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

In the Matter of	)	
	)	
Technological Transition of the	)	GN Docket No. 12-353
Nation's Communications Infrastructure	)	

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AT&T and the National Telecommunications Cooperative Association (NTCA) have both filed petitions requesting that the Commission launch a proceeding to "facilitate" and/or "promote and sustain" the industry's transition from single purpose circuit-switched networks optimized for voice to multi-purpose broadband platforms that can support voice, data and video.[1] Recognizing that the "challenge for the country is to ensure that as [Internet Protocol]-based services replace circuit-switched services, there is a smooth transition," the National Broadband Plan sensibly recommends that "the FCC should start a proceeding on the transition that asks for comments on a number of questions."[2] The AT&T and NTCA petitions, in most respects, appear to be consistent with this recommendation and do not pose a difficult question.

[1] Pleading Cycle Established on AT&T and NTCA Petitions (GN Docket No. 12-353) *Public Notice* (Dec. 14, 2012).

[2] Connecting America: The National Broadband Plan, *Federal Communications Commission* (Mar. 16, 2010) *(National Broadband Plan) available at* http://download.broadband.gov/plan/national-broadband-plan.pdf, at 59.

As ever-increasing numbers of consumers freely choose to discontinue their circuit-switched phone service, incumbent local exchange carriers (ILECs) are under enormous pressure to cut costs and diversify, and their options are severely limited where they are required to maintain inefficient Time Division Multiplexing (TDM) networks and/or where they are under carrier of last resort obligations. Monopoly-era regulations must be reformed so that all market participants have a fair opportunity to compete to provide consumers with more choices and ultimately lower prices.

Since intercarrier compensation and "pro-competition" policies of the type recommended by NTCA and a group of Competitive Local Exchange Carriers (CLECs) here tend to be highly controversial and typically require many years to resolve, they are clearly inappropriate in light of the straightforward purpose of this proceeding, as well as the fact that rapidly changing market conditions cry out for a swift Commission response as to an appropriate framework the for TDM-to-Internet Protocol (IP) transition.

A. REGULATION MANDATING TDM SERVICES IS COSTLY AND UNSUSTAINABLE

Federal and state TDM service rules are an artifact of the deceased monopoly era in telecommunications, and they provide an excellent example of how policymakers can inhibit innovation when they enshrine particular technologies in statutes and regulations.

Significant numbers of consumers are finding their switched access service unnecessary, and they are freely choosing to discontinue it. LECs had over 41 percent fewer switched access lines in service nationwide in 2011 compared to 2001 (slightly over 112 million in 2011 versus almost 192 million in 2001).[3] AT&T estimates that across the 22 states within which it provides

[3] Compare "Local Telephone Competition: Status as of Jun. 30, 2001," *Federal*

local telephone service, "less than 30 percent of homes are actually connected to an ILEC's old [Plain Old Telephone Service] infrastructure."[4] *The Economist* recently predicted that if consumers discontinue landline telephone service at the current rate, "the last cord will be cut sometime in 2025."[5]

The line losses are placing ILECs in an impossible situation, since legacy regulation typically requires that they alone furnish basic voice service to any consumer upon reasonable request within a few days, and TDM is frequently prescribed.

The cost of maintaining circuit-switched networks subject to carrier of last resort obligations does not decrease in direct proportion to the number of remaining subscribers. There are exceptionally high fixed costs in the telephone business. ILECs still have to maintain the lines that are no longer in use, as well as the expensive central office switching capacity and various customer support functions. During the five year period between 2007 and 2011, for example, AT&T's access lines in service declined 40 percent (from 61.582 million to 36.734 million), while its wireline segment operating expenses declined only 12 percent (from $59.805 billion to $52.494 billion). Whereas AT&T was spending the monthly equivalent of

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Communications Commission (Feb. 2002) *available at* http://transition.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/lcom0202.pdf (Table 6) with "Local Telephone Competition: Status as of Jun. 3, 2011," *Federal Communications Commission* (Jun. 2012) *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0614/DOC-314631A1.pdf at Table 9.

[4] "Building a Network for the 21st Century," by Bob Quinn, *AT&T Public Policy Blog* (Nov. 7, 2012) *available at* http://attpublicpolicy.com/fcc/building-a-network-for-the-21st-century/.

[5] "Cutting the cord," *The Economist* (Aug. 13, 2009) *available at* http://www.economist.com/opinion/displaystory.cfm?story_id=14214847.

