In the Matter of

Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended By the Broadband Data Improvement Act

GN Docket No. 14-126

REPLY COMMENTS OF COMPTEL

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REPLY COMMENTS OF COMPTTEL

COMPTEL respectfully submits these comments in reply to certain comments of AT&T in response to the Commission’s Tenth Broadband Progress Notice of Inquiry (FCC 14-113) in the above-referenced docket.

Introduction and Summary

AT&T seeks to evade critical statutory wholesale obligations that are the foundation of competition.1 The Commission should not acquiesce to AT&T’s wishes. Rather, the Commission should reaffirm and strengthen its competition policies to facilitate a more robust broadband business market.2 Since 1996, an estimated $1.3 trillion in investment has been made in the communications industry.3 New technologies and services have been introduced and

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1 See Comments of AT&T at 16.


widely adopted, many of which were in their infancy or not even in existence when the Telecommunication Act of 1996 (“1996 Act”) was passed. These developments demonstrate that the 1996 Act has succeeded in promoting significant investment and advancing the deployment of the networks and services over the last 18 years. In the context of broadband business services, in particular, Commission policies ensuring reasonably priced access to wholesale inputs and interconnection on reasonable and nondiscriminatory terms is necessary to advance the core goals of Section 706: promoting competition and spurring broadband investment. As the Commission has recognized, the fostering of competition in the business broadband market is essential in laying the foundation for a broadband future and wholesale policies have played an essential role in enabling competition and investment in the business broadband market, which is a critical market to the overall economy.4

More often than not, incumbent local exchange carrier (“LEC”) connections offer the only economically viable means for competitors to connect to business customer locations.5 As

4 “Residential broadband competition—as important as it is—is not the only type of competition we must foster to lay the foundation for America’s broadband future. Ensuring robust competition not only for American households but also for American businesses requires particular attention to the role of wholesale markets, through which providers of broadband services secure critical inputs from one another.” Federal Communications Commission, Connection America: The National Broadband Plan at 47 (“National Broadband Plan”), available at: http://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf

5 See Petition of Ad Hoc Telecommunications Users Committee, BT Americas, Cbeyond, Computer & Communications Industry Association, EarthLink, MegaPath, Sprint Nextel, and tw telecom to Reverse Forbearance from Dominant Carrier Regulation of Incumbent LECs’ Non-TDM-Based Special Access Services, WC Dkt. No. 05-25, at 41-46 (filed Nov. 2, 2012) (“Petition to Reverse Forbearance”). CenturyLink, in its petition for the same forbearance relief at issue in the Petition to Reverse Forbearance, actually highlights the significant extent of competition in the business market that comes from traditional competitive local exchange carriers that rely on the competitive provisions of the Act in order to provide business consumers the competitive services they need. See Opposition of COMPTEL, CenturyLink’s Petition for Forbearance Pursuant to 47 U.S.C. § 160(c) from Dominant Carrier Regulation and Computer Inquiry Tariffing Requirements on Enterprise Broadband Service, WC Docket No. 14-9, filed
a consequence, the Commission not only has a statutory duty to ensure rates for the wholesale last miles access services/facilities (whether copper or fiber, TDM or non-TDM) are just and reasonable and non-discriminatory, particularly in the business market, the continued growth of a strong free market for innovative and competitively priced retail products that spur investment depends on it.

The interconnection obligations under Sections 251 and 252 of the 1996 Act are also vital to the future of competitive broadband services and must be maintained with the technology transition. The amount of investment and innovation the industry has experienced would not have been possible if the largest of the incumbent carriers had been allowed to restrict competitive entry and either deny interconnection outright, or set conditions on interconnection that would make competing in a particular market economically impossible for smaller companies. With regard to the importance of interconnection obligations, COMPTEL incorporates into the record, in its entirety, COMPTEL’s Response to Questions in House Energy and Commerce White Paper Network Interconnection.

