

# Legg Mason Saw Accelerating Broadband Adoption for 1Q05

*BBP Staff Report*

**Washington, DC** – Following an anticipated seasonal slowdown in 4Q04 to 2.25 million new customers, broadband providers added 2.57 million. The top incumbents (ILECs) and cable operators (MSOs) combined for the best quarter ever recorded, according to Legg Mason analysts. The company tracks the largest providers.

Legg Mason estimates that more than 30 percent of US households have broadband, with total broadband customer additions of 9.33 million versus 8.57 million in 2004 and 7.18 million in 2003 for the operators it follows. The 2005 forecast is for 29 percent growth over 2004.

BellSouth (62 percent) along with more rural ILECs (57 percent) posted the most significant gains in broadband customers with BellSouth benefiting from more aggressive promotional activity in late 2004. New ILEC customer totals increased for the third successive quarter to 1.42 million, up 244,000 on a year-to-year basis. This is the slowest since 2Q03 as the

strong 2004 DSL performance was tough to match.

On a quarter-to-quarter basis, Verizon (up 26 percent) demonstrated the strongest improvement among the RBOCs. Qwest's DSL customer additions declined on a quarter-to-quarter and year-to-year basis despite the lowest penetration levels of its peers.

While the ILEC pace should continue to ease throughout 2005, Legg Mason forecasts that ILEC customers will increase to 5.1 million from 4.4 million in 2004. This represents a 39 percent year-to-year increase in broadband customers. The original forecast was for only 32 percent.

SBC and Verizon have been running promotions with 12-month commitments while BellSouth was pushing a six-month promotion (now three months, with free modem and install under a 12-month commitment). This has, at least in the near term, helped keep a lid on churn.

Cable broadband adoption also out-

paced forecasts, with 1.14 million net additional customers for the quarter, up slightly from 1.04 million in 4Q04 and 1.12 million in 1Q04. Those operators with below-average penetration, namely Insight and Mediacom, posted the largest gain from the previous quarter, with Mediacom aided in part by the launch of a lower tiered offering. Cablevision, which leads the industry with 48.3 percent broadband penetration of basic subscribers, posted above-average penetration gains driven by strong triple-play performance, peer-leading speeds and relatively attractive price.

Legg Mason had been anticipating 20 percent year-over-year MSO broadband subscriber growth in 2005 but now says 4.24 million net new customers or 23 percent growth is more likely because the launch of VoIP and triple-play promotions appears to be having a larger-than-anticipated impact on broadband adoption. For more information see them at [www.leggmason.com](http://www.leggmason.com).

## Road 9 Allies with Wave7 and Alcatel on Greenfield Fiber

*From BBP Wires*

**Greenwood Village, CO** – Alcatel and Road 9 have formed an alliance to serve the growing FTTU market for new home construction throughout the US. Road 9 specializes in the design, build and operation of FTTU networks for Master Planned Community developers. Road 9 and Wave7 Optics are also working together on a triple-play fiber-to-the-premises infrastructure that will ultimately connect 5,000 homes and 2,000 hotel rooms in The Villages of Loreto Bay, a \$2.2 billion development near the Mexican town of Loreto on the Baja peninsula.

These alliances offer new homebuilders and developers turn-key design, build

and operating business models.

The new networks Road 9 is building with Alcatel will use Alcatel's 7340 FTTU platform. This opportunity further reinforces the move toward fiber-based technologies by many of the large US operators. "Road 9 can partner with builders and developers to offer home owners a complete solution including voice, data and video services or any combination thereof," said Mike Dobbs, senior vice president of Alcatel's Access Business in North America.

"We are well aligned with Alcatel to jointly pursue opportunities in the master planned community marketplace," said Davis Lewis, Executive Vice Presi-

dent of Sales and Marketing at Road 9. "As a result of this alliance, Road 9's ... business model and partnerships combined with Alcatel's world class FTTU platform and market expertise create one of the few truly turn-key solutions available in the industry today."

