

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of  
High-Cost Universal Service Support  
Federal-State Joint Board on Universal Service

WC Docket No. 05-337  
CC Docket No. 96-45

**COMMENTS OF THE INFORMATION TECHNOLOGY INDUSTRY COUNCIL**

April 17, 2008

**INTRODUCTION AND SUMMARY**

The Information Technology Industry Council (ITI) represents over forty of the nation's leading information technology companies, including computer hardware and software, Internet services, and wireline and wireless networking companies.<sup>1</sup> ITI is the voice of the high tech community, advocating policies that advance U.S. leadership in technology and innovation, open access to new and emerging markets, support e-commerce expansion, protect consumer choice, and enhance global competition.

ITI welcomes the opportunity to provide comments in this matter of great importance to the information technology sector and supports the Commission's efforts to reform the Universal Service Fund.<sup>2</sup> ITI's members are at the forefront of developing and manufacturing the

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<sup>1</sup> For more information on ITI, including a list of its members, please visit <http://www.itic.org/about.php>.

<sup>2</sup> *Federal-State Joint Board on Universal Service*, WC Docket No. 05-337, CC Docket No. 96-45, Notice of Proposed Rulemaking, FCC 08-4 (*Identical Support Rule NPRM*), FCC 08-5 (*Reverse Auctions NPRM*), FCC 08-22 (*Joint Board Comprehensive Reform NPRM*), (rel. Jan. 29, 2008) ("NPRM").

technologies and Internet services that are bringing cutting edge broadband innovations to the American public.

Unfortunately, America faces a lingering broadband gap, just as Internet Protocol based broadband networks are rapidly displacing circuit-switched voice networks. Without adequate reform of the Universal Service system, America will continue failing to achieve the innovation infrastructure necessary for all Americans to compete globally and fully participate in the digital era. As the Commission works to achieve its essential Universal Service goals, it should consider the need for regulatory certainty and stability, as well as the importance of allowing new technologies an opportunity to develop and thrive.

Ideally, comprehensive reform of the universal service fund would require immediate transition to a system whereby support is efficiently distributed in a fully technology and competitively neutral manner based on market forces. An efficient funding system would be sustainable, technology and competitively neutral among all players, and minimize the suppression of consumer demand. Government funds would not be used to skew a competitive outcome; rather, reverse auctions and similar market-based mechanisms would be implemented to ensure that funds are distributed in the most efficient manner to subsidize facilities-based providers of high-speed broadband networks (not differentiated based on the type of technology used to provide broadband service).

If the Commission, however, finds that fully competitive and technology neutral universal service reform is not immediately practicable, it should consider interim reform measures to transition support from other fund components to broadband over a set period of five years with a hard transition date. This brief transition period will enable traditionally subsidized

providers to prepare for a comprehensive technology and competitively neutral regime. In support of these goals, the Commission should:

- Recognize broadband as a supported service and phase out support for all other high-cost services;
- Create a technology and competitively neutral, high-speed broadband fund;
- Support only high speed networks;
- Limit funds to the most efficient provider(s) of facilities-based, high-speed broadband networks in unserved and underserved areas;
- Use reverse auctions or similar market-based mechanisms to ensure that funds are distributed in the most efficient manner; and
- Cap the *overall* size of the fund and maintain the identical support rule (or avoid any sort of wireless-only cap).

Adherence to these principles will enable the Commission to target universal service funds to make high-quality, affordable broadband service available in the most efficient manner while continuing to foster investment and innovation.

## **TODAY'S UNIVERSAL SERVICE CHALLENGE**

### **I. IP-Based Networks are Rapidly Displacing Circuit-Switched Voice Networks**

Broadband connectivity allows consumers to be connected to the Internet through wired or wireless networks, using a variety of devices in a mobile, stationary or portable manner to enjoy voice, video, and data services. Wider availability and faster speeds increase the value of broadband connectivity to the American public, with substantial benefits to productivity, education, health care and more. In order to fully realize these benefits, the United States must focus on facilitating a universally available 21<sup>st</sup> century broadband infrastructure.

## II. Granular Data Reveals a Lingering Broadband Gap

The Commission has taken positive steps to facilitate further broadband deployment, and market forces will continue to drive investment in the infrastructure, applications, equipment and services that next generation broadband capability requires.<sup>3</sup> Nonetheless, some areas of the nation, particularly rural and low-income communities, still lack sufficient access to affordable, high-speed broadband or face hurdles to greater adoption of broadband.<sup>4</sup> Additionally, various surveys indicate that the United States, including areas of high population density, may not be keeping pace with the broadband access available in other nations, potentially harming our overall economic competitiveness.<sup>5</sup>

The Commission's own information regarding broadband deployment in the United States, while useful in some respects, has not provide sufficient data regarding the availability of, and subscription to, broadband in the U.S. While ITI commends the Commission for seeking a more accurate and comprehensive accounting of broadband deployment in the United States, we continue to urge the Commission to collect and report more granular, address level data on

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<sup>3</sup> *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, 17145, para. 278 (2003) (*Triennial Review Order*), corrected by Errata, 18 FCC Rcd 19020 (2003) (*Triennial Review Order Errata*), vacated and remanded in part, affirmed in part, *United States Telecom Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004) (*USTA II*) cert. denied, 125 S.Ct. 313, 316, 345 (2004).

