Tentative Agenda of the IEEE P802.11 IR-PHY Sub-Group Meeting

at the interim meeting
in Atlanta, GA
6:00 PM, Monday, September 20, 1993

prepared by Tom Baumgartner

1. Adoption of agenda

2. Comments on and corrections of minutes of the last meeting (802.11-93/121)

3. Presentation(s) regarding modulation methods using attached format (Manchester, BFSK, BPSK, 16 Array PPM, RZBI)

4. Decision on modulation method and preamble

5. Presentation(s) on methods of conformance testing of IR transmitters

6. Presentations(s) on Tx level, Rx sensitivity, and dynamic range

7. Decision on Tx level, Rx sensitivity, and dynamic range

8. Presentation(s) of other submissions

9. Plans for future actions and meetings needed to produce a first draft of the IR PHY standard for the November meeting

NOTE: It is entirely possible that this meeting will be continued to other times (nights?) during this interim meeting in an attempt to reach some conclusions.

Format for Discussion of IR PHY Modulation Methods

Modulation Method: _____

Presentation by: _____

1. Rate the estimated cost of the modulator/demodulator and transceiver using 1 Mbps data rate. Since baseband Manchester is well known and understood, use a Manchester system as a "1.0" in your rating system if you can.

2. How would this modulation method support multiple data rates? What methods of automatic rate detection are possible?

3. What is the signal to noise versus bit error rate curve for this modulation method at 1 Mbps? at 4 Mbps

4. What is the multipath sensitivity of this modulation method at 1 Mbps? at 4 Mbps?

5. Does this modulation method support multiple co-located IR channels? (YES/NO)

5.a. State, if known, the performance degradation with co-located IR channels using this modulation method.

6. Rate the power consumption of the modulator/demodulator and the transceiver using 1 Mbps data rate. Since baseband Manchester is well known and understood, use a Manchester system as a "1.0" in your rating system if you can.

7. Rate the stress on the IR LED using the modulation method. Since baseband Manchester is well known and understood, use a Manchester system as a "1.0" in your rating system if you can.

8. Although preamble length can be as much a function of implementation as modulation method, what preamble length would you recommend for this modulation method?