$80.93 per access line in service in 2007, by 2011 this had risen to $119.09 (a 47 percent increase).[6]

Long gone are the days when providers like AT&T were entitled to raise their rates for basic phone service to cover the cost of providing that service. Rates for voice services are subject to price cap regulation, market regulation (i.e., consumers can choose between competitive alternatives, such as mobile wireless or VoIP) or both. The providers have no option except to cut costs and diversify, but with ILECs (and not their competitors) required to incur significant costs maintaining capacity that is no longer in service, they cannot possibly reduce their costs to reflect the realities of the marketplace. As telephone service becomes noncompetitive, employment and investment will be jeopardized. The National Broadband Plan recognizes that this situation is "not sustainable."[7]

Fortunately, as the number of switched access lines in service dwindles, there is only one obstacle preventing LECs from embracing new efficiencies and developing new sources of revenue to satisfy shareholders: obsolete regulation designed for a bygone era. Modern IP-based networks can deliver voice, data and video. As the National Broadband Plan outlines, "convergence in communications services and technologies creates extraordinary opportunities to improve American life and benefit consumers."[8] For one example, since voice requires relatively little bandwidth compared to video—for which broadband networks will be

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[6] AT&T Annual Report (2011), *available at* http://www.att.com/Common/about_us/files/pdf/ar2011_annual_report.pdf, at 30, 37; AT&T Annual Report (2007), *available at* http://www.att.com/Investor/ATT_Annual/downloads/07_ATTar_FullFinalAR.pdf, at 26, 32.

[7] *National Broadband Plan*, *supra* note 2, at 59.

[8] *Id.*

optimized—voice can be offered at little to no additional cost. It is conceivable that voice could become a free application for broadband subscribers.

B. THE BEST WAY TO ENSURE AFFORDABLE VOICE SERVICE IS TO REMOVE BARRIERS TO BROADBAND INVESTMENT

Since multifunctional broadband platforms can deliver high-quality voice service at lower cost compared to single-purpose voice networks, the best way to ensure affordable voice service is to remove barriers to broadband investment. TDM-based regulation reduces investment in broadband.[9] Robert Atkinson and Ivy Schultz estimated that by 2011 almost half of all capital investment in the wireline networks of the major telephone companies would still be in the "legacy" telephone operations.[10]

We also now see evidence that regulation which was originally designed for TDM also discourages competition for VoIP services. Asked whether Google would provide voice service over the fiber network it recently constructed in Kansas City, a company official replied, "We looked at doing that. The cost of actually delivering telephone services is almost nothing. However, in the United States, there are all these special rules that apply."[11] As a result, Google will not be offering voice service.

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[9] *Id.*

[10] Robert C. Atkinson and Ivy E. Schultz, "Broadband in America - Where It Is and Where It Is Going (According to Broadband Service Providers)," *Columbia Institute for Tele-Information* (Nov. 11, 2009) *available at* http://www.broadband.gov/docs/Broadband_in_America.pdf, at Table 5.

[11] "Google considers but drops plans to include voice service, too," by Alyson Raletz, *Kansas City Business Journal* (Dec. 4, 2012) *available at* http://www.bizjournals.com/kansascity/blog/2012/12/google-considers-drops-phone-service.html.

The National Broadband Plan acknowledges that regulatory reform is needed to sustain billions of investment dollars and tens of thousands of jobs and to promote innovation that increase consumer choice and ultimately lead to lower prices.

> Regulations require certain carriers to maintain [Plain Old Telephone Service]—a requirement that is not sustainable—and lead to investments in assets that could be stranded. These regulations can have a number of unintended consequences, including siphoning investments away from new networks and services. The challenge for the country is to ensure that as IP-based services replace circuit-switched services, there is a smooth transition for Americans who use traditional phone service and for the businesses that provide it. (footnotes omitted.)[12]

Even if some carriers wanted to stick with TDM-based technology, the National Broadband Plan recommended discontinuing subsidies for traditional phone service in favor of ubiquitous broadband that offers high-quality voice,[13] and, in one of the most significant actions taken to date, a bipartisan FCC unanimously adopted this recommendation in 2011.[14]

C. ENCOURAGE STATES TO REFORM CARRIER OF LAST RESORT OBLIGATIONS

In many states, the requirement to maintain inefficient TDM networks is coupled with a carrier of last resort obligation. Although not a TDM-based regulation itself, strictly speaking, carrier of last resort obligations were designed for a TDM world populated by "natural monopolies," where the cost of providing TDM services made competition difficult if not

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[12] *National Broadband Plan, supra note 2,* at 59.