<sup>4</sup> According to the Pew Internet Project's March 2006 study, about 42 percent of all American adults and only 25% of rural Americans have high-speed broadband connections at home. The Pew Internet Project found that only 1-2 percent of U.S. broadband users have fiber or T1-speed access. See John B. Horrigan, *Home Broadband Adoption 2006*, Pew Internet and American Life Project, May 2006: <[http://www.pewinternet.org/pdfs/PIP\\_Broadband\\_trends2006.pdf](http://www.pewinternet.org/pdfs/PIP_Broadband_trends2006.pdf)>

<sup>5</sup> The Organization for Economic Cooperation and Development ranks the U.S. 15th in broadband penetration, down from 4th in 2001 (based on the number of subscribers per 100 people). See OECD Directorate for Science, Technology, and Industry, *Broadband Statistics to December 2006*, April 2007: <[www.oecd.org/sti/ict/broadband](http://www.oecd.org/sti/ict/broadband)>.

Other countries, such as Korea, Japan, and the Netherlands are deploying fiber-to-the-home connections capable of delivering services of 100Mbps and beyond at costs similar to U.S. services providing only 1-6Mbps speeds. See Daniel K. Correa, *Assessing Broadband in America: OECD and ITIF Broadband Rankings*, Information Technology and Innovation Foundation, April 2007, at 2.

broadband availability, uptake, and price.<sup>6</sup> A geographically detailed inventory of availability, subscription uptake and price would offer an invaluable tool to help spur additional broadband investment and competition, simply because it would shine a bright light on the nation's successes and shortcomings in broadband deployment. Such information will also better guide the Commission's efforts to reform the Universal Service system. Notably, the Joint Board has also recommended improved mapping efforts, which we fully support.

## **UNIVERSAL SERVICE REFORM FOR THE BROADBAND ERA**

### **III. The Commission Should Recognize Broadband as the Supported Service**

As the first decade of the 21st century draws to a close, policymakers should seize the opportunity to enact concrete measures to ensure that all Americans have access to high quality, affordable broadband. The current narrowband focused universal service system has not succeeded in making high-quality, affordable broadband service universally available.

Universal service support mechanisms should be reformed in a technology and competitively neutral manner to target support to providers that are deploying and operating facilities-based, high-speed broadband networks in rural, insular, and high cost areas. All other high-cost support should be phased out as quickly as practicable (*e.g.*, establishing a price cap system for traditional RLEC support that rapidly declines over a set period of time). This requires elimination of the inefficient implicit and explicit subsidies and arbitrage scenarios currently embedded in the system.

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<sup>6</sup> ITI has previously urged the Commission to adopt two tiers of broadband: "basic" -- at least 1 Mbps downstream and 384 kbps upstream, and "robust" -- at least 8Mbps downstream and 768kbps upstream; and periodically update these tiers to keep pace with current applications and technologies. See ITI Comments in *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, Report and Order and Notice of Proposed Rulemaking, WC Docket No. 07-38, (rel. April 16th, 2007).

#### **IV. The Commission Should Create a Technology and Competitively Neutral High Speed Broadband Fund**

Ideally, comprehensive reform of the universal service fund requires that support is efficiently distributed in a fully competitive and technology neutral manner based on market forces. High quality, affordable, universal broadband network service is a critical societal goal for the US to stay competitive in the 21st century.

##### **A. Only High Speed Networks Should Be Eligible for Support**

Only deployment of high-speed broadband networks should be eligible for support. ITI believes such networks should be capable of delivering at least 1 megabit per second in at least one direction today, transitioning to services of at least 2.5 megabits per second in at least one direction within in 5 years (by no later than 2013). Thereafter the Commission should fund higher speeds and provide notice to carriers of the speeds they will need to achieve in order to be eligible for funding going forward. The Commission should also seek to raise eligible upstream speeds to levels that are more closely symmetrical to downstream speeds.

