HIGH SPEED ACCESS REPORT

Quarterly Report Covering the Current State of High Speed Access Including xDSL, Cable Modems, and FTTx

Published Quarterly by Information Gatekeepers, Inc. Edited by Clifford Holliday

Second Quarter 2008 High Speed Access Report

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1. **The Quarterly Report** – e-mailed directly to you as soon as the last major carrier reports for the quarter.
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4. **Direct access to the author** – Clifford Holliday – for questions related to the quarterly publication, or for comments on the subject.
5. **Earliest and personal notification** of any new reports that become available in the area of High Speed Access, often with special offers for subscribers.
6. **Customer's Corner has been added –** an opportunity to state your thoughts on these issues, or ask questions.

Note: These reports typically are issued a month and a half or so after the end of the quarter. The delay is caused by the need to wait for the service providers to make their quarterly financial reports. We only take data from those reports, so we must wait for their availability.

Special Announcement to all interested in FTTP, FTTN, and FTTC – the Advanced Access Architectures. Our latest report on this subject – "Advanced Access Architectures – AT&T, Verizon, and Qwest Plans and Forecasts," is nearly ready for release. Check with IGI (www.igigroup.com) in the next few weeks for availability. It will be the most comprehensive report ever issued on the subject, and it is packed with new features, while retaining all the good features of our previous reports on this vital subject!

High Speed Access Report – First Quarter 2008

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High-speed Access News for the Quarter

RBOCs Losing xDSL Lines!

For the first time ever, the major RBOCs have actually shown **a loss in xDSL high-speed access lines** for the quarter! **Verizon and AT&T loss 133,000 and 124,000 xDSL lines, respectively, in the second quarter of 2008! Bell Canada lost 1,000 lines.** Both Verizon and AT&T were saved from actually having a goose egg for the quarter by their AAA (Advanced Access Architecture) activities. Verizon was able to gain 187,000 FiOS high-speed Internet lines and 176,000 FiOS video services. AT&T gained 170,000 U-verse video services. (They don't report U-verse high-speed Internet services separately.)

What's Wrong?

There have been several suggestions as to what is wrong; the economy, the time of year, attention to the AAA plans. This reporter thinks all of these answers are probably right, in varying degrees. Together, they have made the "perfect storm."

Yes, the economy is poor, but the experts haven't been able to agree to call it a recession, and many places are relatively booming. One of the bosses of the two major RBOCs indicated that the economy was not hurting them; the other said it might be. Certainly, we have to put some blame on the economic slowdown.

The time of year is also certainly partially to blame. This historically is a very bad quarter for high-speed growth. It is the end of school quarter, and the time when people are thinking about summer plans. Neither of these is good for high-speed sales. Historically, we would expect to see the second quarter of any year to be about 25% below the other quarters**. For comparison, 2nd quarter 2008 is 55% below the first quarter!**

The other item of possible blame is the excess attention paid by AT&T and Verizon to their AAA businesses. We have been writing now for several quarters about how they (particularly Verizon) have been ignoring their legacy xDSL business while pursuing FiOS and U-verse. These are enormous projects and they take huge amounts of resources and management attention. We have noted a major drop-off in the total high-speed access lines added by Verizon, from an average of over 450,000 lines per quarter to about 250,000. AT&T hadn't been so drastic, but their U-verse program has just kicked in to high gear in the last couple of quarters.

Now we see that the only bright spot in this performance is the fact that AT&T recorded the biggest gain ever for U-verse, adding 170,000 lines this quarter. However, this was accompanied by the drop to a negative figure in xDSL lines.

When you see a gain in U-verse lines like this, it is a little hard to associate that with a bad economy being responsible.

What about Cable?

With the RBOCs having this dismal performance, how did the cable companies do? Well, the cable companies were down by about 32% from last quarter, which was a pretty good quarter. By comparison, they were down by 38% 2nd Q to 1st Q of last year. Taken together, one would have to say the cable companies added about as many cable modems for high-speed access lines as would be expected for a second quarter **– in any kind of economy.**

Bottom Line

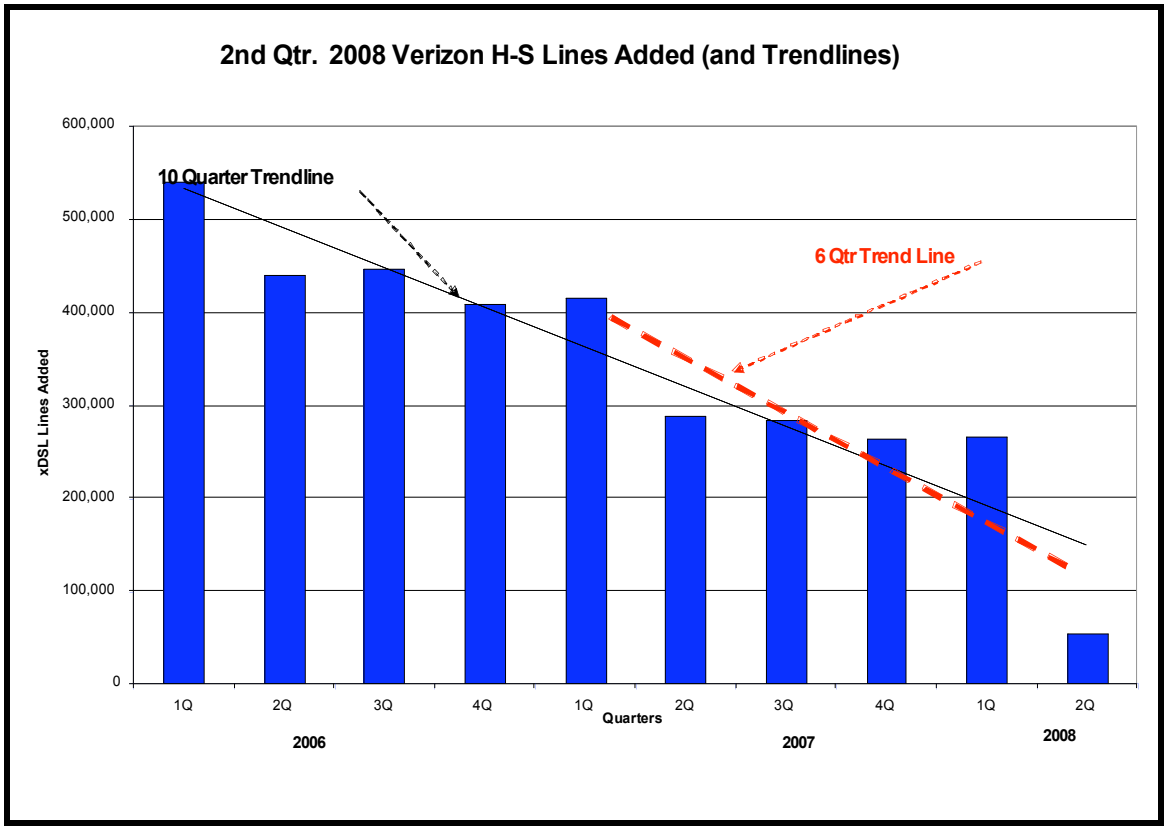
Looking at these three possible causes, this reporter must rank the FiOS and U-verse programs as the biggest contributor to the poor performance (if AT&T and Verizon had gained what they did 2Q of 2007, this would have been a fine second quarter), with the time of year coming in second, and the economy a distant third.

