Building the Business Case for WiMAX

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Agenda

• About Alcatel
• What is WiMAX?
• Business case issues
• Migration Issues
About Alcatel
Alcatel and WiMAX

- Leader in DSL, optics, IPTV, mobile softswitches
- Broadband to any device
What is WiMAX?
How is Access Evolving?

Broadband

Wireless
WiMAX 802.16e

“I can’t access it”

MASSIVE VOIP
LOW GRANULARITY
LOW LATENCY

COVERAGE
CAPACITY
THROUGHPUT

IP APPLICATIONS
NETWORK
TRANSFORMATION

NEW TERMINALS
LOW COST
DEVICES

“I can’t carry it with me”
Major Segments

Next Billion Users

WiMAX 16e

Next Generation Mobile
Technologies

WiFi

WiMAX

UMTS/HSDPA

“on the pause”

“on the zone”

“on the move”
Business Case
Value Drivers for WiMAX

- **Value**
  - Higher bandwidth
  - Remote locations

- **Price**
  - Substitutes
  - Per capita income

- **Cost**
  - Per site costs
  - CPE costs
  - Spectrum
Key Drivers of Profitability

- Subscriber penetration and growth rate
- Service ARPU
- Negative Impact on Profitability:
  - CPE
  - Equipment CAPEX
  - Sales & Marketing
  - G&A
  - Operations
  - Radio site acquisition, utilities, install
- Positive Impact on Profitability:
  - License Fees
  - Radio Site Rental
  - Radio Site Backhaul
  - Network Operation

Degree of Uncertainty

Impact on Profitability

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Deployment Issues
Deployment Issues

- Fixed versus mobile
- Standards versus proprietary
- Availability of terminals
- Spectrum and frequency issues
Cell Radius

- Spectrum available at 2.3, 2.5, or 3.5 GHz
- Base station grid may differ

1.9 GHz cell
2.5 GHz WiMAX
Mitigating Factors

- Similar to 3G LTE
- Most cost-effective alternative
- Intel and embedded devices
Conclusion

- WiMAX supports new segments
- Business drivers
- Deployment issues
Questions?