

**Before the
Federal Communications Commission
Washington, D.C. 20554**

AT&T Petition to Launch a Proceeding)	
Concerning the TDM-to-IP Transition;)	
Petition of the National Telecommunications)	WC Docket No. 12-353
Cooperative Association for a Rulemaking to)	
Promote and Sustain the Ongoing TDM-to-IP)	
Evolution)	

Reply Comments of AARP

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David Certner
Legislative Counsel and
Legislative Policy Director
Government Affairs
AARP
601 E Street, NW
Washington, DC 20049

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Introduction and Overview

AARP is pleased to provide the Commission with these reply comments which address issues raised by various parties in opening comments.¹ The importance of the issues raised in the AT&T and NTCA petitions is evident from the substantial response—more than 90 sets of comments were filed, totaling over sixteen-hundred combined pages. These reply comments will address major issues raised in comments, including:

- The lack of evidence supporting the proposition that current regulation is impeding investment;
- The need for a partnership between state and federal policy makers when addressing TDM transition issues and the inappropriateness of unilateral FCC action and state preemption;
- The ongoing importance of regulatory oversight of interconnection—regardless of the underlying technology;
- The lack of support for the proposition that incumbent local exchange carriers (ILECs) are being forced by regulatory requirements to maintain “two parallel networks”;
- The significant problems with AT&T’s proposed trials; and
- The critical public health and safety role that continues to be fulfilled by TDM networks, and the importance of addressing these roles in the transition to IP networks.

In opening comments, AARP recommended that if the Commission was interested in starting another proceeding on the matters raised by AT&T, that the approach advocated by NTCA was superior.² However, the State Members of the Federal-State Joint Board on Universal Service (hereinafter, “State Members”) make the following recommendation in their opening comments:

¹ As was the case with AARPs’ opening comments, these reply comments were prepared with the assistance of Trevor R. Roycroft, Ph.D., a consultant to AARP.

² AARP Comments, p. 25.

The State Members recommend that, if the Commission wishes to comprehensively examine the network transition issues for regulated wireline telecommunications common carriers and their potential impact on the evolving concept of universal service, the Commission make the appropriate referral to the Federal-State Joint Board on Universal Service.³

AARP believes that this approach also has merit.

While this reply will address other issues that were raised in the opening comments, AARP does not pretend to address each and every issue raised in the opening comments. To the extent that these comments do not address specific issues raised by a party, this should not be taken as a concession of the issue by AARP.⁴ As the Commission considers the comments and reply comments in this proceeding, AARP urges the Commission to keep a sharp focus on its statutory obligations, and the obligations of the state commissions, as specified in both federal and state statutes. The balance of this introduction and overview will highlight some of the key issues raised in the comments on AT&T's petition. Following the introduction and overview, additional areas raised in the comments will be addressed in detail.

Past Technology Transitions have Not Negated Statutory Obligations

In opening comments, AARP discussed the fact that technology transition is nothing new—the PSTN has undergone transformations in the past, and this latest round of technology change does not justify abandoning the policy and statutory principles that have to date been associated with the PSTN.⁵ On this matter Western Telecommunications Association states “previous technological changes—for instance, the transformation from analog to digital

³ State Members Comments, p. 15.

⁴ Verizon and Verizon Wireless offer an agenda in their opening comments that is very similar to AT&T's petition, absent the trial wire center proposal. AARP's response to AT&T's petition in opening comments and these reply comments addresses many issues raised Verizon and Verizon Wireless' proposal. For example, Verizon and Verizon Wireless advocate preemption of state regulation. The discussion of preemption contained in AARP's opening and reply comments applies equally to Verizon and Verizon Wireless' position. However, Verizon and Verizon Wireless also indicate that they support the NTCA Petition (Verizon and Verizon Wireless Comments, p. 2). As discussed by AARP in opening and reply, NTCA's approach is superior to AT&T's.

⁵ AARP Comments, p. 3.

telephony—did not necessarily require substantial changes in the Communications Act or the Commission's Rules.”⁶ Interisle Consulting adds:

The PSTN is a legal, social, and business construct that has evolved over the past century and a half, relying over that time on a variety of technologies. It can continue to evolve to incorporate IP technology without any change to its core model. The Internet is something entirely different, a legal, social and business construct based on a very different core model, also relying on a variety of technologies. These differences remain fundamental even if both happen to make use of IP.⁷

Similarly, Hypercube states:

HyperCube also agrees with NTCA that the Commission cannot abandon its technology-neutral statutory obligation to regulate in the public interest, and that the Commission should implement a “smart regulation” approach to the changing communications environment. In fact, just like the MF [multifrequency] to SS7 migrations in the past, TDM-to-IP interconnection migrations should be treated as a transport/interconnection change, not as a piece of magic that erases all previous obligations.⁸

Sprint Nextel adds:

NTCA in its petition raises two valid and critically important points. First, it emphasizes that whatever regulatory structure is to govern the PSTN as it migrates from a TDM to IP-based infrastructure must uphold certain key principles: protecting consumers, promoting competition, and ensuring universal service. Second, NTCA states these “core objectives of the Act” and implementing regulations must apply “with equal force whether services are rendered through Class 5 TDM switches and copper networks or routers” or IP technologies. Sprint agrees that any proposed deregulation of interconnection requirements must be evaluated through the lens of statutory compliance. If consumers are harmed, if competition is compromised, or if legitimate universal service goals are threatened, the proposal must be rejected.⁹

As will be discussed further below, the statutory objectives are technology neutral. AT&T’s proposal appears to serve no useful purpose, other than stripping all regulatory oversight of AT&T’s operations. As such, it should be rejected.

⁶ Western Telecommunications Alliance Comments, p. iii.

⁷ Interisle Consulting Group LLC Comments, p. 1.

⁸ HyperCube Comments, p. 2.

⁹ Sprint Nextel Comments, p. 20.

Opening Comments Reveal Significant Public Interest Concerns with AT&T's Proposal

Many parties raise public interest concerns regarding the outcome that would result from granting AT&T's petition,¹⁰ and AARP strongly agrees that the public interest would not be served if the petition is granted.¹¹ As noted by Rural Broadband Policy Group (RBPG):

AT&T's requests are directly in opposition to our national commitment and the Commission's responsibility to advance Universal Service of telecommunications. Simply put, with this petition, AT&T seeks a no-regulation pass to conduct business as it pleases and prioritize its profits, not the public interest.¹²

NASUCA states:

NASUCA urges extreme caution in the consideration of AT&T's Petition. The public interest consequences and implications of the Petition indeed require addressing questions long deferred by the FCC, questions of, inter alia, cost allocation, jurisdictional separations, service classification (especially of voice over Internet protocol ["VoIP"] service), and retail rate setting, before the ultimate effects of the network transition can be evaluated.¹³

As will be discussed further below, granting AT&T's petition will result in the provisions of the federal Telecommunications Act being subverted, thus harming consumers, competition, and universal service. While there is no question that the IP-based technology transformation will and must go forward, the public interest will not be served by AT&T's plan.

Broadband "Market Forces" are not Sufficient to Satisfy the Statutory Objectives

Granting AT&T's request would leave it to "market forces" to ensure that the statutory objectives are achieved. As AARP discussed in comments, market power continues to be an

¹⁰ Free Press Comments, p. 3; HyperCube Comments, p. 6; Indiana Utility Regulatory Commission Comments, p. 6; MetroPCS Comments, p. 2; Nebraska Rural Independent Companies Comments, p. 38; Pennsylvania Public Utility Commission, p. 8; Sprint Nextel Comments, p. 27.

¹¹ AARP Comments, p. 14.

¹² RBPG Comments, p. 8.

¹³ NASUCA Comments, p. iii.

issue facing the Commission in the transition to broadband networks.¹⁴ This point was also raised by other parties. For example, T-Mobile states:

T-Mobile advocates for appropriate Commission oversight and regulation both during the transition to IP networks and after the process is complete. ILECs still control tens of thousands of legacy POIs [points of interconnection] deployed over the past century, affording them tremendous market power and the potential for anti-competitive behavior in a variety of arenas. Further, the declining number of end user lines served by ILECs has not diminished ILEC control over bottleneck wholesale network components, such as transport, special access, transit, and backhaul facilities. To ensure a well-functioning, competitive market, the Commission must continue to require ILECs to comply with Sections 201 and 251 interconnection requirements for the telecommunications transport over which all services, including unregulated information services, must ride.¹⁵

Ad Hoc Telecommunications Users states:

Current market conditions do not demonstrate that price-constraining competition has emerged (or can emerge) in the last-mile broadband services marketplace to a greater extent than has been the case for either the voice telephony market or the “legacy” data services market. In fact, in the National Broadband Plan, the FCC concluded that 91% of the Nation’s population will be served by either a monopoly or a duopoly market for broadband services.¹⁶

Free Press notes that AT&T’s claims about misplaced “monopoly-era” regulation are a red herring:

AT&T attempts to sell its vision for a world without telecom services by describing Title II’s obligations and consumer protections as “monopoly-era regulations.” But it is a complete myth to pretend that the common carrier provisions of the Act were only intended to apply to the former Bell Operating Companies’ (BOCs) provision of local telephony services. While some portions of Title II are explicitly concerned with market power (which, by the way, AT&T continues to possess in most of its markets), common carriage obligations are not in the Act simply to deal with market power issues. Consumer protection and universal service are critical national purposes that Congress gave the Commission the tools to ensure, through Title II.¹⁷

¹⁴ AARP Comments, p. 24.

¹⁵ T-Mobile Comments, p. 3.

¹⁶ Ad Hoc Telecommunications Users Comments, p. 8.

¹⁷ Free Press Comments, p. 13.

The lack of competition does not bode well for market forces' ability to deliver outcomes consistent with the statutory objectives, but as Free Press explains, the scope of Title II extends beyond market power concerns.

While parties point to options such as Skype and Facebook as providing competition,¹⁸ the fact remains that to utilize any over-the-top alternative, consumers must have a broadband connection. Choice among broadband providers is limited—most Americans face a duopoly at best.¹⁹ When considering AT&T's request, the Commission must recognize the limited potential of a broadband duopoly to successfully deliver an outcome that is consistent with the statutory objectives.

The Commission Must Not Lose Sight of the Impact of AT&T's Petition on Vulnerable Populations

As discussed in AARP's opening comments, older Americans have unique telecommunications needs, and emerging broadband technologies offer promise in the areas of telemedicine and independent living.²⁰ However, AARP also expressed concern regarding the impact of the technology transition on older consumers, especially with regard to the potential forced migration to wireless-only service.²¹ Similarly, Telecommunications for the Deaf and Hard of Hearing, Inc., et al. (hereinafter, "Consumer Groups"²²) points to the problems this

¹⁸ Verizon and Verizon Wireless Comments, pp. 13-14.

¹⁹ AARP Comments, p. 24; Community Competitors Coalition, third page; Free Press Comments, p. 11; Interisle Consulting Group LLC Comments, p. 4; Granite Telecommunications Comments, p. 6; NASUCA Comments, p. 20; Ad Hoc Telecommunications Users Comments, p. 8.

²⁰ AARP Comments, p. 1.

²¹ AARP Comments, pp. 17-18.

²² Consumer Groups consists of Telecommunications for the Deaf and Hard of Hearing, Inc. ("TDF"), National Association of the Deaf ("NAD"), Hearing Loss Association of America ("HLAA"), Association of Late-Deafened Adults, Inc. ("ALDA"), California Coalition of Agencies Serving the Deaf and Hard of Hearing ("CCASDHH"), Deaf and Hard of Hearing Consumer Advocacy Network ("DHHCAN"), and the Technology Access Program at Gallaudet University.

transition poses to individuals who have disabilities.²³ But Consumer Groups also point to basic issues with the TDM-to-IP transition that affect all consumers:

Sound quality and clarity over an IP network as opposed to the PSTN: Given claims that the sound quality often isn't as good over IP networks, will it be more difficult for hard of hearing people who use amplified hearing aid-compatible telephones to communicate?