[13] *Id.*, at 150-51.

[14] In the Matter of Connect America Fund, etc., *Report and Order and Further Notice of Proposed Rulemaking,* WC Docket No. 10-90 (released Nov. 18, 2011) ("Networks that provide only voice service, however, are no longer adequate for the country's communication needs …. 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 … Under these circumstances, modernizing USF and ICC from supporting just voice service to supporting voice and broadband, both fixed and mobile, through IP networks is required by statute.") *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf, at 5-9.

impossible. The legal obligation to provide timely service upon reasonable request to anyone within a matter of days, subject to regulated rates, terms and conditions, was a *quid pro quo* for a valuable monopoly franchise. The Telecommunications Act of 1996 eliminated the monopoly franchise,[15] but in many states regulated telephone utilities are still under an obligation to provide timely service to anyone who requests it.

An obligation to serve imposes significant costs on a single class of providers (ILECs) that do not have to be borne by commercial rivals (VoIP and wireless service providers), therefore it is anticompetitive and should be eliminated wherever the market is competitive and consumers can choose between multiple providers.

Where consumers have a choice between voice service providers, no provider should be saddled with a monopoly-era duty to provide service. If it is necessary to require a service provider to serve as a carrier of last resort in a particular locale, *first*, the provider should be free to choose the technology(ies) it will use to serve its customers. *Second*, the process for selecting a carrier of last resort should be competitively neutral and not impose undue or discriminatory burdens on a particular provider of voice service or class of providers.

A few critics have predicted predict dire consequences if regulation is streamlined, claiming, for example, that rural communities, the poor and the elderly *could* be "left behind" if basic phone service disappears.[16] The critics have not cited any evidence, nor even alleged, that any consumers have, in fact, lost phone service or have been unable to obtain suitable voice

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[15] Pub. L. 104-104 (1996)

[16] *See, e.g.*, "Kentucky phone companies push to end basic service," by John Cheves, *Lexington Herald-Leader* (Feb. 17, 2012) *available at* http://www.mcclatchydc.com/2012/02/17/v-print/139189/kentucky-phone-companies-push.html ("consumer advocates warn that rural communities, the poor and the elderly could be among those left behind if basic phone service disappears").

service where states have undertaken these reforms. These objections usually overlook or ignore the Commission's efforts in cooperation with service providers to ensure ubiquitous wired and wireless broadband at affordable prices.

D. THE PURPOSES OF THIS PROCEEDING SHOULD NOT INCLUDE PROVIDING A SHORT-TERM WINDFALL FOR RURAL TELEPHONE COMPANIES

NCTA asks the Commission to provide the nearly 600 rural telephone companies it represents with an "incentive" to offer IP interconnection by allowing them to charge other carriers rates that can be grossly inflated, both to generate significant cross-subsidies and to allow rural carriers to recover their aggregate revenue requirement according to the "cost-plus" methodology which, as the Commission has observed in the past, does not provide appropriate efficiency or innovation incentives.[17]

For rural rate-of-return carriers, the price of interconnection will be zero beginning Jul. 1, 2020, since the Commission has adopted "bill-and-keep" for all telecommunications traffic exchanged with a LEC.[18] Under the new regime, aside from what rural carriers receive from their own subscribers, they will also be able seek universal service subsidies where necessary.[19] The Commission has already rejected claims that bill-and-keep does not allow for sufficient cost recovery.[20]

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[17] *National Broadband Plan, supra* note 2, at 147 ("Rate-of-return regulation was not designed to promote efficiency or innovation…")

[18] *Connect American Fund Order,supra* note 14, at 34, Appendix A.

[19] *Id.*

[20] *Id.*, at 746 ("bill-and-keep merely shifts the responsibility for recovery from other carrier's customers to the customers that chose to purchase service from that network plus explicit universal service support where necessary.[20] Such an approach provides better incentives for

Meanwhile, interstate access charges will be available for interexchange *telecommunications* traffic that originates or terminates in IP format but is exchanged between carriers in TDM format between now and 2020.[21] NTCA wants to apply the same rule to voice traffic exchanged in IP format, which isn't "telecommunications" as that term is currently defined. The purpose of a transition is to give regulated entities time to adapt to the loss of something. Since rural carriers cannot levy access charges for this traffic now, there is no loss and therefore nothing to transition.