We aren't going to discuss the individual companies' performances any more in this report, except to report the numbers; enough has been said, and there are many news items to provide.

One last thought, as we watch the telcos lose (or fail to gain) high-speed access lines, we are watching them, perhaps forever, lose these customers. There are only so many people out there that want to subscribe to a high-speed service, and every one that the telcos fail to gain is one opportunity lost!

The following graphs will illustrate these points.

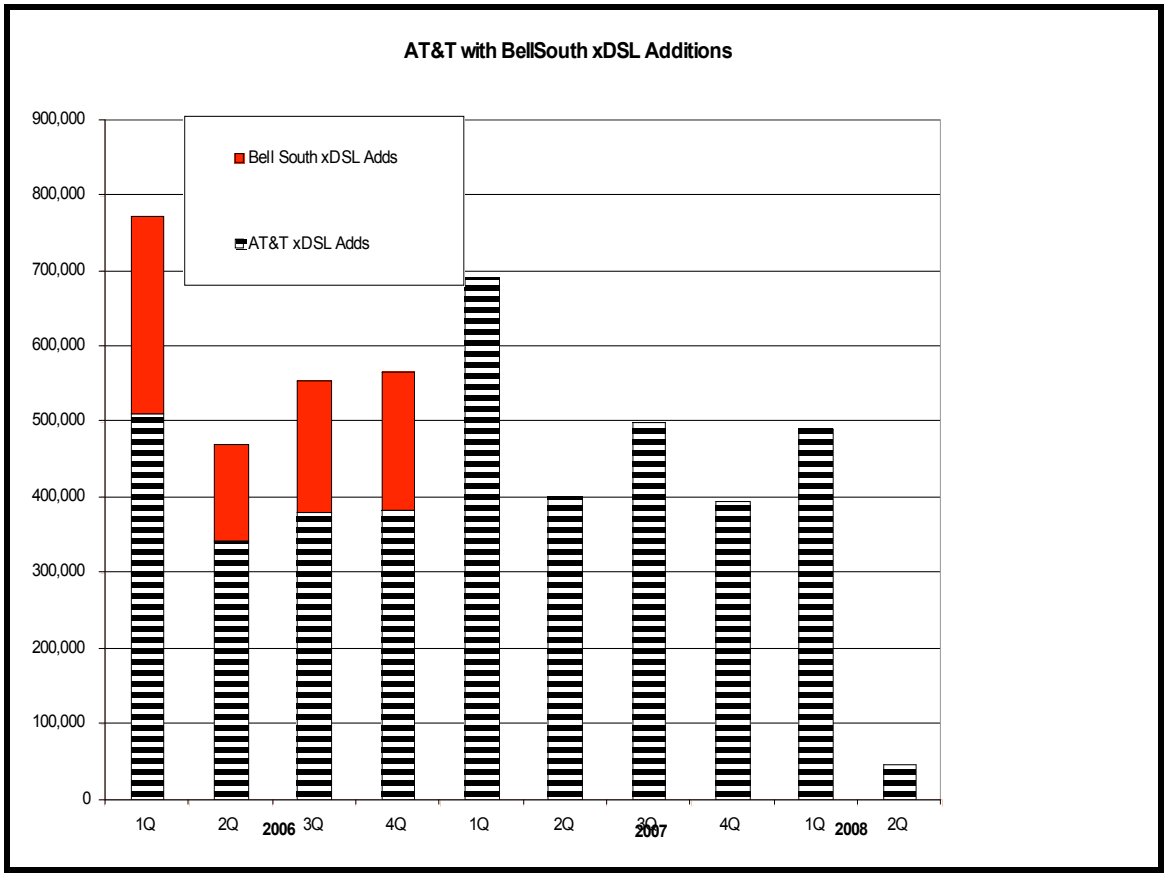
Figure 1: Verizon High-speed Additions – Ten Quarters



The above chart shows this Verizon problem continuing and getting worse! Both trend lines are now sloping down with the six-quarter trend line more decidedly downward, and the ten-quarter trend line has been brought down by the last four quarters' performance.

Please note that this chart includes FiOS as well as xDSL.

Figure 2: AT&T's High-speed Gain Performance by Quarter



Other News

Verizon Announces Plans for Enhanced FiOS Offering

Verizon plans to expand its 50Mbps FiOS Internet service to cover all 10 million homes and businesses that are currently within its FiOS network footprint.

During his keynote address at NXTComm08 in Las Vegas today, Verizon COO Denny Strigl said that all homes and businesses in Verizon's 16-state FiOS footprint will have the option of subscribing to Verizon's 50Mbps FiOS service starting next week. The service, which is currently the fastest of all Verizon FiOS service options, allows peak download speeds of 50Mbps and peak upload speeds of 20Mbps.

Verizon Has Corporate Grade FiOS

Verizon Business has quietly developed an enterprise version of its popular residential FiOS high-speed Internet service that could save companies a bundle on energy costs.

The corporate-grade "service," initially designed for the US military, involves installing the same passive optical network (PON) gear used for FiOS in office buildings and corporate campuses (it's unclear yet whether the offering will also one day be delivered as a managed service). It will be marketed to federal, corporate, and university customers beginning in 2009, Verizon officials say. Ideal customers are those with high bandwidth demands, such as for sharing CAD drawings, streaming video, or real-time workgroup collaboration.

The first installation is in a new, four-story office building in Annapolis Junction, Maryland, that was designed for military contractors and will be ready for occupancy in September. Verizon has been working with systems integrator Science Applications International Corp. (SAIC) for two years to develop the PON offering. Verizon is a subcontractor to SAIC for the network inside the new Washington, D.C.-area office building.

Verizon Going into New York City with FiOS

The stage is set in New York City for a battle between Verizon, Cablevision, and Time Warner Cable (TWC) now that the New York State Public Service Commission (PSC) has signed off on an agreement between Verizon and the city of New York that will let the telco offer video services.

The New York PSC confirmed the agreement yesterday between Verizon and New York City, which means that Verizon can offer its FiOS video service in all five of the city’s boroughs.

Currently, Time Warner Cable provides services in the boroughs of Staten Island, Manhattan, Queens, and one-third of Brooklyn. Cablevision offers its video services in the Bronx and the remaining area of Brooklyn, as well as in areas outside of New York City such as Westchester County, where it competes directly with Verizon.

Verizon Stilll Expanding FiOS

Despite the sluggish economy, Verizon isn't backing off of the gas pedal when it comes to building out its fiber-optic FiOS network.

