Testimony of the Honorable Dave McCurdy
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Before the Senate Commerce, Science and Transportation Committee

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Mr. Chairman, I am pleased to accept your invitation to testify today on behalf of both the Electronic Industries Alliance (EIA) and the Telecommunications Industry Association (TIA).

As you know, EIA is an alliance of several trade associations representing nearly 1,300 companies from the full spectrum of U.S. technology manufacturers. Our member companies' products and services range from the smallest electronic components to the most complex systems used by government and industry. Among our Alliance associations, TIA represents the communications sector, providing a forum for over 600 member companies, the manufacturers and suppliers of products and services used in global communications. Many TIA members manufacture and supply products and services used in the deployment of the broadband infrastructure that enables the distribution of information in all its forms including video programming.

We believe that the objective of legislation before you should be to ensure that broadband networks and services operate in a minimal regulatory environment, which is critical for the continued deployment of broadband and innovation in both next-generation network facilities and the services they empower. Currently, there is a consensus among legislators and regulators that competition in the video services market is a good thing. We are in support of this consensus view and would like to see the momentum continued so that we achieve facilities-based competition in the interest of both producers and consumers.

Benefits of Competition

The ability to offer voice, data, video, and other increasingly intermingled multimedia services over single or multiple infrastructures is becoming more prevalent. This means that competing infrastructure platforms will be able to provide essentially similar multimedia experiences. The question that Congress can help answer is: how long will it take to make these converged and competing services available to consumers at lower prices?

Integration, broadband technology communications infrastructure, and seamless mobility of communications and computing are expected to bring enormous economic and societal benefits to the U.S. and the world and improve the quality of life for all consumers. With that in mind, I think it is helpful to review the recent history of broadband technology.

The Evolution of Technology

The first evolution of broadband technology is from dial-up Internet access to current-generation broadband access. This is characterized as a shift from 56 kilobit-per-second narrowband capability to around 1.5 megabit-per-second ("Mbps") broadband capability – roughly a 20-fold capacity expansion.

Current-generation broadband technology has been deployed as the result of market-driven, deregulatory actions taken by Congress and the FCC. The federal government played a positive and significant role in promoting competition through deregulation. House passage of the Tauzin-Dingell bill[1] in February 2002 spurred three major decisions by the FCC that created a favorable environment for broadband investment: the cable modem decision of 2002[2], the Triennial Review Order of 2003[3],

[1] *See* United States. Cong. House of Representatives. Internet Freedom and Broadband Deployment Act of 2001. 107th Cong. H.R. 1542. Washington: GPO, 2001.
[2] *See* FCC GN Docket No. 00-185, CS Docket No. 02-52, (rel. March 15, 2002).
[3] *See* FCC CC Docket No. 01-338, (rel. Aug. 21, 2003).

and, most recently, the DSL decision of 2005[4]. Thus, the pro-competitive, deregulatory actions taken by this body and by the Commission have worked to encourage the first evolution of broadband technology.

The next growth spurt from current-generation to next-generation broadband access is characterized by yet another 20-fold increase in capacity, from 1.5 Mbps to as much as 25-30 Mbps. Both are massive expansions, but the second evolution to next-generation broadband is what allows for future growth. Among developed nations worldwide, the U.S. is behind in broadband deployment, and a second evolution is necessary to offer new and competing services to consumers.

Thanks to many technology drivers, current-generation broadband access is well on its way. Progress in technology deployment is often measured by the substitution of the new for the old. By this measurement, tremendous progress has been made in the deployment of current generation broadband, where U.S. subscribership increased by more than 700% from 5.1 million in 2000 to 39.1 million in 2005, while dial-up subscribership peaked at 47.3 million in 2002 and has since declined to about 35.2 million subscribers in 2006, the level that existed in 2000.[5]

The second broadband technology shift has just begun and involves a number of different technologies, including fiber to the premises (FTTP), fiber to the node (FTTN), fiber to the curb (FTTC), very high speed digital subscriber line (VDSL) for increasing broadband rates over telco platforms, high speed data interfaces for cable systems such as DOCSIS 2x and DOCSIS 3.0, and satellite and wireless broadband technologies, such as Wi-Fi and Wi-Max. All of these technologies hold great promise and are in various stages of development and deployment.

