# **TANDBERG – Leading the Way in** Videoconferencing on Wireless LAN

# What is a Wireless LAN?

A wireless local area network (LAN) is a flexible data communications system that can be implemented as an addition to or replacement for a wired LAN. Using radio frequency technology, wireless LANs transmit and receive data over the air, minimizing the need for wired connections. Wireless LANs are becoming widely recognized as a general-purpose connectivity alternative for a broad range of business customers.

### How Do Wireless LANs Work?

A typical wireless LAN configuration uses devices called Access Points. An access point normally has an Ethernet port for connection to the wired network, and an antenna for wireless communication. The Access Point connects the wireless and wired networks.





The typical operating range of the Access Points and PC cards supported by the the TANDBERG 1000, TANDBERG 880 and TANDBERG 550 is 25-500 meters

The operating range, management capabilities, wireless network security and number of users supported depend on the type of access point and card utilized and also the physical hinders such as walls that affect the reception. The access point is usually mounted high but may be mounted practically anywhere as long as the desired radio coverage is obtained. End users access the wireless LAN through wireless-LAN adapters, which typically take the form of PC cards. In TANDBERG's case, the cards currently supported are the Compaq WL110, the Lucent Orinoco Silver and Gold cards, Enterasys Networks RoamAbout 802.11 DS High Rate, Melco Buffalo WLI-PCM-L11G, Melco Buffalo WLI-PCM-L11GP and the Cisco AIR-PCM352. These are inexpensive and are readily available from most PC equipment providers.

The PC Card fits easily into the slot on top of the TANDBERG 1000 and into the back of the TANDBERG 880 and the TANDBERG 550



# What are the Benefits of Wireless LAN?

Wireless LANs provide all the functionality of wired LANs, without the physical constraints of the wire itself. Wireless LANs are ideal solutions for companies who are trying to avoid the potentially large infrastructure, installation and maintenance costs associated with implementing a wired LAN or for expanding companies who need the flexibility of being able to extend their networks rapidly and as cost effectively as possible. A wireless LAN limits the amount of cabling and the labor associated with installation and as a result, the cost of installing and maintaining a wireless LAN is generally lower than the cost of installing and maintaining a traditional wired LAN. In addition, because wireless LANs are relatively simple to reconfigure and expand, they can reduce the indirect costs resulting from user downtime and administrative overhead. Since only the access points of wireless LANs require cabling, network managers are freed from pulling cables for wireless LAN end users. Once configured, wireless LANs can be moved from place to place with little or no modification. Wireless technology has roots in military applications. As a result, security has long been a design criterion for wireless devices.

In summary, it can be said that wireless LAN applications offer users the reliability and high performance connectivity of wired LANs with the added flexibility, security and affordability of wireless.

# **TANDBERG** and Videoconferencing on Wireless LAN

### TANDBERG 1000, TANDBERG 880 and TANDBERG 550

With the increasing popularity of wireless LANs, TANDBERG recognized the need for and the advantages of videoconferencing products compatible with this type of network. As a result, TANDBERG introduced the TANDBERG 1000 with wireless LAN support in October 2001, the TANDBERG 880 in February 2002, and the TANDBERG 550 in April 2002. The TANDBERG 1000 was the first fully integrated videoconferencing system to support wireless LAN technology. The compact size of the three TANDBERG systems with wireless support makes them highly portable and



therefore uniquely suited for use on a wireless LAN.

#### **User Areas**

Wireless videoconferencing is destined to dominate several application areas – primarily the small room, executive office and shared office environments. With the streamlined, integrated approach of the TANDBERG 1000, only a single cable is required – for power. This ensures that the TANDBERG 1000 wireless product will maintain and enhance the style and order prevalent in many executive offices. The simple cabling requirements of this product make it well suited as a shared office tool to be borrowed and used in any available office space with a wireless LAN. This provides all employees easy access to videoconferencing and allows for flexibility of use and ad hoc meetings. In addition, many companies have introduced a "hot desking" office environment whereby employees have no

The compact size of the three TANDBERG units makes them highly portable and thus ideally suited for use with a wireless LAN

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fixed workspace but utilize whichever workstation is available. With the introduction of the TANDBERG 1000 on wireless LAN, they can now move their videoconferencing units as easily as they move their laptop computers and document holders. In addition, the fact that the TANDBERG 880 and the TANDBERG 550 can be placed on any TV monitor, means that they can easily be moved from television set to television set with only a power cable to disconnect.

## **Return on Investment**

Companies that are not currently using wireless LAN but choose the TANDBERG units, will benefit from these systems' multiple network interfaces and will not have to invest in new videoconferencing equipment when they switch to this type of network. They can also rest assured that these systems run on wireless LAN compatible with the IEEE 802.11b standard which supports 64-bit and 128-bit encryption.

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