Verizon plans on having FiOS in more than its previously stated goal of 18 million homes by the end of 2010, according to Reuters. Verizon president and COO Denny Strigl said that the company would continue to expand its FiOS network to the tune of more than $20 billion, while doing so at a faster rate than the original plan called for.

"We think we can take our target up. But we're looking at that right now, in terms of the overall economics of doing that," Strigl said at a Deutsche Bank conference in New York. "We'll pass 12 million by the end of this year, 15 million the next, 18 million the next. I think even within that same time period, there may be some upside for us in number of homes passed without significantly changing the capital requirements."

Verizon's FiOS rollout was initially slower than expected due to a lack of equipment, such as set-top boxes, as well as the regulatory approval process in the states where the telco wanted to roll out the triple-play service.

While FiOS currently has an edge with Internet speeds in some areas where it competes with cable operators, DOCSIS 3.0 wideband deployments by MSOs are expected to level the playing field.

DOCSIS 3.0 can achieve downstream speeds of up to 160Mbps by bonding 6MHz – or in the case of Europe and some parts of Asia and Latin America, 8MHz – channels together. DOCSIS upstream channel bonding can provide up to 120Mbps of shared throughput for cable operators.

AT&T Considers VoIP on U-verse

IPTV and VoIP over the same network is closer to becoming a commercial reality for AT&T. The telco, which now has 549,000 IPTV customers on its U-verse broadband network, has started testing a VoIP offering over the same network facilities in San Antonio, Texas. The company is preparing two different U-verse VoIP plans, according to a story at Network World. U-verse Voice Unlimited will

cost $40 a month for unlimited local and nationwide minutes, and U-verse Voice 1000 will cost $30 a month for 1,000 call minutes.

AT&T Explains Low High-speed Addition Performance

Lindner, who is also a senior executive vice president, attributed much of the second-quarter numbers to seasonality – the end of the school year prompts service shutdowns – and to economic weakness that has affected the housing industry and consumers in general. Lindner also talked up the ability of U-verse, AT&T's IPTV service, to help in voice line retention and broadband expansion.

"Beyond normal seasonality, we are seeing some economic impacts," Lindner said. "We are not seeing significant increases in non-paid disconnects and churn – it's been a very small impact; our non-paid disconnects are up maybe 2%. We are seeing more weakness in terms of inward orders."

Some of the customers who are disconnecting broadband are "indicating they are not going to a competitor," Lindner said. "These tend to be more customers that are in the value segment, customers that have more incidental usage of broadband and Internet in the home, and as a cost-cutting measure, they are saying 'We will use wireless access or Internet access at the office.'"

AT&T Aadds Second HD Stream

AT&T Inc. today confirmed release of its U-verse IPTV service, which will support concurrent high-definition (HD) video streams to consumer homes, previously the key shortcoming of the service.

While other telco TV offerings, such as Verizon Communications Inc.'s FiOS, supported multiple concurrent HD streams, U-verse did not. That means, for example, a subscriber could view one HD feed, but not record a second on a DVR at the same time.

The ability to support two HD streams simultaneously is critical to the success of U-verse, considering the ongoing, industry-wide competition to provide HD programming. Combine that with the proliferation of DVRs' promise of whole-home DVR services, and the stakes are high.

Qwest Announces Details of its FTTN Service

Qwest Communications is introducing fiber-to-the-network offerings in 23 markets under the Qwest Connect brand, hoping to have the rollout reach about 2 million customers this year. The two FTTN ADSL2+ services being launched are the Qwest Connect Quantum 20Mbps service for $99.99 per month and the Qwest Connect Titanium 12Mbps offering for $46.99 per month. Both services are targeted at residential and small-business users. Qwest announced last year that it would be investing $300 million in an FTTN broadband upgrade, but unlike other large telcos, it does not have IPTV in mind as a primary service.

Frontier Video Growth Up

Frontier Communications bucked the current industry trend of poor broadband performance to some extent in the second quarter, reporting growth where larger rivals have seen significant declines.

Frontier, formerly Citizens Communications, added 16,300 broadband customers in the quarter, 3% more than the previous quarter and nearly 17% more than a year earlier. That includes 7,800 dialup customers who converted to higher speeds in the quarter. The additions raise the carrier's residential broadband penetration to nearly 36%.

Embarq Seeing Gains from Video

In spite of lost revenue from a continued customer landline exodus and a quarter without marketing its wireless operation, Embarq still posted a higher second-quarter profit, due largely to its video strategy. According to CEO Tom Gerke, Embarq's decision to deemphasize wireless and increase emphasis on video resulted in 22,000 video additions, the highest level the telco has recorded since the second quarter of 2006.

Century Tel Adds Video

CenturyTel reported video-subscriber gains of 16,000 to bring its video-customer base up to 89,000 at the end of the second quarter, but it also experienced a slight downturn in its voice lines to end the period, with just over 2 million voice

subscribers. The telecom, which closed out the second quarter with 607,000 DSL subscribers, saw its revenue and net income rise in the period.

Cox Issues RFI for FTTP

Cox Communications Inc. has issued a wide-ranging request for information (RFI) for fiber-to-the-premises (FTTP) technologies and their possible application to the MSO's residential and business services strategies, Cable Digital News has learned.

Word of the RFI began to seep out at The Cable Show in New Orleans. Since then, multiple industry sources have confirmed a few details about the project, but, as is typical of any RFI, they indicate that there's no big product order associated with it.

Cox declined to comment about the RFI, but a spokesman noted in a statement that "in some cases we have delivered fiber-to-the-premises solutions to planned communities, schools or business parks that have been insistent on this kind of solution. The flexibility of our HFC to provide fiber solutions in cases that warrant it is yet another testament to our network capabilities."

People familiar with the RFI say Cox wants to review and digest several FTTP options, including PON-based schemes as well as "radio frequency over glass" (RFoG) approaches that allow operators to use their existing headends, set-tops, and modems. The Society of Cable Telecommunications Engineers has already launched RFoG standards work, but, at this point, no official standards effort is under way to develop a cable-friendly PON platform or any CableLabs specifications beyond Docsis 3.0. (See SCTE Moves on RFoG and Fog Lifting on RFoG.)

"It [the RFI] is fairly broad. Cox is looking at everything that's possible, picking all the vendors' brains," says a source familiar with the project. "There's no purchase orders associated with [the RFI], but they are couching it in terms [of showing] a tremendous amount of interest right now in what the next-generation architectures should be."

Comast Increasing Upstream Speeds

Comcast said that it is increasing upstream speeds nationally for its Performance and Performance Plus residential high-speed Internet customers at no additional cost.

Customers of the company's Performance tier, which is currently rated at a maximum of 6Mbps downstream/384kbps upstream, will see upstream speeds increase to 1Mbps. The upstream on the Performance Plus tier, now at 8Mbps downstream/768kbps upstream, will be boosted to 2Mbps.