To best promote widespread deployment of next-generation technology, Congress should continue its pro-competitive, deregulatory stance. And indeed, you have already

[4] *See* FCC CC Docket No. 02-33. (rel. Sept. 23, 2005).
[5] *See* Telecommunications Industry Association , *Telecommunications Market Review and Forecast,* 2005.

taken steps in this direction. Most recently, with leadership from this Committee, Congress adopted a "hard date" for the DTV transition[6], which will release prime spectrum for the development of new wireless solutions. Congress has also encouraged the FCC to facilitate competition in the wireline voice market by applying the light hand of regulation for VoIP, which will enable cable companies and new entrants to compete with incumbent telephone companies.[7]

Deregulation in the video realm is the next logical step. Video is the application driver for the deployment of next-generation broadband because video uses an enormous amount of bandwidth. The telephone companies want to deploy video over new broadband networks to gain additional revenue as their core markets rapidly change. The local franchise process is a regulatory barrier to entry that impedes timely investment in new facilities and capabilities, slowing delivery of competitive and innovative services to consumers. This process requires service providers to negotiate and obtain individual and unique authorizations in thousands of jurisdictions. Federal legislation facilitating entry of new video providers will result in the deployment of more robust infrastructure, increased competition and consequent consumer benefit.

Problems with the Video Franchise Process

The local franchise process should be replaced with a uniform, federal system that will be managed by the FCC with limited input by existing local franchise authorities. We have spent a significant amount of time analyzing the effects of various local franchise requirements on next-generation broadband deployment, and I will summarize our thoughts in that regard here and provide a more detailed discussion in an annex to this testimony.

[6] *See* Deficit Reduction Act of 2005, Pub. L. no. 109-171, Title III Digital Television Transition and Public Safety.
[7] *See* FCC CC Docket No. 04-267. (adopted Nov. 9, 2004).

The first problem is delay by local franchise authorities in awarding franchises, as it adversely affects broadband deployment and video competition. Prompt entry into the video market is a key predicate to justifying construction of new broadband facilities, regardless of the network architecture, because the extra revenue potential of video (as well as ancillary offerings such as video on demand, HDTV, and personal video recording capability) is necessary to justify the multi-billion dollar investment such networks require.

The delayed entry of these competitive video providers results in less competition, less consumer welfare benefit, and delay in the second evolution of broadband technology. The solution is to automatically issue a franchise within a set period of time.

The second major problem with the current video franchise process is the practice of requiring new entrants to build out facilities beyond the area they find economical. In the case of a telephone company entering the video market, video deployment logically follows the existing wire center footprint, which typically does not follow franchise area boundaries. As a result, build-out requirements present entrants with a choice between building out an entire service area and incurring losses associated with providing service where it is not economic to do so, or not building out at all and instead choosing to use limited resources as a competitor in communities that do not have build-out requirements. The solution, we believe, is to establish a franchise process that does not require such counterproductive build-out requirements.

The third problem is the prevalence of extraneous obligations. Congress has already indicated its intent to limit payments for franchises by establishing in Title VI of the Communications Act that the 5% statutory franchise fee is a ceiling for payments "of any kind."[8] Yet, franchise authorities often seek payments that far exceed the 5% fee. These extraneous requirements increase costs and discourage the investment in next-generation broadband capability, thereby delaying the second evolution of broadband

[8] *See* U.S.C. Sec. 542(g)(1).

technology. The solution, we believe, is to prohibit the imposition of extraneous cost beyond 1% of gross revenues.

If a bill is enacted this year that adequately addresses these issues, as the Stevens-Inouye bill appears to do, we believe it will significantly accelerate deployment of next-generation broadband capability and capture the consumer welfare benefits of competition in the cable TV space.

We are also pleased that the Stevens-Inouye bill would make its streamlined franchise process available to existing cable TV providers, as we think this step is important to encourage investment by all providers and to spur healthy competition.

Municipal Broadband

As a long-standing principle, EIA and TIA support legislation that allows municipalities to deploy broadband and provide video services on a transparent and nondiscriminatory basis, thereby removing barriers for another competitor's entry into the marketplace. Particularly in fiber to the premises, municipalities were among the early leaders, although recent court decisions have slowed deployment in a number of states. Although we believe municipalities should consider all options before entering the telecom field, if municipal leaders feel that they must build their own networks in order to provide satisfactory broadband services to their constituents, they should have the freedom to make those decisions.

