

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

In the Matter of

Technological Transition of the	)	
Nation's Communications Infrastructure	)	WC Docket No. 12-353
	)	
	)	
United States Telecom Association Petition	)	WC Docket No. 13-3
For Declaratory Ruling that Incumbent	)	
Local Exchange Carriers are Non-dominant	)	
In the Provision of Switched Access	)	
Services	)	
	)	

**REPLY COMMENTS OF THE DIGITAL POLICY INSTITUTE  
AND KLEINHENZ AND ASSOCIATES IN WC DOCKET NO. 12-353**

**AND**

**COMMENTS OF THE DIGITAL POLICY INSTITUTE  
AND KLEINHENZ AND ASSOCIATES IN WC DOCKET NO. 13-3**

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**I. INTRODUCTION AND SUMMARY**

The Digital Policy Institute (“DPI”) and Kleinhenz and Associates (“Kleinhenz”)<sup>1</sup> file this pleading as both Reply Comments to the AT&T Internet Protocol (“IP”) Transition Petition

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<sup>1</sup> The Digital Policy Institute is an independent, interdisciplinary research and policy development organization located at Ball State University in Muncie, IN. The DPI has served as a catalyst for research and education on digital media issues since 2004. Robert Yadon, Ph.D., and Barry Umansky, J.D., are both senior research fellows in the Institute. Jack Kleinhenz, Ph.D. is CEO of Kleinhenz & Associates and Regional Economist and Lecturer at Case Western Reserves Weatherhead School of Management. Kleinhenz & Associates is a business and economic consulting and an investment advisory firm based in Cleveland, Ohio. The firm specializes in industry studies, forecasts, regional economic and labor market issues, strategic planning and business plan development.

(“AT&T Petition”) and initial Comments to the United States Telecom Association Petition (“USTA Petition”). We believe that the issues discussed in both Petitions are related significantly, and we file in support of each. Specifically, each Petition arises in the context of, and is a natural outgrowth of, the remarkable technological transformations in the telecommunications industry that have occurred in the last few years -- transformations that were foreseen, in some measure, by Congress in the Telecommunications Act of 1996 (the “Act”).<sup>2</sup> These transformations have, in turn, positively impacted the American economy, particularly the telecommunications industry that is today characterized by increased competition, new technologies and service offerings, and expanded consumer choice beyond what was originally contemplated in 1996. The incumbent telephone companies are now poised to transition to an all-IP infrastructure (the “IP transition”) that will undergird the networks of the future. This transition is the subject of the AT&T Petition.

Our support for these Petitions is based on our interest in ensuring that the nationwide IP Transition occurs quickly and efficiently in order to spur job creation, and national economic growth as a mechanism to sustain America’s global competitiveness. We affirm the Federal Communications Commission (“FCC” or “Commission”) determination that the transition can take place only with massive amounts of private investment, beyond the nearly \$1.2 trillion that network operators already have invested in broadband networks. Finally, DPI and Kleinhenz believe that government should work efficiently and make its decisions on the best and most reliable available data in the marketplace – a goal that would be advanced by granting both Petitions. Part of this data accumulation, DPI and Kleinhenz suggest, would be from research based on the “wire center” experiments proposed in the AT&T petition. In this regard, we urge

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<sup>2</sup> *Telecommunications Act of 1996*, Pub. L. No. 104-104, 110 Stat.56 (1996).

the Commission and AT&T Indiana to create such a wire center test in Muncie, IN, the site of research – spanning over 80 years – of social trends and American consumer behavior.

## **II. VIBRANT COMPETITION EXISTS: THE FCC SHOULD FIND THAT INCUMBENT LOCAL EXCHANGE CARRIERS ARE NO LONGER DOMINANT CARRIERS**

Since the turn of the century, the American telecommunications marketplace has undergone a truly remarkable transition. This transition has been led by *consumers* who, with myriad new technologies and applications available to them, have chosen services that go beyond traditional telephone voice service and provide improved and faster service, enhanced features and capabilities, and more mobile functionality.

As the USTA Petition notes, the telecommunications market today is marked by robust competition not merely among companies (important though such competition is) but, more profoundly, among platforms enabled by broadband technology.<sup>3</sup> Today, 35.8% percent of consumers have, in the vernacular, “cut the cord,” dropping their traditional wireline service and adopting a wireless-only alternative.<sup>4</sup> Data show that 46% of all Americans own smartphones, outnumbering more basic phones.<sup>5</sup> In addition to those cutting the cord, a significant number of former Incumbent Local Exchange Carrier (“ILEC”) subscribers have chosen to receive voice service from broadband services providers. Today, approximately 75 percent of ILEC customers have completely transitioned away from traditional networks. For example, within the 22 state

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<sup>3</sup> Petition for Declaratory Ruling of the United States Telephone Association (“USTA Petition”) in WC Docket No. 13-3, filed December 19, 2012, at 2.