**Competition Policies Spur Investment**

In its comments in this proceeding, AT&T yet again makes the absurd argument that statutory wholesale obligations, specifically referring to Sections 251 and 271 of the 1996 Act,

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6 47 U.S.C §§201 and 202. This is in addition to the obligations under 47 U.S.C. §§251 and 271.

somehow have the effect of deterring it from investing in next-generation facilities. Despite its repetition, the claim that existing statutory wholesale obligations reduce incentives to invest in and deploy the infrastructure needed to deliver broadband services has never been proven. In fact, the Commission recognized evidence to the contrary in its *Technology Transitions Order and Further NPRM*. Specifically, it found that between 1996 and 2001 – the time period after the telephone network was open to competition and *before* the Commission started granting ILECs watershed relief from their wholesale obligations – the industry experienced “a torrent of new investment deployed over 200,000 miles of trenches and approximately 18 million miles of fiber – enough fiber to circle the equator 750 times.”\(^8\) As noted above, since 1996, an estimated $1.3 trillion in investment has been made in the communications industry and new technologies and services have been introduced and widely adopted, many of which were in their infancy or not even in existence when the 1996 Act was passed. These developments demonstrate that the 1996 Act has succeeded in promoting significant investment and advancing the deployment of the networks and services over the last 18 years.

An analysis commissioned by NASUCA likewise concluded that there “is ample evidence that ILECs are investing, and that regulation is not standing in the way of these investments.”\(^9\) The study espoused “the shift to broadband investment [that] was documented in the Atkinson Report, with the share associated with legacy networks showing a substantial

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Moreover, the smaller rural telephone companies are touting the steps they are taking, such as upgrading their voice switching systems by replacing them with softswitch technology (IP-enabled switches) that support Ethernet interfaces and IP routing cores, to migrate their networks from circuit to packet switching. They “continue to make progress evolving their multi-use networks to provide the services their customers want today and will demand in the future using a common IP-enabled broadband network platform.” And, they do so without demanding to get out of their statutory obligations.

Moreover, AT&T’s claims of being required to maintain two networks is nonsense, as the same physical infrastructure that has supported TDM-based services over the decades supports IP-based services. This network consists of trenches, poles, rights-of-way, conduits, fiber, copper loops, spectrum licenses, municipal permitting for disruptions of streets and pavements, easements, right of access to buildings, and all the other necessary inputs for any network. As the NASUCA Report found “there is no question that ILECs are currently utilizing substantial proportions of their legacy infrastructure to deliver broadband services.” Yet, as a practical matter, only incumbent local exchange carriers enjoy the benefit of a ubiquitous network that represents the cumulative investment of decades, supported by a geographically dispersed


12 NECA Report at 15.

13 NASUCA Report at 3.
customer base that is still significant, even after years of competition.\textsuperscript{14} Certainly parts of this network must be replenished, but much of the core investment – in poles, conduits, rights-of-way, fiber and even copper – is easily reusable in a broadband infrastructure.

Competitive LECs, on the other hand, would have to duplicate the entire ILEC network. While many competitors have been building their own network since the 1996 Act, the economics of replicating \textit{all} portions of the incumbent network infrastructure have not changed, as the most significant costs of providing service lie with the physical infrastructure, not with higher layers that electronically define and control traffic flow. Given the harsh reality that last-mile facilities are uneconomic to duplicate in many instances,\textsuperscript{15} the Commission has already found that it is not economically viable for competitors to replicate the incumbent LEC network in its entirety.\textsuperscript{16}

\textsuperscript{14} According to the FCC’s most recent Local Competition Report, incumbent LECs still serve the majority of the wireline retail local telephone service connections. \textit{Local Telephone Competition: Status as of June 30, 2013}, Industry Analysis Division, Wireline Competition Bureau, June 2014, Figure 3, page 4 (“2014 Local Competition Report”). Significantly, the incumbent’s market share is effectively consolidated in a \textit{single} provider, while the competitors’ share is spread among \textit{multiple competitors}. For example, according to the FCC’s Local Competition Report, in the District of Columbia the single incumbent LEC (Verizon) has 59% of the total end-user switched access lines and VoIP subscriptions, while the remaining 41% of the market is divided among \textit{99} competitors. \textit{See 2014 Local Competition Report} at pp. 20 (Table 9) and 28 (Table 17).