Will basic telephone plans on the IP network be more expensive than what people are paying now? More expensive plans may have a disproportional impact on deaf and hard of hearing people who often earn less than hearing people.²⁴

As will be discussed below in more detail, the complexity of the transition requires that risks be minimized by the oversight of this Commission, and by state commissions, as the states are more familiar with localized and unique issues that may arise. As noted by NARUC, “the trials that are the heart of the AT&T petition cannot take place without consent of any affected State.”²⁵

Classification of Broadband and IP-Based Services as Telecommunications would Advance the Statutory Objectives

A fundamental problem facing this Commission as it moves forward with this most recent technology transition, and AT&T’s request, is the Commission’s ongoing failure to classify broadband and IP-based services as telecommunications. As AARP noted in the FCC’s recent contribution methodology docket “by failing to designate broadband service as a telecommunications service, the Commission continues to leave the waters unnecessarily muddy.

²³ Specific questions raised by Consumer Groups include how will an all-IP network support synchronization between audio and video for hard of hearing people who engage in speechreading? How will an all-IP network support the quality requirements for sign language video calls? What will be the impact on telecommunications access for deaf-blind people? How will an all IP network affect TTY users and their equipment? Consumer Groups Comments, pp. 6-7.

²⁴ Consumer Groups Comments, pp. 6-7.

²⁵ NARUC Comments, p. 20.

This lack of clarity leaves the Commission's policy direction overly vulnerable."²⁶ On the relevance of this issue to the instant proceeding, Free Press summarizes:

With its series of classification rulings, the Commission decided in effect to only apply Title II to the PSTN, a business model built on a transmission network utilizing TDM switching and SS7-based signaling. These ill-founded decisions mean that if an ILEC like AT&T moves from TDM to IP switching, as it long ago moved from Strowager switches to crossbars, somehow that ILEC is no longer offering telecommunications services. In other words, because of the Commission's flawed logic in the *Wireline Broadband Order*, we're one step away from a world where not one single home in America has access to a telecommunications service provider. AT&T is simply trying to get the Commission to do what AT&T could not get Congress to do: declare that the amendments to the Communications Act that Congress enacted in 1996 applying to *nothing*, ending all of the company's common carrier public interest obligations, while preserving all of the public interest benefits that AT&T enjoys as a common carrier.²⁷

Public Knowledge also addresses the overarching regulatory classification issue:

Public Knowledge submits that Title II is a clear source of authority that has always governed phone services. If those opposing the inclusion of basic social obligations in the next generation of phone service are not willing to accept the broad authority granted in Title II, they must explain how the Commission has any authority to carry out activities like administering phone numbers or distributing funds for build-out in under-served areas.²⁸

Other parties point to the appropriateness of the continued applicability of Title II obligations in an IP-based world. MetroPCS states that all IP-to-IP interconnection should fall under the purview of Section 251(a) of the 1996 Act, thus supporting the proposition that IP falls within the realm of telecommunications.²⁹ MetroPCS goes on to state that the transition to IP should not erase ILECs' obligations under 251(c), further stressing the appropriateness of telecommunications classification for IP-based services.³⁰ Likewise, Comptel states:

²⁶ AARP Comments *In the Matter of Universal Service Contribution Methodology, A National Broadband Plan For Our Future*. WC Docket No. 06-122, GN Docket No. 09-51, July 9, 2012, pp. 2-3.

²⁷ Free Press Comments, pp. 12-13, underline emphasis added, italic emphasis in original.

²⁸ Public Knowledge Comments, p. 27.

²⁹ MetroPCS Comments, p. 5.

³⁰ MetroPCS Comments, p. 6.

In the very least, the Commission must ensure that the ILEC has entered into SIP [session initiation protocol] interconnection agreements with each of the impacted competitors, which are compliant with Sections 251(c) and 252, publicly filed and available for opt-in, before being allowed to shut down its TDM network—even for a “test.”³¹

When viewing the Commission’s earlier decisions to classify broadband services as information services, it is clear that at the time that the Commission made these decisions, broadband was an emerging technology, and the PSTN was still the preeminent network. It was at least conceivable that the statutory objectives could be achieved given the Commission’s broadband/PSTN split, with the Commission imposing Title II requirements on the PSTN alone. However, now the Commission has determined that broadband will be the core service associated with satisfying statutory provisions:

Fixed and mobile broadband have become crucial to our nation’s economic growth, global competitiveness, and civic life. Businesses need broadband to attract customers and employees, job-seekers need broadband to find jobs and training, and children need broadband to get a world-class education. Broadband also helps lower the costs and improve the quality of health care, and enables people with disabilities and Americans of all income levels to participate more fully in society. Community anchor institutions, including schools and libraries, cannot achieve their critical purposes without access to robust broadband. Broadband-enabled jobs are critical to our nation’s economic recovery and long-term economic health, particularly in small towns, rural and insular areas, and Tribal lands.³²

The universal service challenge of our time is to ensure that all Americans are served by networks that support high-speed Internet access—in addition to basic voice service—where they live, work, and travel. . . .³³

³¹ Comptel Comments, p. 7, emphasis in the original. Peerless Networks advances a similar position at p. 16 of its comments.

³² *In the Matter of Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform – Mobility Fund*. WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, WC Docket No. 03-109, WT Docket No. 10-208. Report and Order and Further Notice of Proposed Rulemaking, November 18, 2011, ¶3. (Hereinafter *Connect America Fund Order*.)

³³ *Connect America Fund Order*, ¶5.

These evolving objectives correctly reflect the statutory requirements of making “available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nationwide, and world-wide wire and radio communication service with adequate facilities at reasonable charges. . . .”³⁴ While the specific technology associated with the legacy PSTN (in this case narrowband TDM technology) is being phased out, the statutory objectives are not being phased out, and the Commission must rectify the scope of its authority over broadband services and the statutory objectives.

The Commission is at a policy crossroads. If the Commission moves in the direction advocated by AT&T, telecommunications will effectively cease to exist, with the result being the inability of the Commission to fulfill the statutory objectives. As Free Press correctly observes, should the Commission follow AT&T’s advice federal telecommunications law will apply to “*nothing*.” If the Commission revisits the issue of broadband classification, and correctly concludes that broadband services are telecommunications, then policy and statutory objectives associated with consumer protection, universal service, and competition can be successfully fulfilled.³⁵

State Preemption is not a Reasonable Path Forward

AARP discussed the inappropriateness of the preemption of state authority advocated in AT&T’s petition.³⁶ Many parties raise the issue of preemption and point to the serious problems

³⁴ 47 U.S.C. §151.

³⁵ Should the Commission classify broadband as a telecommunications service, it is important to note that the Commission does not have to apply the entire existing regulatory superstructure. Rather, the Commission could exercise forbearance while retaining its authority to promote competition, universal service, and consumer protection. If broadband were classified as telecommunications the Commission should not exercise forbearance of Sections 201, 202, 208, 214, 222, 251(a), (b), and (c), 254, 255, and 256 of the Act.

³⁶ AARP Comments, pp. 14-16.

with AT&T's preemption proposal. State Members point to the lack of legal foundation for AT&T's preemption proposal:

The FCC lacks legal authority to preempt the States and grant the relief requested in the AT&T Petition. . . . Irrespective of whether such AT&T wireline telecommunications common carrier subsidiaries or affiliates are incumbent or competitive local exchange carriers (ILECs or CLECs), the States exercise appropriate jurisdiction and regulatory oversight over their intrastate operations and facilities. In addition . . . the States have the ultimate responsibility to ensure the preservation and existence of universal service for their citizens at reasonable and affordable rates, and to exercise appropriate regulatory oversight over the COLR obligations of such ILEC telecommunications utilities.³⁷

State Members go on to correctly point out that the states have independent statutory authority under Section 214(e)(2) of the 1996 Act.³⁸

The Ohio Public Utilities Commission also points to the inconsistency of AT&T's proposal with the Telecommunications Act:

[S]tates are able to provide the granularity necessary to maintain availability and affordability of telecommunications services. Accordingly, the Ohio Commission maintains that any new regulation that preempts or unduly interferes with states' regulatory oversight conflicts with this core objective of the Act. As the transition from TDM to IP progresses, the Ohio Commission urges the FCC to adopt only those regulations that recognize and preserve the states' vital regulatory oversight role.³⁹

NASUCA also challenges AT&T's views on the appropriateness of preemption:

Anything that might conceivably be an impediment to AT&T's business plan is to be preempted—and then eliminated. This includes longstanding state and federal policies that require telecom carriers to provide service upon a customer's request. AT&T says that such policies are no longer necessary with an all-IP network, given the supposed number and variety of providers of services over that network. Yet that will be small consolation to the consumer in the mountains, or on the plains, or indeed, in the low-income area of a large city, where no carrier wants to provide service, because it's not in

³⁷ State Members Comments, p. 4.

³⁸ State Members Comments, p. 8.

³⁹ Public Utilities Commission of Ohio Comments, p. 5.

the carrier's business plan. . . . this is contrary to the most fundamental provisions of the Telecommunications Act (and state telecom laws).⁴⁰

The Pennsylvania Public Utility Commission (PAPUC) offers a similar assessment:

The Pa. PUC shares the IP Petitions' focus on advancing the deployment of broadband IP-based networks. However, the Pa. PUC opposes these IP Petitions to the extent they rely upon preemption, forbearance, or questionable allegations about technology and network modernization. The Pa. PUC does not agree that technology alters the ongoing challenges of meshing market-based economic pricing and competition with traditional consumer protection and carrier of last resort (COLR) obligations. The Pa. PUC continues to believe that federal state joint jurisdiction policies addressing this ongoing tension and reflected in intercarrier compensation and universal service are not obviated by technological change, particularly given its uneven deployment in America today.⁴¹

NARUC points out, among other things, that AT&T provides absolutely no factual support for its claims regarding the need for FCC preemption of state authority:

Moreover, AT&T provides no empirical data to back up the “facts” alleged to justify preemption. Specifically, the carrier alleges, in a series of conclusory statements, that State “legacy service obligations” reduce “carriers’ financial incentives to invest in new, IP-based networks and services” and “therefore deter broadband investment.” But AT&T offers zero empirical evidence to back up this claim. The only evidence that is available indicates that incumbent local exchange carriers and the private sector have invested well over \$1.2 trillion in broadband networks and IP technology. This hardly suggests that the current regime has deterred investment in, and transition to IP technologies.⁴²

The National Association of Telecommunications Officers and Advisors, the National Association of Counties, The National League of Cities, and the United States Conference of Mayors (NATOA, et al.) point to the critical need for continuity of carrier of last resort obligations and the inappropriateness of the preemption of state authority:

While we support the transition to new, more advanced transmission technologies, we are concerned that without careful planning, some consumers may be left without any telephone service at all, while others may only have the single option of wireless voice service. As we have seen from the recent derecho storm in June 2012 and Superstorm Sandy, wireless services can and do fail. Regardless of the technology used, 911 services

⁴⁰ NASUCA Comments, pp. 22-23.

⁴¹ PAPUC Comments, p. 5.

⁴² NARUC Comments, p. 7.

must remain available to all residential and commercial consumers. As such, we reject industry calls to preempt state regulations, such as carrier of last resort (“COLR”) service requirements, based solely on expressions that consumers have multiple service options from multiple providers. The right to depend on reliable telephone service in times of emergencies must not be abandoned along with these copper networks.⁴³

Nebraska Rural Independent Companies (NRIC) points to the importance of a fact-based determination of the regulatory impediments that are alleged by an ILEC to be hindering broadband deployment:

If a state regulation does indeed impose an obsolete technical requirement that is a barrier to installation of more modern technology, AT&T can ask the state to withdraw that regulation based on a fact-driven demonstration as to why such regulation is adversely affecting the deployment of IP-based technology within AT&T's network. Rather than seek here to target any specific action in a state that conflicts with federal policy, AT&T apparently seeks global preemption of the entire field. To have the Commission eviscerate state commission roles that are respected under the Act would create needless conflicts at a time when both the Commission and state commissions should be acting together to continue the migration to IP-based networks.⁴⁴

Sprint addresses the role of the states in a general conclusion on the inappropriateness of AT&T's request:

FCC action on this matter is premature at this time, for at least three reasons. First, AT&T is already demonstrating that it is capable of implementing an IP deployment while concurrently operating its TDM network. Second, AT&T will continue to rely on its TDM network to provide voice service to the vast majority of its subscribers for the next several years. Third, it is largely the purview of State, rather than federal, regulators to determine the timing of the retirement of TDM networks.⁴⁵

Sprint continues:

[G]iven that State commissions are closer to the specific circumstances in their States than is the FCC, deferring to the States (at least initially) regarding the timing of the decommissioning of an incumbent LEC's TDM network would appear to be the most sensible approach.⁴⁶

⁴³ NATOA, et al. Comments, pp. 2-3.

