WPAN SG Meeting Report

Utrecht, NL

May 4-6, 1998

WPAN Report Contents

- Utrecht, NL Agenda Summary
- Current Press Release
- Irving/Dallas TX Venue May 19-21, 1998
- Technical Guidelines a.k.a. Functional Requirements and Applications
- WPAN Call For Proposal
- WPAN Liaisons

Monday May 4, 1998

- Opening of session
  - introductory comments
  - roll call
  - voting rights
  - logistics
  - other announcements
  -

Monday May 4, 1998

- Approval of minutes from Cambridge meeting
  - Pat, Larry second 4,0,0

- Review of Contributions
  - Stuart Kerry, Butterfly HomeRF Pitch added to Wednesday May 6th, 1998 Agenda

- Adoption of agenda
  - Hearing no objections agenda accepted

- Old business
  - We need a Spectrum Availability and Requirements Matrix

- New business

Monday May 4, 1998

- Review objectives of meeting
  - Solicit WG Proposal (802.11 FH/DS)
  - Progress Draft PAR and 5 Criteria & Coexistence
  - Draft Liaisons w/ Press Release, Call For Proposal, etc.

- Review functional requirements document aka Guidelines

- Discuss requirements for a standard

Tuesday May 5, 1998

- Reviewed
  - PAR process/templates
  - Draft PAR
  - Draft 5 Criteria
  - Draft Guidelines
- Created Application Summaries
- Determined next steps
  - Create Spectrum Availability Matrix
  - Liaisons, Promote CFP

Wednesday May 6, 1998

- HomeRF Pitch from Stuart J. Kerry
- Created SG report for afternoon plenary

WPAN SG Press Release

- IRVINE, CA 12 March 1998 - IEEE P802.11 Working Group announced today the formation of a study group to identify a project for standardization of a LAN for wireless communications for Wearable computing devices. This study will examine the requirements for Wireless Personal Area Networking (WPAN) of PCs, peripherals, and consumer electronic devices to communicate and interoperate with one another.

WPAN SG Interim Meeting

Sheraton Grand Hotel (10 minutes from Dallas/Fort Worth Airport)

4440 West Carpenter Freeway

Irving, TX 75063

+1 972-929-8400, +1 800-345-5251

- May 19th, 1998 1:00pm to 5:00pm to May 21st, 1998 8:00am to 2:00pm
- Reference "GTE IEEE Meeting" Rate
- Irving Venue doc.: IEEE 802.11-98/163
- Irving Agenda doc.: IEEE 802.11-98/169

Current WPAN Prioritized Guidelines

- A

  - Low Cost: i.e., relative to target device

  - Small Size e.g., ~.5 cubic inches

    - excludes antenna & battery

  - Power Management: Very Low current consumption

    - Average 20mW @ 10/90 or less

  - Data

  - Should allow coexistence of multiple Wireless PAN's in the same area (20 within 400 square feet)

  - Should allow coexistence of multiple Wireless Systems i.e. P802.11 in the same area

Current WPAN Prioritized Guidelines

- B

  - Effective Data Rate at the MAC SAP: (19.2 - 100) kbit/s (actual 1 device to 1 device)

  - All devices within a WPAN must be able to communicate with each other

  - Networking support for a minimum of 16 devices

  - Voice

  - Range: 0-10 meters

  - Mobility: 0-10mph (hand-off not required to another PAN)

  - Bridge or Gateway connectivity to other data networks

Current WPAN Prioritized Guidelines

- C
  - – No single element of failure
  - – Video

WPAN SG Applications Examples

- Mobile Worker
  - Courier: Communications between Printer, Scanner, Computer, Gateway to WAN, etc.
  - Road Warrior: Communications between Laptops, HPCs, Pagers, Cellular Phones, Scanners, Gateway to WAN, etc.

- Physiological Monitoring
  - Patient: Communications between Body Sensors, Personal Data Collection Device, Gateway to WAN, etc.
  - Sports: Communications between Shoe Sensors, Body Sensors, Personal Data Collection Device, Gateway to WAN, etc.

WPAN SG Call For Proposal for Irving, TX

- The following will describe a Call For Proposal (CFP) for the lower layers i.e., OSI RM MAC & PHY Layers of the Wireless Personal Area Network (WPAN).

- Proposals are solicited from members of the WPAN Study Group, Academia, and Industry to provide a straw model for Medium Access Control and Physical layer solutions that are consistent with the WPAN Functional Requirements.

- CFP doc.: IEEE 802.11-98/169

Proposed WPAN SG Liaisons

- Infrared Data Association (IrDA)

- Home Radio Frequency Working Group (HRFWG)

- ETSI Broadband Radio Access Networks (BRAN) Project

- ATM Forum Wireless ATM (WATM) Working Group

- Wireless LAN Alliance (WLANA)

- Internet Engineering Task Force (IETF)

Slide 15

Bob Heile, GTE

Conclusion

- The WPAN SG would like to thank the 802.11 Working Group for their assistance with the setup of the Utrecht Meeting.