broadbandtrends.com
the voice of broadband

# THE VOICE OF BROADBAND

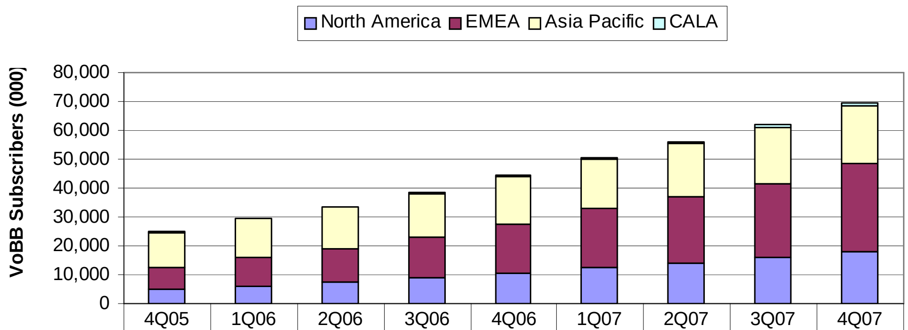
April 16, 2008 Volume 4, Issue 3 Editor: Teresa Mastrangelo

## Industry News & Commentary

### Global Voice over Broadband Subscribers Reach 70 million in 2007

At the end of 2007, the number of voice over broadband subscribers grew by 56 percent over 2006 to reach 69.4 million. During 4Q07, CALA experienced the strongest quarter over quarter growth at 19 percent, while EMEA added the largest number of subscribers at 4.7 million. EMEA is the largest market for VoBB, with 30.5 million subscribers, followed by Asia Pacific with 20 million and North America with 17.8 million. At the end of 2007, 79 percent of all North America VoBB subscribers were receiving their service from a cable operator.

**Global VoBB Subscribers by Region, 4Q05-4Q07**




| | 4Q05 | 1Q06 | 2Q06 | 3Q06 | 4Q06 | 1Q07 | 2Q07 | 3Q07 | 4Q07 |
|---|---|---|---|---|---|---|---|---|---|
| CALA | 63 | 101 | 190 | 305 | 410 | 517 | 644 | 813 | 966 |
| Asia Pacific | 12,133 | 13,261 | 14,160 | 15,321 | 16,395 | 17,248 | 18,430 | 19,312 | 20,160 |
| EMEA | 7,862 | 10,043 | 11,621 | 13,719 | 16,901 | 20,398 | 22,777 | 25,771 | 30,500 |
| North America | 4,752 | 6,184 | 7,585 | 9,133 | 10,662 | 12,380 | 14,123 | 15,920 | 17,752 |

Source: broadbandtrends.com

Japan remains the largest market for VoBB services, with 16.8 million subscribers; however, the United States is quickly closing the gap, ending 2007 with 15.6 million subscribers. France has the highest level of penetration of broadband subscribers at 73 percent versus Japan at 59.2 percent.

NTT is now the largest global VoBB provider with 5.032 million subscribers, followed by Softbank with 4.65 million, Comcast with 4.38 million and France Telecom with 4.1 million.

### Conference Report: IPTV World Forum March 12-14, 2008

The IPTV World Forum, along with six other co-located conferences took place March 12-14, 2008. According to conference organizers the number of registered attendees was 5,500; however, the number of actual paid conference attendees appeared significantly lower. In the IPTV World Forum, a number of operators that had been deploying IPTV for quite some time provided valuable insight into the state of their IPTV service. These included Neuf Cegetel, FastWeb, KPN, TeliaSonera, Belgacom and Tiscali. Most of these operators are moving into the 2nd stage of their service – by developing ARPU and reducing churn by introducing a variety of new options such as additional channel packages, PVR, enhanced VOD and interactive applications.

It was an interesting contrast to attend the IP Cable conference, which focused on how cable operators would compete with Telco TV. In short, they firmly believe that IPTV has had and will have minimal impact on their business and felt that DTT and Satellite were bigger threats. It was clear, however, for European Cable Operators that a Hybrid IP approach would prove to be the best path to the future, rather than ALL-IP and held firm in their belief that broadcast content would always be of higher quality than pure IP, but that IP made sense for long-tail and niche content.

