WIRELESS MARKET
OBSERVATIONS

PRESENTATION TO
IEEE 802.11

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WINDATA
Market Issues for Wireless LANs

- An enabling technology that should expand the overall LAN connectivity marketplace
- A complementary technology that augments other connectivity medium including fiber, twisted pair, coax, etc.
- Connectivity advantages in the areas of mobility, speed of installation, flexibility, and recoverable costs.
Applications

Temporary offices
Retail stores
Factory Floors
Schools
Satellite offices
Construction obstacles
Unattached US PCs

- Unconnected PCs
- New LAN PCs
- LAN PCs Moved

source: IDC

WINDATA
Worldwide Portable PC Market

source: InfoCorp & WINDATA
Portable PC Issues

- The portable PC networking market breaks down into two submarkets:
  - In building connections
  - Wide area connections
- In building applications in turn divide into 2 markets
  - Hand held devices; bursty small packet traffic; high speed is not important
  - Stationary devices; network characteristics similar to desktop PCs; high speed important
- Will portables replace current desktop PCs?
Typical configurations

There are no typical configurations!

- Large offices
  - Coverage in range of 20,000 sq ft
  - Compatibility with structured wire system (operation and management)

- Small offices
  - Coverage in range of 10,000 sq ft
  - Ability to use pure wireless

- Retail
  - Distance range 150 feet
Wireless Space Management

- The system must be "smart" enough to manage multiple subnets and avoid conflict among them.
- Conflict avoidance cannot be legislated onto the end user.
- Restricting coverage is not reliable with radio.
- To maximize market success potential the system must be free of installation and operation restrictions.
Wireless Network Management

- Network Management is required.
- Should be compatible with efforts underway in 802.3 and 802.5
- Management definition under CMIP and SNMP
- Build on management structures defined in wired areas.
Relationship to 802.x

- Market requires a seamless integration of wireless with 802.3 & 802.5
- Cannot afford another 802.4 situation
- 10Base36 much more successful than 802.4