



Bruce Kushnick, bruce@teletruth.org
718-238-7191
Tom Allibone, tom@teletruth.org
1-888-FYI-AUDIT

July 26th, 2005

On the web at:

<http://www.newnetworks.com/BroadbandDQAmartin.htm>

38 Million "Broadband Users" in the US? America Leads the Globe in "Broadband Connections"?

Teletruth Files Against FCC's Data — Tell the Truth About Broadband! Get Rid of "Garbage Pail Statistics". Speed Matters.

- Did you know that America is currently 16th in the world in broadband according to the ITU (International Telecommunications Union) or 12th, according to the OCED (Organisation for Economic Co-operation and Development). America is behind such countries as Korea, Japan, Canada and Iceland, among others.
- Speed Matters: Did you know that the definition of "broadband" went from 45mps in both directions in 1992, to 200K in one direction in 2005? —225 times slower.
- Did you know that America's phone customers spent an estimated \$120 billion for fiber optic networks they never received? The FCC never investigated "customer-funding" and yet plans on giving the phone companies more "investment incentives".
- Municipalities throughout the US are in a 'broadband uprising', having to do work-arounds for the broadband networks that were never delivered.

Teletruth today filed a Data Quality Act Complaint against the FCC's statistics, claiming that the FCC is politically driven to inflate the number of broadband connections in the United States, as well as presenting a distorted picture of broadband in the US.

Point 1: The FCC should redo its recent broadband release and retract the FCC Chairman's statements on broadband because the FCC's methodology gives an inflated picture of "broadband".

In a recent op-ed in the Wall Street Journal by FCC Chairman Martin, "United States of Broadband", July 7, 2005, the Chairman claims America is number one in the world with 38 million broadband subscribers.



"First, the U.S. leads the world in the total number of broadband connections with 38 million subscribers."

This statement is being used to support President Bush's promise for Universal broadband by 2007.

"The dramatic growth in broadband services depicted in this report proves that we are well on our way to accomplishing the president's goal of universal, affordable access to broadband by 2007." (July 7, 2005)

Link to Op –Ed: <http://www.newnetworks.com/matinopedwsj.htm>

What Chairman Martin does not say is that the FCC's definition of broadband includes anything over 200K (Kilobytes-per-second), and in only one direction. This, of course, inflates the broadband number to make America appear to be number one in broadband.

Chairman Martin quotes the information supplied in a recent FCC press release dated July 7, 2005.

"Federal Communications Commission Releases Data On High-Speed Services For Internet Access" — "High-Speed Connections to the Internet Increased 34% During 2004 for a Total of 38 Million Lines in Service"

The 38 million "high-speed connections", which again is 200K in one direction, are now "broadband" connections.

Link to FCC Press Release:

<http://www.newnetworks.com/FCCbroadbandrelease070705.htm>

Bell Definition of Broadband in 1992— 45MPS and Capable of High Quality Video.

The irony is that 13 years ago, the definition of "broadband" as used by Verizon (Bell Atlantic, NYNEX and GTE), SBC, (Pacific Bell, Southwestern Bell, SNET and Ameritech) BellSouth, and Qwest (formerly US West) was a service capable of 45mps (megabits per-second) or faster and could deliver high-quality video in both directions — and that was in 1992!

By calling one-directional 200K services "broadband", the FCC has essentially inflated the number of connections, but at the detriment of America's economy. We can now claim we have more connections than the rest of the world, but the truth is



embarrassing. We're technologically behind on every front that would prove to be important — speed matters.

Violations of the Data Quality Act

As we will discuss, the FCC's data is biased and politically driven, and therefore fails three basic Data Quality Act tenets — to be "objective", "reliable" and "accurate". Teletruth and our members, as well as the entire economy are being harmed by this misrepresentation pertaining to America's broadband deployments and our place in the world.

To see more about the Data Quality Act:

<http://www.newnetworks.com/dataqualityactchallenge2.htm>

Background:

Since 1999, the FCC, in order to keep face and to make it look like America was on the right path, published numerous biased reports. The FCC redefined "advanced" broadband as 200K in both directions, and "high speed" as 200K in one direction.