"Deploying a future-proof network composed completely of fiber not only supports current customer requirements, but ensures that future service needs will be met as well," said Dobbs.

Atlanta-based Wave 7 Optics, a major force in FTTH system work, is at [www.wave7optics.com](http://www.wave7optics.com). Alcatel is at <http://www.alcatel.com/fttu>. Road 9 is at <http://www.road9.net>.

## New Splitter Line from Extreme Broadband Engineering

From BBP Wires

Englishtown, NJ – Clever vertical True Flex™ broadband digital splitters from

Extreme Broadband Engineering save space and reduce truck inventories. The mounting tabs are installer-friendly and enable technicians to go to any installation site with just a single product. They work in traditional vertical configurations as well as horizontal configurations in premise enclosures, MDU boxes, apartment boxes and walls.



Left: Conventional splitter is a tight fit in a premise enclosure. Right: Vertical True Flex splitter reduces cable bends

The design reduces the number of cable bends and saves space in a premise enclosure.; The splitters come in 1-, 2-, 3-, 4-, 5-, 6-, or 8-outputs and have standard soldered-back zinc diecast housings that offer consistent RFI isolation. See [www.extreme-broadband.com](http://www.extreme-broadband.com)

### IP-Phone Connect (IPPC) Selects Alloptic GEAPON for Denmark FTTH

From BBP Wires

Livermore, California – Alloptic, a pioneer in the development of Gigabit Ethernet Passive Optical Networks (GEAPONs), announced that IP-Phone Connect (IPPC) has selected its access network solution to provide VoIP, ultra-high speed data services, and RF video services to new and existing residential developments in Denmark.

Ulrik Seiersens, Principal for IPPC, said, “As we looked at our alternatives, point-to-point solutions were inefficient in the use of fiber and lacked the ability to handle RF video. Alloptic’s solution was able to handle RF video over a single fiber passive optical network with ... gigabit bandwidth. There was also the added benefit of being an Ethernet-based platform.”

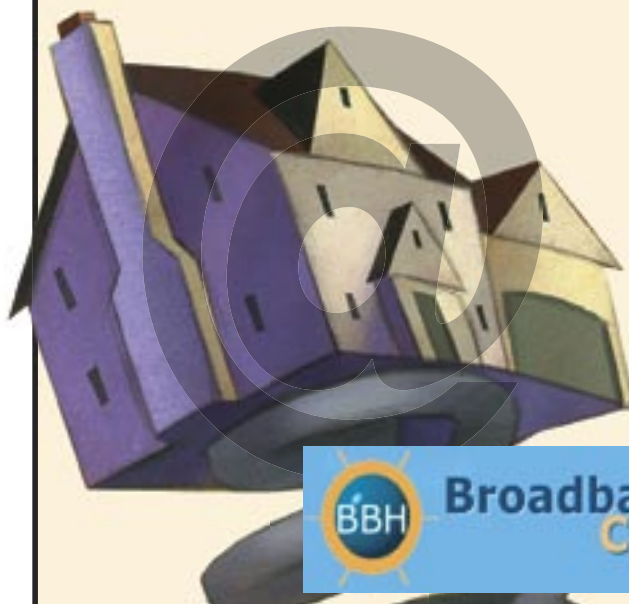
Alloptic, founded in 1999, has several years of GEAPON operational history around the world. It uses a standard ITU PON architecture, while delivering a gigabit of bandwidth and native ability to support traditional TDM voice over Ethernet and IPTV. See [www.alloptic.com](http://www.alloptic.com) for details.