The draft bill before the Committee includes a statutory clarification to allow municipal entry, subject to a right of first refusal provision requiring consideration of private sector offers to provide desired services. While we encourage private sector deployment where possible, we are concerned that the right of first refusal requirement could create uncertainty and opportunities for litigation that delay broadband deployment for protracted periods.

Net Neutrality

Mr. Chairman, the issue of net neutrality has become a central focus of telecom reform in this Congress. Last week, the House overwhelmingly passed video franchise reform legislation that included an appropriate, cautious response to net neutrality concerns. EIA and TIA support the study element of the approach taken in the Stevens-Inouye bill to answer a number of important questions on this issue before legislating. However, if you determine the net neutrality study presently included in S. 2868 is insufficient, we urge this Committee to adopt the approach taken by the House. When no two stakeholders can agree on a definition of net neutrality, and no stakeholder can point to a tangible problem, policymaking with respect to the Internet must begin with the principle of "first do no harm." The net neutrality provision in H.R. 5252 establishes appropriate safeguards against problems that may arise, while doing no harm.

The value of a network is determined by its adoption by consumers. As leading manufacturers of network equipment, TIA and EIA member companies share an interest in ensuring that broadband networks are both deployed and used. If consumers are unsatisfied with the service they are receiving, the incentive to build new networks is lost. Network equipment generally goes unnoticed by the consumer, but it is clearly the consumer that drives its demand.

Accordingly, EIA, TIA and other members of the High-Tech Broadband Coalition ("HTBC") created the network *Connectivity Principles* several years ago and urged the adoption of the principles by federal policymakers. The FCC did so in 2004 under Chairman Michael Powell as principles of "Network Freedom," and again in the summer of 2005 under Chairman Kevin Martin as the Commission's "Policy Statement."

This spring, TIA determined that additional principles were necessary to support the interests of not only consumers but also unaffiliated content providers and therefore released new *Broadband Internet Access Connectivity Principles*. We attach a copy hereto for your use.

In short, TIA's *Broadband Internet Access Connectivity Principles* state that subscribers should be able to get the capacity for which they pay to connect to the Internet, access any content on the Internet as long as such content is lawful, use any applications they chose as long as such use does not hurt the network or other users, and attach to the network any device they choose as long as it does not harm the network. TIA believes that the FCC has jurisdiction to vigilantly monitor the broadband Internet access service market and expeditiously review any complaint of anticompetitive activity. Let me emphasize that we believe unaffiliated content providers, as consumers of bandwidth, should benefit from the *Connectivity Principles* just like retail subscribers.

It is the interest of some to go beyond these principles in an effort to safeguard against a problem that, at this point and in the foreseeable future, is non-existent. Advocates of stronger net neutrality language are clearly concerned about what they view as potential violations of net neutrality, as opposed to legitimate violations of net neutrality.

We find this troubling because legislating against potential misdeeds can have unfortunate unintended consequences, as we experienced after the 1996 Telecom Act when the FCC's use of an unbundling regime discouraged investment in local broadband access by incumbent local exchange carriers. This was an unintended negative consequence, and we are loathe to see similar outcomes from net neutrality legislation, however well-meaning the intent.

The lesson of unbundling is instructive. If policymakers take actions that disturb the business models of the companies deploying next-generation networks, the result may well be to delay or stop deployment. Then we all will suffer – the carriers, equipment vendors, content providers, and consumers.

To understand the thought process of a service provider building a new network to offer new advanced services and how its business model may be affected by strong net

neutrality regulations, one would have to determine what specifically the unaffiliated application providers want, what it will cost, and who will ultimately pay.

It may be that unaffiliated application providers want carriers to offer them the same bandwidth, speed, and additional capabilities that carriers offer retail subscribers. This could force the carriers to internalize the revenue lost to provisioning the networks to meet their demands, and ultimately force the consumer to make up for lost revenue.

While this is clearly a hypothetical, the net neutrality debate lives in the realm of hypothetical, and this is one possibility that does not bode well for consumers, service providers, or equipment providers. The system described above would surely weaken the incentive for service providers to deploy new advanced networks, thereby slowing investment in network equipment and the process through which consumers will be offered lower prices and more choices for digital services.

For Congress, the question of who will pay is undoubtedly the most important. Certainly, Congress does not want to require carriers to build excess capacity into their networks and pass the cost on to retail consumers. If this were to occur, most Americans who use Internet access for simple applications such as e-mail would carry an enormous, unfair burden. Clearly, if unaffiliated applications providers want network capability – bandwidth, speed, quality of service, and content – it is in the interest of the consumer that the unaffiliated application providers must pay for it.

