumgartner

Motion 1 Discussion: none

Approved: 5 Opposed: 1 Abstain: 0

Motion #1 passes

Tom's paper which hasn't yet received a number.

Motion #2: The receiver FOV be specified as the 50% sensitivity angle.

Moved by: Tom Baumgartner
Seconded by: F. J. Lopez-Hernandez

Motion 2 Discussion: none

Approved: 5 Opposed: 1 Abstain: 0 *Motion #2 passes*

Motion #3: **That the receiver FOV specification be 90% (+/-45%) minimum.**

Moved by: Tom Baumgartner
Seconded by: F.J. Lopez-Hernandez

Motion 3 Discussion: none

There is a lot of work to define a receiver mask like the transmitter mask. That will have to be done later.

Approved: 5 Opposed: 0 Abstain: 1 *Motion #3 passes*

Barry: Multi-rate is desired by both IR and DSSS. The MAC will have to support it.

Manuel: It would be more understandable to use mW/cm² instead of dBm/cm².

Motion #4: **Use mW/cm² as units for power for surface instead of dBm/cm².**

Moved by: Manuel Betancor
Seconded by: F.J. Lopez-Hernandez

Motion 4 Discussion: none

Approved: 5 Opposed: 0 Abstain: 0 *Motion #4 passes*

Barry assigned the list of items to be written to volunteers.

Meeting adjourned until Wednesday, 8:30 AM.

The meeting reconvened Wed., 8:30 AM. Barry distributed the latest text by disk and all changes were reviewed by the committee.

Motion #5: **Moved that the changes in document P802.11-94/288 be accepted as the latest text for the draft standard.**

Moved by: Tom Baumgartner
Seconded by: Barry Dobyms

Motion 5 Discussion: none

Approved: 6 Opposed: 0 Abstain: 0 *Motion #5 passes*

The meeting was adjourned at 10:30 AM.