The increases anticipate speed increases that will come from the implementation of DOCSIS 3.0 technology.

Comcast recently launched its first DOCSIS 3.0 market in the Twin Cities (story here), offering data tiers with up to 50Mbps download speed and 5Mbps uploads.

The company said that it expects to deliver even faster speeds of up to 100Mbps to its customers throughout the next two years, with the capability of delivering speeds of 160Mbps or more in the future.

Time Warner Adding Internet Video

Time Warner Cable (TWC) is closing in on piping Internet video onto subscribers' TVs.

Bringing Internet content to televisions has long been a Holy Grail of sorts for both consumers and cable operators. According to Reuters, TWC CEO Glenn Britt said that he expects his company will be able to offer such an application in one or two years.

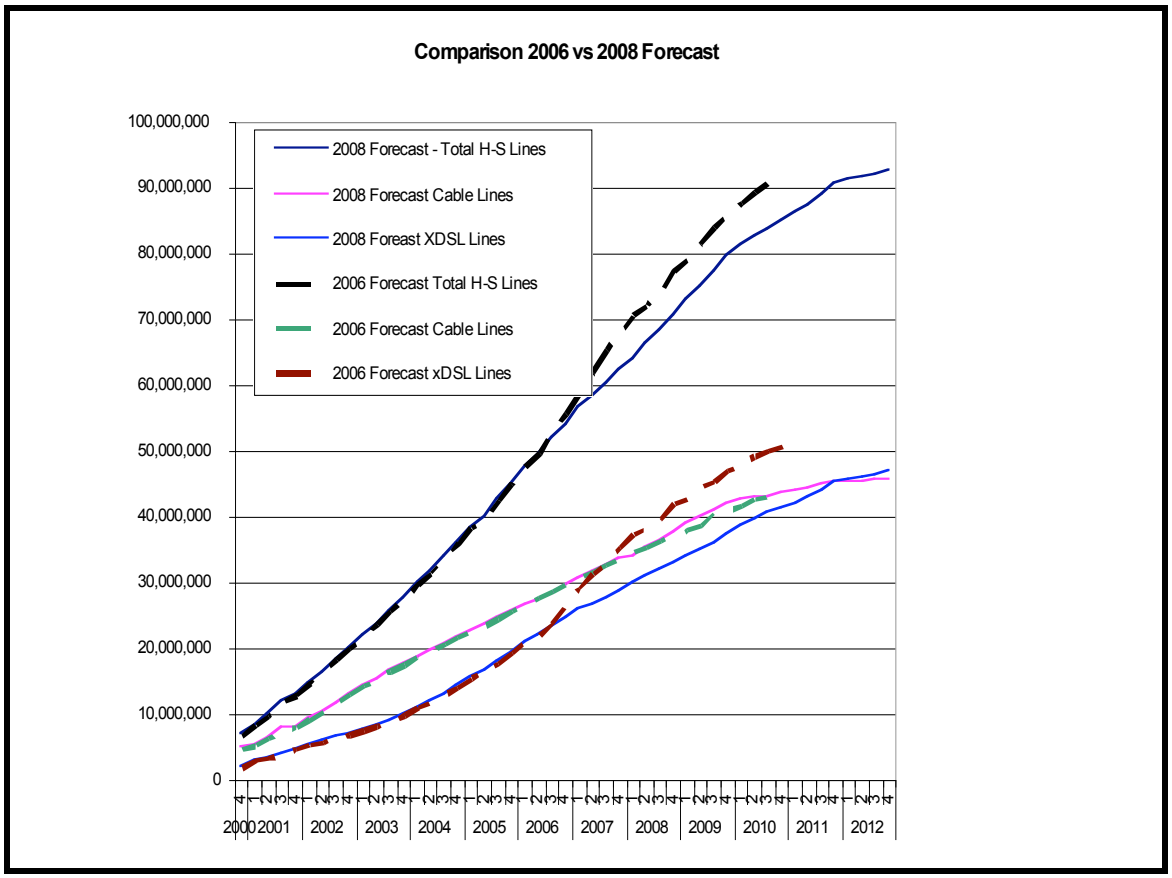
From a technology standpoint, cable operators have some work to do in order to bridge the gap between TVs and the public Internet, and they also need to resolve content rights issues. Cable operators, content providers, and broadcasters will also have to come to terms with how Internet video will be monetized by all of the parties involved in the food chain.

Results for the Quarter

Now we will turn to the results for the quarter. **We will first present our new forecast. Note that this is a repeat from last quarter's HSAR. We want to be sure that everyone understands the new forecast and the reasons for it.**

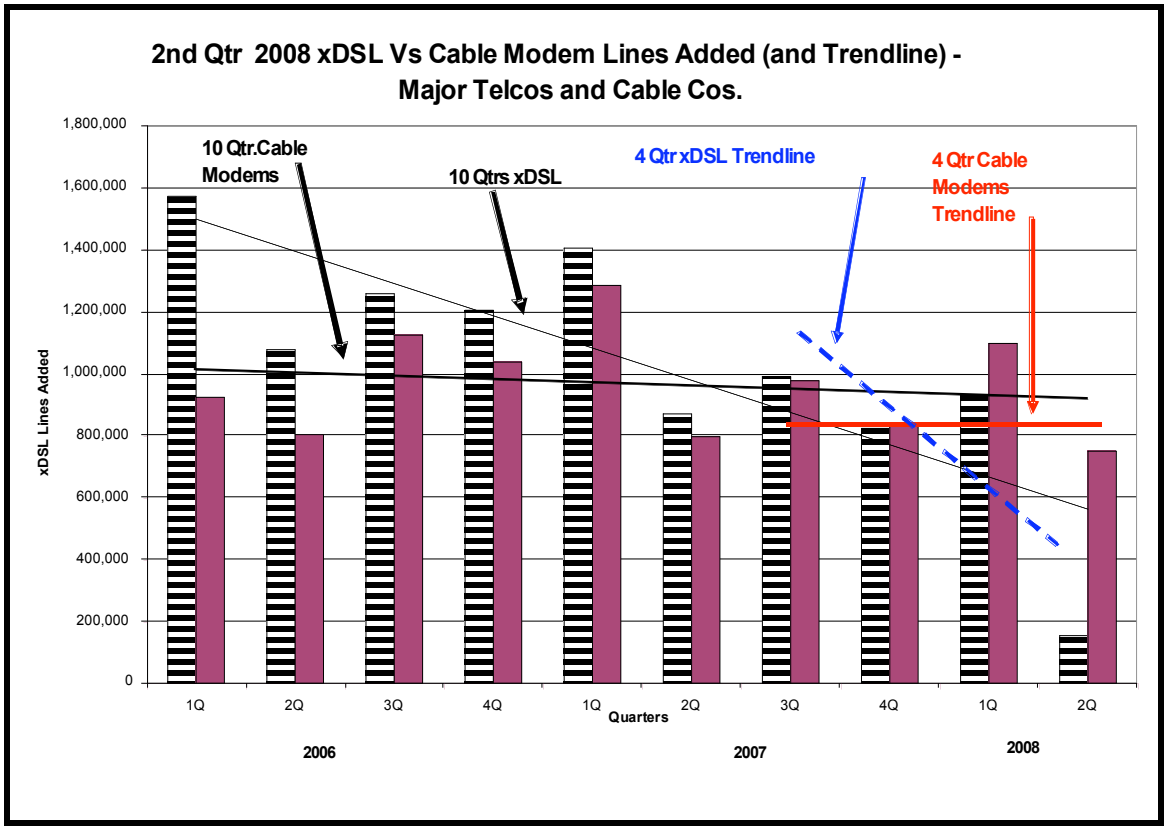
We found it necessary to change primarily because the telco high-speed growth (xDSL plus the telco advanced networks) was falling far behind our 2006 forecast. The reasons for this are outlined in the above material about Verizon, and their reemphasis on the FiOS development. In addition, we want to add two more years to the forecast and to slightly downtrend the tail of the forecast. This "downtrending" allowing for a slightly lower cap on the penetration ratios, achieving about 79% in the last year of the forecast and remaining fairly stable. This recognizes that some households will perhaps never (at least way out of our forecast range) have computers, and certainly not high-speed access. The new forecast has left the cable modem business virtually unchanged, as it was (and continues) right on our 2006 forecast. The new forecast and the comparison to the old one is as follows.

