

# Wireless Personal Area Networking

A Study Group Report  
July 6, 1998

## WPAN Update

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## Introduction

- This effort was initiated about a year ago to encourage the development of “Wearables” standards, and to solicit support from the IEEE to develop the standards.

## Motivation

- The increasing adoption of wearable and handheld computing and communicating devices, and the proliferation of peripheral devices for them, has made clear the need to provide wireless connectivity.
- Examples of applications include Collaborative Maintenance, Mobile Worker, Medical Sensing, Data Synchronization, etc. Examples of devices, which can be networked, include Computers, PDA/HPCs, printers, microphones, speakers, bar code readers, sensors, displays, Pagers, and Cellular & PCS Phones.
- The wireless capability will provide functionality, efficiency, productivity and, in some cases, safety of highly mobile workers using computing and communicating systems.

## Objectives

- Review WPAN/WLAN Requirements
- Determine Need for Standard
- If warranted, draft a PAR and 5 Criteria for submittal to 802/802.11
- Seek appropriate Sponsorship within 802

## History

- June, 1997. Cleveland, OH, Request to PASC
- July 16, 1997. Nashua, NH IEEE PASC Plenary Meeting
- December 2, 1997. Cleveland, OH Wearables Ad Hoc Committee Meeting
- January 14-15, 1998. Memphis, TN, Wearables Ad Hoc Committee Meeting
- January 22, 1998 Lynnwood, WA IEEE 802.11 Interim Meeting
- March 9-13, 1998 Irvine, CA IEEE 802 Plenary Meeting
- April 8-9, 1998 Cambridge, MA IEEE 802.11 [WPAN SG Meeting](#)
- May 4-8, 1998 Utrecht, NL IEEE 802.11 [WPAN SG Meeting](#)
- May 19-21, 1998 Irving, TX IEEE 802.11 [WPAN SG Meeting](#)
- July 6-10, 1998 LaJolla, CA 802 Plenary Meeting

## Findings

- Reviewed the WPAN/WLAN requirements and produced submission ref: -98/160. The WPAN will require an a new MAC & PHY or *802.11 Light*
- Determined there was a need for a standard and therefore a PAR and 5 Criteria were written.
- Submitted the WPAN PAR and Five Criteria to our Sponsor ref: -98/162r6 and -98/161r3 respectively on June 3rd, 1998
- Found that it will take two (2) years [3/98 to 3/00] to get a MAC & PHY Standard, via IEEE 802
- 802.11 WG is focused on higher bit rate PHYs than required by WPAN

## Special Announcement

### WPAN Presentations:

- HomeRF - Tim Blaney, Commcepts
- Bluetooth - Simon Ellis. Intel
- Motorola - Rich Ditch

## Next Steps

- Update ExComm and 802 Plenary on SG work since last Plenary (PAR,5 Criteria)
- Move, at the opening 802.11 Plenary, that the WPAN PAR be submitted to 802 for formal action
- Establish the relationship of HomeRF and Bluetooth to the work of this group
- If PAR approved, establish Appropriate Type Group

## Appendix A Participating Companies

- 3Com
- Aironet
- Amerisys
- AMP
- Boeing
- Broadband Access Systems, Inc.
- Butterfly Communications, Inc
- Carnegie Mellon
- Clarion
- Commcepts
- Consultant
- DEC
- FedEx
- GTE
- Harris
- H-P
- Informed Technology, Inc.
- Intermec/Norand
- Lace
- Lucent
- McDonnell Douglas
- Micrilor
- MIT Media Lab
- Motorola
- Netwave
- PED Inc.
- Raytheon
- Sanders
- Symbol
- TI
- Unisys
- ViA
- Walt Disney
- Xetron

## Appendix B

### Archive, Mailing List, etc.

- Archive
  - <ftp://ftp.flexipc.com/wearablesgroup/>
- Mailing List
  - [stds-802-wpan@majordomo.ieee.org](mailto:stds-802-wpan@majordomo.ieee.org)