

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
AT&T Petition to Launch a Proceeding)	GN Docket No. 12-353
Concerning the TDM-to-IP Transition)	
)	
)	

COMMENTS OF TECHNET

The Technology Network (“TechNet”), which represents America’s leading technology companies, strongly supports AT&T’s Petition to launch a proceeding to consider the regulatory issues raised by the “telephone industry’s continued transition from legacy transmission platforms and services to new services based fully on the Internet Protocol (‘IP’).”¹ Specifically, AT&T requests that the Commission consider conducting, for select wire centers chosen by incumbent local exchange carriers (“ILECs”) that elect to participate, trial runs of the transition to next-generation services, including the retirement of time-division multiplexed (“TDM”) facilities and offerings and their replacement with IP-based alternatives.² As detailed below, TechNet strongly supports AT&T’s petition and believes that the proposed trials will help the Commission better understand the technological and policy dimensions of the TDM-to-IP transition and, in the process, identify the regulatory reforms needed to promote consumer interests and upgrade America’s broadband infrastructure.

¹ See AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition (filed Nov. 7, 2012) (“Petition”); see also “Pleading Cycle Established on AT&T and NTCA Petitions,” GN Docket No. 12-353, DA 12-199 (Dec. 14, 2012).

² *Id.*

I. REPLACING THE COMMISSION’S ANTIQUATED TDM-BASED NETWORK REGULATIONS WITH AN UPDATED REGULATORY FRAMEWORK WILL DRIVE PRIVATE SECTOR INVESTMENT AND SPEED THE TDM-TO-IP TRANSITION.

In the *National Broadband Plan*, the Commission highlighted the benefits of IP technologies and fiber deployment, as well as the inefficiencies associated with maintaining parallel copper and fiber networks.³ Ultimately, the Commission concluded that it needed to “start considering the necessary elements of this [IP] transition in parallel with efforts to accelerate broadband deployment and adoption” in order to “ensure that the transition does not dramatically disrupt communications or make it difficult to achieve certain public policy goals.”⁴ Since these statements, the Commission has taken important steps to achieve the goals of the *National Broadband Plan*.⁵ The Commission’s next step should be to grant AT&T’s Petition.

³ “Connecting America: The National Broadband Plan,” Federal Communications Commission, at 48, 49, 50 (2010) (“*National Broadband Plan*”). The *National Broadband Plan* recognizes that “incumbent deployment of fiber offers consumers much greater potential speeds and service offerings that are not generally possible over copper loops.” *Id.* at 48-49. In addition, “fiber is generally less expensive to maintain than copper.” *Id.* at 49. As a result, “requiring an incumbent to maintain two networks ... reduces the incentive for incumbents to deploy” next-generation facilities and “siphon[s] investments away from new networks and services.” *Id.* at 49, 59. The *National Broadband Plan* further recognizes that regulations that “require certain carriers to maintain POTS—a requirement that is not sustainable—[would] lead to investments in assets that could be stranded,” and recommends that the Commission initiate a proceeding to “ensure that legacy regulations and services d[o] not become a drag on the transition to a more modern and efficient use of resources.” *Id.* at 59.

⁴ *Id.*

⁵ In 2011, the Commission reformed universal service and intercarrier compensation in the *ICC/USF Transformation Order*. See *Connect America Fund*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Red 17663 (2011). By redirecting universal service support to broadband, the new regime will enable providers to deliver broadband Internet access and other IP-enabled services to millions of Americans in high-cost areas for which there is no business case for private investment. In December 2012, the Commission announced the formation of an agency-wide Technology Transitions Policy Task Force, which will be tasked with ensuring “that our nation’s communications policies continue to drive a virtuous cycle of

As detailed below, AT&T's plan will help spur the nationwide modernization effort to all-IP infrastructure and in turn speed the nation's economic recovery.

The benefits of widespread IP-enabled networks and services cannot be overstated. Converged IP networks are simply more dynamic, versatile, resilient, and cost-efficient than legacy TDM networks.⁶ Further, high-speed IP-enabled broadband networks and services foster economic development, build strong communities, improve delivery of government services, and upgrade educational and health care systems. The proliferation of IP-enabled networks, and the continued autonomy of over-the-top services, will foster opportunities for innovation and expand services and products available to consumers. Specifically, as TechNet has outlined in prior studies, businesses and local economic development agencies rely on fast and reliable IP technologies and broadband networks as critical inputs for productivity.⁷ Likewise, state and local governments understand that IP technologies and broadband can help them deliver services to citizens at a lower cost and more effectively.⁸ In addition, individuals rely on IP-based

(footnote cont'd.)

innovation and investment, promote competition, and protect consumers.” “FCC Chairman Julius Genachowski Announces Formation of Technology Transition Policy Task Force,” FCC News Release (Dec. 10, 2012). Among other issues, the Task Force will coordinate the Commission's efforts on IP interconnection, resiliency of 21st century communications networks, business broadband competition, and consumer protection with a particular focus on voice services. *Id.*

⁶ IP-based technology uses a common language which enables seamless communication of voice, data, video, and Internet applications among various devices (TVs, phones, mobile phones, machines, laptops, tablets, etc.).