- Advanced networks are 200K in both directions.
- High-speed networks are 200K in one direction.

Over 13 years ago, in 1992, ALL of the phone companies filed with various state commissions to remove the old, inferior copper wiring and replace it with fiber optics. The argument was that the old wiring could not handle "broadband".

In 1992, testimony given by Verizon (then New Jersey Bell), in order to receive financial incentives to rewire the state, claimed that broadband was 45mps services (or higher) that was capable of "high definition video" in both directions.

"Broadband Digital Service — Switching Capabilities matched with transportation capabilities supporting data rates up to **45,000,000 bits per second** (45mps) and higher, which enables services, for example, that will allow residential and business customers to receive high definition video and to send and receive interactive (i.e., two way) video signals."

By 2005 over 75% of New Jersey should have been rewired. None of it exists today.

In fact, from 1992 through 1995 America was promised a fiber-optic future, where the phone companies received massive financial incentives to roll out statewide fiber-optic



services to home and offices, schools and libraries – in order to deliver 45mps or faster broadband.

200K was Not Broadband. And Why 45mps?

And why 45mps? Broadband was defined as being able to deliver high-definition, 2 way video.

Take Texas and Southwestern Bell (SBC). In September 1995, the state passed a law that required SBC to be able to deliver 45mps or faster, in 2 directions. By the year 2000, all schools, libraries, and hospitals throughout the state should have been offered these services.

"On customer request, the electing company shall provide broadband digital service that is capable of providing transmission speeds of up **to 45 megabits per second or better** for customer applications."

And the law made concessions in bandwidth requirements if the service could deliver video TV broadcast quality.

"...or at lower bandwidths if evolving technology permits the delivery of video signal at quality levels comparable to a television broadcast signal, by January 1, 2000."

200K can not handle video.

More importantly, the Telecom Act of 1996 required broadband to handle "high-quality" video services. The definition of "Advanced capability" includes "broadband" with a capability of high-quality voice, data, graphics and video telecommunications. Section 706(c)(1) defines "advanced telecommunications capability" as follows:

"The term "advanced telecommunications capability" is defined, without regard to any transmission media or technology, as high- speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics and video telecommunications using any technology."

200K does not deliver high-quality video. Using 200K as a standard was wrong. Also, there is no series of distinctions that would allow 200K to even be "high-speed" as broadband based on the Telecom Act's definition.



The outcome? We lost a generation of technology and this new FCC is perpetuating the problem. Teletruth has argued that setting the speed at such a low threshold 'dummied-down' the country's true broadband expectations, thus making us 12th-16th in the world in broadband, not number one.

NOTE: We need to note that the FCC was more cautious in previous announcements, such as its 3rd report on "advanced capability", February 07, 2002.

"FCC Releases Report On The Availability Of High-Speed And Advanced Telecommunications Capability --- Report on High-Speed and Advanced Telecommunications Services Shows Nearly Ten Million Subscribers".

See: http://www.fcc.gov/Bureaus/Common_Carrier/News_Releases/2002/nrcc0201.html

Notice that "broadband connections" is NOT mentioned, because the FCC was complying with the Telecom Act's definition of "advanced" capability. The current FCC doesn't seem to understand this distinction and why it is critical.

We need to note that we are not the only group that has noticed that the FCC's broadband reports are giving a deceptive view of broadband in America. Network World Newsletter: Gibbs & Bradner, 07/19/05, has an article titled "Today's focus: Continuing deceptions". The writer also makes the point that the FCC is inflating their numbers and using "high-speed" in exchange for "broadband".

See: <http://www.networkworld.com/columnists/2005/071805bradner.html>

"Maybe because it became clear that few observers agreed with its use of the term broadband to mean such a slow service, and maybe because the numbers were not going to be all that impressive, the FCC has now dropped the term and substituted "high-speed," which it defines as at least 200K bit/sec, but it only has to be in one direction -thereby halving its already low requirement. This is misleading at best.