Look for our IPTV State of the Market report schedule for publication in May 2008, which will take a closer look at this market.

**FCC to Finally Change its Definition of Broadband**

On Wednesday March 19, 2008, the FCC voted to implement new measures for broadband tracking. These include the following: (1) seven new broadband speed tiers ranging from 768 kbps to 100Mbps: (2) reporting for both downstream and upstream speeds; and (3) requiring broadband operators to report actual number of subscribers per census tract rather than only by ZIP codes. While these steps are commendable, we believe the FCC should have taken gone further with their reporting requirements. Not only did they decide to not require operators to report the prices of their services, they are no requirement for granularity at a market or regional level. Additionally, we are disappointed that the FCC does not appear to have taken into consideration comparative metrics such as income versus speed, income versus technology, housing density versus speed availability, pricing by region/zip code and investigate the effects of bundling on adoption.

The new broadband speed tiers as shown in Table 1.

**Table 1: New Broadband Speed Tiers**

| Tier | Speeds |
|---|---|
| 1st Generation Data | 200 kbps to 768 kbps |
| Basic Broadband Tier 1 | 768 kbps to 1.5 Mbps |
| Broadband Tier 2 | 1.5 Mbps to 3 Mbps |
| Broadband Tier 3 | 3 Mbps to 6 Mbps |
| Broadband Tier 4 | 6 Mbps to 10 Mbps |
| Broadband Tier 5 | 10 Mbps to 25 Mbps |
| Broadband Tier 6 | 25 Mbps to 100Mbps |
| Broadband Tier 7 | > 100 Mbps |

Source: FCC, broadbandtrends.com

## Food for Thought…..

**Identifying IPTV Subscribers: Why Analyst Firm numbers vary considerably**

One of the questions that is often asked is how market analysts obtain their data, in other words "What do you count?" IPTV subscribers provide a perfect example of how data can vary considerably from research firm to research firm. The first place to start is with the definition. According to the ITU-T IPTV Focus Group, the definition of IPTV is as follows:

> *"IPTV is defined as multimedia services such as television/video/ audio/text/graphics/data delivered over IP-based networks managed to support the required level of QoS/QoE, security, interactivity and reliability."*

At broadbandtrends, we would go one step further in defining IPTV as a service that includes linear TV streams delivered via Internet Protocol (IP) over a DSL or FTTx. It would not include TV over the Internet that is accessed via the web and watched on a PC.

In addition, we exclude subscriber data from operators, such as Verizon, which uses an overlay broadcast network and delivers only VOD via IP or operators such as BT, which offers a hybrid solution of Freeview (over the air channels) and VoD, which is delivered via IP.

In addition, there is debate on whether analysts should only include "paying" subscribers, rather than broadband subscribers that get free television as part of their broadband subscription, such as PCCW and Free. At broadbandtrends, we have decided to include these free-TV subscribers.

At the end of 2007, broadbandtrends estimated global IPTV subscribers at 11.8 million (not including Verizon or BT), Parks Associates says 14 million, Informa Telecoms and Media says 12.34 million, ABI says 13.5 million, IMS Research 13.2 million.

Next Issue: We'll talk a little bit about forecasting.

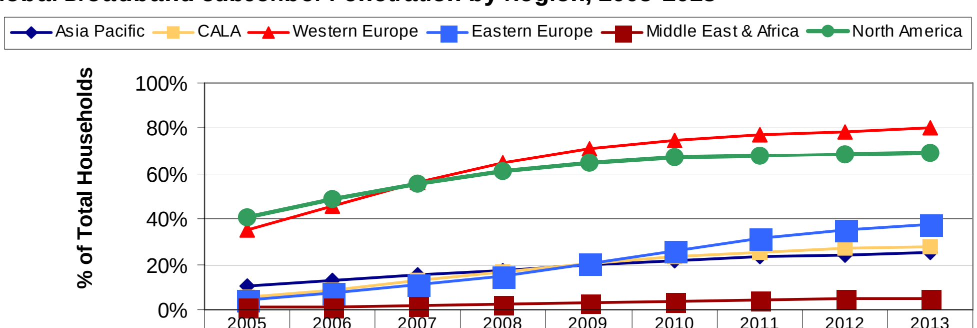
## Research News

**Market Outlook Report: Global Broadband Penetration to Reach 33% of Households by 2013**

Broadbandtrends recently issued its Global Fixed Broadband Subscriber Market Outlook Report for 2008-2013. Global fixed broadband subscribers are expected to grow from 334 million at the end of 2007 to nearly 587 million by the end of 2013, representing a CAGR of 10 percent. Global penetration of households will reach 33 percent during this period. Continued growth is being driven by strong regulatory and government initiatives that are helping to accelerate broadband availability; while innovative services and applications such as IP-TV and FMC combined with lower prices will continue to drive adoption.