## Head For Home

**BroadbandHomeCentral.com**

Keep up to date on residential and community broadband • Separate hype from reality • Get an unbiased look at what’s really happening • Use the resource that thought leaders depend on

Sign up at [BroadbandHomeCentral.com](http://BroadbandHomeCentral.com) for your *free* monthly subscription to: *Sandy and Dave’s Report on the Broadband Home.*



Analyzing Broadband-enabled:

- Technologies
- Markets
- Products
- Services



# Omnitronix Improves Reliability for WiMax Antenna Sites

*BBP Staff Report*

**Seattle** – Multi-function SNMP [Simple Network Management Protocol] traps from Seattle-based Omnitronix that address monitoring and maintenance issues for remote communications towers may deliver the competitive edge for emerging WiMax providers. One of the biggest challenges to any advanced wireless operation is the maintenance of continuous and economical service regardless of weather conditions and power irregularities or outages. With an array of cellular towers linked to main communications hubs in each service area, every coverage “umbrella” is likely to have dozens of remote sites that are vulnerable to lightning strikes, heat, wind and other conditions that cause power sags, spikes and outages.

While each site is traditionally equipped with standby batteries, that power only lasts a finite number of hours. So for WiMax antennas, any random spike or power outage could mean rolling service trucks. To avoid physical site visits, a system operator must have the ability to remotely cycle power when a device freezes up or when a new configuration requires rebooting.

Also required is the full-time monitor-

ing of cabinet entry and events, as well as protection and management of devices within the cabinet. Most importantly, the ability to remotely handle all of these functions through SNMP over a private IP network enables the direct control necessary to ensure reliability.

Manufacturers of devices for the telecommunications industry like Omnitronix have scrambled to provide the necessary monitoring and control functionality within a cost-effective package. The Omnitronix SNMP-Link Model SL81 Remote Site Manager is a good example. This network peripheral provides: remote monitoring and management services (such as handling serial alarms), on-board contact closure alarms, on-board temperature and humidity sensors, remote serial access, and alarm notification/resolution. With it, network headend staff can address serial devices at distant locations during emergencies.

Not so obvious, such a device can also address switching challenges. Typically, the arrayed-cell sites of any WiMax provider will contain base station radios, backhaul radios, switches and routers. The POP sites will have considerably more hardware, so an express need ex-

ists for a switching device that is versatile enough to adapt for the various equipment types within the network. Quite often, several stand-alone relays are called for, adding to the expense and complexity of equipping a site.

The Omnitronix device has a self-contained relay system that handles all switching. Each of eight relays may be separately set to accept varying input voltages of 48vdc, 24vdc, 110vac or 220vac and are capable of switching loads of up to 10A. The mechanical relays have three connection points, so that they can be wired “normally off” or “normally on.” As a result, even if power is interrupted, the switch will remain in its “normal” setting so that service is not interrupted.

Good monitoring devices should have serial ports and a console server to allow multiple access paths to any other device on the system so that when the back-haul goes down or a microwave transmitter stops operating, a network manager can simply telephone into the system and either jump onto an Ethernet bridge or communicate through an RS-232 serial connection. Omnitronix is at [www.omnitronix.com](http://www.omnitronix.com).

# Telecast Announces RattlerT Fiber Diagnostic Tool

*From BBP Wires*

**Worcester, MA** – The new RattlerT mini HD/SDI transceiver from Telecast Fiber Systems, displayed for the first time at the National Association of Broadcasters’ conference, has already won two awards for its ability to lower cost and complexity in fixed and remote broadcast applications. “Our new Rattler family provides broadcasters with small, handy solutions to the cabling challenges they routinely face in the field,” said Eugene Baker,

Telecast’s vice president and chief technical officer.

“These represent the first HD/SDI fiber adapters that fall into the category of ‘gadgets,’ allowing crews to carry full-featured fiber systems in their pockets for immediate requirements. They are plug-and-play devices that even include integrated diagnostics, such as a power meter and signal indicators.”

The Rattler accepts a coax input into the TX unit for uncompressed

signal output on fiber, and turns it back into coaxial video with the RX unit. Each 3-inch-long device, weighing approximately 1.8 ounces, derives power from a standard USB cable. The mini USB interface also includes provisions for SNMP network monitoring access.

The Rattler won the STAR Award from TV Technology and the Pick Hit Award from Broadcast Engineering. For details, see [www.telecast-fiber.com](http://www.telecast-fiber.com).