Figure 3: New Forecast - 2008



Our next chart and all subsequent ones will use the new forecast in all places where “forecast” is indicated.

Figure 4: Change in Trend lines - Last Four Quarters – Cable vs. Telcos



In the above chart, note that both trend lines for the telcos are still negative, and the four-quarter trend line is terrible. **This chart really shows how bad the quarter was for the telcos!** They are losing potential customers who will be very hard to recapture. The telcos **need to find a marketing technique** that will allow them to retain a focus on their legacy xDSL business while introducing the new, higher-speed access options.

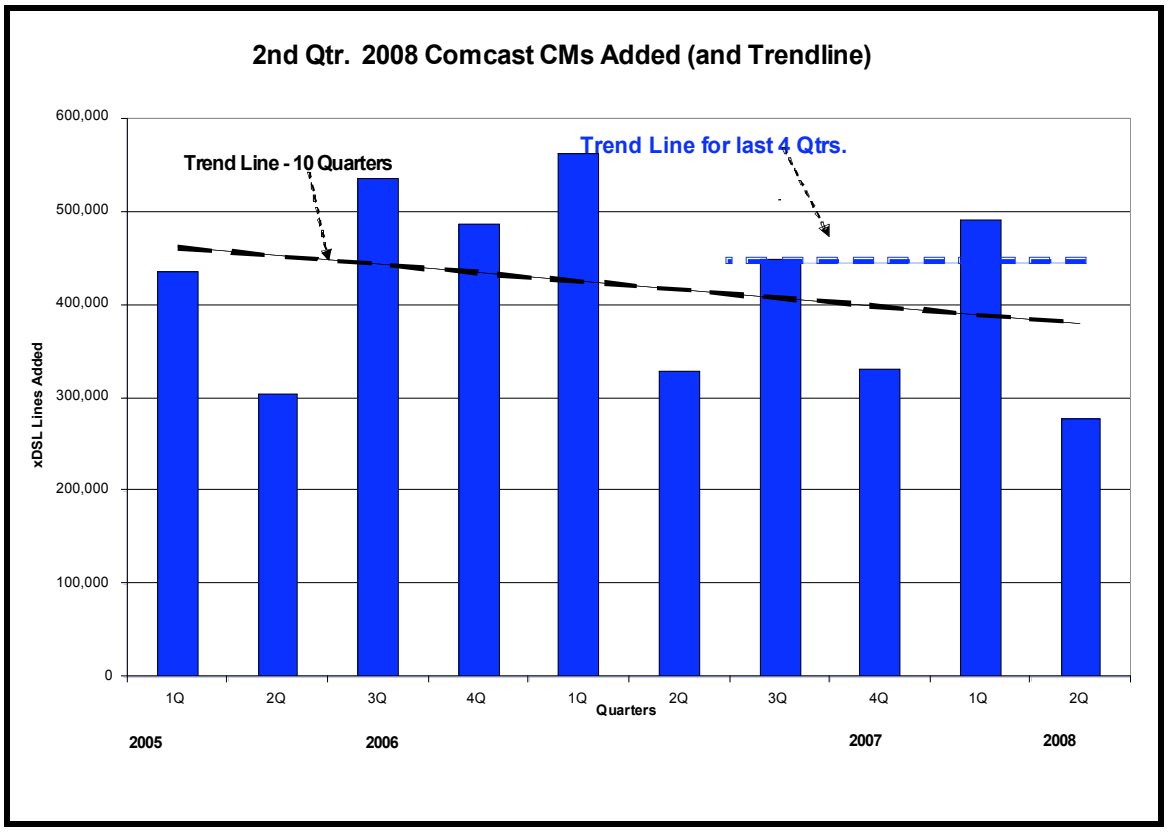
The cable companies have a positive to flat trend the last four quarters, and for the long term. In total, the cable companies remain right on our forecast, while the telcos continue to fall now drastically behind.

Comcast High-speed Growth Flat – Good for the Season!

Two of the last four quarters we reported that Comcast had great results, and for several quarters in a row. Comcast is now reporting close to 300,000 lies gained for the 2nd quarter. While that is not great performance, it is about as expected for a second quarter, when things are historically slow.

The following chart shows Comcast's additions over the last 10 quarters.