There appears to be a strong business case—absent an artificial regulatory "incentive"—for carriers of all sizes to deploy softswitches that enable IP interconnection. NTCA concedes that by the end of 2011, over half of small rural carriers had either already deployed or had plans to deploy softswitches. The Commission has correctly rejected similar concerns of rate-of-return carriers that federal policy "disincents investment in softswitches," noting that such switches are significantly less costly and more efficient, and create new opportunities to generate additional revenues.[22] As one expert cited by the Commission wrote on the back cover of his book,

> Hardware switches can cost tens of millions and occupy a city block in real estate. Softswitches are a fraction of the cost and the size of a refrigerator. Bypassing big iron can also make for a more efficient development environment, potentially offering more revenue-generating features than a Class 5 switch.[23]

For one thing, the recovery these carriers are seeking was designed for a bygone era when switching was significantly more expensive, pursuant to a methodolgy that does not provide

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carriers to operate efficiently by better reflecting those efficiencies (or inefficiencies) in pricing signals to end-user customers.")

[21] *Id.*, at 40, Appendix A.

[22] *Id.*, at fn. 1730.

[23] Franklin D. Ohrtman, Jr. Softswitch: Architecture for VoIP (McGraw-Hill Professional, Dec. 10, 2002).

appropriate incentives for cost-cutting.[24] For another, if rural telephone companies are going to be protected from the hazard of technological obsolescence, someone else will have to pay. If the cost is shifted to the customers of non-rural providers, like usual, not only is that a form of regressive taxation, but urban and suburban consumers already frequently pay substantially higher rates for phone service than rural subscribers.

As the Commission has previously noted, there are a number of rural carriers with local rates that are significantly lower than rates that non-rural consumers pay (as low as $5 per month in some areas of the country).[25] The Commission's theory as to how some rural carriers got away with charging $5 rates ("some state commissions may not have examined local rates in many years, and carriers may lack incentives to pursue a rate increase when federal universal service support is available")[26] helps illustrate the manifest shortcomings of the old regulatory regime and show why the rates that rural carriers want to impose on IP interconnection for the first time are unreliable.

Although the Commission is undertaking several reforms to "eliminate waste and inefficiency and improve incentives for rational investment and operation by rate-of-return LECs,"[27] the prices the industry is stuck with until 2020 reflect the fact that too often regulators have been subject to inappropriate political pressure and have faced resource contrants that have forced them to rely on cookie-cutter solutions and conduct far too few "thorough total company

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[24] *See, e.g., Connect American Fund Order, supra* note 14, at para. 892 ("Under the interstate regulation that has historically applied to them, rate-of-return carriers were able to increase *interstate* access rates to offset declining [call volume], which has averaged 10 percent per year, and consequently had insufficient incentive to reduce costs despite rapidly decreasing demand.").

[25] *Id.*, at para 235.

[26] *Id.*

[27] *Id.*, at paras. 194-294.

earnings reviews." Just as it has been too easy for rural carriers to avoid cost-cutting and rate increases by shifting their revenue requirements to universal service subsidy sources, the same thing happens with respect to intercarrier compensation. The access charges that out-of-town phone companies have been forced to pay to rural carriers, in many cases, have gossly exceeded the cost of interconnection.

The Commission is to be highly commended for addressing this situation going forward—both by reducing interstate access charges over the years, and by mandating intrastate access charge reductions to achieve parity with interstate rates[28] limiting subsisies (on a dollar-for-dollar basis) to carriers who charge unreasonably low rates for local phone service. Since intercarrier compensation reforms are highly controversial and typically require many years to resolve, they are clearly inappropriate for the otherwise straightforward purpose of this proceeding, as well as the fact that rapidly changing market conditions cry out for a swift Commission response as to an appropriate framework the for TDM-to-IP transition. The same consideration applies to a proposal from several CLECs for expanding "pro-competition" regulation.

E. THE COMMISSION SHOULD NOT FOCUS ON EXPANDING REGULATION FOR THE BENEFIT OF CLECS

Cbeyond, EarthLink, Integra Telecom, Level 3 Communications and tw telecom ask the Commission to update "pro-competition" policies that were designed almost 20 years ago for a very different set of market conditions in which the incumbent providers still had significant

[28] *Id.*, at para. 791.

market power. In particular, the CLECs are demanding post-transition access to the IP-based last-mile facilities of the ILECs at regulated rates, terms and conditions.[29]

As everyone knows, the current regime was the subject of many years of bitter conflict, both at the Commission and in the courts. This period was a complete waste of time considering the competitive insignificance of the CLECs on the whole, plus the fact that robust voice competition emerged from the wireless and cable sectors of the communications industry that were not subject to—and had no need for—the Commission's "pro-competition" rules.