# NPOWR To Launch Broadband TV Network On America's Passion For Channel Surfing

*From BBP Wires*

**Los Angeles** –While the phrase “channel surfing” is enough to make most network chiefs recoil, one company is building a business around this very concept. NPOWR Digital Media expects to launch stimTV Network this October. It is the first broadband television network to unapologetically embrace today's generation of short attention spans with its stream-of-conscious format.

NPOWR's edge is its patented software that allows viewers to instantaneously sort and customize thousands of video clips, creating a truly personalized entertainment experience. The stimTV™ interface takes channel surfing to a whole new automated level. stimTV™ viewers initially encounter a random flow of

seven-to-ten-second film clips consisting of everything from music videos, movie trailers and celebrity interviews to director commentary, concert highlights and behind-the-scenes footage.

The idea is to give them just enough of a taste to decide whether or not they want a further look. Then, with a simple click of the mouse, the experience becomes customized. Viewers can further fine-tune their stimTV experience by creating a very brief and completely anonymous profile that enables the software to deliver a truly tailored stream of videos.

NPOWR plans a multi-tiered launch of stimTV over the next 12 months, with several key channels or “corridors,”

including Music, Cinema, Shopping and Lifestyle. First to debut is stimTV Music. NPOWR has already signed strategic content agreements with 23 record labels and will feature clips from the live performances, original interviews and music videos of hundreds of bands.

“In this world of tech-savvy, multitaskers, you have mere seconds to reach consumers and perhaps convince them to check out a new band or buy a CD,” said Alex Moreno of Beggars Group/Matador Records. “NPOWR has turned this into a science with stimTV, filling the void where traditional television falls short. We are delighted to be part of this revolution.” For more information, visit [www.stimtv.com/NPOWR](http://www.stimtv.com/NPOWR).

# Atlantic Engineering Group and ZoomyCo Form Strategic FTTP Partnership

*BBP Staff Report*

Atlanta – Atlantic Engineering Group (AEG) and Zoomy Communications (ZoomyCo) last month announced a strategic relationship to provide design, engineering, construction, and installation services for municipalities and real estate developers considering the deployment of Fiber-to-the-Premise technology directly to the home, business or premise.

The two companies have exchanged company stock. ZoomyCo will join with

the AEG design team in providing design and engineering services to AEG's municipal clients. In turn, AEG will provide supplementary construction and project management services to ZoomyCo's real estate development customers.

AEG is the leading engineering and construction firm in the U.S. for municipal FTTP networks. Its customers include FTTP projects in Kutztown, PA; Bristol Virginia Utilities; Bristol Tennessee Essential Services; Dalton Utilities, GA;

Jackson Energy Authority, TN; Morristown, TN; Provo, UT; Quincy, FL; Sallisaw Municipal Authority, OK and many other municipal fiber projects. AEG's projects will pass over 200,000 homes and businesses this year. ZoomyCo is the nation's leading engineering firm focused on the real estate development FTTP market and has provided turnkey implementation for numerous master planned communities. Visit them on the web at [www.atlantic-engineering.com](http://www.atlantic-engineering.com).

# AT&T Tests WiMax in New Jersey

*BBP Staff Report*

**Morristown, NJ** – AT&T is testing WiMAX with two corporate customers in New Jersey, and hopes for commercial deployment of WiMAX next year. Hossein Eslambolchi, AT&T's chief technology officer, predicts that WiMAX will replace 3G mobile-phone networks and become the 4G standard for mobile phones as well as for data and video.

He said AT&T has been testing VoIP, video, instant messaging and gaming over IP for the test customers, two New Jersey-based firms. One trial, in Middletown, uses Intel hardware. The experimental licenses from the U.S. Federal Communications Commission for the AT&T trials cover 2 GHz to 3 GHz. There is no draft WiMAX standard for

that part of the spectrum yet, but one may be approved in July and be final by the end of the year.

AT&T is aiming at medium-size businesses, noting that there are 270,000 firms in the target market, but only 7,000 have their own wired networks. AT&T alone pays more than \$8 billion a year to lease lines to provide such services.