⁴⁴ NRIC Comments, pp. 44-45.

⁴⁵ Sprint Nextel Comments, p. 9.

⁴⁶ Sprint Nextel Comments, p. 11.

AARP cannot overstress the importance of state and federal collaboration as the transition to broadband networks unfolds.⁴⁷ AT&T's proposal is contrary to the statutory foundation of universal service and will undermine the many decades of joint cooperation between state and federal authorities in the pursuit of universal service, competition, and consumer protection objectives.

Public Knowledge appropriately points to the volume and complexity of issues that would undermine the Commission's ability to single-handedly deal with all regulatory and policy matters:

Nor could the FCC realistically hope to absorb the volume of day-to-day issues that arise on a regular basis—from consumer complaints to interconnection issues to managing local 9-1-1 resources—that are currently handled on the local level. Accordingly, the Commission should resist calls to preempt local authority simply for the sake of having a “uniform” national policy.⁴⁸

XO points out that within the context of AT&T's proposed “experiment,” that preemption would add to the risk facing consumers and competitors:

AT&T seeks to have the Commission assert preemptive regulatory authority and run roughshod over the rights of states, all in the name of conducting this experiment. There would be no mechanism to undo the harms that would occur when AT&T's experiments prove unsuccessful or resources to put restore the markets to their former status.⁴⁹

⁴⁷ United States Telecom Association (USTA), while supporting the AT&T trials, indicates that “the AT&T Petition offers an opportunity for the Commission and state regulators to conduct informative, but geographically limited, trial runs for regulatory reform in discrete wire centers.” (USTA Comments, p. 4.) AARP certainly agrees that if any trials take place, that the states must be involved, however, USTA appears not to understand that granting AT&T's petition would eliminate the role of the states.

⁴⁸ Public Knowledge Comments, p. 10.

⁴⁹ XO Comments, p. 33.

In its comments (and petition) AT&T points to *Louisiana Public Service Commission* as providing a basis for preemption.⁵⁰ However, NARUC correctly points to the need for congressional authority for this Commission to regulate intrastate services:

In *Louisiana*, the FCC complained that if the FCC and the States apply different regulations to the same facilities, then the whole purpose of the federal regulations will be frustrated. The Court responded: “[w]hile we do not deprecate this concern, §152(b) precludes both the FCC and this Court from providing the relief sought. As we do often admonish, only Congress can rewrite this statute.”⁵¹

NARUC continues:

[T]he FCC has only recently declined “to preempt State obligations regarding voice service, including COLR obligations,” specifying, with respect to the same arguments raised by AT&T in its Petition, that:

Proponents of such preemption have failed to support their assertion that State service obligations are inconsistent with federal rules and burden the federal universal service mechanisms, nor have they identified any specific legacy service obligations that represent an unfunded mandate that make it infeasible for carriers to deploy broadband in high-cost areas. Carriers must therefore continue to satisfy State voice service requirements.⁵²

While preemption is inappropriate, and partnership with the states should be pursued, it is also important that the Commission ensure that competition, consumer protection and universal service objectives are satisfied for all Americans. As noted by Public Knowledge:

At the same time, in those places where state legislatures have preempted their own authority, the Commission must step in to ensure that the five fundamental goals of the Act [service to all Americans, interconnection and competition, consumer protection, network reliability, and public safety] are met. The FCC is not a substitute for local regulators, but it is a necessary backstop and last resort for all Americans.⁵³

⁵⁰ AT&T Comments, p. 4; AT&T Petition, p. 23.

⁵¹ NARUC Comments, p. 8.

⁵² NARUC Comments, p. 10, quoting the FCC’s *USF/ICC Transformation Order*, at ¶ 82, mimeo at 31.
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf

⁵³ Public Knowledge Comments, p. 10.

Public Knowledge’s comment regarding the backstop role played by the FCC is important to consider in light of a recommendation made by the California Public Utilities Commission (CPUC), which posits that the trials might be permitted under certain circumstances:

One would be for the FCC to hold such trials only in states that have no COLR requirements and do not require state approval for withdrawal of service.⁵⁴

AARP disagrees with CPUC and does not believe that it is appropriate to throw consumers under the bus in states that may have been induced to abandon COLR obligations. Furthermore, the data from trials in such states would provide little useful information for the jurisdictions that continue to enforce these obligations.

In summary, with regard to the TDM-to-IP transition, this Commission should not, and indeed cannot, attempt to “go it alone.” The states must be involved with the issues surrounding the transition, and the calls for preemption from AT&T and other parties must be rejected.

Parties Advocating Preemption Offer No Compelling Rationale

Of the parties that advocate for the FCC preempting state authority, the Commission should note that none offer a compelling reason for doing so. For example, Verizon and Verizon Wireless suggest that preemption of COLR obligations should be pursued on the basis that “state law is preempted if it ‘stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress’”.⁵⁵ If there is a conflict between COLR obligations and congressional universal service objectives, Verizon and Verizon Wireless do not indicate what it might be. As a general proposition, COLR obligations are highly complementary to the federal statutory objectives of making “available, so far as possible, to all the people of the United

⁵⁴ CPUC Comments, p. 12.

⁵⁵ Verizon and Verizon Wireless Comments, p. 31. Quoted matter within the Verizon quote from *Geier v. American Honda Motor Co.*, 529 U.S. 861, 873 (2000).

States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nationwide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”⁵⁶

TechFreedom bases its support for preemption based on a faulty understanding of AT&T’s plan:

AT&T seeks to operate its trial IP network (and, presumably, its eventual nationwide IP network) freed of regulatory restraints under Section 214 and state rules that might preclude it from discontinuing its copper network alongside its fiber network.⁵⁷

However, as discussed by AT&T in its comments, AT&T is not building a fiber network, but instead will rely on its “repurposed” copper loops.⁵⁸ Thus, AT&T has no plans to discontinue its copper network, undermining TechFreedom’s rationale for preemption. Furthermore, as discussed in more detail in another section of this reply, the FCC’s copper retirement rules allow copper loops to be retired once fiber is deployed. TechFreedom goes on to state that:

[T]he FCC could justify preempting state regulation in the IP Transition by declaring that promoting competition and doing away with unnecessary regulation are two of the agency’s primary objectives — both of which are benefited by facilitating, and expediting, the IP Transition.⁵⁹

TechFreedom’s claims regarding this Commission’s “primary objectives” overlook the technologically neutral statutory objectives discussed by AARP in opening comments and elsewhere in this reply.⁶⁰

Similarly to TechFreedom, the Free State Foundation indicates that:

⁵⁶ 47 U.S.C. §151.

⁵⁷ TechFreedom Comments, p. 1.

⁵⁸ AT&T Comments, p. 2.

⁵⁹ TechFreedom Comments, pp. 11-12.

⁶⁰ AARP Comments, p. 3.

[T]he Commission should be ready to issue declarations that preempt state regulations where technological and market developments demonstrate the inherently interstate nature of new types of IP-based services, as well as the impediments posed by state or local regulations.⁶¹

However, Free State Foundation, like TechFreedom, fails to identify a single impediment posed by state or local regulation. Free State continues that “to ensure that IP-enabled services can successfully operate through the channels of interstate commerce, the Commission should exercise its preemptive authority where needed to ensure statutory goals are achieved.”⁶² There is nothing stopping IP-enabled services from following the channels of “interstate commerce” today, however, stripping the states of their ability to oversee critical statutory and public policy objectives will interfere with commerce at the state level, as well as public health and safety. Free State also provides a long discussion of the potential role of forbearance authority to implement AT&T’s proposed trials. As noted by NARUC, however, “the FCC’s forbearance authority. . . does not provide a basis for preempting State law. The provision specifies that the FCC can forbear ‘from applying . . . any provision of this chapter to a telecommunications carrier or telecommunications service.’ Forbearance allows the FCC to stop applying only “provisions of this chapter” (i.e., Title II of the Act).”⁶³

In conclusion on the issue of preemption, AARP finds significant support for its position that preemption is inappropriate and would generate substantial harms. No party offers any compelling evidence that preemption would benefit technology transition or promote the statutory objectives.

⁶¹ Free State Foundation Comments, p. 7.

⁶² Free State Foundation Comments, p. 10.

⁶³ NARUC Comments, p. 6.

TDM Technology Continues to Play a Critical Public Safety Role

AARP pointed to the important public safety implications of TDM technology and urged caution regarding AT&T's proposed wire center "trials."⁶⁴ Other parties express similar concerns.⁶⁵ Furthermore, beyond the obvious 911-related issues, AARP pointed out that there are technologies outside of the PSTN that rely on TDM technology that may be adversely affected by TDM retirement.⁶⁶ Other parties raise this issue, for example Harris Corporation points to the reliance of Federal Aviation Administration (FAA) air safety systems on TDM technology:

AT&T's proposal of selecting TDM Serving Wire Centers (SWCs) for IP transition and cessation of TDM services could cripple ongoing FAA NAS telecommunications services vital to national air traffic security. Essential FAA applications and services, reliant upon TDM, could be halted, leaving the FAA without feasible alternatives. If serving wire centers that provide the FAA with vital TDM services are selected for AT&T's experiment to exclude TDM services to customers, air travel in this nation could become less safe and secure.⁶⁷

Harris Corporation continues:

While efforts are being made through the FAA's "NextGen" Programs to upgrade the National Airspace System to communications interfaces based upon Internet Protocol (IP) standards, over 92% of FTI services continue to be TDM-based. Moreover, support for TDM technologies will be required for the foreseeable future until methods of replacing TDM-centric services and delivery of IP-based and digital services to remote sites can be achieved.⁶⁸

It would be unreasonable, to expect, for example, the FAA to update its nationwide systems to facilitate AT&T's trials.

⁶⁴ AARP Comments, pp. 9 & 19.

⁶⁵ CPUC Comments, p. 15; Massachusetts Department of Telecommunications and Cable Comments, pp. 3-4; NASUCA Comments, p. 2; NAURC Comments, p. 9; National Cable and Telecommunications Association Comments, p. 10; NECA and OPATSCO Comments, p. 11; Pennsylvania Public Utilities Commission Comments, p. 10; Public Knowledge Comments, p. 7; Rural Broadband Policy Group Comments, p. 10; State Members Comments, p. 12; T-Mobile Comments, p. 14; TechFreedom Comments, p. 8; Telecommunications Industry Association Comments, p. 3; Verizon and Verizon Wireless Comments, p. 3.

⁶⁶ AARP Comments, p. 13.

⁶⁷ Harris Corporation Comments, p. 2.

⁶⁸ *Id.*

Alcatel Lucent's comments illustrate localized and intertwined policy issues associated with the IP/TDM transition as they relate to public safety and competition. In its comments Alcatel Lucent describes the efficiencies that can be gained through the replacement of localized IP-TDM gateways with regionalized interconnection:

In one real world example, Alcatel-Lucent performed an intensive three month long economic and technical analysis of one carrier's options for replacing its aging Class 5 infrastructure. *Existing regulations required the carrier to host an IP-TDM gateway at all existing central offices with either any active interconnect or 911 PSAP trunk. In today's IP voice market, the most common approach is to centralize such gateways (e.g. 4-8 locations nationwide).* Legacy regulatory requirements that have nothing to do with the efficiency of modern day IP networks essentially undermined the economic analysis, as the capital and operating expenses for large numbers of widely distributed, lower capacity gateways was much, much higher than a more scalable, centralized approach.⁶⁹

Of particular interest in this story are the policy issues surrounding the IP-TDM gateways. The key question here, be it the current issue of placing an IP-TDM gateway for a 911 trunk or a point of interconnection, or a future fully IP-based gateway connecting 911 trunks or interconnection, is whether it is reasonable policy to allow the high degree of centralization that Alcatel Lucent indicates is most economical. For example, what would be the impact on localized 911 facilities if local 911 calls had to be hauled to interconnection points that were hundreds or thousands of miles away? This might be more cost-effective and improve a carrier's bottom line, but such an approach would introduce risks. Network failures induced by natural or man-made disasters in one part of the nation might negatively impact access to emergency facilities in multiple areas of the nation. Alternatively, requiring interconnecting parties, such as localized or regional competitive local exchange carriers (CLECs) or regional wireless carriers, to haul traffic to regionalized or national interconnection points could impact carrier costs,

⁶⁹ Alcatel Lucent Comments, p. 16, emphasis added.

competition, and service quality. Just because it is cost effective to configure a technology in a particular manner does not mean that the configuration is in the public interest. Alcatel Lucent illustrates the need for oversight and the input of state and local entities, as well as other interested parties.

