

## COMMERCIAL EXPLOITATION OF WIRELESS LANS

The savvy telecom user, manager, administrator, carrier and service provider is always in search of the “next big thing”. It’s here: wireless LANs. While wireless LANs have been around for many years there has never been a bigger selection nor have costs ever been as low as they are now. This makes the wireless LAN, long a mainstay of enterprise networking, ripe for commercial exploitation. This course is ideal for anyone wishing to cut through the hype and techno-babble and understand the commercial opportunities which are emerging with widespread deployment of wireless LANs. Wireless LANs are contrasted and compared with other potential data services on 2.5 and 3G wireless systems and the full range of commercial possibilities is investigated for WLANs.

### *Audience:*

Telecom carriers, service providers, wireless software and application developers, equipment manufacturers, Venture Capitalists (VCs), consultants, marketers and anyone else needing a clear view of the commercial potential of Wireless LANS.

### *Prerequisites:*

There are no prerequisites for this workshop other than an interest in the commercial potential of Wireless LANS.

### *Objectives:*

At the conclusion of this course the student will be able to:

- Understand the basics of WLAN, Bluetooth, Infrared and 2.5G/3G Wireless Technologies
- Articulate public deployment issues and regulations
- Judge business plans, business cases and opportunities for WLANs
- Explain Quality of Service (QoS) Issues with WLANs
- Sort out regulatory, standards and spectrum issues
- Identify WLAN opportunities for carriers, service providers, software developers and equipment manufacturers
- Understand the role of LMDS and MMDS in future WLAN deployment

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### COURSE OUTLINE

#### Day 1

#### 1. Introduction to Unlicensed Spectrum

- WLAN
  - What is it and it's use
  - Standards
- Bluetooth
  - What is it and it's use
  - Standards
- Infrared
  - What is it and it's use
  - Standards
- WLAN/Bluetooth common issues
  - Same spectrum - interference issues

#### 2. Technology / Application Comparison: 2.5G/3G to WLAN

- 2.5G
  - Technology overview
  - Applications
- 3G
  - Technology overview
  - Applications
- WLAN
  - Technology overview
  - Applications
- WLAN/2.5G/3G comparison matrix

#### 3. Public access WLAN

- Existing deployments
  - Public access WLAN vs. enterprise WLAN
  - Public access WLAN today
  - Vendor profiles
- Public access WLAN deployment requirements
  - Access point equipment
  - Hot spot provider
  - Client software

- WLAN service provider
- Network and application mediation service provider
- Public access WLAN Deployment issues
  - Security and privacy
  - Rating, billing and payment, clearing and settlement
  - Quality of service
  - Regulatory and political issues
  - Standards wars
- Evaluation of the public access WLAN value chain
  - Structure of value chain
  - Business models of current players
  - Business case assessment
- Evolution of public access WLAN
  - Hot spot access
  - Seamless service: phase I
    - i. Hot spot roaming
    - ii. Integrated billing
  - Seamless service: phase II
    - i. WLAN-to-2.5G/3G roaming
    - ii. Seamless hand-off between networks
  - Network and service provider consolidation
  - Expected growth of public access WLAN market
    - i. Anticipated growth
    - ii. Enterprise use
      - a. Small business use
      - b. General purpose users
    - iii. Opportunities for service providers
    - iv. Opportunities for equipment providers
    - v. Opportunities for software providers

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### Day 2

#### 4. WLAN's role in the evolution of wideband wireless and mobile networks

- Evolution of WLAN technology
  - Greater bandwidth
  - Improved security
  - Standards evolution
  - MMDS and LMDS
- 4G
  - Technology approach
  - Service evolution relative to 3G and WLAN
- Hybrid network/service approach
  - WLAN is a piece of the overall puzzle
  - Network topology
  - A day in the life of an end-user
- Evolution of mobile terminal capabilities
  - Presence and location
    - i. Deriving presence and location
    - ii. Using presence and location
    - iii. Added value to service offerings

#### 5. Summary

- WLAN solves near-term problems while offering near-term revenue
- WLAN is both complementary and competitive to other technologies
- WLAN represents a service opportunity that must not be overlooked