<sup>4</sup> *Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January–June, 2012*. United States Centers for Disease Control and Prevention, December 2012.

<sup>5</sup> *Pew Research Center Internet and American Life Project Report*, March 1, 2012.

ILEC service territory served by AT&T, only about 25% of households still subscribe to “plain old telephone service” (the number of residential fixed access lines has fallen by 68 percent since 1999), even as the number of households has increased.<sup>6</sup> The pace of this transition has only accelerated over time. Within the next year, the expected number of subscribers who receive voice service through Voice over Internet Protocol (“VoIP”) services provided on broadband networks will exceed those who receive voice through ILEC antiquated telephone networks.

Beyond the simple question of market share, if the ILECs lack the power to control prices, block access to customers, and control critical facilities used by other competitors, they can no longer be considered “dominant.” As such, DPI concurs with conclusion set forth in the USTA Petition that ILECs are no longer dominant carriers.<sup>7</sup>

As an example, AT&T’s former monopoly market share in the interstate interexchange long distance telephone business market had declined from 90.1% in 1984 to 55.2 percent in 1994, at the time the Commission determined that AT&T was no longer dominant in that market.<sup>8</sup> Similarly, the FCC found that cable providers were no longer dominant providers of video services when their market share dropped significantly. In view of the data described above and Commission precedent, it makes little sense for the FCC to continue to treat ILECs as dominant (and thus highly regulated), particularly when ILEC market share has dropped precipitously as consumers continue to abandon antiquated voice-only services and rapidly migrate to the many varieties of competitive alternatives that now exist in the marketplace.

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<sup>6</sup> These data were derived, in part, from the Commission’s January 2013, report titled *Local Telephone Competition Status as of December 31, 2011*.

<sup>7</sup> USTA Petition, *supra* note 3, at 14-15.

<sup>8</sup> *Order, Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, 11 FCC Rcd 3271 (1995).

In this regard, the Commission should follow the path taken by numerous states. As USTA notes, at least 20 states, including Indiana, have recognized the existence of competitive alternatives and the fact that ILECs are no longer dominant in the market place and do not subject ILECs to traditional monopoly-style regulations.<sup>9</sup> Indeed, DPI’s own series of research reports dating back to 2006, have found that for states like Indiana, Ohio, Michigan, Missouri and Illinois, data continue to support deregulation where appropriate, and the traditional rationale for telecom utility regulation – *i.e.*, fixed landline telephone service as a natural monopoly – is now gone.<sup>10</sup>

Further, and as DPI’s above-referenced research has observed, the traditional landline telephone business in Indiana and surrounding states continues to decline with consumer adoption of competing technology. Today, there is no basis to claim that incumbent landline providers are, per se, “dominant” entities requiring the same, close government scrutiny of past decades. The predictable result is that state regulatory forbearance has led to increased investment in broadband and increased competition.

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<sup>9</sup> USTA Petition, *supra* note 3, at 18. *See also* Advanced Communications Law & Policy Institute at New York Law School, “Primer on State Efforts to Deregulate Telecommunications,” pp. 2-3, February 2012, available at: [http://www.nyls.edu/centers/projects/advanced\\_communications\\_law\\_and\\_policy\\_institute/resource\\_library](http://www.nyls.edu/centers/projects/advanced_communications_law_and_policy_institute/resource_library).

<sup>10</sup>See, e.g., DPI reports titled *Telecom Regulatory Reform: Indiana Update 2012*, January 2012, and *Telecommunications Deregulation, a Policy Progress Report*, March 2010. DPI research reports and white papers may be accessed at: <http://digitalpolicyinstitute.com/publications/white-papers/>.

### **III. THE TELECOMMUNICATIONS ACT OF 1996: PROVIDING A PATH TO THE FUTURE**

The 1996 Act established a pro-competitive, de-regulatory national policy framework in order to make available to all Americans advanced telecommunications and information technologies and services by opening all telecommunications markets to competition.<sup>11</sup> As noted above, in the years since the Act became law, robust competition in the voice telephone market became reality. Yet certain commenters on AT&T's Petition somehow continue to cling to the views that: (1) dominant-carrier regulation should continue, despite significant evidence demonstrating that the overwhelming number of consumers choose *less* regulated alternatives for voice service; (2) certain burdensome elements of dominant carrier regulation should be extended to services in which the FCC has decided to exercise its regulatory forbearance authority; and (3) the Act remains a static instrument, inflexible and unable to deal with a changing marketplace and the new world of telecommunications, including the IP Transition. In advancing these views, those filers opposing these petitions fail to understand the state of today's marketplace and misinterpret the purpose and goals of the statute.