On the other hand, TechFreedom is dismissive of concerns regarding network resiliency and the technology transition:

In the era of a true monopoly telecom network the government simply mandated that Ma Bell build its network to a certain level of resiliency, and the costs were borne by all users in the form of higher rates. In an era of competition, that approach is no longer tenable: Shackle telecom providers with the costs of maintaining the copper network, and consumers will simply flee to cheaper providers, leaving an ever-shrinking customer base to bear an increasing share of the legacy network's costs.⁷⁰

Ignoring the fact that state regulators have addressed service quality in markets with competition for years, it is astonishing to find this glib assessment of the lack of importance of network reliability in light of the recent experience of Superstorm Sandy, and the insight provided by the Commission's *Derecho Report*. The point that TechFreedom misses is that going forward, regardless of the transmission technique associated with the public networks of the future, network reliability, including backup power systems, must be appropriately addressed. Network reliability will continue to be a critical policy issue precisely because of externalities. Left to itself, the market will fail to deliver the socially optimal levels of network reliability, access to emergency services, and backup power. A consumer might be tempted to purchase a low-quality, low-cost network service that does not provide these service components, but their decision will have spillover effects. If my neighbor cannot reach 911 when their house is on fire because they have chosen a "low cost" communications alternative, my property is also placed at

⁷⁰ TechFreedom Comments, p. 9.

risk. The solution is to ensure that all services meet minimum performance standards with regard to access to emergency services. Furthermore, this is not a “copper” issue as TechFreedom asserts, and unless action is taken, the vital public safety role of telecommunications in emergency situations will vanish to the detriment of society. Will there be costs associated with, for example, assuring that consumers have reliable access to emergency services during the very periods when grid power is more likely to be out? Certainly—and it is up to this Commission, the state commissions, and local officials to ensure that the network reliability, access to emergency services, and backup power systems associated with future networks are adequate, and that the costs are equitably recovered.

The technology transformation to an IP-based platform does not absolve this Commission (or the states) of their responsibility to ensure that the public telecommunications network is reliable and delivers adequate service in light of public safety concerns, not to mention the growing issue of the reliability of broadband, which is becoming an essential service to many households. For example, on or around January 22, 2013 AT&T’s U-Verse service experienced widespread outages, apparently due to a problem with a software upgrade.⁷¹ According to press reports, AT&T acknowledged the problem through its Twitter feed.⁷² Just because this outage affected an IP-based platform does not alter any of the concerns associated with service outages that have affected the PSTN. Furthermore, given that households may integrate broadband into a wide variety of household activities (home automation, video services, alarm systems, etc.) the performance of broadband networks certainly has an equal, if not greater, impact on consumers

⁷¹ DSLReports.com. "AT&T Suffering Major U-Verse Outage, Users Unable to Use TV, Voice or Internet Services," January 22, 2013. http://www.dslreports.com/shownews/ATT-UVerse-Suffering-Large-National-Outage-122841?utm_source=dlvr.it&utm_medium=twitter

⁷² “AT&T U-Verse Users Experience Outage,” *PCWorld.com*, January 23, 2013. <http://www.pcmag.com/article2/0,2817,2414618,00.asp>

than is the case for the TDM-based PSTN. Going forward, this Commission and the states must take actions that ensure that carriers providing broadband connections are held accountable for delivering reliable and high quality services.

Alleged Regulatory Impediments to Investment in Next-Generation Technologies

ILECs Report Robust Investment in their Comments

In opening comments AARP stressed that contrary to AT&T's assertions on the matter, there is no evidence that ILEC investment is being suppressed by regulation.⁷³ In fact, even AT&T lauded its ongoing investment efforts, and provided no evidence of regulatory impediments to investment.⁷⁴ Verizon and Verizon Wireless offer a detailed account of a robust ILEC investment agenda:

Verizon has invested heavily in transitioning from its decades-old copper-and-TDM-based networks to new fiber-based IP networks. Verizon has spent billions of dollars to deploy a fiber-to-the-premises network past nearly 18 million homes and businesses, offering voice, Internet, and video services. More than 14.5 million premises in Verizon's footprint are open for sale, and of those, more than 37 percent subscribe to FiOS Internet service.⁷⁵

AT&T's Project Lightspeed was a multibillion-dollar initiative to deploy more than 40,000 miles of new, fiber-optic facilities to enable AT&T to provide VoIP and Internet access services, as well as U-verse video service. AT&T recently announced a \$6 billion investment plan "to expand and upgrade its wireline network to bring robust IP broadband services" to more than 75 percent of its wireline footprint, "[a]s its traditional DSL broadband technology approaches the end of its life cycle." CenturyLink "continue[s] to invest in [its] fiber to the node . . . deployment," and expected its 2012 fiber investment, which included fiber-to-the-tower connections, to be approximately \$2.8 billion to \$2.9 billion. Frontier invested more than \$2 billion in the last three years to "enhanc[e] the existing outside plant by pushing fiber deeper into the network, enhanc[e] interoffice transport and expand[] the capability of [its] data backbone." Windstream expected to incur capital expenditures between \$950 million and \$1.05

⁷³ AARP Comments, pp. 5-7.

⁷⁴ AT&T Petition, pp. 3-4.

⁷⁵ Verizon and Verizon Wireless Comments, pp. 5-6.

billion in 2012, more than the \$702 million spent in 2011, “due to [its] significant investments in fiber-to-the-tower and other initiatives.” FairPoint has exceeded the capital expenditure commitments totaling more than \$260 million it was required to make in Maine and Vermont by March 31, 2011, and is on track to spend \$350.4 million in New Hampshire by March 31, 2015.⁷⁶

This review of ILEC investment history and plans, as framed by Verizon and Verizon Wireless, contradicts AT&T’s claims that regulation is impeding ILEC investment in advanced network technology.

Similarly, CenturyLink, while being generally supportive of AT&T’s petition, provides strong evidence that the technology transformation is not adversely affected by regulation, and also states that the planning horizon for the TDM-to-IP transition will extend over years:

The TDM-to-IP transition has begun. Last year, CenturyLink invested nearly \$3 billion in its network, including expenditures to enhance its broadband reach and expand fiber-based backhaul to mobile wireless cell sites. CenturyLink ended the third quarter of 2012 with more than 5.8 million broadband customers. In just that quarter, CenturyLink added nearly 155,000 broadband subscribers, enabled over 310,000 living units with fiber-to-the-node service (for a total of 6.8 million), completed construction of fiber backhaul facilities to nearly 1,400 wireless cell sites (for a total of 13,500), and expanded its Ethernet-over-copper footprint. Network migration to an IP platform continued in real time for many providers. . . . CenturyLink is no exception and continues to plan the migration of its TDM-based network equipment and facilities to IP in 37 states.

Nevertheless as an industry, *we are still in the early stages of the TDM-to-IP transition.* ILECs face the costly and daunting task of migrating TDM networks and systems that were developed over decades. In the case of CenturyLink, its existing local networks currently include approximately 3,800 circuit switches. Complete migration to IP will require the company to replace these switches with packet-based switches, extend IP functionality throughout the network, modify countless internal systems, and reconfigure its local and toll trunking network.⁷⁷

The progress (and challenges) described by CenturyLink do not jibe with AT&T’s view that regulatory constraints are hindering progress. Rather, CenturyLink illustrates the technological foundation of the transition, and the *technology-related* obstacles that ILECs face. These carriers

⁷⁶ Verizon and Verizon Wireless Comments, pp. 8-9.

⁷⁷ CenturyLink Comments, pp. 3-4, emphasis added.

provide no reasonable evidence that lifting regulatory constraints would mitigate the technology-transition challenges faced by ILECs.

AT&T on Regulation and Fiber Deployment

AT&T points to previous FCC decisions that prohibited broadband unbundling as helping to spur fiber deployment in the U.S. AT&T concludes that now is the time to eliminate the “regulatory underbrush” which AT&T alleges is hindering additional investment:

In Europe, for example, legacy unbundling rules have slowed investment in next-generation architectures and contributed to the relatively low fiber penetration rates there. Fortunately for U.S. consumers, the Commission has recognized since the 2003 Triennial Review Order that requirements such as forced-sharing obligations for packetized infrastructure suppress appropriate investment incentives and chill the deployment of advanced services without any commensurate benefit. The Commission should now eliminate the regulatory underbrush of other requirements that apply (or have been claimed to apply) in this context but that could stifle innovation and investment in next-generation services.⁷⁸

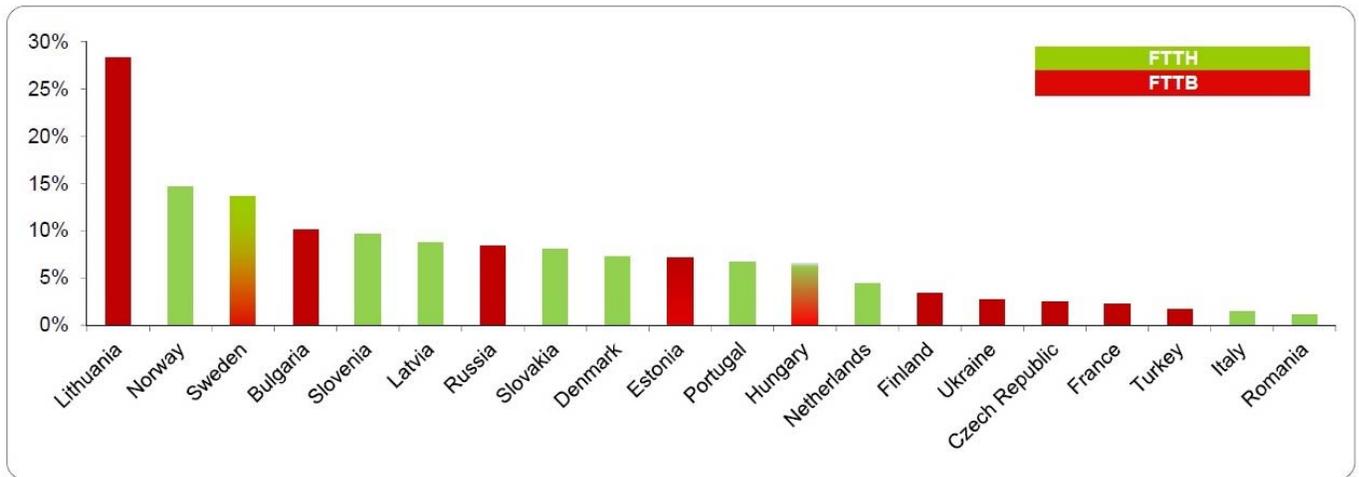
While it is true that fiber penetration in some European nations is lower than the U.S. average, AT&T’s fiber to the home (FTTH) deployment, *which amounts to zero*,⁷⁹ is well below that experienced in the European nations for which data is available. As illustrated in Figure 1, many European nations beat AT&T’s fiber deployment performance by a wide margin.⁸⁰

⁷⁸ AT&T Comments, pp. 6-7.

