

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Development of Nationwide Broadband)	
Data to Evaluate Reasonable and Timely)	
Deployment of Advanced Service to All)	WC Docket No. 07-38
Americans, Improvement of Wireless)	
Broadband Subscribership Data, and)	
Development of Data on Interconnected)	
Voice over Internet Protocol Subscribership)	

**COMMENTS OF
THE ALLIANCE FOR PUBLIC TECHNOLOGY**

I. Introduction

The Alliance for Public Technology (APT) welcomes the opportunity to provide comments on the critical issues regarding the Commission’s measurement of broadband deployment in the United States, and to discuss the need for more detailed data collection tactics. APT is a non-profit, membership organization based in Washington, D.C. concerned with fostering affordable, useable access to information and communications services and technologies for all people. Through its membership of consumer and public interest groups, unions, and individuals, some of whom historically have been left out of the Information Age, APT represents millions of Americans, including the elderly, minorities, low-income, rural and urban populations and people with disabilities. APT’s mission is to promote deployment of advanced telecommunications services in order to foster improved and more affordable health care for all citizens, expand educational opportunities for lifelong learning, enable people with disabilities to be more independent

and productive members of our society, create opportunities for jobs and economic advancement, make government more responsive to all citizens, and simplify access to technology. In addition, we can reduce urban traffic congestion, highway construction, pollution, and carbon emissions by encouraging the deployment of high speed residential broadband services capable of supporting telework, as well as the creation of business tools that minimize commuting and travel while enhancing productivity, efficiency, and e-commerce.

APT is the leading consumer group focused exclusively on broadband and advanced telecommunications technologies. APT was the driving force behind the concept of Section 706. APT also filed a petition with the Commission in 1998 seeking expedited action for the first 706 inquiry and has submitted comments in each subsequent 706 inquiry urging the Commission to use its authority to encourage investment in and deployment of advanced telecommunications capabilities. In this important proceeding, APT recommends:

- A new, evolving definition for advanced telecommunications capability;
- Adoption of new, detailed broadband assessment mechanisms; and
- Better analysis of the Commission's data.

II. What is “Advanced Telecommunications Capability?”

APT supports a new, evolving definition for advanced telecommunications capability.

While the Commission needs revamped broadband data collection methods before wholesale changes can be made, APT recommends that the Commission create a better definition for the broadband services it seeks to measure. The Commission's current

minimum threshold definition for broadband services, fixed at 200 kilobits per second (Kbps) upstream and downstream, has outlived its usefulness. Broadband speeds evolve rapidly. Fiber to the home deployments are offering upwards of 50 megabits per second (Mbps). Internet2, a consortium of colleges and universities working with government and industry to develop the next generation of Internet services, is planning to build a network with a capacity of 100 gigabits (Gbps).¹ A cable executive recently demonstrated a modem that could transmit data at 150 Mbps.²

The Alliance has consistently argued that the definition of advanced services must be dynamic and evolve with changes in technology. APT has and will always advocate for high capacity communications networks in both directions, not for entertainment and shopping, but for life-enhancing applications such as education and training, social services and health care.³ For example, real-time video sign language communication is providing the deaf and hard-of-hearing community with new opportunities for greater independence, integration and privacy. Using broadband connections, patients and providers can interact in a variety of ways to expand the reach of urban specialists and improve the quality of care, reducing costs and saving lives by eliminating the need for extensive travel. Therefore, APT supports the Commission in a more aggressive approach to defining advanced telecommunications services, which will encourage innovation.

The Telecommunications Act of 1996, and Section 706 in particular, recognized the evolving nature of technology and did not limit the definition of broadband to any speed or technology. With that in mind, the Commission should look at the entirety of

¹ Associated Press, Anick Jesdanun, *Researches Break Internet Speed Record*, April 24, 2007.

² http://www.upi.com/NewsTrack/Business/2007/05/09/new_modem_100_times_faster_than_dsl/

³ Alliance for Public Technology, April 4, 2000, Reply Comments to the FCC, CC Docket No.98-146, pg. 1.

the broadband marketplace to craft a definition that fits today's reality and can evolve quickly as technology moves forward. APT recommends that the FCC adopt a goal to have at least 50 percent of our citizens, regardless of their location or demographic status, connected to broadband services with 10 Mbps downstream and 1 Mbps upstream capacity by the end of 2010, with special care taken so that tribal lands are not excluded. As technology improves and consumer demand evolves, we should adjust the speed and percentage of penetration targets upward.⁴

III. The Commission should adopt new detailed broadband assessment mechanisms.

The FCC's current data collection system is completely inadequate to assess facilities-based competition in the deployment of residential advanced telecommunications services. The FCC should collect information on loop type, including traditional copper, coax, hybrid fiber-coax, hybrid fiber-copper, and fiber to the home (FTTH), as well as loop technology, such as ADSL and cable modem. The FCC should be able to identify by 9-digit zip code the relevant number of homes and small businesses served and passed by each loop type and served by each loop technology in order to assess the prospects for meaningful facilities-based competition and high speed broadband deployment.

APT supports the FCC's tiered measurement of broadband speeds with additional categories from 200 Kbps to 1 Mbps, 1Mbps to 3 Mbps, and moving upward into the multi-megabyte speeds now available from fiber, DSL and cable modem. Since the 200

⁴ *Achieving Universal Broadband: Policies for Stimulating Deployment and Demand*, Alliance for Public Technology, February 2007, pg. 25.