Consider, first, the argument that the Act is static, a contention easily dismissed and indeed refuted by the language of the Act itself. Without question, in 1996, ILECs retained certain vestiges of dominance in their provision of voice services, and the Act's newly created regulatory structure did not eliminate their dominant status. The framers of the Act, however, wisely anticipated that technology and markets ultimately would outstrip the ability of regulatory regimes to keep pace. Congress enacted not merely a law but indeed a vision for a future telecommunications industry that would be highly competitive, technologically advanced, and

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<sup>11</sup> *Telecommunications Act of 1996, supra* note 2.

consumer-driven. This vision is today fast approaching reality, if it is not diverted by calls for extending burdensome outmoded regulations to a new competitive, IP-based era in which legacy, copper-era monopoly regulations are inappropriate.

In the 1996 Act, Congress empowered the Commission with the ability to forbear from enforcing statutes and regulations where it deemed that would be consistent with the public interest and would benefit consumers and competition. Now seventeen years after enactment, that day now has arrived.

DPI and Kleinhenz support government policies that promote competition and create appropriate incentives for private investment. We do not, however, believe promoting competition need be coupled with enacting regulatory mechanisms to preserve or advance an individual carrier's particular business model regardless of changes in the marketplace or innovation. While Congress certainly foresaw an important role for competitive local exchange carriers ("CLECs") in the Act, neither that role nor business models reliant on access to now antiquated facilities are forever protected or favored by the Act. Forbearance is a tool that empowers the Commission to promote consumer welfare and encourage innovation that feeds the cycle of technological advancement. The Commission has previously used its forbearance authority under the Act to stimulate new investment and to extend deployment of advanced broadband networks. In 2003, the FCC used its forbearance authority to withhold the application of legacy regulation to the buildout of fiber-based facilities and services. That decision helped spur the deployment of new fiber-based facilities to residences and businesses providing IP-based broadband services at faster speeds, enhanced quality of service and expanded choice.

Commenters opposing the Petitions, however, fail to appreciate the positive effect that forbearance has had on deployment of next generation IP network infrastructure. Indeed, some

CLECs now go as far as urging the Commission to revisit and/or reverse the wise exercise of the Commission's forbearance authority in 2003.

In its 2003, Forbearance decision,<sup>12</sup> the Commission sought to advance the interests of consumers by promoting the build out of high speed advanced IP-based broadband networks and services. To spur new investment, the FCC chose not to apply the "sharing" or "unbundling" requirements of the 1996 Act to the "fiber loops or to the packet-switching features, functions and capability of [] hybrid loops" deployed by incumbent telephone companies.<sup>13</sup> The FCC, however, continued to require ILECs to "offer unbundling access to stand-alone copper and sub-loops" deployed by incumbent telephone companies (the existing telephone network and facilities that offer time division multiplexing).<sup>14</sup> This decision to forbear and not impose "sharing" regulations on new investment in fiber-based IP infrastructure created the right economic incentives for incumbent carriers to deploy new fiber to the home and hybrid-fiber networks.

Arguments from commenters requesting the Commission to impose burdensome Title II requirements, unbundling requirements, and access to last mile IP-based facilities are fundamentally misplaced, fail to reflect the telecommunications markets as it exists today, and, equally important, would have deleterious consequences for the development and expansion of the telecommunications markets of the future. If ILEC dominance is the justification for the imposition of Title II regulation on a highly competitive market, then that justification clearly no longer applies. The FCC has no reason to impose old, investment-inhibiting regulatory

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<sup>12</sup> *Report and Order and Order on Remand and Further Notice of Proposed Rule Making*, 18 FCC Rcd 16978 (2003).

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

requirements on new IP-based technology in the telecommunications markets. The 2003 Commission decision to forbear from placing outdated legacy regulations on fiber-based facilities and networks has led to the remarkable growth of the telecommunications industry (wired and wireless), spurred consumer ability to access advanced IP-based services and has provided the impetus for the IP Transition.