⁷⁹ AT&T’s U-Verse relies on AT&T’s “repurposed” copper distribution network (AT&T Comments, p. 2). The scope of AT&T FTTP deployment is not mentioned in its most recent Form 10-K. In fact, the word “fiber” does not appear in any of AT&T’s recent 10-Ks. AT&T indicated that it would deploy FTTP in new neighborhoods in a 2007 press release. The extent of that deployment must serve a tiny fraction of AT&T’s operating territory. See, “AT&T Selects Vendors for U-verse G-PON Fiber Deployment in New Residential Construction Areas.” <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=23962>

⁸⁰ From data available from Fiber to the Home Council Europe. http://www.ftthcouncil.eu/documents/Reports/Market_Data_December_2011.pdf

European Ranking – December 2011



Source: IDATE for FTTH Council Europe

Figure 1: Fiber to the Home Council Europe Data on Fiber to the Home (FTTH)/Fiber to the Building (FTTB) Deployment

While fiber to the home deployment in Europe certainly do not rival levels achieved in Japan and South Korea, which have achieved fiber deployment rates of, respectively, 87 and 67 percent,⁸¹ the data in Figure 1 shows an outcome for European nations that is superior to what AT&T has delivered its customers—even though AT&T is not required to unbundle its broadband facilities. Furthermore, if unbundling has somehow limited fiber-deployment incentives in Europe, as AT&T claims, AT&T must also explain how Japan and Korea have achieved their high levels of fiber deployment *given that both Japan and Korea require broadband and fiber unbundling*.⁸²

⁸¹ OECD FTTH/B deployment data, available at <http://www.oecd.org/internet/broadbandandtelecom/oecdbroadbandportal.htm>

⁸² See, for example, Robert W. Crandall, Jeffrey A. Eisenach, & Allan T. Ingraham, “The Long-Run Effects of Copper Unbundling and the Implications for Fiber,” March 2012, pp. 16-17. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2018929. AT&T cites this paper as supporting the proposition (Footnote continued on following page.)

Other than Verizon's FiOS deployment,⁸³ the business decisions of ILECs have not resulted in much next generation fiber-based broadband, even though that outcome was promised by the ILECs when they sought broadband unbundling relief.⁸⁴ Strip away the broadband unbundling obligations, argued the ILECs, and the floodgates of market entry and broadband investment will be opened—multiple competing broadband platforms will be available to every customer.⁸⁵ The FCC ultimately gave the ILEC industry exactly what the industry wanted. ILEC broadband facilities were classified as information services and freed from unbundling requirements. However, the widespread deployment of next generation fiber technologies (and robust broadband competition) have not emerged, and compared to other nations that continue to require broadband unbundling, the U.S. experiences higher broadband prices, lower broadband speeds, and lower broadband penetration.⁸⁶

Now, like Lucy in the classic Peanuts comic strip,⁸⁷ AT&T has again teed up the broadband investment “football” for this Commission. This time, AT&T's story goes, all that is needed to ensure the transition to next generation networks, and to encourage fiber deployment, is to kick away the “regulatory underbrush” of existing state and federal regulation of the PSTN. Only then, according to AT&T, will the floodgates of further investment be thrown open.

that broadband unbundling discourages fiber investment. The paper's authors, like AT&T, gloss over the experience in Japan and Korea.

⁸³ Verizon has deployed fiber much more extensively in its service area than has AT&T. FiOS is available to approximately 14.5 million homes across twelve states, as well as the District of Columbia. Verizon and Verizon Wireless Comments, p. 6. See also, Verizon Form 10-K for the year ending December 31, 2011, p. 8.

⁸⁴ For a clear statement of this position, see the Verizon-funded study by Robert S. Pindyck, “Mandatory Unbundling and Irreversible Investment in Telecom Networks,” NBER Working Paper 10287, February 2004. http://web.mit.edu/rpindyck/www/Papers/Mandatory_Unbundling.pdf

⁸⁵ TechFreedom, in its comments in this proceeding, renews the argument that the harms from unbundling outweigh any pro-competitive benefits (TechFreedom Comments, p. 6). TechFreedom offers no support for its claim.

⁸⁶ See, for example, *Next Generation Connectivity: A Review of Broadband Internet Transitions and Policy from Around the World*. Berkman Center for Internet and Society, February 2010. See also, data available at <http://www.oecd.org/sti/broadbandandtelecom/oecdbroadbandportal.htm>

⁸⁷ See, for example, http://3.bp.blogspot.com/Rz3S_fMoMrU/TmOEQu2bBLI/AAAAAAAAAC08/K0zUQx_pf68/s1600/trust.jpg

Unfortunately, the more likely outcome is that the FCC will find itself, like Charlie Brown, lying flat on its back. AT&T offers no proof of the connection between existing regulation and its alleged unwillingness to invest. Furthermore, Verizon's experience demonstrates that next generation networks based on fiber deployment can be achieved within the current regulatory environment. This Commission should decline AT&T's offer to kick away the "regulatory underbrush."

The Alleged "Regulatory Requirement" for ILECs to Maintain "Two Networks"

AT&T asserts in its comments, as it did in its petition, that absent Commission action, that gross inefficiencies will be introduced as ILECs will be required to operate "two networks."⁸⁸ Some commenters point to alleged regulatory requirements that compel ILECs to deploy two networks:

Current legacy regulations, which we believe have become outdated, *require incumbent local exchange carriers (ILECs) to maintain two networks* – a maintenance-heavy, legacy copper circuit-switched network that supports only traditional phone service and a next-generation, high-speed IP-based network.⁸⁹

Of course, there is no such requirement, and copper-based networks are utilized to deliver much more than "traditional phone service." ILECs continue to rely on copper as it offers the potential to provide high-speed data and video services. As noted by Alcatel Lucent in its comments, innovations such as "DSL Phantom Mode" enable gigabit speeds over traditional copper loops.⁹⁰

Thus, as the PSTN evolves, technological change is providing incentives for the continued

⁸⁸ AT&T Comments, p. 4; AT&T Petition, p. 2.

⁸⁹ Women Impacting Public Policy, et al., unnumbered page 8, emphasis added.

⁹⁰ Alcatel Lucent Comments, p. 2. See also, "Alcatel-Lucent's DSL Phantom Mode named 'Broadband Innovation of the Year'" http://www3.alcatel-lucent.com/wps/portal/!ut/p/kcxml/04_Sj9SPykyssy0xPLMnMz0vM0Y_QjzKLd4x3tXDUL8h2VAQAURh_Yw!!?LMSG_CABINET=Docs_and_Resource_Ctr&LMSG_CONTENT_FILE=News_Releases_2010/News_Article_00246.xml

reliance on traditional network components, such as copper distribution plant, resulting in a single network.

Several parties, in addition to AT&T, point to a discussion contained in the *National Broadband Plan* as indicating that the Commission recognizes the inefficiencies of requiring two networks.⁹¹ These commenters remove the Commission’s discussion in the *National Broadband Plan* from its context, resulting in a distorted interpretation. The passage in the *National Broadband Plan* to which AT&T and other parties point discusses the trade-offs between competition and efficiency and illustrates the problems that arise for competitors if copper is retired:

FCC rules permit incumbents that deploy fiber in their loops to “retire” or remove redundant outside-plant copper facilities after notifying competitive carriers that may be affected. Retirement of these copper facilities affects both existing broadband services and the ability of competitors to offer new services. There are countervailing concerns, however. Incumbent deployment of fiber offers consumers much greater potential speeds and service offerings that are not generally possible over copper loops. In addition, fiber is generally less expensive to maintain than copper. As a result, requiring an incumbent to maintain two networks—one copper and one fiber—would be costly, possibly inefficient and reduce the incentive for incumbents to deploy fiber facilities.

The FCC should ensure appropriate balance in copper retirement policies as part of developing a coherent and effective framework for evaluating its wholesale access policies generally.⁹²

Thus, the FCC states that *if* they were to require an incumbent to have two networks, there would be potential inefficiencies and higher costs—and that path was not taken. The risk that is introduced as a result of the FCC’s copper retirement policy is to competitors who want to utilize

⁹¹ AT&T Petition, p. 2; ITTA Comments, p. 9; TechFreedom Comments, p. 3; Technology Network Comments, p. 2; Telecommunications Industry Association Comments, p. 5; U.S. Chamber of Commerce Comments, p. 3; Verizon and Verizon Wireless Comments, p. 40.

⁹² *National Broadband Plan*, pp. 48-49.

copper-based unbundled network facilities. The bottom line is FCC rules already protect ILECs from having to maintain two networks.

Several parties point to additional factors that undermine the “two network requirement” argument. For example, Nebraska Rural Independent Companies (NRIC) state:

AT&T's claim that it is necessary for carriers to run two parallel networks operating at the same time during the conversion from TDM-to-IP evolves as further network investment and deployments take place *is inconsistent with the operational experience of NRIC's member companies*. Further, AT&T has not demonstrated the amount of investment needed to maintain parallel networks even assuming that two networks are required. In NRIC's member companies' experience, the evolution from TDM-to-IP allows carriers to retire one type of investment with a new, more efficient type of investment in an incremental rather than wholesale manner. This evolution occurs as a business case is developed for deployment, as depreciated or obsolete equipment is replaced, and as funding is available for investment in these technologies.⁹³

Other parties also point out that the transition to broadband has resulted in a single network.⁹⁴ In its comments, AT&T also illustrates that the transition to broadband has resulted in a “repurposing” of its existing network:

Providers are not simply infusing new technologies into their legacy networks, even though they may repurpose some piece parts of those networks (such as last-mile copper sub-loop facilities used in FTTN architectures).⁹⁵

Alternatively, Sprint Nextel states that even if AT&T is somehow operating “two parallel networks,” it does not appear to be undermining AT&T’s profitability:

AT&T asserts that operating both TDM and IP networks is “immensely expensive” and “exorbitantly expensive.” Once again, AT&T does not quantify such expenses or present any evidence to support these assertions. However, during the fourth quarter of last year, at a time when AT&T was operating both TDM and IP networks, it earned a profit of \$1.8 billion on revenues of \$14.9 billion for its wireline operations. Most competitive

⁹³ NRIC Comments, p. 16, emphasis added.

⁹⁴ New Network Institute Comments, p. 2; NASUCA Comments, pp. ii-iii.

⁹⁵ AT&T Comments, p. 2.

voice network operators would welcome the opportunity to enjoy a margin of 12.0 percent even when maintaining “redundant” networks.⁹⁶

In conclusion, there is no evidence that ILECs are required to maintain two parallel networks, or otherwise do so. The evidence of a widespread and nationwide effort on the part of ILECs to transform their networks to advanced service platforms indicates that the investment incentives of ILECs are not being undermined by regulation.

The Comments Point to the Ongoing Need for Oversight of Interconnection Issues

AT&T and Section 251 Obligations

In its opening comments, AT&T argues that its request for unilateral authority to determine IP-based interconnection arrangements is consistent with Section 251 of the 1996 Telecommunications Act because Section 251 does not apply to IP-based information services.⁹⁷ As AARP pointed out in its opening comments, the provisions of the 1996 Act are technology neutral.⁹⁸ This fact is also stressed by T-Mobile:

Until Congress amends the Act, Section 251 will continue to apply to ILECs’ interconnection obligations regardless of the technology the ILECs use to provide service. Indeed, the interconnection requirements of Section 251 and 252 are agnostic as to the technology employed by providers of telecommunications transport and termination services—even when those telecommunications services are used to provide unregulated information services. As such, even after the transition is completed, all ILECs, including rural ILECs covered by the Section 251(f) exemption, will continue to have an enforceable obligation to “interconnect and exchange traffic” under Section 251(a) and (b), irrespective of the nature of the service provided to end users. The Commission has held that the enforcement of those obligations is “necessary to promote local competition . . . and eliminate a potential barrier to broadband investment.” Moreover, because VoIP is often accessed over broadband facilities, enforcement of interconnection rights “for the purpose of exchanging traffic with VoIP providers will

⁹⁶ Sprint Nextel Comments, p. 17. Sprint Nextel cites to <http://www.att.com/gen/press-room?pid=23672&cdvn=news&newsarticleid=35937> to support this statement.

⁹⁷ AT&T Comments, pp. 11-12.

⁹⁸ AARP Comments, pp. 12-13.

spur the development of broadband infrastructure,” and therefore is consistent with the exercise of the Commission’s ancillary jurisdiction in furtherance of the goals of Section 706 of the Act.⁹⁹

TEXATEL states:

[T]he Commission must decide whether SIP-based [session initiation protocol] interconnection will be regulated pursuant to FTA [the Federal Telecommunications Act] and existing interconnection agreements (modified as necessary to accommodate the new technologies). TEXATEL asserts that not only is such regulation advisable, it is mandated by the FTA. In most regards, SIP is just another signaling technology to set up calls, tear down completed calls, and to control the packet based transmission over TCP/IP platforms.¹⁰⁰

State Members also address this issue:

Wholesale interconnection obligations as enunciated in TA-96 and independent State laws remain unaffected by the evolving network technologies and the utilized communications protocols. The overriding legal principles continue to rest with Sections 251 and 252 of TA-96, 47 U.S.C. §§ 251 and 252, that guarantee the seamless and reliable exchange of traffic between telecommunications carriers irrespective of the network telecommunications technologies and communications protocols that are being used.¹⁰¹

NARUC adds:

NARUC has spent the last decade urging the FCC to follow the technology-neutral approach of the Telecommunications Act and confirm the obvious, i.e., (1) that fixed (and nomadic) VoIP services are, in fact, “telecommunications services” and, [2] as the NTCA Petition suggests, that “all interconnection for the exchange of traffic subject to Sections 251 and 252 is governed by the [1996 Act] regardless of the technology used to achieve such interconnection.”