\textsuperscript{15} Consider the broadband deployment strategy of even the largest provider in the country, AT&T. As the Commission is aware, AT&T’s broadband deployment (U-verse) exploits the cost-advantage of having a pre-paid – \textit{i.e.}, a fully, or near-fully, depreciated – copper loop investment to avoid incurring the cost of replacing these facilities with fiber or some other facility.

\textsuperscript{16} \textit{See, National Broadband Plan} at 47; \textit{See also, Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. \S\ 160(c) in the Phoenix, Arizona Metropolitan Statistical Area}, Memorandum Opinion and Order, WC Docket No. 09-135, FCC 10-113, ¶ 93 (2010) (“\textit{Qwest Phoenix Order}”)(“Even in those markets that the ILECs claimed to be \textit{most} competitive, the Commission found that “reasonably efficient competitors face barriers to entry that are likely to make entry into these markets uneconomic without access to [UNE loops].”")
AT&T also chooses to ignore that certainty with regard to wholesale access to last-mile facilities at just and reasonable rates encourages competitive LECs to invest in their own network facilities because they can supplement their reach where they cannot build. As Jeff Storey, the President and COO of Level 3 Communications, explains: “We will win a couple of customers. We’ll buy off-net service in there and then we will build our fiber and capture those net [expenses]… But it’s important for us to use off-net providers in the meantime. We can’t go everywhere and so it is a big component of our business….“\textsuperscript{17} This is particularly important given the prevalence of the multi-location customer in the business market, which means that carriers must have an extensive network footprint that allows them to offer services widely in order to compete in the business market. Furthermore, competitors’ ability to develop an economic case for building middle mile and long haul facilities is based on the ability to obtain last mile access to the customer. Thus, where access to unbundled last mile facilities is not available and/or special access rates (for TDM and non-TDM services) are unreasonable, investment opportunities are lost along with the consumers’ ability to have a choice in a provider.

The fact that wholesale obligations promote competition and spur investment was recognized by Congress in enacting Section 706, which states that the Commission must encourage the deployment of advanced telecommunications capability “…in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or...

\textsuperscript{17} CenturyLink Forbearance Petition, Attachment 21, p. 10.
other regulating methods that remove barriers to infrastructure investment.” In its 2010 Open Internet Order, the Commission found that regulations that protect the ability of edge providers to reach end-users spur innovation and improvements to network infrastructure. The Commission’s finding that protecting and promoting edge-providers access to end users spurs innovation and investment is just as applicable with regard to a competitors’ access to business customers. The last-mile bottleneck is the same irrespective of the traffic type. Specifically, wholesale obligations that protect and promote competitive access to consumers protect and promote a “virtuous cycle” of investment and development, because they drive end user demand for more and better broadband technologies, which in turn, stimulates competition among broadband providers to further invest in their own networks.

Wholesale Access Policies are Needed to Spur the “Virtuous Cycle” of Investment in the Business Broadband Market

Wholesale access policies are not just a factor that contribute to competition, which in turn spurs investment, such policies are a necessary component for there to exist any significant competition in today’s business market. The bulk of competition in the business broadband market comes from traditional competitive local exchange carriers that are investing large sums in their own network but rely, to a large extent, on the facilities/services of the incumbent LEC to connect to business customers in the last mile. The Commission has recognized this fact, stating the “nation’s regulatory policies for wholesale access affect the competitiveness of markets for


20 See id.
retail broadband services provided to small businesses, mobile customers and enterprise customers.”

With regard to the Commission’s previous decision on packet-based services, such as the forbearance from dominant carrier rules granted to AT&T, the Commission itself subsequently found that the lack “of appropriate wholesale access to packet-based facilities in particular serves as a constraint on competition in broadband services, which can typically be provided more efficiently using packet-based inputs.”