Figure 5: Comcast CM Additions



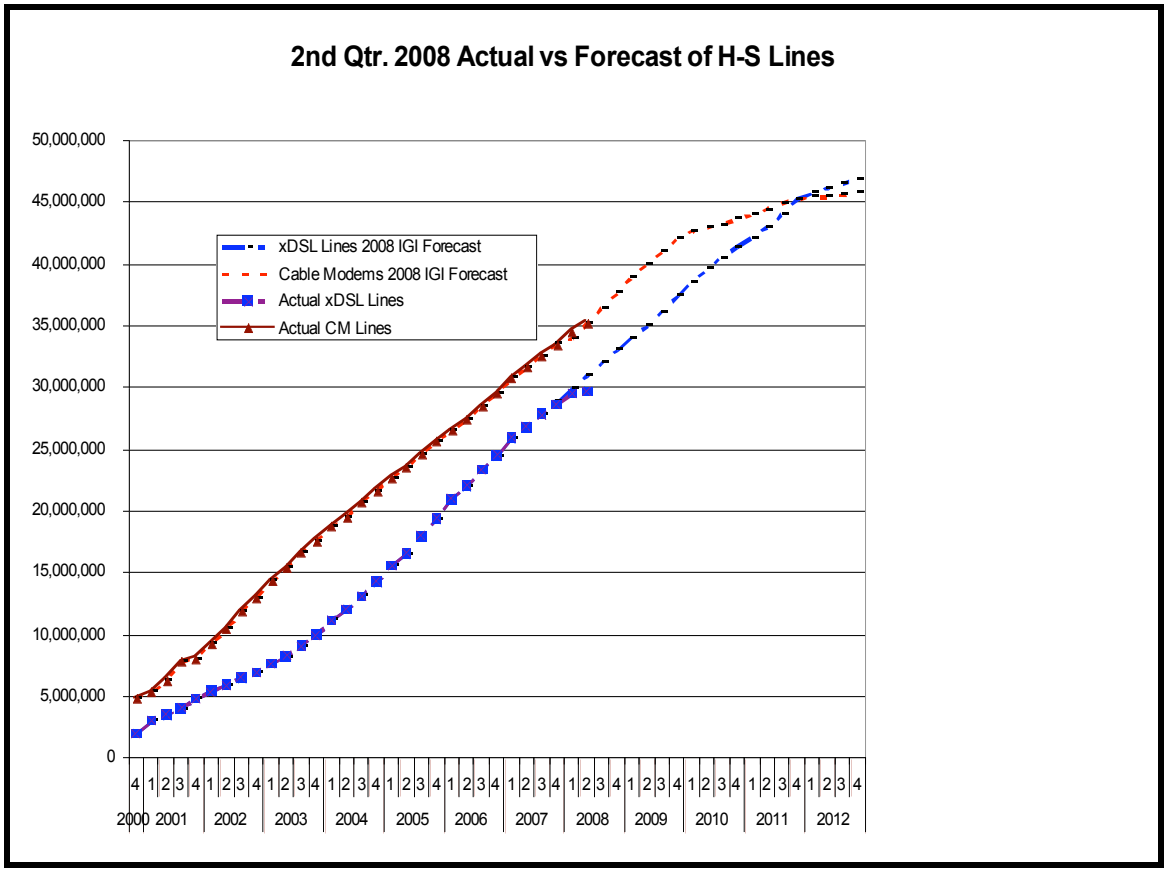
The long-term has now turned somewhat negative, while the four-quarter trend is flat.

Telcos Continue to Fall Behind

As noted in our lead story, the telcos had a terrible quarter (except for AT&T U-verse, which had its best quarter ever!). None of the telcos really performed very well this quarter. AT&T is above its last year's quarter, but still its performance is weak if the BellSouth properties are included as on a previous graph.

The following chart shows the additions for xDSL (the RBOCs) vs. cable modems.

Figure 6: Comparison of RBOCs' 3rd Quarters 2006 vs. 2007

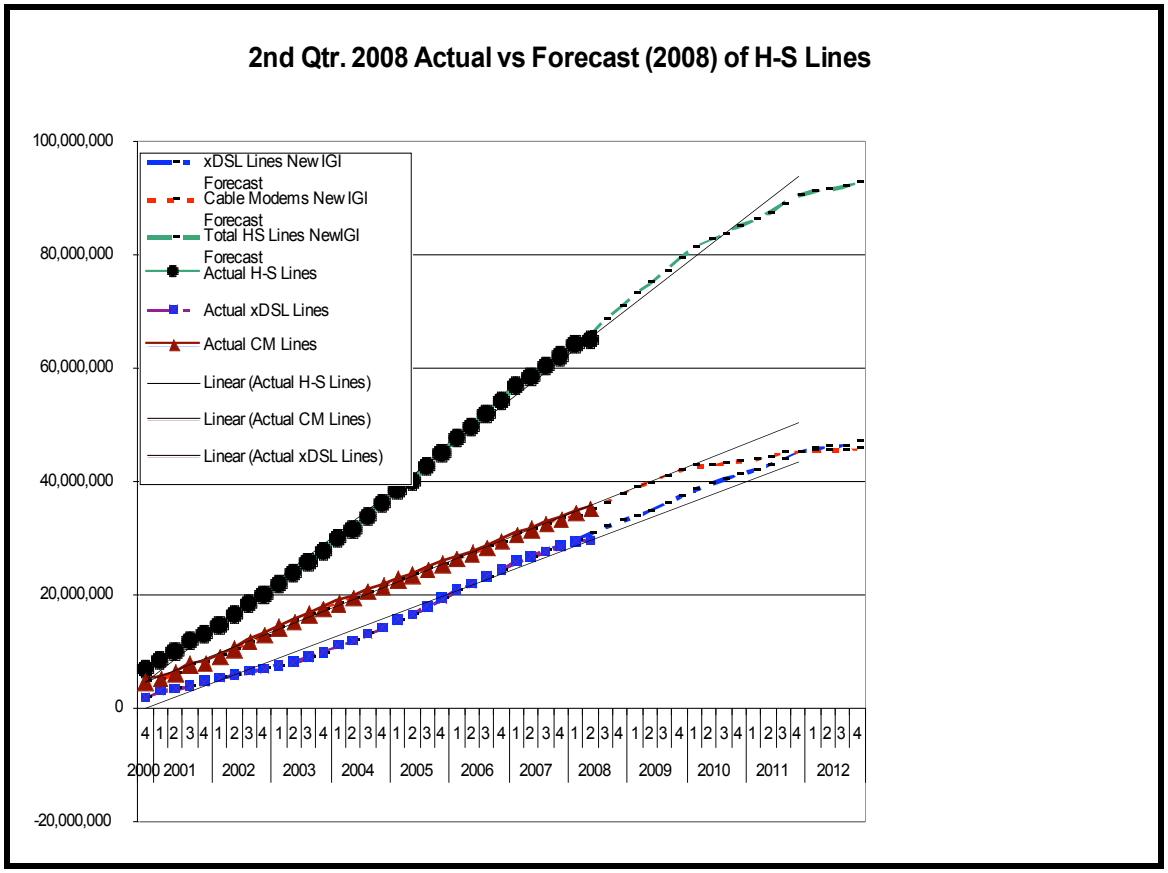


As can be seen, the telcos, with this quarter's dismal performance, are now behind the new forecast. Cable modems continue to be right on forecast.

Comparison of Telcos and Cable Companies

The following chart illustrates the historical relationship between the major cable companies and the major US telcos, as well as this quarter's results. It also provides linear trend lines for both CMs and xDSL.