Kbps figure does not likely represent the actual broadband speeds enjoyed by today's subscribers, it is important to obtain specific information about how many Americans have access to services at 1, 5, and 10 or more megabits per second in each 9-digit zip code.

Once the Commission establishes new measurements, it should work with federal, state, local, and tribal officials to empower communities to create, from the bottom up, detailed maps of broadband availability. The Alliance urges the Commission to examine ConnectKentucky more closely as an extraordinarily successful model of broadband mapping to emulate. Working as a public-private partnership with broadband providers across the state, ConnectKentucky's mapping of broadband availability, and resulting identification and analysis of gaps in coverage, led to accelerated deployment for underserved areas. As the NPRM notes, ConnectKentucky also approached the communities that were found to have limited or no broadband service and worked with the local populations to identify demand and need. This information was shared with broadband providers who were then able to make informed business decisions about investing in the unserved areas where demand existed. As a result of this process, 92 percent of Kentucky households can obtain broadband service today, and Connect Kentucky believes that every single household will have access to some form of broadband by the end of 2007.⁵

Using the Connect Kentucky model, the Commission should perform a series of "case studies" across the country to identify deployment patterns in urban, suburban, and rural communities.

⁵ Connect Kentucky, *Broadband Adoption and Barriers: Results & Analysis from the ConnectKentucky Technology Assessment Study*, www.connectkentucky.com.

APT urges the Commission to seek the most comprehensive data possible so that broadband deployment solutions can be effectively tailored to serve the communities with the greatest need. One possible solution would be for the Commission to delegate the nationwide mapping responsibility to the National Telecommunications and Information Administration (NTIA). The NTIA could develop a map to view broadband data at the local level. This map could easily be developed with an open-source model, “whereby participating broadband consumers across the country could visit a website to test the speed of their Internet connection and voluntarily enter their zip code and monthly service price.”⁶ In some cases mapping technology, like Google maps, could help generate expansive and accurate nationwide data on broadband deployment. In other areas, like tribal lands, it may not be as effective.

IV. The Commission should conduct more thorough analysis of the collected broadband data.

It is insufficient to say, as the Commission has in its previous 706 and bi-annual broadband deployment reports, that deployment has successfully occurred if a 5-digit zip code has at least one subscriber of broadband service with speeds of at least 200 Kbps second. This narrow measurement does not offer the Commission, Congress, or the American people an accurate picture of broadband deployment.

The NPRM asks whether the Commission should identify underserved areas for further study and if so, should the Commission look at the full range of competitive services? APT believes that the Commission must closely examine as many of the

⁶ *Assessing Broadband in America: OECD and ITIF Broadband Rankings*, Information Technology and Innovation Foundation, April 2007, pg. 8.

factors affecting these underserved areas as possible. In addition, tribal lands and reservations should be their own study area.

Broadband services are no longer a convenience; they are increasingly an essential part of life and economic growth in present day society. Broadband services are as vital as transportation for consumer welfare and overall economic strength. Commercial transactions over the Internet are growing to the point that the business models for retail stores are being threatened. Workers are increasingly able to telecommute over broadband connections.⁷ E-government is providing important public services on line, such as registration for the Medicare Part D prescription drug benefit. Consumers are posting blogs, watching movies and making phone calls over broadband lines that are replacing traditional delivery mechanisms. Rural residents in Alaska are even receiving communion and attending 12-step self-help sessions over the Internet. Virtually every aspect of our lives can be significantly enhanced with access to connections with high-speed capability in both directions. Those consumers who do not have access to broadband services could well be left behind in the growing digital society. In fact, in the event of a natural disaster, a man-made emergency or a pandemic, broadband may be indispensable to our national security.

To permit us to more accurately measure the success of our nation's deployment efforts, identify gaps in the availability of high-speed access and ensure that consumers can make accurate, informed decisions about the broadband choices available to them, the Commission should adopt the following recommendations.

⁷ This is especially true of people with disabilities and the growing population of older adults who are remaining in the workforce longer than ever before.

- Collect data based on the exact number of subscribers in each 9-digit zip code. The current system, which uses one subscriber in a 5-digit zip code, is inadequate and misleading.
- The FCC should collect data on the number of homes passed with high-speed services. The availability of broadband connections to the home is essential to a community's quality of life today, regardless of the level of subscribers.
- The FCC should make use of commercial databases and services to augment its own data, but not rely exclusively on private sources. Government resources, such as NTIA, the Bureau of the Census and the GAO should be considered as well.
- APT supports the development of an automated voluntary reporting mechanism for consumers to inform the FCC about the state of broadband in their communities.
- The Commission should analyze broadband prices, looking for discrepancies between zip codes. Where inequities are found, they should be addressed.

Conclusion

APT commends the Commission for its commitment to broadband deployment and urges immediate action to continue that progress so all Americans can enjoy the benefits of advanced telecommunications technology. The Commission should update its broadband definition and collect better data both on the demographic aspects of

deployment and the types of services/speeds currently obtained by all sectors of our nation. This improved information will help speed the deployment of advanced services to all Americans. Otherwise, we risk becoming a nation of gated digital communities.

Respectfully submitted,

/s/

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