"It seems like the FCC has been able to confuse (deceive?) some in the press who touted the growth in broadband usage based on the FCC report. It also seems to have confused the FCC chairman, who published an editorial in the July 7, Wall Street Journal touting the growth of broadband deployment in the U.S."

Point 2 Redo the Definition of "Broadband".



We are asking the FCC to use the Telecom Act's "broadband" definition as — any service capable of delivering HDTV quality video services in two directions. "High-speed" and "advanced" should not to be included in this definition.

Point 3 Get Rid of "Garbage Pail" Statistics

The FCC's statistics blur the definition even further by including small business and larger businesses with residential deployment.

"During the year 2004, high-speed lines serving residential, **small business, larger business**, and other subscribers increased by 34%, to 37.9 million lines." (Emphasis added)

The number of households is a standard number for residential telecommunications services. The reason the FCC is blending all businesses, small business with residential customers, etc. is to increase a dismal deployment of broadband.

Point 4 Redo the Information by Speed, Not Hand Waiving.

Teletruth requests that the FCC redo its entire current broadband report because it fails to give an accurate assessment of broadband in America. For example, what are the breakouts, by speed-of-service for residential, small business and large business customers? These are the questions America needs to answers to.

Point 5 Chairman Martin Presents Poor Analysis of the Comparison Between the US and the Rest of the World.

America is 16th according to the ITU, 12th according to the OCED. How are the other information defined? The OCED examines the number of subscriptions based on population — i.e, broadband connections per 100 inhabitants, while the ITU is based on the percentage of consumers that are broadband subscribers.

OECD Broadband Statistics, December 2004

- http://www.oecd.org/document/60/0,2340,en_2825_495656_2496764_1_1_1_1,00.html

ITU's Broadband Statistics, 2004

- http://www.itu.int/ITU-D/ict/statistics/at_glance/top20_broad_2004.html.



The Chairman, however, questions the OECD's analysis.

"Although last December's report by the OECD ranks the U.S. 12th with respect to broadband subscribership per 100 inhabitants, there is more to the story: broadband growth in the U.S. is exceptional and leads the world. Unfortunately, our OECD ranking does not match the reality. For example, in terms of size, the U.S. has more than twice the population of the other countries ahead of it on the OECD list. And, no other country has as many urban areas or as many remote and widely-dispersed rural areas spanning huge distances.

"If you compare the broadband penetration rates of some "leading" countries with comparable U.S. states with similar population density, you see similar penetration rates. For example, Japan, which ranks 8th in the OECD report has a population density of 350 inhabitants per square kilometer and has 15 broadband subscribers per 100 inhabitants. These numbers are very similar to Massachusetts which has a population density of 317 inhabitants per square kilometer and 18 broadband subscribers per 100 inhabitants."

Calculating Broadband by Inhabitants, 51 Territories at a Time.

Why is this analysis disingenuous and inaccurate? Well, the simple reason —The United States of Broadband is a patchwork quilt of 51 different states and territories and virtually each one had a separate series of promises to deploy broadband — which never happened.

For example, by 1995, Massachusetts should have had 330,000 fiber optic lines — not DSL over copper wire. This fact was outlined in every piece of testimony, public statements, articles, etc.. Meanwhile:

- Pac Bell's California was to have 5.5 million fiber-optic households by 2000.
- Ameritech's 5 states should have had 6 million.
- Bell Atlantic was to have over 12 million households by 2000.

At the proposed rates of deployments, by 2005, America should have had 78 million households rewired with fiber optics.



None of these promises to the public or regulators were ever fulfilled. For a timeline of the California promises and failure to deliver, we call your attention to a timeline created by the San Diego Tribune (published in 1998) with our updates.

See: <http://www.newnetworks.com/californiabroadband.html>

The Chairman also talks of territories and distance. The monies collected in Texas or Pennsylvania were supposed to be evenly distributed. The cost was supposedly averaged over the entire state's subscribers with higher phone rates, including every low income, Hispanic, or black family, every hospital, school, library or government agency.