The AT&T Petition signals the next bold step in an effort to further advance next-generation network deployment to American consumers and businesses. Today, ILECs – unlike their competitors in the broadband market – must maintain two networks, the antiquated circuit-switched, time division multiplex (TDM-based) telephone network and the newer packet-switched, Internet protocol (IP-based) networks they have built and continue to deploy. As the FCC’s Technological Advisory Council (“TAC”) noted, this is detrimental to investment because the “cost of subsidizing access to the [switched access] system will rise dramatically” if carriers face the burden of maintaining two systems, not one, as a result of outdated regulations or for the apparent sole benefit of a few competitors offering services that business customers themselves increasingly will find less functional and therefore less attractive.<sup>15</sup> If adopted, the CLEC proposals in response to the AT&T Petition and the USTA Petition would leave the rapidly-converging telecommunications industry hamstrung by regulations, harming both consumers and businesses.

History documents that technology always leads policy, and the Commission should recognize and embrace technological innovation in lieu of placing its hand on the scale to protect outmoded business models of any one type of competitor.

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<sup>15</sup>See, *Technological Advisory Council Chairman’s Report*, April 22, 2011. See also Technological Advisory Committee presentation titled *Status of Recommendations*, September 27, 2011.

The reverse is equally true. Regulatory certainty helps spur the type of private investment that the Commission seeks to attract for America's broadband markets; in contrast, continued uncertainty regarding what rules would apply to IP networks act as a sharp deterrent to the investment necessary to further technological innovation. Few regulatory decisions would be more harmful to the Administration and the FCC's goal of universal broadband adoption than the continued uncertainty that would be hanging over future investment in the form of potential Title II obligations that might be applied to competitive broadband network operators in the future.

#### **IV. THE AT&T PETITION PROMOTES THE FUTURE FORESEEN BY THE ACT, YET IS NARROWLY TAILORED**

With respect to the AT&T Petition, the proper way forward is clear. Broad agreement exists on the desirability -- indeed, the inevitability -- of the IP transition, a point noted in the comments filed by the National Cable & Telecommunications Association and several other companies and associations with a strong interest in these IP transition issues. Yet, contrary to the views of certain critics, AT&T seeks not to impose the IP Transition by fiat on the entire nation; but rather that petitioner proposes -- and DPI and Kleinhenz support, and as expressed more fully, below -- the initiation of geographically limited *trials* for all-IP deployment, under the direct supervision of the Commission and in an environment in which interested parties and the public may raise questions and concerns regarding the difficult technical, policy, and consumer issues associated with the transition.

These initial steps should be welcomed, not feared. The very limited scope of the proposed trials should reassure the public and all other interested parties that complex issues and concerns will be raised and addressed. Nevertheless, the conclusion is clear: these limited trials

are well within the Commission's authority to adopt regulatory forbearance under Section 10 of the Act; and the trials are desirable as path toward the all-IP future.

We wonder, in fact, if those who today criticize the AT&T Petition have forgotten recent history. The transition to digital television – a successful initiative to transition away from legacy technology – was preceded by a similar beta test, under the direct supervision and authority of the Commission.<sup>16</sup> Commenters opposing AT&T's proposals for beta tests seem to suggest that these experiments will result in a series of deregulatory horrors for consumers – a position that demonstrates a lack of confidence in the Commission's ability to monitor and oversee the IP Transition and carry out its vision to expand next generation broadband network deployment nationwide. Yet what petitioner proposes is not wholesale deregulation; rather it, DPI and Kleinhenz assert that a series of limited trials to identify what, if any, regulations are necessary in an all-IP world is key to informed decision making. Just as in the case of the transition to digital television, these trials are an indispensable part of making the next innovation – the switch to all-IP networks – a reality for consumers and businesses.

**V. THE COMMISSION SHOULD DESIGNATE MUNCIE, IN, AS THE LOCATION OF A “WIRE CENTER” EXPERIMENT.**

DPI and Kleinhenz endorse the AT&T recommendation that the Commission elicit proposals from ILECs for the designation of specific “wire centers” to use as part of the experiment to transition from TDM to IP-based technology, as well as develop detailed plans for conducting trials at those wire center locations. We suggest the FCC, in coordination with

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<sup>16</sup> See, e.g., Fourth Further Notice of Proposed Rule Making in MM Docket No. 87-268 (1995).

AT&T Indiana, designate Muncie, IN, as the site of one of the proposed wire center experiments that would test-bed the transition from traditional copper wire telecommunications operations to all digital, Internet-protocol systems. This would not be the first time that Muncie, IN, would be the site of major studies of American consumer, social and technology trends and transitions.

In addition to DPI, Ball State University is the site of the Center for Middletown Studies. The purpose of that Center is to conduct research, based initially on Robert and Helen Lynd's seminal account of Muncie, Indiana, during the 1920s, *Middletown: A Study in Modern American Culture* (1929),<sup>17</sup> and on subsequent studies by the Lynds and many others.