It is also worth repeating that, since there are costs as well as benefits from forcing access to ILEC facilities, this regime was never intended to last forever. When the Commission established the current unbundling rules, it recognized that it was Congress' expectation that new competitors would use unbundled elements from ILECs "*until* it was practical and economically feasible to construct their own networks."[30] (emphasis added.) The Commission further observed that "it is only through owning and operating their own facilities that competitors have control over the competitive and operational characteristics of their service, and have the incentive to invest and innovate in new technologies that will distinguish their services from those of the incumbent."

Justice Stephen E. Breyer, whose 1982 book has been described as "one of the two towering landmarks of regulatory policy and scholarship," has said that

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[29] *See:* Letter from Thomas Jones, Counsel for Cbeyond, Inc., EarthLink, Inc., Integra Telecom, Inc., Level 3 Communications, LLC, and tw telecom inc. to Marlene H. Dortch, Secretary, FCC, GN Docket No. 12-353 (Jan. 22, 2013) *available* at http://apps.fcc.gov/ecfs/document/view?id=7022109891.

[30] In re Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, 15 FCC Rcd. 3696 (1999) (Third Report & Order) *(Local Competition Order)*, at para. 6.

> the sharing of facilities by two or more firms is *not* itself competition; but sometimes sharing of bottleneck facilities will help bring about competition in the unshared, remaining parts of the service. It is this latter form of competition that the [Telecommunications Act of 1996] seeks to promote.[31]

If the regulated rates, terms and conditions are too "reasonable," as Breyer goes on to explain, CLECs would have an incentive to lease elements from ILECs forever, not create new independent facilities; rules which have this effect would "tend toward a system in which regulatory price setting would *supplant,* not *promote,* competition."[32] If government is setting rates, terms and conditions, that is *regulation,* not *competition.*

The Commission understood this principle in the late 1990's (although the rules it established failed to achieve it). Chairman Reed E. Hundt has confirmed that "our policy was to introduce competition and then to deregulate," and that the "purpose of pro-competitive rulemaking ultimately would be the elimination of rules."[33]

There is nothing special about the last-mile facilities that CLECs were expected to deploy. Unlike the terminal facilities in *U.S. v. Terminal Railroad Association,*[34] the last-mile facilities at issue here can be duplicated, and the cost is *not* prohibitive. In 2006, the Government Accountability Office found that competitor need only sign up a couple customers to justify the cost of extending their own facilities to the commercial buildings they typically

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[31] Stephen Breyer, Economic Reasoning and Judicial Review, AEI-Brookings Joint Center 2003 Distinguished Lecture (AEI Press, 2004) at 9.

[32] *Id.,* at 10.

[33] Reed E. Hundt, You Say You Want a Revolution: A Story of Information Age Politics (Yale Univ., 2000) at 26, 56.

[34] 224 U.S. 383 (1912).

serve.[35] Aside from constructing their own facilities, there is also no reason that CLECs cannot lease the facilities of cable operators, wireless providers or each other. ILECs are no longer "natural monopolies," and regulatory policies predicated on that fact of history are unnecessary and anticompetitive.

What's plainly at issue here is identical to the situation Breyer described, i.e., the rules make it cheaper for the CLECs to lease facilities from ILECs instead of building new independent facilites. If anything, the time has come for the Commission to follow its own advice, i.e., "only facilities-based competition can fully unleash competing providers' abilities and incentives to innovate, both technologically and in service development, packaging, and pricing …"[36] and encourage rent-seekers to fend for themselves.

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[35] "FCC Needs to Improve Its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services," GAO-07-80 (Nov. 2006) at 26 *available at* http://www.gao.gov/new.items/d0780.pdf ("[R]epresentative from one firm estimated that they would need three to four DS-1s of demand, while representatives from two other firms estimated demand of greater than 2 DS-3s was required. However, one incumbent firm and one cable company noted that the necessary revenue to extend a nearby network into a building is relatively low.")

[36] *Local Competition Order*, *supra* note 30 at fn. 12.

CONCLUSION

Petitioners call attention to an urgent and widely-recognized need to for the Commission to promptly conduct a thorough review of federal and state regulations that severely restrict TDM service providers' flexibility to compete and eliminate those requirements that are anticompetitive and inhibit investment in broadband. The Commission should also resist entreaties to reopen highly-contentious intercarrier compensation and "pro-competition" policies that could take many years to resolve and will almost certainly trigger more litigation.

Respectfully Submitted,

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