The continued application of Section 251 requirements is supported by a number of other parties.¹⁰² Cablevision explains its concerns regarding ILEC interconnection obligations in more detail:

⁹⁹ T-Mobile Comments, pp. 14-15.

¹⁰⁰ TEXATEL Comments, unnumbered fourth page.

¹⁰¹ State Members Comments, p. 10.

¹⁰² See, for example: Cbeyond et al. Comments, p. 11; Community Competitors Coalition Comments, fourth page; Competitive Carriers Association Comments, p. 4; Cox Communications Comments, p. 3; Free Press Comments, pp. 14-15; HyperCube Telecom LLC Comments, p. 18; Independent Telephone and Telecommunications Alliance
(Footnote continued on following page.)

Today, as in 1996 when Congress created the ILEC interconnection obligations, ILECs hold disproportionate power in the market for interconnection services. Among other things:

- Interconnection agreements are negotiated at the state or multi-state level. Thus, while competitive providers may have made significant inroads in some local markets, ILECs continue to control larger geographical areas and thus retain dominant positions in interconnection negotiations.
- Through affiliated entities, large ILECs control significant volumes of wireless and international traffic, and they can and do leverage this power in interconnection negotiations.
- Due to both the more recent entry of competitive providers into the market and the fact that it is highly inefficient for a multitude of competitive carriers to each interconnect with one another separately, competitive providers frequently exchange traffic indirectly, by means of mutual interconnection with the local ILEC. As a result, ILECs as a practical matter control access not only to their own traffic and that of their affiliates, but also of unaffiliated competitive providers with whom they directly interconnect.

The combination of these factors continues to provide ILECs with meaningful market power which, if unrestrained by government oversight, would allow them to exploit their dominant position to the disadvantage of competitive providers – the exact reason Congress gave the Commission such oversight responsibility in the first instance.¹⁰³

This statement suggests a more comprehensive problem that does not comport with AT&T's deregulation approach. Ongoing market power, especially with regard to interconnection, would result in market trials that would undermine competition and disadvantage the customers of the firms that must interconnect with AT&T (or other ILECs).

In the *Connect America Fund Order* the Commission noted:

[W]e observe that section 251 of the Act is one of the key provisions specifying interconnection requirements, and that its interconnection requirements are technology neutral—they do not vary based on whether one or both of the interconnecting providers is using TDM, IP, or another technology in their underlying networks.¹⁰⁴

Comments, p. 6; MetroPCS Comments, p. 3; NARUC Comments, pp. 3-4; TelePacific Comments, p. 14; XO Comments, p. 12.

¹⁰³ Cablevision Comments, pp. 4-5.

¹⁰⁴ *Connect America Fund Order*, ¶1342.

In that same order the Commission also stated that good faith negotiation requirements are technology neutral:

The duty to negotiate in good faith has been a longstanding element of interconnection requirements under the Communications Act and does not depend upon the network technology underlying the interconnection, whether TDM, IP, or otherwise.¹⁰⁵

The Commission should reject AT&T's petition as it is based on a foundation that subverts the statutory provisions contained in Section 251 of the 1996 Act.

VoIP Interconnection is More Complex than Best-Effort IP

In a January 15, 2013 *ex parte* filed by AT&T in this proceeding AT&T argues that “all VoIP traffic may ultimately be exchanged pursuant to the same peering and transit arrangements as other Internet traffic.”¹⁰⁶ Comcast makes similar statements in its comments in this proceeding.¹⁰⁷ AT&T and Comcast's statements are oversimplifications of the issues surrounding VoIP interconnection. While it is technically correct that VoIP traffic can be exchanged through standard peering and transit arrangements, suggesting that such a solution would have no competitive or service quality impacts is disingenuous. Managed VoIP providers do not rely on best-effort service arrangements when designing their services. As explained by XO:

While this “best efforts” (*sic*) Internet peering arrangement is appropriate for routing public Internet traffic, it provides insufficient quality of service for managed IP voice services sought by business and enterprise customers. Rather than simply relying on the best efforts of the routers in Internet peering arrangements, interconnection for routing of managed IP voice traffic – managed IP interconnection – requires agreement among providers on a variety of parameters to ensure QoS demands are satisfied. These parameters are inserted into the voice packets by session border controllers (“SBCs”), equipment whose features and functionalities are essential for successful interconnection

¹⁰⁵ *Connect America Fund Order*, ¶1011.

¹⁰⁶ AT&T January 15, 2013 *Ex Parte*, p. 6. AT&T's statement reproduces a quote from Comcast filed in *Connect America Fund et al.*, WC Docket Nos. 10-90 et al., Feb. 24, 2012.

¹⁰⁷ Comcast Comments, p. 2.

and QoS for managed IP voice traffic, but whose functionalities are totally irrelevant to the exchange of public Internet traffic.¹⁰⁸

Interisle Consulting, notes the importance of understanding the role of the SBCs:

The SBC is central to VoIP interconnection, and must play a key role in the transition. Yet it is not mentioned even once in the Connect America Fund Order and Further Notice. . . . Nor does AT&T mention it in their Petition. Instead they seek to keep IP-based PSTN interconnection “free of legacy regulation,” as if it were the Internet itself exchanging packets at IP. This is simply a disingenuous way of pretending that IP-enabled PSTN interconnection is something that it is not.

Because of this distinction between the Internet and non-Internet managed IP networks, it makes no technical sense to use the Internet as a model for telephone network interconnection. Nor does it make business or regulatory sense, as the Internet is a different entity that has achieved its own success based upon a different business and regulatory model. Of course AT&T and other price cap LECs would prefer to be regulated (or more accurately unregulated) like ISPs! But when they are carrying telephone calls, serving telephone subscribers, operating the outside plant network, and interconnecting with other PSTN carriers, they aren’t acting as ISPs. They are still the telephone company. There is simply no justification for major rules changes based on a gradual transition to IP-multiplexed voice. While AT&T notes that “IP-enabled services” are generally treated as information services, these specific telephone services, which just happen to also use IP, should not be—they are Title II PSTN telecommunications, pure and simple.¹⁰⁹

Cbeyond et al. notes that the interconnection envisioned by AT&T does not exist, as AT&T has elsewhere admitted:

Indeed, AT&T cannot explain how the “managed” VoIP traffic of business customers today will be exchanged using the same peering arrangements as other Internet traffic when, by its own admission, “[d]ifferential packet handling is still uncommon for traffic exchanged between unaffiliated IP networks through ordinary peering and transit arrangements.” Comments of AT&T, WC Dkt. Nos. 10-90 et al., at 18 (filed Feb. 24, 2012).¹¹⁰

These comments are consistent with AARP’s observation in comments that the change in technique associated with delivering vital voice services does not require an abandonment of the

¹⁰⁸ XO Comments, p. 11.

¹⁰⁹ Interisle Consulting Group LLC Comments, pp. 7-8.

¹¹⁰ Cbeyond et al. Comments, p. 13.

basic principles that govern interconnection arrangements.¹¹¹ VoIP interconnection illustrates the importance of oversight of interconnection arrangements in the post-TDM world. The Commission should reject AT&T's approach as it would potentially undermine competition in the VoIP-based public network of the future.

Problems with AT&T's Proposed Trials and Data Generation

In comments AT&T mentions that its wire-center trials will provide the commission with "real world data" that can inform the commission's approach to "broader reforms."¹¹² Other parties also raise the issue of a "data generation" benefit of AT&T's proposed trials.¹¹³ For example, the National Association of Manufacturers states that:

The pending Petition to start a geographic trial should provide the Commission with data on how best to initiate the transition toward the deployment of modern communications networks based on all Internet Protocol ("IP") technology.¹¹⁴

Ignoring the fact that the horse is long out of the barn with regard to initiating the "transition toward the deployment of modern communications networks," whether AT&T's approach would generate any useful data is highly questionable. AT&T's proposal would result in a wide swath of regulatory constraints being removed in various wire centers of various ILECs.¹¹⁵ As these wire centers would have disparate baseline levels of investment, and would be subject to different business plans, interpreting the resulting "data" would be difficult.

It is a useful thought experiment to consider how AT&T's wire center trials would unfold. As the ILECs specify the candidate wire centers, whether a representative set of

¹¹¹ AARP Comments, p. 3.

¹¹² AT&T Comments, p. 1.

¹¹³ Asian American Federation, et al. Comments, p. 12; HyperCube Telecom Comments, p. 4.

¹¹⁴ National Association of Manufacturers Comments, p. 1.

¹¹⁵ AT&T Petition, pp. 11-20.

transition issues would arise is highly doubtful. As noted by Intelepeer Inc., non-participation in the trials would leave many unique issues out of the picture.¹¹⁶ Selection bias is also a major concern. For example, would an ILEC choose a wire center with a heavy concentration of interconnected CLECs? That type of wire center would present a highly complex environment where the granting of AT&T's prerequisite conditions (e.g., elimination of "legacy copper loop requirements")¹¹⁷ would illustrate an immediate negative impact. It may be a safe bet that complex wire centers would not rise to the top of an ILEC's candidate list. In addition, there is absolutely no guarantee that information observed during a trial, when the ILEC is operating under the threat of a reversion to regulation if they misbehave, would reflect behavior that would occur once they obtained full regulatory relief.

Furthermore, how would this Commission tease out the impact of any individual element of the trial on broadband investment? The method certainly is not specified by AT&T or any other party. Claims of increased investments following a trial would be nothing more than *post hoc* arguments, not to mention subject to gaming. Given the disparity in ILEC investment plans in the current regulatory setting, interpreting data on the impact of AT&T's experiment would be next to impossible. For example, given the current regulatory backdrop, Verizon has deployed fiber in a substantial portion of its service territory; AT&T has not. Just what would the Commission conclude if, for example, AT&T claimed that copper-based U-Verse investment expanded by 10 percent in a selected wire center following the "experiment," while at the same time numerous Verizon wire centers that were not part of the experiment already had fiber deployed? The data already suggests that investment in advanced broadband is occurring in the

¹¹⁶ Intelepeer Inc. Comments, p. 5.

¹¹⁷ AT&T Petition, p. 19.

current regulatory climate, and that the failure to invest in fiber is not the fault of regulation, but is instead a failure of corporate vision.

Association of Teleservices International points to other problems with AT&T's alleged data generation plan:

There simply is no reason to believe that conducting the test bed experimentation advocated by AT&T would provide sufficient meaningful information to guide the establishment of transition policies. Experience gained during such test beds would be almost entirely artificial and not a reasonable guide to the actions and conduct that policies would have to grapple with in the future.¹¹⁸

Similarly, Cbeyond, et al. state:

AT&T neither proposes any metrics or other criteria that would be used to measure the success or failure of these trials nor explains how measuring conduct in such artificial circumstances (where, as mentioned, an incumbent's conduct is likely to be different than would be the case outside of a test environment), against any criteria would yield useful information.¹¹⁹

As noted by Cablevision, any data generated from the trials would be highly suspect and subject to gaming:

The predictable result of such trial runs is that ILECs would simply decline to exploit their market power during the "trial" phase (and enter into a handful of negotiated agreements on terms comparatively reasonable to the interconnecting party), and then turn around and extract monopoly rents as soon as they are released more permanently from their interconnection obligations. Put simply, there is no reason to trust that the trial runs proposed by AT&T would yield anything resembling the actual results of the "market-based, regulation-free" interconnection regime that AT&T ultimately desires.¹²⁰

State Members point out that if the trials go forward, they must include state participation, and also note that the results of individual trials would be unlikely to be predictive across geography or jurisdiction:

¹¹⁸ Association of Teleservices International Comments, p. 4. Critical Messaging Association offers a similar assessment at p. 4 of its Comments.