##### **B. Limit Funds to the Most Efficient Providers**

An efficient funding system is one that is sustainable, competitive and technology neutral across the board, and minimizes the suppression of consumer demand. It is *non-neutral* to give inefficient providers more funding, as this effectively rewards their high costs and provides incentive for them to sustain these high costs. Thus, government funds should no longer be used to skew a competitive outcome by steering investment toward inefficient legacy copper technology, and thus putting more advanced fiber, coaxial cable, and wireless technologies at an artificially-created competitive disadvantage. Rather, universal service support should be limited to the most efficient providers of facilities-based, high-speed broadband networks in rural,

insular, and high cost areas. All high-speed broadband providers should compete for funds on a level playing field regardless of the technology used to provide the subsidized service; those able to provide the subsidized service in the most efficient manner should receive the funds.

**C. Use Reverse Auctions to Ensure Efficient Distribution of Funds and Subsidize Deployment Only**

Reverse auctions or similar market-based mechanisms would ensure that funds are distributed in the most efficient manner to subsidize broadband network infrastructure and services. Reliance on market forces, competition, and innovation is the preferred and most efficient means of achieving the goal of high-quality, affordable, universal broadband. ITI supports the Joint Board’s recommendation for a “deployment-only” broadband fund – in the absence of evidence to justify support for ongoing maintenance and upgrading costs of broadband (*i.e.*, funds should be targeted to areas where broadband currently does not exist).

**D. Cap the Overall Size of the Fund and Maintain the Identical Support Rule**

Per the Joint Board’s recommendation, a cap<sup>7</sup> should be applied to control the *overall* size of the fund in a competitive and technology neutral manner that: 1) minimizes suppression of consumer demand; and 2) does not skew investment toward inefficient legacy copper technology and against more advanced fiber, coaxial cable, and wireless technologies.

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<sup>7</sup> Imposing a cap helps to ensure that the fund is economically sustainable. As ITI has noted in the past, the fund’s contribution methodology should be reformed and transitioned to a numbers or connections approach to further ensure the broader goal of economic sustainability. Under a numbers or connections approach, a fee would be assigned based on each working North American Numbering Plan Number or each connection a consumer has such as their telephone or broadband connection. The Commission should not levy fees on non-interconnected applications or services. See ITI comments in *Universal Service Contribution Methodology; Federal-State Joint Board on Universal Service; 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms; Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990; Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size; Number Resource Optimization; Telephone Number Portability; Truth-in-Billing and Billing Format; IP-Enabled Services*, Report and Order and Notice of Proposed Rulemaking, WC Docket No. 06-122, ¶¶ 65-70 (rel. June 27, 2006)

The Commission should maintain the identical support rule and avoid any form of CETC- cap, as it effectively singles out wireless carriers. Elimination of the identical support rule would further skew funds toward high-cost and more inefficient wireline services, while competitively disadvantaging lower-cost wireless services. Thus, a wireless cap – while it may be competitively neutral among one subset of broadband providers (wireless) – is not competitive or technology neutral vis-à-vis the overall marketplace of broadband providers competing for USF monies.

In a market-based system, support would be awarded to those facilities-based, high-speed broadband network providers that can provide the supported service most efficiently (not differentiated based on type of technology used to provide that service). If the Commission eliminates the identical support rule, this decision should only be necessary for the short-term (on an interim basis), until the fund is 100 percent transitioned to broadband.

**E. If Immediate Transition to a Technology and Competitively Neutral System is Not Feasible, the Commission Should Consider Interim Transition Measures Over a Set Period of Time**

As noted above, comprehensive universal service reform ideally would require immediate transition to a system where support is efficiently distributed in a fully technology and competitively neutral manner. However, if the Commission finds that such reform is not immediately practicable, it should consider interim reform measures to transition support from other fund components to broadband over a set period of time.

If the Commission finds that comprehensive reform of universal service will require an interim transition period, then it should consider a set period during which traditional RLECs may require temporary support to prepare for a comprehensive competitive and technology

neutral distribution regime. The Commission should set a hard date for the end of this interim transition period, and thus the start of a fully competitive and technology neutral distribution system. The proposed \$300 million is inadequate in the long term for a broadband fund.

In the short-term (for a clearly defined and limited period), support should be transitioned from other high-cost fund components to the broadband fund. The Commission should adopt specific benchmark percentages (*e.g.*, 20 percent per year for 5 years) for phasing out all other high-cost support with a final hard transition date. Once the 100 percent benchmark is reached, monies from the broadband fund should be efficiently distributed in a fully competitive and technology neutral manner based on market forces to providers of facilities-based, high-speed broadband networks in rural, insular, and high cost areas. Again, reverse auctions and similar market-based mechanisms should be used to ensure that funds are distributed in the most efficient manner to subsidize broadband network infrastructure and services.

## CONCLUSION

ITI urges the Commission to address the growing problems with the Universal Service system by aggressively pursuing comprehensive reform and recognizing broadband as a supported service. The Commission should move to create a broadband fund that is competitively and technology neutral. This long overdue and necessary step will provide the regulatory certainty necessary to facilitate greater broadband deployment and foster continued investment in innovative services.

Respectfully Submitted,

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