⁷ See “TechNet's 2012 State Broadband Index,” John B. Horrigan, PhD, TechNet Senior Fellow, Ellen Satterwhite, TechNet Innovation Fellow, at 19 (Dec. 2012).

⁸ See *id.*

services and technologies to communicate with family and friends, shop online, advance their educations, and manage their health care needs.⁹

By contrast, antiquated circuit-switched networks—which rely on last century’s TDM technology to transmit voice service—offer nowhere near the same level of functionality for consumers and businesses. Further, maintaining a legacy TDM network—with its local, regional, and national infrastructure and back-office support systems—is extremely expensive for service providers.¹⁰ As AT&T explains, “[b]y one estimate, ILECs collectively have devoted approximately half of their wireline capital expenditures in recent years to the upkeep of their legacy networks.”¹¹ These resources would be better spent on deploying broadband to unserved areas and upgrading existing networks to cutting-edge IP technologies. Unfortunately, the Commission’s antiquated rules make it difficult and costly to transition to IP technologies.¹²

Accordingly, TechNet strongly supports AT&T’s goal of eliminating the Commission’s costly TDM-regulatory regime and moving to a regulatory approach that speeds America’s Internet transformation and drives private sector investment in technology. As AT&T documents, allowing carriers to retire legacy TDM-based services and networks would free up

⁹ See *id.*

¹⁰ In the *National Broadband Plan*, the Commission recognized that “requiring an incumbent to maintain two networks ... reduces the incentive for incumbents to deploy” next-generation facilities and “siphon[s] investments away from new networks and services.” *National Broadband Plan* at 49, 59.

¹¹ Petition at 12.

¹² The Petition highlights several types of antiquated regulations that create regulatory uncertainty and deter investment (*i.e.*, Section 214 discontinuance requirements, notice-of-network-change rules, service-obligation rules, the unsettled regulatory status of IP-enabled services, equal access obligations, dialing parity, and legacy copper loop requirements). See *id.* at 13-19.

billions of dollars for these carriers to invest in next-generation IP services.¹³ Further, the less regulatory uncertainty a provider faces about the application of legacy regulatory burdens to next-generation IP services, the greater the incentive it will have to build and expand a broadband platform to support those services.¹⁴ Working together, the private sector and the Commission should address these issues and, with a balanced, light-touch regulatory framework, create appropriate incentives necessary for the build out of these smart IP networks. This will increase access to next-generation broadband services for more individuals and businesses, which in turn will create new jobs, stimulate powerful economic growth, and foster advances in health care and education.

II. AT&T'S TRIAL RUN CONCEPT PROVIDES A GREAT STARTING POINT FOR EVALUATING HOW TO SUCCESSFULLY TRANSITION TO IP TECHNOLOGIES NATIONWIDE.

The Commission should partner with industry to implement geographically-limited trial runs that will help guide the Commission's nationwide efforts to facilitate the IP transition.

TechNet strongly supports this proposal. The high tech and communications companies that TechNet represents routinely use trial runs and other forms of experimentation to test innovative, new technologies to determine if they are ready for wide-scale release. In this case, the trials will enable the FCC to carefully examine the complex policy and technical issues related to IP-enabled networks in a real world, real time setting. TechNet is confident that the

¹³ *See id.* at 12.

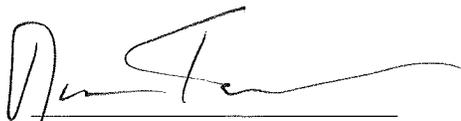
¹⁴ As AT&T explains, despite the private sector's \$1 trillion investment in broadband networks, millions of Americans in rural and other high-cost areas still lack access to broadband, and the ubiquitous deployment of IP facilities and services in these areas is not inevitable. *See* Petition at 4. Indeed, in many of these areas, the business case for broadband deployment is limited. And where that case is weakest, the regulatory environment will influence providers' future investment decisions. Accordingly, if the Commission wants to spur private investment in these areas, it should act now to facilitate the nationwide transition to an all-IP network.

Commission will observe that updating antiquated regulations in the trial markets will foster the rapid deployment of innovative, IP-enabled services and technology without any offsetting harm to consumers. Further, these trials will enable the Commission to consider, from the ground up, what, if any, new or old regulations would be needed to protect consumers and their choices (even if it is a “landline” service on an IP-based platform) during the nationwide IP transition. Policymakers should create a 21st century regulatory framework that identifies and addresses consumer protections in the digital IP age, such as ensuring public safety and promoting access to new technologies for underserved areas, while driving private sector investment in the technology ecosystem. Accordingly, TechNet urges the Commission to authorize such trial runs as soon as possible.

III. CONCLUSION

For the foregoing reasons, TechNet urges the Commission to grant AT&T’s Petition and work with ILECs to begin the proposed trial runs as soon as possible.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dan Turrentine", written over a horizontal line.

Dan Turrentine
Vice President, Government Affairs

January 28, 2013