In Pennsylvania, the obligations, according to the law, was that by 2004, half if the state was supposed to be wired with 45mps, in "rural, urban and suburban areas" equally.

"Verizon PA has committed to making 20% of its access **lines in each of rural, suburban, and urban rate centers** broadband capable within five days from the customer request date by end of year 1998; **50% by 2004**; and 100% by 2015." (Emphasis added)

According to the Pennsylvania Public Utility Commission in 2003:

"In view of Bell's commitment to providing 45 Mbps for digital video transmission both upstream and downstream, we look forward to Bell's providing this two-way digital video transmission at 45 Mbps."

In a related Data Quality Act complaint that was filed against the FCC's previous broadband reports, we discuss how the FCC failed to include thousands of documents pertaining to these state obligations. For example, the 1999 report neglected to discuss the announced deployments of the Bell's fiber-optic services, even though the Telecom Act specifically requests that the FCC examine whether broadband was being delivered on a 'timely and reasonable' basis.

See: (PDF format) <http://www.teletruth.org/docs/TeletruthNIA706Dataqualityact.pdf>

Point 6 Americans Are Being Ripped Off Compared to the Speed And Price of Service Around The Globe.

There is another part of the equation that makes America far worse off — that speed of service as well as the price for those services are an embarrassment.



Right now, announcements come from all over the world of 100 mps services. Broadband Reports (10/2004) stated that Japan's NTT is selling 100mps service for \$40 dollars.

And according to Fortune magazine on South Korea's broadband "wonderland", September 7, 2004, while the FCC dummies down the definition of broadband to 200K, countries like South Korea only start counting broadband at megabit speeds, because they are rolling out true broadband and not some poor substitute. (a megabit is 1000K)

"At a time when the Federal Communications Commission defines broadband as an Internet connection capable of transmitting 200,000 bits of information a second (200 kbps), the Korean speedometer doesn't even start until transmission speeds pass the one million bits (one megabit) mark. Wired connections of eight megabits are routine—about five times faster than my American high-speed cable modem on a good day—and many Korean subscribers have already bumped up to 20-megabit connections."

How many 45mps connections are there in the US? How does it cost-compare to these other countries?

There are those that will argue that Verizon's FIOS or other Bell company deployments are these same services — just a decade late. This is not true. FIOS' top advertised speed is only 30mps, and that cost \$199.— There are no 45mps services. More importantly, the state commitments required these networks to be open to competitors. The FCC, however, has given these companies the exclusive —an anti-competitive, anti-customer action.

This means that Verizon or SBC can deploy where they feel it is a "good" investment, and not a plan for "Universal Service", which was what was granted by the states as part of the agreement to replace the copper wiring.

And that's only part of the story about the price of broadband service. As Dana Blankenhorn wrote in his critique of Chairman Martin's op-ed, it isn't simply the broadband connection customers are forced to pay but also for the other services on the same wire.

http://www.corante.com/mooreslore/archives/2005/07/08/orwells_fcc_chair.php

"The fact, Mr. Martin, is that I am paying \$110/month for 1.5 Mbps downloads — that's \$50 for DSL and \$60 for the phone line. The



alternative from cable is equally pricey — \$70/month for the cable and \$40/month for the cable modem service."

Government Subsidies vs Monopoly Collecting Excessive Profits.

There are those who will argue that many of the other governments are monopolies that funded the network upgrades through rates.

Isn't that what every Bell companies did, except the money wasn't controlled by the government, but by a monopoly that kept more money as profits than any 'regulated monopoly' had the right to do. One has only to examine the Bell profits from the state Alternate regulations --- They went from a return of 12% to over 30%. Also, when the deals with the Bell companies were cut by state, there was no local competition.

Point 7 Violations of the Data Quality Act

The Data Quality Act requires agencies to present data that is "objective", "reliable" and "accurate", not politically biased. It is clear from the presentation by the FCC that their statistics are aimed, not at accuracy, but at demonstrating that America is "Number One". Unfortunately, the data presented, using "High-Speed" and "Advanced Services", do not match the Telecom Act's definition of broadband – being able to handle high-quality video. And there are no break outs of the data to examine small business and businesses as opposed to households, thus making the information useless and therefore unreliable in comparing to other countries' offerings.