Figure 7: Comparison of CMs to xDSL Additions and Comparison to Forecast



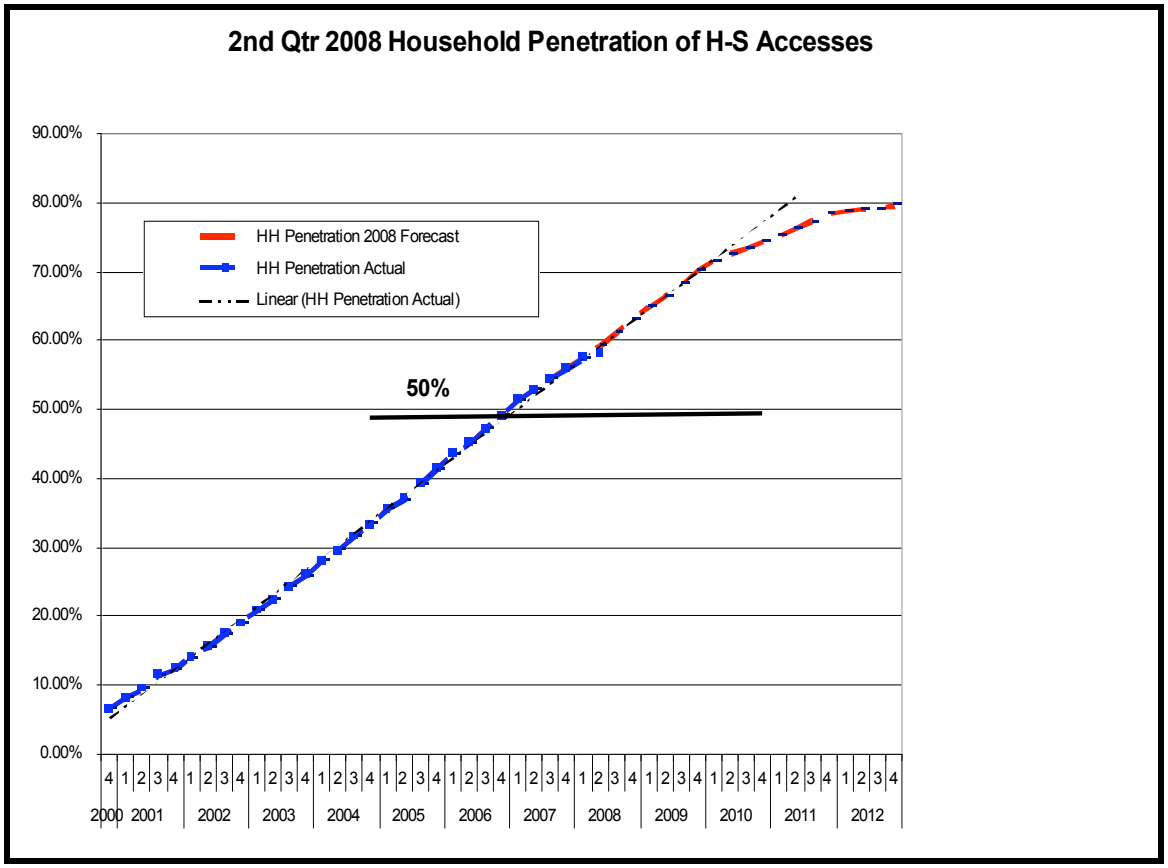
The above chart illustrates the overall situation and provides comparison to our forecasts. To help in reading the chart, the straight black lines are linear trend-line projections of (from the bottom) xDSL lines, cable modem lines, and total high-speed access lines. The dashed lines for these three quantities are our new forecast for each of these (made in early 2008). The heavier symbol lines (squares for xDSL, pyramids for CMs, and circles for total) are the actuals (actual in-service quantities as of the selected date) for each of the statistics.

Cable continues to follow the trend line and our forecast (which has built-in corrections for historically bad quarters). The telcos had been following the new forecast, but now the trend line, with the latest bad quarter, brings into question their ever catching the cable companies.

Household Penetration

This heading refers to the percentage of households in the US with installed and working high-speed access service. This is a very important statistic, because it really measures how many Americans have residential access to high-speed service. It is an indication of how good a job the carriers have done in making the service available, and how well it is being accepted by the public. Beware of other measures that suggest a much higher percentage than is included in the following graph. While we are a fan of high speed access, we feel it is irresponsible to report achievements for it based on surveys or polls, as some have done. The only way to measure household penetration is to count it, and that's what we do.

Figure 8: Household Penetration of High-speed Access



While we have emphasized the bad news this quarter, the penetration is now nearly 60% of US households!

Summary of High-speed Activities for the Major Carriers

The following chart illustrates the quarterly additions for xDSL and cable modems for the moist recent quarters for the largest carriers.

Figure 9: Summary of Major Carrier Activity

Major Cable Companies

	2006	2007	2007	2007	2007	2007	2008	2008
	Total to date	**1Q**	**2Q**	**3Q**	**4Q**	**Total to date**	**1Q**	**2Q**
Charter	2,611,000	123,900	60,300	53,000	50,000	2,898,200	60,000	50,000
Comcast	10,269,200	563,000	330,000	450,000	331,000	11,943,200	492,000	278,000
Rogers	1,310,400	42,000	21,100	55,000	40,000	1,468,500	41,000	13,000
Cox	3,300,000	100,000	100,000	100,000	100,000	3,700,000	100,000	100,000
Time Warner	6,644,000	356,000	188,000	224,000	214,000	7,626,000	304,000	208,000
Totals	**24,134,600**	**1,184,900**	**699,400**	**882,000**	**735,000**	**27,635,900**	**997,000**	**649,000**

Major Telcos

	2006	2007	2007	2007	2007	2007	2008	2008
	Total to date	**1Q**	**2Q**	**3Q**	**4Q**	**Total to date**	**1Q**	**2Q**
BellSouth	3,632,000	0	0	0		3,632,000	0	0
Embarq	1,017,000	87,000	52,000	60,000	61,000	1,277,000	63,000	24,000
Bell Can.	2,474,000	43,000	29,000	34,000	29,000	2,609,000	10,000	-1,000
Qwest	2,137,000	167,000	100,000	111,000	95,000	2,610,000	90,000	31,000
SBC	8,537,000	691,000	400,000	499,000	396,000	10,523,000	491,000	46,000
Verizon	7,062,000	416,000	288,000	285,000	264,000	8,315,000	266,000	54,000
Totals	**24,859,000**	**1,404,000**	**869,000**	**989,000**	**845,000**	**28,966,000**	**920,000**	**154,000**
Total high-speed accesses	**48,993,600**	**2,588,900**	**1,568,400**	**1,871,000**	**1,580,000**	**56,601,900**	**1,917,000**	**803,000**

Note: The numbers for BCE (Bell Canada) are not completely consistent due to a spin-off of rural lines in Ontario and Quebec. We will correct this going forward.

FTTP Watch

Verizon FiOS

Verizon added 187,000 FiOS customers this quarter. Of these 176,000 also subscribed to FiOS TV. This is only a fair quarter FiOS additions, but it is the brightest spot for Verizon

AT&T Lightspeed (U-verse)

AT&T U-verse added 170,000 in the last quarter.

By the end of this year (2008,) AT&T says 18 million homes will be able to receive fiber to the node.

