WiMAX Case Study: NETAGO WIRELESS

Objective

> Provide an overview of a Nortel WiMAX trial in rural Canada
Outline

> Background on service area
  • where it is
  • the Special Services Area Board
  • a few photos ...

> Background on Netago Wireless

> Why Netago chose WiMAX

> Trial is a success!
  • video

A Few Facts on Special Areas

> Population: 12,000: growing across Alberta except for Special Areas Board (SAB)
> Area: 8,000 square miles (20500 sq. km), arid terrain
> Industries: farming, ranching, oil and gas
> Objective: attract new businesses and families to SAB, retain future generations

> Netago Vision: Provide high-speed data services to residents of rural Alberta at comparable prices to urban areas

Broadband services is a missing critical economic driver
The NETAGO WiMAX network operates in the 3.5GHz band and will be made available to ~80% of SAB residents by the end of summer 2006, extending the service area of the Alberta SuperNet Project [www.albertasupernet.ca](http://www.albertasupernet.ca) which is a provincial government initiative designed to bring affordable broadband services to ~4,200 government, health, library and educational facilities in 429 communities across Alberta.

**Special Services Area Board - Synopsis**

> Special Services Area Board (SAB) is a unique rural municipal area covering ~2.1 million hectares in south-eastern Alberta.

> Responsible for administration for all municipal services plus leasing of public lands in the area. 60% is public land leased for grazing, cultivation or irrigation. SAB also operates 5 community pastures: grazing for 9,000 cattle.

> Responsible for all local roads, comprising some 5,000 miles (8,000 km) within the area.

> Set up for land use control in the 1930s, continues to operate the area for the betterment of the land and the people from within.
Creating NETAGO Wireless

> 2003: Netago Wireless opens doors
> 2004: Options for broadband connectivity remain cost prohibitive
> 2005:
  • Alberta SuperNet launches - fiber connections for all of Alberta
  • Netago establishes partnerships
    • Upstream provider: Alberta SuperNet
    • Municipal government: Special Areas Board
    • Equipment manufacturer: Nortel
> 2006: WiMAX trial and network launch

Partnerships are essential to make the impossible probable
Why NETAGO Chose WiMAX

- Non-proprietary solution
- Economies of scale
- Quality of service

- Extend existing coverage by 50%
- Lower cost to consumers
- Enable VoIP, prioritize business over end-users

WiMAX is THE technology to make broadband happen for this area

Video 1

BROADBAND WIRELESS > MADE SIMPLE
What we did

Trial exceeded customer expectations

Timing:
> Summer 2005: RFP requested
> Dec 2005: Equipment arrives
> Jan 2006: Trial launched

Implementation:
> Cover Hanna and 2 rural areas
> Trial with 3 towers / 3 BTSs
> Omni directional antennas
> 35 outdoor and 8 indoor subscriber units

Results:
> Ranges up to 20 km and 15 km to outdoor and indoor units
> Speeds of 1.5 / 2 and 3 Mbps, depending on the needs
> Tested streaming video at 8 Mbps

Success Stories

> Residents: office from home, online banking, distance learning
> Ranchers: agricultural research, buy/sell cattle
> Oil company: company LAN speeds of 2 Mbps increased work productivity
> Calgary Stampede: 2 Mbps enables transfer of high-bandwidth data

Customers are delighted
Learnings and Advice

> Spectrum
  • How do you get it?
  • Partners can help
  • Work closely with Regulator

> Services, such as site engineering and selection
  • Wireless experience is a major plus

> Partnerships
  • Relationships can make it or break it
What’s Next?

> Commercial launch summer 2006

> Expansion beyond SAB area

> Trial new technologies with Nortel

Thank you!
Merci!