

# IEEE P802.11 Wireless LANs

## MEETINGS AD-HOC GROUP Initial Report

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### 1 Introduction

The "meeting" is an environment which is currently poorly serviced by technology. Despite the staggering advances in information technology and electronic communication in all its forms many of us (surely all in *this* meeting) find an increasing amount of effort taken up by meetings and wonder just how efficiently we are making use of our time. As we make our lives ever more complex the need for direct and personal contact with other humans seems to become more important.

The meeting is an interesting application for wireless LANs. Whilst this represents a genuine opportunity area for innovative products, I also believe that discussion on this topic will generate a better insight for our work on the requirements specification.

### 2 Progress

At the Kauai meeting the "meetings" ad-hoc group was established with two participants. No further meetings have taken place and there has only been the opportunity for limited work since then. This note documents the discussion which took place in Kauai. It is hoped that the group can continue and make a valuable contribution to the work of P802.11.

### 3 Types of Meeting

Four types of meeting are proposed for further discussion.

- Conference
- Conference Room
- Sales
- "Hallway"

Consideration of these should provide a useful spread of requirements as each represents a quite different environment. The Conference Room meeting will be further subdivided into Business and Technical meetings and the Sales meeting into Off-Site and On-Site meetings. The "Hallway" is intended to cover a range of spontaneous meeting environments.

An off-site conference is so far the only one of these which has been considered in more detail.

## 4 The Conference

### 4.1 Scope

A large off-site conference, for example a technical presentation, committee or council meeting, seminar or even a standards meeting. It is assumed that the conference venue will provide some communications infrastructure and aids but that individuals will bring their own computing equipment and personal communications aids.

### 4.2 Characteristics

i) large group  
30 - 500 people

ii) structured layout  
Fixed seating. Chairman, secretary etc. Participants all facing in one direction towards either chair or presenter.

iii) semi-formal  
(usually) Only one person speaking at a time. Presentation style. But opportunities for intervention and cross communication.

iv) uncontrolled diversity of platforms  
Participants provide their own computing and personal communication aids.

v) large quantities of information  
Text and graphics, image (eg 35mm slides)

vi) distribution of information  
A conference's primary concern is one of distribution of information.

vii) secondary communications  
As well as the primary distribution of information, participants need access to other information within the conference, communication with each other, communication with the chairman or secretary and communication off-site.

viii) control  
The meeting is controlled and organised by the chairman.

### 4.3 Services

The following are services which could be provided by a wireless network. They are not presented in any prioritised order.

i) Voice  
This is similar to the function of a conference PA system with either delegate microphones or a roving microphone. Telephony service is not a requirement.

ii) File Transfer  
File distribution. File retrieval (eg archive documents). Presentation material. Notes.

iii) Data Base Access  
eg Document Register. List of Participants.

iv) Off-Site Data Base Access

- v) E-Mail  
Both off-site and within conference.
- vi) File Sharing
- vii) Printing  
Printer sharing
- viii) WAN Access  
For data base access, file transfer, E-mail etc..
- ix) Voting
- x) Signalling to Chairman
- xi) Image distribution

#### 4.4 Platforms

Although there is little or no control over the platforms which may form part of this network as participants will bring their own it is most likely that these will all be personal computers of one form or another. There will be a great diversity of manufacturers and capabilities of these machines. Many of the services listed in 4.3 will be easily supportable across this range but others (for example those relating to voice or image) will depend on the capabilities of the machines forming the network and may be restricted due to a lack of standardisation.

The personal computers may be portables, laptops or notebooks. Any servers provided on the network are likely to be personal computer based.

#### 4.5 Communication Requirements

Communication will, at different times, need to be :-

**Point-to-Multipoint**  
For example for presentation or notice distribution

**Point-to-Point**  
Inter-delegate communication, chairman or secretary to or from delegates

**Point-to-Server**  
Servers provided on the network may include Print, File and Communications Servers

An important consideration will be the transient nature of the network users. Users will occasionally be joining or leaving the network or changing location. Security and authentication, for example for the distribution of documents or confidential information will also be important.

Some conference environments will require the creation and management of ad-hoc closed user groups for example for working groups or other sub-groups within the main meeting.

#### **4.6 MAC Service Requirements**

For further study.

#### **4.7 PHY Service Requirements**

For further study.

The chairman of this ad-hoc group is Rick Albrow whose address is on the front of this contribution. Further participation or contributions would be most welcome.  
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