Supplementing their original book, the Lynds returned to Muncie during the 1930s to examine the impact of the Great Depression. They produced a second book, *Middletown in Transition*<sup>18</sup> and inaugurated a tradition of returning to Muncie to explore the development of modern American society up close.

Following the Lynds' lead, marketers flocked to the city during the middle of the 20th century to test new products, while social scientists used Muncie as a laboratory for investigating a variety of questions. In the late 1970s, a team of sociologists led by Theodore Caplow of the University of Virginia compiled a new Middletown study, 50 years after the initial work. This effort, which became known as Middletown III, produced two books, *Middletown Families*<sup>19</sup> and *All Faithful People*.<sup>20</sup>

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<sup>17</sup>See Lynd, Robert S. and Helen M. Lynd. *Middletown: A Study in Contemporary American Culture*. New York: Harcourt, Brace, and Company (1929).

<sup>18</sup> See, e.g., Lynd, Robert S. and Helen M. Lynd. *Middletown in Transition: A Study in Cultural Conflicts*. New York: Harcourt, Brace, and Company (1937).

<sup>19</sup> See Caplow, Theodore, et al., *Middletown Families: Fifty Years of Change and Continuity* (1982).

<sup>20</sup> See Caplow, Theodore, et al.. *All Faithful People: Change and Continuity in Middletown's Religion*. Minneapolis: University of Minnesota Press (1983)

Between 1979-1982, the film producer Peter Davis brought out *Middletown*, a series of six separate films which were aired on PBS. Caplow and his research team returned to Muncie in 1998-99 for another study, known as Middletown IV.<sup>21</sup> This project occurred in cooperation with the broadcast of Ben Wattenberg's documentary, *The First Measured Century*, shown on PBS in late December 2000, and the publication of a book with the same title. Along with these major efforts, the past 80-plus years have seen a host of more specific investigations of particular aspects of modern life as experienced in Middletown.<sup>22</sup>

The subsequent Middletown Media Studies (2003-2004) involved investigations that tracked the ways in which ordinary Americans residing in and around Muncie engage with the many new forms of media available in the twentieth century.<sup>23</sup> DPI now proposes to conduct, in concert with Ball State's Center for Information and Communication Sciences (CICS), similar

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<sup>21</sup> See Geelhoed, E. Bruce. *Muncie: The Middletown of America*. Chicago, IL: Arcadia Publishing (2000).

<sup>22</sup> See, e.g., Caccamo, Rita. *Back to Middletown: Three Generations of Sociological Reflections* (2002).

<sup>23</sup> See, e.g., Papper, R.A., Holmes, M.E., Popovich, M.N., & Bloxham, M.V. (2005, September). *Middletown Media Studies II: The media day*. Muncie, IN: Ball State University Center for Media Design; Holmes, M.E., Papper, R.A., Popovich, M.N., & Bloxham, M.V. (2005, September). *Middletown Media Studies II: Concurrent media exposure*. Muncie, IN: Ball State University Center for Media Design; MMSI; and Papper, R.A., Holmes, M.E., & Popovich, M.N. (2004). *Middletown Media Studies: Media multitasking...and how much people really use the media*. *The International Digital Media and Arts Association Journal*, 1(1), pp. 9-50. (Invited monograph for the inaugural issue.)

Related publications include:

Papper, R., Holmes, M.E., & Popovich, M. (2008). *Middletown Media Studies II: Observing consumer interactions with media*. In (A. Grant & J. Wilkinson Eds.), *Understanding media convergence* (pp. 52-63). London: Oxford University Press; and Holmes, M.E., & Bloxham, M.V. (2008) *An observational method for time use research: Lessons learned from the Middletown Media Studies*. *Social Indicators Research*, 93(1), 245-248. DOI: 10.1007/s11205-008-9371-z.

research on the “IP transition.” DPI would conduct that research using, in significant part, data gathered from the proposed “wire center” experiment in Muncie.

## **VI. CONCLUSION**

Taken together, the Petitioners here foresee a welcome and public-benefitting new chapter in the history of American telecommunications. The Commission can take an important step by recognizing that old, legacy regulatory systems are past their prime and antithetical to the vision and promise of an all-IP future . Granting each Petition will hasten the IP Transition, spur the private investment on which that transition depends, and fulfill the promise of the *National Broadband Plan* of universal access to high-speed broadband for America’s citizens and American leadership in the 21<sup>st</sup> Century economy.

Respectfully submitted,

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