DSL will remain the dominant broadband technology throughout the forecast period, with 63 percent of total fixed broadband subscribers. FTTH will offer the strongest growth opportunity with 26 percent CAGR, while cable will be the lowest at 6 percent. Of the alternative broadband technologies, WiMAX holds the most promise for widespread deployment, while broadband over powerline and satellite will continue to find limited market opportunity. It is expected that WiMAX will be most successfully deployed in emerging and rural markets; however, it will likely be challenged by advances in mobile broadband technology.

**Global Broadband Subscriber Penetration by Region, 2005-2013**




| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|
| Asia Pacific | 10% | 13% | 15% | 18% | 20% | 22% | 23% | 24% | 25% |
| CALA | 6% | 9% | 13% | 17% | 20% | 23% | 25% | 27% | 28% |
| Western Europe | 35% | 46% | 56% | 65% | 71% | 75% | 77% | 78% | 80% |
| Eastern Europe | 4% | 7% | 11% | 15% | 20% | 26% | 32% | 35% | 37% |
| Middle East & Africa | 1% | 1% | 2% | 2% | 3% | 4% | 4% | 5% | 5% |
| North America | 40% | 49% | 56% | 61% | 65% | 67% | 68% | 69% | 69% |

Source: broadbandtrends.com

This 42-page report contains (35) Figures, (6) Tables and a detailed accompanying spreadsheet. For more information on this report, please contact us at sales@broadbandtrends.com

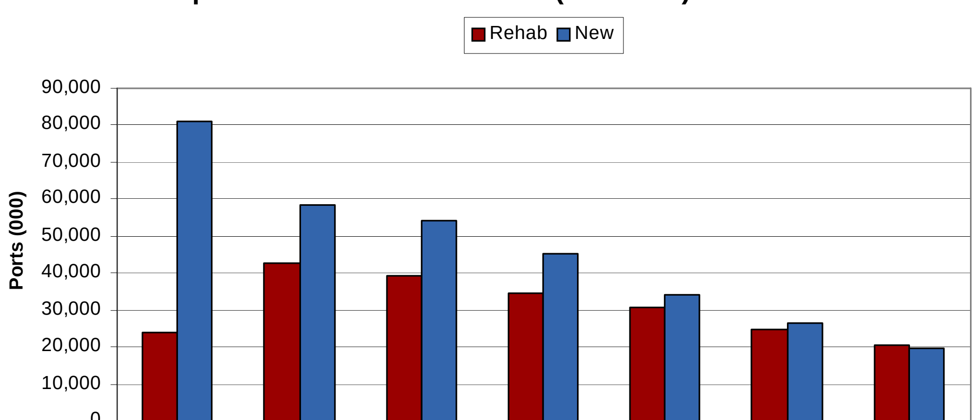
## Market Outlook Report: Upgrade Activity Continues to Breathe New Life into DSLAM Market

Broadbandtrends recently issued its Annual Market Outlook for DSL Equipment for the period 2008-2013. As part of our findings, we noted that operators in all regions continue to leverage their copper plant to offer their consumers an increasing variety of multi-media enhanced broadband services. As such, global DSL port shipments, driven by a combination upgrade activity and new subscriber growth, are expected to remain robust through 2009. During 2007, Global DSL shipments from Ethernet-based platforms exceeded ATM-based port shipments, as operators began to migrate their networks towards IP. In addition, due to aggressive Fiber-to-the-Node deployments in a number of countries, VDSL shipments are finding wide scale deployment in markets outside of Asia Pacific resulting in the acceleration of Remote Terminal (RT) deployments throughout the forecast period.