Point 8 Municipalities Wiring America ---A National Broadband Uprising Is Symptomatic of What's Wrong with the Bells' Deployments.

In what has become a national uprising, hundreds of municipalities who are tired of waiting for Godot — the phone or cable companies — are now starting to rewire their own communities with fiber or Wifi services. These work-arounds should be a sign to the FCC that the Bell companies haven't delivered.

For example, the City of Philadelphia recently stood up to Verizon and is now able start offering wifi services to the underserved city. However, this concession to Philly was given so that the state law would block all others munis from offering municipality services.

Godot? It's a shame that Verizon didn't fulfill its obligation to rewire the city, as stated in Bell Atlantic's 1996 press release with Lucent, discussing the Pennsylvania deployment — 12 million homes by 2000!:



http://newscenter.verizon.com/proactive/newsroom/release.vtml?id=37942&PROACTIVE_ID=cecdcdc6cecf7cacac5cecf7cfc5cececcc8c7cec6ccc9cfc5cf

"The fiber-to-the-curb architecture that Bell Atlantic will build is the next step in the company's ongoing, aggressive network modernization program. ...Bell Atlantic plans to begin its network upgrade in Philadelphia and southeaster Pennsylvania later this year. The company plans to expand this Full Service Network deployment to other key markets over the next three years. Ultimately, Bell Atlantic expects to serve most of the 12 million homes and small businesses across the mid-Atlantic region with switched broadband networks." (by 2000)

Point 9 Follow the Money, Chairman Martin — Customer-Funded Networks.

According to Chairman Martin, the Bell companies should be freed from undue regulation that stifle investment.

"We need to place all broadband providers on equal footing so that they can fairly compete in the marketplace. This means that we must treat all such providers in the same manner — free of undue regulation that can stifle infrastructure investment."

Once again the FCC's hasn't bothered to "follow the money" and investigate who exactly has been doing the funding of broadband. It has NOT been the Bell companies but the customers, based on changes in state laws.

For example, in Pennsylvania, as we have documented, Verizon PA received massive financial incentives that did not end up in the wiring that was promised but in the pockets of the parent company, Verizon. By 2004, it is estimated that Verizon PA received over \$4 billion dollars in the form of higher rates and tax deductions for fiber-optic deployments — That's over \$1000 a household and counting.

We have pointed out in other FCC filings, New Networks Institute estimates that America's phone customers were charged over \$120 billion in the form of higher phone rates and massive tax write-offs for networks the customers never received.

The idea that the FCC has ignored any calls for investigations into the actual funding of broadband, and yet continues to exclaim that we now need less regulation for infrastructure investment, shows how the lack of data collection and analysis can have adverse reactions on public policy.



Conclusion

Using bad data has harmed our economy, is closing out choice and innovation, and will continue to make America look through rose-colored-biased glasses. Teletruth's patriotism is to the economy, and to the truth-about broadband, not to some political agenda. We're not number 1. We're 12th or 16th and making claims otherwise is simply hiding what America is doing – allowing the monopolies to deliver inferior services and not holding these companies accountable for a decade of deception. America has a dirt road, not an information superhighway, as compared to other countries that have used the government regulatory system and markets effectively. Free market in America has become synonymous with giving the phone companies what they want at the customer's expense.

Making America number 1 in broadband through actions, not rhetoric, is Teletruth's goal. Will this FCC step up to task at hand and fix its data collection and analysis?

Bruce Kushnick, Chairman, Teletruth
Executive Director, New Networks Institute

Tom Allibone, Director of Audits, Teletruth
President, LTC Consulting

None of this is new to the FCC. We've filed about the topic of broadband and the data supplied by the FCC. To see out filings on this (since 1998)

See: <http://www.newnetworks.com/Collected%20Broadband%20Information.htm>