# Tandberg Television Shows Next Generation IPTV Solutions at Supercomm

*BBP Staff Report*

**Chicago** – Tandberg Television came to Supercomm this month with its first-to-market high definition products for MPEG-4 AVC and Windows Media Video 9 (Microsoft's implementation of VC-1, the proposed SMPTE standard). They offer telcos a new way to compete with recent HDTV advances in satellite TV. The company's IPTV demonstration combined the Tandberg Television EN5920 standard definition encoder with Microsoft TV IPTV Edition.

Tandberg also showed its new N2 On-Demand Solutions brand, an on-demand platform featuring a range of products for content production, inventory management and program distribution.

"As the competition between direct-to-home broadcast television increases, there is a growing need for telcos to differentiate their services from cable and satellite to attract more subscribers. This means growing beyond traditional scheduled, standard definition programming," said

Braxton Jarratt, Vice President of Marketing of Tandberg Television Inc.

"We believe that our multi-channel IPTV encoding solutions for both HD and SD will meet and surpass the stringent quality requirements that telcos require today and will help them achieve new revenue levels using the power, flexibility and bandwidth efficiency afforded by advanced compression. For more information visit them on the web at [www.Tandbergtv.com](http://www.Tandbergtv.com).

# Tandberg Television Delivers Video Headend for Indian IPTV

*From BBP Wires*

**Southampton, UK** – Tandberg Television says it has delivered a complete IPTV video head-end to Atlas Interactive for a large multimedia broadband deployment over the Indian telephone network. The Atlas netTV project will launch to an initial 50,000 ADSL subscribers in Delhi in 2005.

Atlas' netTV project is the start of what is hoped will be a broadband entertainment system across India. The network can deliver video on-demand, broadcast TV, music, video conferencing, SMS, e-

mail, Web, intranet access and data. Atlas Interactive India is part of the \$350 million Atlas Group of Companies Limited, a player in the expanding Indian market for interactive premium content distribution via fixed or mobile telephone, the Internet and television.

A range of Tandberg solutions are being deployed in the Atlas network, including TT1260 professional receivers that feed the video streams to an IP Streamer. Each streamer in the system includes Tandberg Television encoders to allow for bit-rate

reduction to meet the low bandwidth capacity of the ADSL network. All parts of the system have full redundancy and are controlled by the nCompass management system, with monitoring based on Tandberg's TT1260 with integrated IP input and TT4010 transport stream analyser.

The video head-end is being installed and integrated by TANDBERG Television's long-standing Indian business partner, Horizon Broadcast Electronics Pvt. Ltd. See [www.atlasgroup.bm](http://www.atlasgroup.bm).

# Small Telephone Company Chooses Motorola for Triple-Play

*From BBP Wires*

**Arlington Heights, Ill.** – Motorola says the Middleburgh Telephone Company will roll out triple-play services in upstate New York using Motorola's standards-based, end-to-end access solution to collapse its telephone, cable and data networks into a single multi-service platform. That will allow the company to offer advanced services including voice, digital video, high-speed data, video-on-demand, pay-per-view, high-definition television and digital video recording.

"Selecting a single multi-service solution will enable us to remain com-

petitive in our markets today and in the future," said Jason Becker, manager of Broadband Services for Middleburgh Telephone. "Analysis, coupled with our business model investigation... determined that the Motorola platform provides us what we need to execute our strategic triple-play program," Becker said.

Motorola can deliver applications over xDSL, Fiber-to-the-Premises (FTTP), Fiber-to-the-Node (FTTN), Passive Optical Networks (PON), Hybrid Fiber Coax (HFC), and broadband

wireless access networks. The company's Multi-Service Access Platform delivers over 750,000 streams of digital video over xDSL, representing more than 70 percent of North American telco subscribers.

Middleburgh Telephone Company is a privately held independent telephone company founded in 1897. It is a four-generation family owned and operated business with three generations currently working at the company. It serves more than 20,000 customers in upstate New York.

