

Sarajevo, November 5, 2010

Broadband Wireless Access

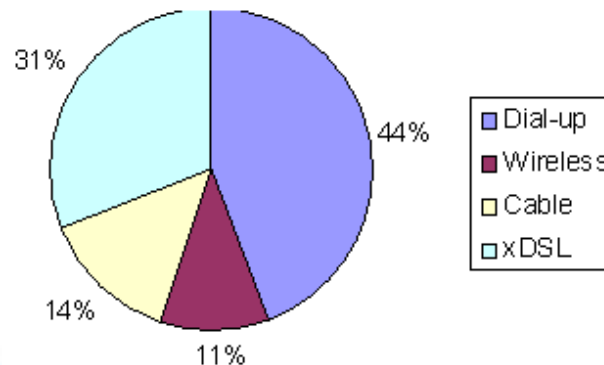
Outline

- Demand Drivers for Broadband Access
- What is Broadband Wireless Access?
- Standards
- Security
- 5 reasons why Broadband Wireless Access?
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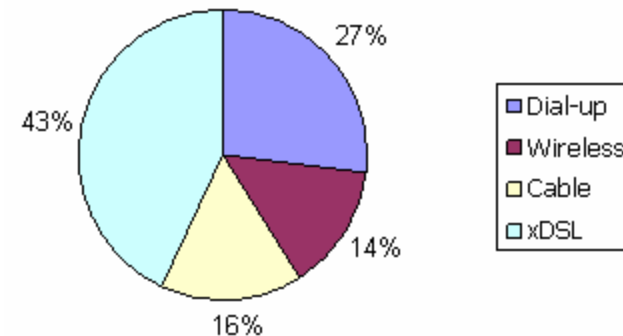
Demand Drivers for Broadband Access

- Internet growing.
- Strong demand in small, midsize and semi-rural markets.
- Data traffic demand is driving access market to provide high-capacity transport.
- Limitations of Fiber/DSL technology are driving the broadband wireless industry.

Internet subscribers in B&H, 2008.



Internet subscribers in B&H, 2009



What is Broadband Wireless Access?

- Wireless broadband is a fairly new technology that provides high-speed wireless internet and data network access over a wide area.
- Wireless broadband access uses radio spectrum rather than copper or fiber optic cable as a medium for transporting telecommunications and data traffic.
- Categorization:
 - WLANs
 - WMANs
 - WWANs



Standards

- 802.11 family
- HiperLAN by ETSI
- 802.16 family
 - With emerging 802.11n standard, WiFi is expected to provide throughput values up to 540Mbps.
 - IEEE developed 802.16 standard to provide BWA to fixed Line of Sight Subscribers Stations (SSs)
 - IEEE 802.16-2005 supports non-LOS (NLOS) SSs and Mobile Subscribers (MSs)



WiFi (Wireless Fidelity Alliance)



Security

- Wireless access has special security considerations.
- The most common solution is wireless traffic encryption.
- Modern access points come with built-in encryption.
- The first generation encryption scheme WEP proved easy to crack; the second and third generation schemes, WPA and WPA2, are considered secure if a sufficiently strong password or passphrase is applied.



5 reasons in favor of Broadband Wireless Access?

- Increased mobility and collaboration
- Improved responsiveness
- Better access to information
- Easier network expansion
- Enhanced guest access

5

reasons

europroNET's message

- High number of dial-up users due to a large uncovered area results in a big demand for BWA.
- In Finland, Internet is the right of every citizen (such as electricity, water, etc.)
- Introduce BWA according to EU Directive via WiMax and forthcoming technologies.



Thank you!