We are unaware of any analysis that answers the questions of what the unaffiliated application providers want, what it will cost, and who will ultimately pay. Because of this lack of analysis, we support the study element of the approach taken in the Stevens-Inouye bill. If the Committee finds this approach insufficient, we suggest that the approach taken in the House bill is the appropriate alternative.

Conclusion

In conclusion, we feel that it is crucial for Congress to continue the momentum towards legislation that has been driven by consensus support for competition in the video services market. We believe that legislation consistent with the foregoing positions will increase investment and competition, create jobs, and enhance American competitiveness.

Regarding net neutrality, let me stress to this Committee how important it is that Congress should proceed only where there is consensus and continue to work on issues where consensus does not exist. You have an opportunity to achieve real success this year that will accelerate deployment of next-generation networks and benefit consumers through lower prices and improved services. Franchise reform, for example, is long overdue and is an area in which there is great consensus. Net neutrality, on the other hand, is an issue on which there is little consensus and even less clarity. I would propose that Congress continue to examine the net neutrality issue until it is clear what the problem is – if there in fact is a problem – and what the solution should be.

On behalf of both EIA and TIA, I urge the Committee to act quickly on video franchise reform and other issues on which there is a consensus so we can enact them this year. With such action, we can capture the benefits of accelerated broadband deployment and the consumer welfare benefits of competition now.

ANNEX 1: DETAILED DISCUSSION OF SPECIFIC PROBLEMS WITH THE CURRENT VIDEO FRANCHISE PROCESS

Problem 1: Delay

Unfortunately, the current video franchise process does not facilitate the entry of new video providers in a timely fashion. The franchise-by-franchise negotiation process established under the old monopoly framework is simply too slow and unwieldy to encourage the speedy entry of new providers. Verizon has filed documents with the FCC establishing that, to serve its entire target area with video service, it must negotiate between 2,000 and 3,500 franchises, excluding those in Texas.[9] Verizon began negotiations with 320 franchise authorities in November 2004 and, as of February 2005, had only 26 franchises other than those that were automatically issued in Texas.[10] For those franchises that have been successfully negotiated, negotiation time has ranged between two months and 17 months, with an average of 7.65 months.[11] The more important focus, however, is the negotiations in which Verizon has *not* been successful: in over 80% of the franchise negotiations Verizon initiated in November 2004, a franchise still has not been granted.[12]

BellSouth faces a similar situation, which may need to negotiate 1,000 franchises. As of last month, BellSouth had 20 franchises, requiring between 1.5 months and 32 months of negotiation time for each, at an average of 10 months.[13]

Moreover, this is not just a problem for the Regional Bell Operating Companies. Smaller companies such as Knology, Grande Communications, Guadeloupe Valley Telecommunications Cooperative and the Merton Group have all reported a similarly protracted period of franchise negotiations, ranging between 9 months and 30 months.[14]

The delayed entry of these competitive video providers results in less competition, less consumer welfare benefit, and delay in the second evolution of broadband technology.

Problem 2: Build Out

The second major problem with the current video franchise process is the practice of requiring new entrants to build out facilities beyond the area they find economical.

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[9] *See* FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising,* Feb 13, 2006, Attachment A at 5.
[10] *See* FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising*, Feb 13, 2006, Attachment A at 4.
[11] *See* FCC MB Docket No. 05-311, Comments of Verizon on Video Franchising, Feb 13, 2006, Attachment A, Exhibit 1.
[12] *See supra footnote 11.*
[13] *See* FCC MB Docket No. 05-311, *Comments of BellSouth Corporation and BellSouth Entertainment,* LLC, Feb. 13, 2006, at 10, 11.
[14] *See* FCC MB Docket No. 05-311, *Comments of the Fiber-to-the-Home Council,* Declarations of Felix Boccucci, Andy Sarwal, Jeff Mnick, Terrence McGarty.

For example, in the case of a telephone company entering the video market, video deployment logically follows the existing wire center footprint, which typically does not follow franchise area boundaries.[15] If a telephone company wants to offer video service throughout a wire center which covers 30% of a local franchise area, for example, the requirement to build out to the entire franchise area might well make it economically infeasible to provide video service *at all* within that franchise area.

This is not merely a whimsical example. We recently analyzed telephone company wire centers in Texas – where the characteristics of wire center deployment are typical of the nation on average – and found that only 3% of the wire centers completely overlap the geographic area of franchise areas.