¹¹⁹ Cbeyond et al. Comments, p. 23.

¹²⁰ Cablevision Comments, pp. 5-6.

Assuming that the “experiments” advocated by AT&T could go forward, the State role at a minimum is essential in: (1) selecting the local exchanges in question; (2) designing and monitoring the “experiment;” (3) affording the due process participation of end-user consumers under applicable State law and regulations; and, (4) timely mitigating either any “experimental” failure or any other unforeseen and undesirable result. Furthermore, the State role and participation in such “trials” are essential because the results of such “experiments” cannot be arbitrarily extrapolated among types of exchanges within a State (e.g., urban, suburban, and rural), nor can they be extrapolated across states (i.e., what may be applicable in Illinois may not be equally applicable in Utah, and most likely will not be readily applicable in Alaska).¹²¹

NECA and OPATSCO point out that the need for technical trials requested by AT&T does not match the experience of other ILECs:

It is also unclear at this point why permission or regulatory relief from the Commission would be needed to conduct a “technical” trial; many carriers are already converting their networks to IP technology via the installment of softswitches and fiber. Moreover, nothing in the current regulatory framework precludes carriers from interconnecting on an IP-enabled basis. Indeed, RLECs currently have tariff provisions in place to permit such interconnection in short order. This again highlights why any trial runs need better definition and bounding prior to being authorized – the right question is what precise regulations or issues might be precluding the effective deployment of IP, and should those specific rules then be modified or eliminated for the purpose of a trial?¹²²

With regard to NECA and OPASTCO’s question regarding the precise regulations that might be precluding the effective deployment of IP, AT&T’s petition, or the comments do not supply an answer.

Even parties that are generally supportive of AT&T’s trial proposal, such as National Cable and Telecommunications Association and Telecommunications Industry Association, point out that the transition associated with the trials is a highly complex process that should not be taken lightly:

At the same time, a major infrastructure upgrade of this nature also has the potential to be highly disruptive. . . . in an all-IP environment, different signaling protocols and

¹²¹ State Members Comments, p. 7.

¹²² NECA and OPATSCO Comments, p. 11.

databases will be needed to ensure that traffic is delivered properly. Using these protocols and databases for all providers and all types of voice traffic without the fallback of exchanging traffic in TDM format will require adjustments by all providers. While implementing all of this would be challenging enough among companies that do not compete with each other, the complicated history of regulated interconnection arrangements between incumbent LECs and their competitors increases the complexity of the task. Consequently. . . Commission oversight of incumbent LEC plans and implementation will be needed to maximize beneficial outcomes and minimize harmful disruption.¹²³

Telecommunications Industry Association states:

As the Commission considers any policy forcing transition from TDM to IP, it must protect the public interest furthered by the use by critical infrastructure of TDM services provided by commercial service providers. Many critical infrastructure systems across the nation rely on TDM for services and applications, and these essential functions must be provided an appropriate transition path so that key safety services can continue to function and are not stranded.¹²⁴

Should the Commission move forward with AT&T's proposed trials, it must protect consumers, competition, and the users and providers of the systems that rely on TDM technology.

In conclusion, while AT&T's proposed experiment will certainly be complex, the returns to this Commission in the form of useful information will likely be negligible. This is because, as Free Press appropriately notes, AT&T's approach to the trials turns research methodology on its head:

[T]he Commission should recognize that what AT&T is actually proposing is not a valid experiment; it is AT&T's attempt to establish a rigged demonstration designed to "prove" correct AT&T's beliefs about the need for regulatory oversight. Real experiments involve the investigator, not the subject, setting the parameters and controls.¹²⁵

There is no reason to believe that the trials would inform the Commission in any reasonable manner of the issues that will arise from the technology transition, and the Commission should reject AT&T's proposal.

¹²³ National Cable and Telecommunications Association Comments, p. 7.

¹²⁴ Telecommunications Industry Association Comments, p. 3.

¹²⁵ Free Press Comments, p. 27.

Parties Supporting AT&T's Petition are Not Convincing

Several parties offer support for the AT&T petition.¹²⁶ However, none add any rationale beyond AT&T's unsupported assertions. Some reiterate the poorly supported claims from AT&T's petition as fact. For example, Mobile Future and TechNet point to AT&T's claims regarding 50 percent of ILEC investment supporting "legacy" services as indicating the failings of the current approach.¹²⁷ As noted by AARP in opening comments, AT&T's 50 percent claim is contradicted by other statements made by AT&T, and also ignores the shared nature of investments associated with "legacy" infrastructure, such as that relied upon by AT&T to deliver its U-Verse services.¹²⁸

The "two parallel network" theme is a common one among supporters of AT&T's petition.¹²⁹ Institute for Policy Innovation (IPI) provides a representative example:

It borders on the absurd to require that companies like AT&T maintain two parallel networks, a forward looking one that is desired by consumers and businesses and that facilitates new products and services using the latest technology; but also an expensive legacy network that is necessary only to comply with outdated regulations.¹³⁰

It is not always clear where IPI and others have obtained their information regarding "two parallel networks,"¹³¹ but what is clear is that the "requirement" that IPI identifies does not exist.

As Verizon and Verizon Wireless explains, ILECs:

¹²⁶ ADTRAN Comments, p. 1; Hance Haney Comments, p. 1; Information Industry Counsel, p. 1; Independent Telephone and Telecommunications Alliance Comments, p. 8; Mobile Future Comments, p. 5; TechAmerica Comments, p. 1; Verizon and Verizon Wireless Comments, p. 2.

¹²⁷ Mobile Future Comments, p. 7; TechNet Comments, p. 4.

¹²⁸ AARP Comments, pp. 6-7.

¹²⁹ Independent Telephone & Telecommunications Alliance Comments, p. 9; TechFreedom Comments, p. 3; TechNet Comments, p. 2; Telecommunications Industry Association Comments, p. 5; U.S. Chamber of Commerce Comments, third page; Women Impacting Public Policy, et al. Comments, eighth page.

¹³⁰ Institute for Policy Innovation, unnumbered fourth page.

¹³¹ Some of these parties pile on to the misquoting of the language contained in the *National Broadband Plan*, discussed above, which takes out of context the Commission's concern that copper retirement may negatively impact competition.

are required either to keep the existing copper loop connected after deploying fiber to the home, or, if the ILEC has retired the copper loop, to “provide unbundled access to a 64 kbps transmission path over its FTTH loop.”¹³²

Thus, it is up to the ILEC, once they have deployed advanced fiber-based broadband, whether they continue to leave the copper loop in place. If there is an estimate of the cost of this requirement to those carriers that have deployed FTTH, Verizon or any other party does not provide one, and it strains credulity that this requirement is impeding the deployment of advanced broadband, especially given Verizon’s decision to deploy FTTH in large portions of its service area. For carriers like AT&T that use copper to deliver their advanced broadband services, TDM-based and IP-based technology runs on the same plant. As discussed in AARP and other parties’ opening comments,¹³³ carriers have deployed advanced technologies using a single integrated network. The “parallel network” impediment is not reasonably supported by any party.

Some of those supporting AT&T’s general proposal temper their support by addressing the need to honor statutory objectives. For example, Hypercube states:

A key objective of any trials must be to ensure that an evolution to IP-based technology does not interfere with the FCC’s and the States’ ability to implement the statutory framework (including Sections 214, 251, and 252 of the Communications Act) designed by Congress to ensure that high quality services are made universally available to the public in a competitive marketplace, and that no segment of the public is deprived of the services on which they have come to depend.¹³⁴

TechAmerica states:

TechAmerica further agrees with AT&T that policymakers, especially the Commission, should create a 21st century regulatory framework that identifies and addresses consumer

¹³² Verizon and Verizon Wireless Comments, p. 28. Quoted matter referencing the *Triennial Review Order*, ¶277.

¹³³ AARP Comments, pp. 10-11; Nebraska Rural Independent Companies Comments, p. 16; NASUCA Comments, pp. ii-iii; New Networks Institute Comments, p. 2.

¹³⁴ HyperCube Comments, pp. 4-5.

protections in the digital IP age, such as ensuring public safety and promoting access to new technologies to underserved and unserved areas.¹³⁵

Verizon and Verizon Wireless state:

. . . there are issues—such as public safety, access for persons with disabilities, universal service, and the like—that may continue to require some regulatory involvement or backstop to protect and serve consumers even as technologies evolve. . .¹³⁶

Likewise, Comcast indicates that the Commission should allow AT&T’s proposed trials to go forward “to the extent that the record demonstrates that the ‘trial runs’ proposed by AT&T would hasten this (TDM-to-IP) transition.”¹³⁷ As discussed above, and in AARP’s opening comments, AT&T provides no evidence that this would be the case.

Comcast also takes issue with NTCA’s recommendation that carriers be provided with “an incentive to offer IP interconnection by allowing them to recover through rates that would be developed pursuant to the Act the costs of exchanging traffic through such interconnects.”¹³⁸ This too illustrates the complexity of issues associated with the TDM-to-IP transition.¹³⁹ Small rural carriers face higher costs of provisioning their network (be it TDM-based or IP-based). Large carriers like Comcast, which have assiduously avoided serving low-density, high cost areas may find it expedient to argue that all IP traffic should be exchanged on a bill-and-keep basis, but that is not a reasonable (or sustainable) arrangement.¹⁴⁰ However, Comcast goes on to state, when addressing the NTCA petition, that:

¹³⁵ TechAmerica Comments, p. 2. TechNet offers similar guidance, TechNet Comments, p. 6.

¹³⁶ Verizon and Verizon Wireless Comments, p. 3.

¹³⁷ Comcast Comments, pp. 1-2.

¹³⁸ NTCA Petition, p. 14.

¹³⁹ Broadvox also indicates in its Comments that disputes over IP traffic compensation are a matter for this Commission to address. Broadvox Comments, second page.

¹⁴⁰ CTIA also advances the bill-and-keep argument (p. 7), and it offers no remedy for the inherent problem of bill-and-keep when interconnecting carriers have disparate cost structures.

[T]he Commission should continue to gather and analyze information about the diverse and evolving interconnection arrangements between VoIP providers, and the Technology Transitions Policy Task Force may provide a useful vehicle for conducting this ongoing analysis.¹⁴¹

Here Comcast appears to envision a process that is at odds with AT&T's proposal. AT&T's proposal would undermine the efforts of the Technology Transitions Policy Task Force and place the reigns in AT&T's hands with regard to interconnection arrangements.¹⁴²

Cablevision Systems indicates that it supports AT&T's petition,¹⁴³ but offers an important caveat:

FCC oversight of interconnection with ILECs remains necessary, regardless of the technology used, in order to ensure a competitive marketplace that promotes consumer choice and fosters investment in IP networks by all providers.¹⁴⁴

CALinnovates, et al., while indicating support for AT&T's petition, also adds:

To bring these advanced services quickly to consumers, the transition to IP networks should occur in a collaborative environment where private industry and the public sector work together toward mutually-beneficial solutions.¹⁴⁵

However, as discussed in AARP's opening comments, AT&T's proposal is anything but collaborative. Rather, AT&T would exclude the states, local authorities, and other interested parties.

In summary, "AT&T's unsupported allegations about the putative inhibitory impact of decentralized, local telecommunications "legacy" regulations on IP roll-out"¹⁴⁶ are not saved by

¹⁴¹ Comcast Comments, pp. 6-7.

¹⁴² AT&T Petition, p. 21; AT&T Comments, pp. 11-12.

¹⁴³ Cablevision Comments, p. 2.

¹⁴⁴ Cablevision Comments, p. 2.

¹⁴⁵ CALinnovates, Alphabird, Appalicious, At The Pool, Avetta, iSideWith, Lex Machina, MySocialCloud & Silicon Valley Italian Executive Council Comments, unnumbered third page. (Hereinafter CALinnovates, et al.)

¹⁴⁶ NARUC Comments, p. 7.

any other commenting party. The resounding lack of evidence to support AT&T's claims must lead this commission to reject AT&T's petition.