## Broadweave Goes with Telco Systems Active Ethernet

*From BBP Wires*

**Foxboro, Mass.** – Telco Systems today announced that Broadweave Networks has selected Telco Systems’ Active Ethernet products for deployment in a fiber-to-the-home community of 8,000 homes and 4.5 million square feet of office and retail space currently under construction in Utah to deliver primary-line VoIP, IP Video and broadband Internet at speeds of up to 1 Gbps to homes.

The Telco Systems’ EdgeGate CPE IP gateway product line and the T5 Compact IP Ethernet aggregation switch will build the backbone of the network. The Telco Systems’ EdgeGate CPE triple-play gateways are located outside subscribers’

premises and connected to a T5 Compact IP switch located in the neighborhood.

Businesses in a Broadweave Connected Community can order bandwidth-by-the-slice at speeds up to 10 Gbps, as well as enhanced data services such as messaging and collaboration, voice services such as unified communications and hosted telephony, and even video services like business TV and video telephony.

The EdgeGate CPE supports various combinations of two and four analog voice lines (VoIP FXS ports), 8 10/100BaseTX Ethernet ports for data and video, and optical Fast/Gigabit Eth-

ernet uplinks. The EdgeGate CPE outdoor cabinet supports automatic meter reading and offers battery backup and Lifeline POTS. It also supports all current VoIP signaling protocols including SIP, MGCP, and H.323 as well as IGMP for IP video.

The T5 Compact is a carrier-class IP Ethernet switch that provides high performance in a super-compact package. Only 1 RU high, the T5 Compact boasts the capacity of physically larger backbone switches. See [www.broadweave.com](http://www.broadweave.com). Telco Systems is a wholly owned subsidiary of BATM Advanced Communications. See [www.telco.com](http://www.telco.com).

## Verizon Signs Additional Programming Deals for FiOS TV

*From BBP Wires*

**New York** – Verizon announced separate programming-distribution agreements with five networks last month. Under the agreements, Verizon will carry the channels on Verizon FiOS TV when it launches later this year. They are: Varsity TV, Gospel Music Channel, Soundtrack Channel, MavTV and Go!TV. Verizon previously announced agreements with NBC Universal Cable, Starz Entertainment Group, Showtime Networks, A&E Television Networks and Discovery Networks, and says it is close to finalizing agreements with several other major content-partners.

As the only 24-hour network dedicated

exclusively to teenagers, Varsity TV delivers programming produced by, for and about teens. Varsity On Demand and Varsity Mobile allow teens to experience entertainment on their own terms and on the screen of their choice.

Gospel Music Channel is the first 24-hour network devoted to all styles of gospel music. The program schedule includes music videos, artist profiles, specials and live concerts of top artists.

Soundtrack Channel is the only cable and satellite channel exclusively featuring music videos from movie and television soundtracks, including original movie

videos that are produced for the channel. Soundtrack Channel also features entertainment news, behind-the-scenes specials and celebrity interviews.

MavTV is a new network targeting men aged 18-54. The emphasis is on sports and gaming, but it also presents all the other themes relevant to men, including women and relationships, gadgets, finance, health and fitness, and entertainment.

Go!TV is the only bilingual (English/Spanish) channel in the United States dedicated to world soccer. It offers more than 1,500 live matches annually, news updates and informative programming.

## SMC Networks’ New Desktop Switches for Gigabit SOHO

*From BBP Wires*

**Irvine, CA** – SMC Networks has new additions to its EZ Switch line of networking solutions for SOHO and home networking. The EZ Switch 8-port 10/100/1000 Gbps switch (SMCGS8) and the EZ Switch 5-port 10/100/1000

Gbps (SMCGS5) are available now, at a suggested retail of \$95.99 for the 8-port and \$65.99 for the 5-port. That’s about \$12 a port for gigabit Ethernet. Both have auto-MDIX on all ports and quiet, fanless operation.

“Home and SOHO users are looking for ways to open up bandwidth, but don’t want a stack of ugly hardware in the corner,” said SMC Product Manager, Iain Kenney. Visit SMC on the web at [www.smc.com](http://www.smc.com).