There are still questions about the adequacy of the bandwidth provided by Lightspeed. Our report noted below covers this issue and forecasts a big change in the AT&T plans. It is certainly open to question as to the viability of using their FTTn-based architecture to provide services that will be competitive in the near future.

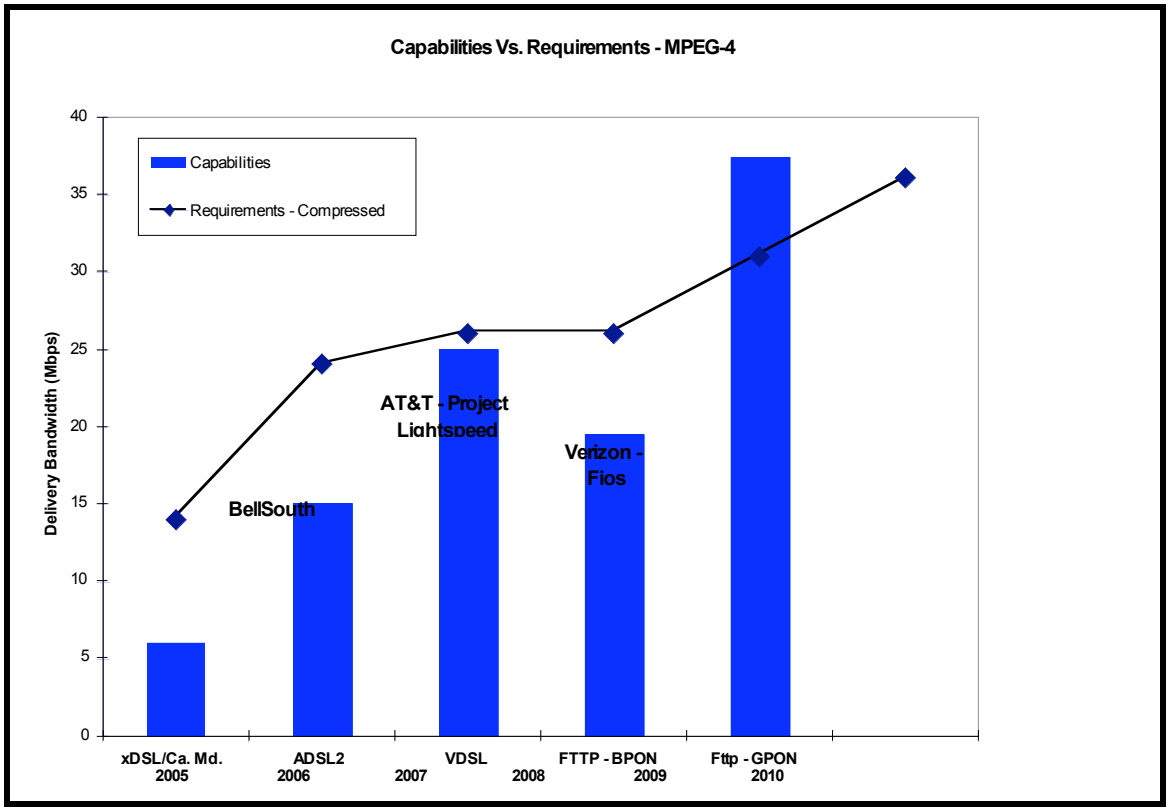
The latest rumor is that AT&T is only getting 20-24Mbps from its FTTn architecture rather than the 24-28Mbps anticipated at 2,500 feet. This small a difference could make a very tight situation — as to available bandwidth vs. required — almost untenable.

The other big question at AT&T is what to do with the FTTC (fiber-to-the-curb) legacy from the acquired BellSouth properties. This architecture is enough different form AT&T's FTTN to be very significant. FTTC is much closer to FTTP, and much more capable than FTTN. A recently passed law in South Carolina that requires only statewide (as opposed to citywide) television franchises has been the instigator for AT&T to announce that it plans to upgrade the network in this state to bring U-verse to it. (The same situation exists in Georgia.) It appears now that AT&T will choose a hybrid FTTC/ FTTN architecture for South Carolina and Georgia.

We continue to forecast that AT&T will quietly convert to a different architecture for U-verse. This change may be small, perhaps only a slightly different distance from the customer to the node, but it will change. <u>The physical facts haven't changed, and we continue to believe that the consumer needs for bandwidth will drive AT&T ultimately to a different architecture.</u>

Our report, "How Much Bandwidth Is Enough in the Access Network," outlines the argument for needing more bandwidth than FTTN can deliver. The following chart from that report illustrates the forecast bandwidth needs and the capabilities of the various architectures.

Figure 10: Bandwidth Needs and Architecture Capabilities



Note that the capabilities of BPONs illustrated in this graph are based on very conservative assumptions, while the VDSL assumptions are very positive. The GPON bandwidth of 37.5 is based on 64 subscribers per GPON. **Verizon is only using 32 customers per GPON, thus getting 75Mbps per customer!** This difference is what has trapped the FTTN advocates. This chart also suggests why we continue to believe that **GPONs in a passive network** will be the standard for all telco carriers, ultimately.

Customer's Corner

Every quarter we will offer our clients the opportunity to sound off, ask questions, and make comments on the forecasts – whatever you like. We will publish the best to the comments with or without names, as directed by you. If you send me something and don't want your name included, please say so. To submit something for our 3rd Quarter 2008 report, just send an email to Clif Holliday. The address is c.holliday@ieee.org. **We look forward to hearing from you.**

We have a few questions and comments from our last report and we will include them below without names, since we had not warned that we may use the comments.

1. ***Q.** "Can I re-use the figures and material in this report for publication elsewhere." (Repeat – FYI)
   Answer: Yes, you may as long as you give us proper credit.

2. **Q**. "Will FTTP begin to have an effect on High-speed Access Lines and when will this start to show up?" (From C.D.T. in Lexington, KY, Repeated again – again because of the Verizon results this quarter.)
   Answer: It really showed up in the 4th Q 07 and with AT&T. We think the reason for Verizon's (and AT&T's) poor showing this quarter is the focus they are giving FiOS. The second quarter results show that in spades!

3. **Q.** "Could you include more on the side issues of the carriers?" Mary D., Tampa.
   Answer, See the "Other News" section above. We have included these issues where appropriate. This quarter we have also included much more news from smaller carriers.

4. **Q.** "Why do you brag about your correct forecasts?" Rose Marie, Los Angles. (Repeat)
   Answer, If we don't brag about them, no one else will. Seriously, we need to let our readers know of the accuracy (and sometimes the inaccuracies) of our forecasts, so they can better judge how to use them.

Notes to the media:
For interviews with Dr. Polishuk or Clif Holliday (author of the Lightwave Reports) please contact Dr. Polishuk at 617-782-5033 or at marketing@igigroup.com. Charts and graphs from the latest IGI telecom reports, noted above, can be made available to media outlets as needed, as can information from our latest reports on Network Traffic, FTTP, NGN, and ROADMs.