Other Report highlights include the following:

- VDSL port shipments will steadily increase from 17 percent in 2007 to over 50 percent by 2013
- RT-based DSL platforms will account for 53 percent of total ports shipped, up from 32 percent in 2007
- Replacement/Rehabilitation Activity will grow from 23 percent of total port shipments to 51 percent by 2013

**Global DSL Port Shipment New versus Rehab Ports (2007-2013)**




| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|
| Rehab | 23,737 | 42,691 | 39,434 | 34,631 | 30,860 | 24,823 | 20,395 |
| New | 81,235 | 58,621 | 54,296 | 45,162 | 34,266 | 26,498 | 19,648 |

Source: broadbandtrends.com

This 25-page report contains (31) Figures and (4) Tables and includes a detailed excel spreadsheet. For more information on this report, please contact us at sales@broadbandtrends.com

## Mergers, Acquisitions & Funding Review

- Enablence Technologies to Acquire Wave7 Optics (April 15, 2008)
- GENBAND Acquires NSN SURPASS hiG Media Gateways (April 14, 2008)
- RGB Networks Adds $20M in Funding (April 14, 2008)
- Aperto Picks up $20 million (April 2, 2008)
- Falcon Broadband & Prime Time Communications to Merge (April 2, 2008)
- Clearleap Raises $9M in 1st Round (March 13, 2007)
- Viaccess acquires ORCA for $21M (March 10, 2008)
- Tzero Raises $18M in Series C Funding (March 3, 2008)

## New Reports

**Become a Client!** Clients get full access to our research and data as well as unlimited access to our analysts. For more information please visit our website: http://www.broadbandtrends.com/services.htm

Recently published research includes the following:

**Market Outlook Report: *"Upgrade Activity Continues to Breathe New Life into DSLAM Market"***
Published April 15, 2008

**Market Deployment Update: *"Slowing DLC Deployments Reflect RBOC transition to FTTN/FTTH"***
Published April 3, 2008

**Market Outlook Report: *"Global Broadband Penetration to Reach 33% of Households by 2013"***
Published March 31, 2008

**4Q07 broadbandtrends Report: *"Global Fixed Broadband Subscribers Reach 335M in 2007"***
Published March 25, 2008

**Research Note: *"FCC To Change Broadband Reporting Requirements"***
Published March 20, 2008

## Selected News Highlights (March 4 to April 15, 2008)

- NYC Seeks City-Wide CATV Franchisee - Verizon believes it is the right operator (April 15, 2008)
- MetaSwitch hits an IOC Milestone: 150 served (April 9, 2008)
- Embarq intros Broadband-enabled Telephone (April 8, 2008)
- Occam Networks Announces FTTH Quick Start Program (April 8, 2008)
- Verizon Launches HD Video on Demand for FiOS TV (April 2, 2008)
- Tellabs Discontinues GPON efforts at Verizon (April 2, 2008)
- Adtran adds GPON to TA5000 (April 2, 2008)
- PMC-Sierra Introduces 10G EPON Reference Designs for FTTH (March 31, 2008)
- Telrad Introduces MultiService Access Gateway (March 25, 2008)
- Jersey Telecom Migrates to NGN with UTStarcom (March 25, 2008)
- Comcast Launches Business Class Voice Services to SMBs (March 24, 2008)
- Deutsche Telekom Takes 20% Stake in OTE (March 17, 2008)
- NEC Launches Full-Scale IPTV Solution (March 11, 2008)
- Open IPTV Forum adds members; publishes architecture spec (March 10, 2008)
- Huawei wins Optical Access contract with China Netcom (March 7, 2008)
- HomePlug Shipments Double in 12 months (March 5, 2008)

## Next Issue: May 14, 2008

For previous issues, please visit: http://www.broadbandtrends.com/Newsletter.htm. Pass it along! To subscribe, please send an email with "subscribe" in the subject to editor@broadbandtrends.com. To unsubscribe, please send an email with "unsubscribe" in the subject to editor@broadbandtrends.com.

THE WINDSOR OAKS GROUP

The Windsor Oaks Group LLC is an independent market research and consulting firm specializing in the coverage of network transformation activity related to broadband infrastructure and services, including IP-TV, VoIP and NGN