Some Consumer and Small Business Groups that are Supportive of AT&T's Petition do not appear to Understand AT&T's Proposal

Comments were filed by several parties representing consumer and small business groups that offer unequivocal support for the AT&T petition.¹⁴⁷ In each case, these parties offer an extensive discussion of the benefits of the expansion of broadband and IP-enabled services.¹⁴⁸ However, none of these groups provides a single bit of evidence supporting the proposition that AT&T's approach will contribute to achieving these objectives. In fact, these groups appear to misunderstand AT&T's proposal. For example, National Grange, et al. states that "AT&T's petition is unique in that it does not request specific rule changes."¹⁴⁹ In fact, AT&T's petition

¹⁴⁷ Comments of American Consumer Institute; Comments of Women Impacting Public Policy, Small Business & Entrepreneurship Council and the National Association For Moms in Business (hereinafter WIPP, et al.); Comments of League of United Latin American Citizens, United States Hispanic Chamber of Commerce, and Labor Council for Latin American Advancement (Hereinafter League of Latin American Citizens, et. al.); Comments of the Minority Media And Telecommunications Council, National Association for the Advancement of Colored People, 100 Black Men of America, A. Philip Randolph Institute, International Black Broadcasters Association, Minority Business Enterprise Legal Defense and Education Fund, National Association of Black County Officials, National Association of Black Owned Broadcasters, National Association of Neighborhoods, National Black College Alumni Hall of Fame, National Black Farmers Association, National Coalition on Black Civic Participation, National Organization of Black Elected Legislative Women, Rainbow Push Coalition, United Negro College Fund and United States Black Chamber, Inc. (hereinafter Minority Media, et al.); Comments of Asian American Federation, Asian American Justice Center, Asian Business Association, Asian Pacific American Institute for Congressional Studies, Asian Pacific American Labor Alliance, Asian Pacific American Legal Center, Asian Women in Business, Japanese American Citizens League, Leadership Education For Asian Pacifics, Oca, and Southeast Asia Resource Action Center (hereinafter Asian American Federation, et al.); Comments of National Hispanic Council on Aging and National Hispanic Medical Association (hereinafter National Hispanic Council on Aging, et al.); Comments of American Agri-Women, National Farmers Union, The National Grange, US Cattlemen's Association, United States Distance Learning Association, and Women Involved In Farm Economics. All filed January 25, 2013.

¹⁴⁸ WIPP, et al. Comments, unnumbered fourth and fifth pages; Minority Media, et al. Comments, pp. 8-12; League of Latin American Citizens, et al. Comments, pp. 5-8; Asian American Federation, et al. Comments, pp. 5-12; National Hispanic Council on Aging, et al. Comments, unnumbered second page to unnumbered sixth page.

¹⁴⁹ National Grange, et al. Comments, p. 2.

specifies several substantial rule changes, not to mention wholesale preemption of state authority.¹⁵⁰

Alternatively, several of these groups state that AT&T's petition is about opening up a "national dialogue" regarding the IP transition.¹⁵¹ Asian American Federation, et al. is more specific and states:

Approval of the AT&T Petition will start a national dialogue on how to ensure that high-speed next-generation IP networks reach more classrooms, encouraging customized education through blended and/or distance learning programs.¹⁵²

These subjects are not contained in AT&T's petition, thus it is not clear how Asian American Federation, et al. has reached this conclusion. AARP believes that AT&T's petition is much more about *monologue* than dialogue. AT&T posits a list of demands, including the preemption of state authority and suspension of AT&T's obligations under the 1996 Telecommunications Act. AT&T's proposal would usurp the ongoing dialog that is being facilitated by the Commission's Technology Transition Policy Task Force and Technology Advisory Council.

While the consumer groups cited above are unequivocal in their support of the AT&T petition, the National Urban League and National Action Network, while supportive of the AT&T petition offer cautionary guidance to the Commission:

The Commission should study the potential harm to consumers of color, if any, that the AT&T Petition may cause by removing AT&T's existing regulatory obligations.¹⁵³

As discussed above, the risks to consumers, competition, and universal service arising from AT&T's proposal are great, and AT&T's approach should be rejected.

¹⁵⁰ AT&T Petition, pp. 13-19.

¹⁵¹ League of Latin American Citizens, et al. Comments, p. 3; Minority Media, et al. Comments, p. 3; National Hispanic Council on Aging, et al. Comments, unnumbered first page.

¹⁵² Asian American Federation, et al. Comments, p. 10.

¹⁵³ National Urban League and National Action Network, p. 2.

It is not clear if these groups, some of which indicate that they represent the interests of minority, low income, and other disadvantaged groups understand, have considered, or are aware of, the implications of AT&T's petition on competition, or carrier of last resort obligations. For example, CLECs like Blue Casa¹⁵⁴ have targeted the Latino community by utilizing the pro-competitive provisions of the 1996 Telecommunications Act. Granting AT&T's petition would have a negative impact on CLEC operations.¹⁵⁵ While the competitive impact of granting AT&T's petition are unequivocally negative, the impact on service availability for low income consumers may be even more pronounced. Granting AT&T's petition would eliminate service deployment or "carrier of last resort" (COLR) obligations.¹⁵⁶ The lifting of COLR obligations could result in the elimination of ILEC-provided wireline services in inner cities or rural areas—or anywhere else the ILEC deems that it is unprofitable to serve.

AARP agrees with these consumer groups that the deployment of affordable and high quality broadband networks has the potential to provide an expansive set of benefits to all consumers. However, AT&T's petition does not provide a reasonable path forward. AT&T's approach would subvert the efforts of state and local authorities, as well as other interested parties, to ensure that the IP transition does not come at the expense of competition or service availability. The transition to IP-enabled networks is underway, and the challenge that consumer representatives face is to ensure that the technology-neutral objectives of the federal Communications Act continue to be achieved. Specifically, so that "all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, (have

¹⁵⁴ Blue Casa operates in California. <http://www.bluecasa.com/>

¹⁵⁵ COMPTTEL Comments, p. 3; Granite Telecommunications Comments, pp. 15-18; XO Comments, pp. 27-28.

¹⁵⁶ AT&T Petition, pp. 15-16.

access to) a rapid, efficient, Nationwide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”¹⁵⁷

There is Broad Support for the Approach Advocated in the NTCA Petition

AARP finds points of agreement with the NTCA petition.¹⁵⁸ Positions advanced in the NTCA petition drew broad support from a varied group of industry participants, including ILECs, CLECs (including facilities-based CLECs), RLECs, public utility commissions, and consumer groups.¹⁵⁹ Many parties state that the NTCA petition provides a more balanced approach to regulatory review than that advocated by AT&T. XO summarizes the advantages of the NTCA petition nicely:

NTCA offers a more balanced view of industry changes, from XO’s perspective, acknowledging that the Internet is not going to swallow up today’s PSTN or the next generation IP-based PCN [public communications network]. NTCA recognizes that there is an evolution of the current PCN, “a technology shift within a network (or, really a series of interconnected networks).” NTCA further states that, despite the shift to a new network platform, the core objectives of the Act in general, and the 1996 Act, in particular, “must apply with equal force whether services are rendered through Class 5 TDM switches and copper networks or routers, soft switches, and cutting-edge fiber or wireless solutions.” NTCA notes that regulatory distinctions do not turn on changes in technology.¹⁶⁰

Other parties point to other facets of the NTCA petition. For example, Cox Communications finds that NTCA offers a superior approach on the issue of interconnection:

¹⁵⁷ 47 U.S.C. 151.

¹⁵⁸ AARP Comments, pp. 21-25.

¹⁵⁹ Association of Teleservices International Comments, p. 4; Critical Messaging Association Comments, pp. 4-5; California Public Utilities Commission Comments, pp. 12-13; Cox Comments, pp. 9, 14; Free Press Comments, p. 15; HyperCube Comments, p. 2; MetroPCS Comments, p. 6; NASUCA Comments, pp. 3, 34; NARUC Comments, p. 3; Nebraska Rural Independent Companies Comments, p. 5; NECA and OPATSCO Comments, p. 7; Public Knowledge Comments, p. 11; Public Utilities Commission of Ohio Comments, p. 9; Sprint Nextel Comments, p. 20; TelePacific Comments, pp. 13-14; TEXATEL Comments, second page; Washington Independent Telecommunications Association Comments, p. 1; XO Comments, p. 12.

¹⁶⁰ Sprint Nextel Comments, p. 12.

AT&T suggests elimination of basic requirements that affect the ability of competitors to operate efficiently in the interconnected voice market, while NTCA recognizes that basic interconnection obligations are central to the efficient operation of that market. The Commission should adopt NTCA's approach.¹⁶¹

MetroPCS offers similar sentiment:

Accordingly, NTCA urges the Commission to confirm "that all interconnection for the exchange of traffic subject to sections 251 [. . .] is governed by the Act, regardless of the technology that might happen to be used to achieve such interconnection."

MetroPCS strongly endorses NTCA's position.¹⁶²

Several parties point to the appropriateness of NTCA's advocacy for the continued applicability of the statutory objectives:

NASUCA agrees with NTCA that the overarching objectives of the Communications Act must "apply with equal force whether services are rendered through Class 5 [time-division multiplexing] TDM switches and copper networks or routers, softswitches, and cutting-edge fiber or wireless solutions."¹⁶³

Public Knowledge states:

The NTCA's filing is right to emphasize that the Commission must first and foremost ensure that the post-transition phone network continues to protect consumers, promote competition, and achieve universal service.¹⁶⁴

Association of Teleservices International adds:

NTCA's petition, on the other hand, correctly posits that the transition should be conducted with the preservation of the important governing principles firmly in mind. It can be debated whether the principles of consumer protection, preservation of competition and fostering universal service are the only ones that should be considered, but, at a minimum, they are a useful starting point.¹⁶⁵

Hypercube concludes:

¹⁶¹ Cox Communications Comments, p. 9.

¹⁶² MetroPCS Comments, p. 6.

¹⁶³ NASUCA Comments, p. 3.

¹⁶⁴ Public Knowledge Comments, p. 11.

¹⁶⁵ Association of Teleservices International Comments, p. 4. Critical Messaging Association provides a similar statement, Critical Messaging Association Comments, pp. 4-5.

HyperCube also agrees with NTCA that the Commission cannot abandon its technology-neutral statutory obligation to regulate in the public interest, and that the Commission should implement a “smart regulation” approach to the changing communications environment.¹⁶⁶

These comments point to the superiority of the NTCA approach. AARP believes that should the Commission act on either of these two petitions, NTCA’s provides an approach that is far superior to AT&T’s.

Conclusion

In opening comments, AARP pointed to the appropriateness of an analogy offered in the NTCA petition—i.e., the effect of granting AT&T’s petition would take a “sledgehammer” to the existing regulatory foundation.¹⁶⁷ As discussed above, many other parties have expressed concern over the status of the existing regulatory foundation during and after the transition to IP-based systems. What is clear from the record is that AT&T’s proposal would result in the demolition of the foundation upon which this Commission and state regulatory agencies pursue relevant statutory objectives, including the promotion of competition, universal service, and the protection of consumers. This foundation has resulted in the delivery of widespread benefits to consumers and businesses in the U.S., as was intended by the Communications Act.

AARP believes that the Commission should reject AT&T’s petition. Furthermore, to ensure that the regulatory foundation continues to deliver benefits, the Commission should address the now-overdue issue of the regulatory classification of broadband services. As discussed above, the Commission now stands at a crossroads with regard to its ability to ensure that its authority applies to essential broadband telecommunications services. AT&T’s petition

¹⁶⁶ HyperCube Comments, p. 2.

¹⁶⁷ AARP Comments, p. 25.

represents the wrong path forward as it substitutes AT&T and other ILECs' business plans for the statutory objectives, thus threatening consumer protection, universal service, and competitive outcomes.

As discussed above, if the Commission believes that the time is ripe for adding another proceeding to its agenda, the approach advocated by NTCA is more reasonable. However, as noted by State Members, there is another path:

The State Members recommend that, if the Commission wishes to comprehensively examine the network transition issues for regulated wireline telecommunications common carriers and their potential impact on the evolving concept of universal service, the Commission make the appropriate referral to the Federal-State Joint Board on Universal Service.¹⁶⁸

While NTCA advocates for a collaborative approach involving the FCC, the states, and other interested parties, State Members' proposal provides another appropriate pathway. State Members' suggested approach would certainly ensure a superior outcome, as compared to AT&T's demolition proposal.

¹⁶⁸ State Members Comments, p. 15.