Therefore, the requirement that new entrants build out to an entire franchise area will result, in many instances, in potential competitors delaying or even abandoning plans to enter new video markets.

Again, this is not just a Bell Company problem. The National Telecommunications Cooperative Association has reported that many of its members, which tend to be small rural telephone companies, want to get into the cable business but have reported problems with local franchising authorities – particularly unreasonably short build out periods or requirements to build outside the carrier's own service territory.[16]

The solution, we believe, is to establish a franchise process that does not require such counterproductive build out requirements.

Problem 3: Extraneous Obligations

The third major problem with the current video franchise process is the imposition of extraneous obligations that exceed 1% of revenues.

Congress has already indicated its intent to limit payments for franchises by establishing in Title VI of the Communications Act that the 5% statutory franchise fee is a ceiling for payments "of any kind."[17] Yet, franchise authorities often seek payments that far exceed the 5% fee by imposing requirements such as the assumption of all Public, Education and Government (PEG) costs incurred by the incumbent cable operator over the entire span of its service, the installation of institutional networks (I-Nets), the requirement to bury aerial plant, the assumption of applications and acceptance fees, etc.[18] These extraneous requirements increase costs and discourage the investment in next-generation broadband capability, thereby delaying the second evolution of

[15] *See* FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, at 40.
[16] *See* FCC MB Docket No. 05-311, *Comments of the National Telecommunications Cooperative Association*, Feb. 13, 2006, at 4,5.
[17] *See* U.S.C. Sec. 542(g)(1).
[18] *See* FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, at 57-75.

broadband technology. The solution, we believe, is to prohibit the imposition of extraneous cost beyond 1% of gross revenues.

APPENDIX

Broadband Internet Access Connectivity Principles

TIA has long supported the rights of broadband Internet access service consumers to connect to and utilize their choice of legal Internet content, applications and devices, while also recognizing the needs of service providers in a competitive market to manage the security and functionality of their networks. TIA reaffirms its pro-consumer principles, as outlined below, while continuing to observe that currently no significant evidence exists of these principles being abused in the marketplace. As such, it is not now necessary for the Federal Communications Commission to promulgate detailed rules in this area. Rather, the FCC should address any such problems on a case-by-case basis in the event they arise.

1. A competitive broadband Internet access market offers consumers choices with respect to "connectivity" – that is, the ability to access any lawful Internet content, and use any device, application, or service over the public Internet – so long as they do not harm the network. In particular:

   1.1. Consumers should receive meaningful information regarding their broadband Internet access service plans.

   1.2. Broadband Internet access consumers should have access to their choice of legal Internet content within the bandwidth limits and quality of service of their service plan.

   1.3. Broadband Internet access consumers should be able to run applications of their choice, within the bandwidth limits and quality of service of their service plans, as long as they do not harm the provider's network.

   1.4. Consumers should be permitted to attach any devices they choose to their broadband Internet access connection, so long as they operate within the bandwidth limits and quality of service of their service plans and do not harm the provider's network or enable theft of services.

2. A competitive broadband Internet access market also gives facilities-based broadband Internet access providers competitive incentives to undertake risky, new investments, while precluding anticompetitive behavior against unaffiliated businesses. In particular:

2.1. Broadband Internet access service providers should remain free to engage in pro-competitive network management techniques to alleviate congestion, ameliorate capacity constraints, and enable new services, consistent with the technical characteristics and requirements of the particular broadband platform.

2.2. Broadband Internet access service providers should remain free to offer additional services to supplement broadband Internet access, including speed tiers, quality of service tiers, security and spam services, network management services, as well as to enter into commercially negotiated agreements with unaffiliated parties for the provision of such additional services.

2.3. Such network management tools would enable operators to continue to optimize network efficiency, enable new services, and create incentives for continued build-out to meet increasing capacity demands.

2.4. Broadband service providers should also remain free to innovate in the deployment of managed services, such as packaged video programming, which utilize the same networks but are distinct from public Internet access services.

TIA believes that the FCC has jurisdiction to vigilantly monitor the broadband Internet access service market and expeditiously review any complaint of anticompetitive activity. However, as no significant evidence of a problem exists at this time, it is not now necessary for the FCC to promulgate detailed rules in this area. Rather, the FCC should address any such problems on a case-by-case basis in the event they arise.