Indeed, even incumbent LECs, when competing outside of their incumbent region, recognize the importance of wholesale last-mile access policies to their ability to supplement their reach in order to offer service and ensure business consumers have a choice in providers. As Windstream has stated: “Despite investing billions of dollars in recent years to expand and upgrade its network throughout its incumbent (ILEC) and competitive (CLEC) local exchange areas, Windstream’s substantial CLEC operations still rely on AT&T’s ILEC facilities for last-mile access to serve consumers in AT&T operating territories.” Likewise, Verizon has advocated to Ofcom: “As a Communications Provider solely offering services to the business sector, wholesale access products are very important to Verizon … As such, Verizon holds the view that continued regulatory controls must remain in place to safeguard access to the necessary wholesale inputs and thereby support competition to the benefit of customers.”

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21 National Broadband Plan at 47.

22 Id. at 65, n. 70


Without this key form of wholesale access, evidence suggests the business market would not experience the benefit of vigorous competition. Indeed, incumbent LECs’ business market share dwarfs the share of the largest cable providers. AT&T alone reportedly had more “business services revenue” for one quarter of 2013 (reportedly $8.9 billion)\(^\text{25}\) than what USTelecom attributes to the six largest cable companies for the entire year ($8.5 billion).\(^\text{26}\)

Moreover, as Windstream demonstrated in a recent ex parte, non-cable competitors – which deploy services both over their own network facilities as well as last-mile facilities leased by from the incumbent LEC – provide by far the largest source of competition in the nonresidential market with a 26% share of non-residential customer expenditures, compared to cable’s ten percent share.\(^\text{27}\) This analysis on non-residential customer expenditures not only comprise of enterprise and small business, but include government, health care, and schools and libraries.\(^\text{28}\)

The services competitive carriers offer these entities is critical to their operations. The business broadband market benefits greatly from the competition provided by wholesale access policies.


\(^{28}\) Windstream Aug. 7, 2014 Ex Parte.
If Ethernet Services Were Competitive, AT&T Would Not Have to Seek Commission Action Transition Customers

AT&T, in its comments, tells the Commission that it should set a date certain “after which no carrier or customer should have rights to demand services or interconnection in TDM format.” While AT&T blames its statutory obligations for the continued demand for TDM interconnection and TDM services, it actually refuses to enter into an agreement for IP interconnection, in accordance with the 1996 Act, and does not offer comparable packet-based services at equivalent rates. If the market for packet-based wholesale input services (e.g., Ethernet) were competitive, as AT&T alleges, it would not need to ask the Commission set a transition deadline. This is because the customers themselves would choose to purchase these alternative services (which are generally viewed as superior and more efficient). The fact that AT&T is able to force carriers to interconnect in TDM (a far less efficient means of interconnection) and needs the Commission to compel the transition of AT&T’s customers from an inferior technology says everything about the state of the market for interconnection and the underlying last mile transmission component; it’s not working.

Ethernet (a core enterprise broadband service), for example, is a robust technology with vast capabilities. Yet, as we discuss more fully in COMPTEL’s Comments on AT&T’s proposal for wire center trials, AT&T’s Switched Ethernet (“ASE”) service offered through its public guidebook imposes arbitrary limitations on the underlying Ethernet technology that limit the effectiveness of AT&T’s products to serve as a prospective TDM replacement technology. The fact that DSn services are still popular demonstrates that the Ethernet products, as offered by

29 Comments of AT&T at 16.

AT&T, are generally not substitutable for the existing TDM services. In pure and simple terms, consumers are rejecting AT&T’s Ethernet service offerings when they choose to obtain the DSn services they receive today. Consumer sovereignty is an important feature of a market economy, for by revealing their own preferences through the services they select, carriers (including COMPTEL members) are forced to accommodate the native demand of their customers. If the market was functioning probably, AT&T would offer services that are, at least, as reasonably priced and functionally equivalent as its TDM services, and we would see more customers choosing – indeed preferring – them over the TDM services that AT&T proposes to eliminate. New technologies should expand choice and empower customers, not be used as an excuse to escape statutory obligations and, thereby, leave consumers with the sole choice of an unaffordable service.

The deficiency in the Commission’s current wholesale last mile access policies with regard to packet-based services/facilities will have an increasing detrimental impact on the business market, especially small businesses and the smaller locations of larger, multi-location businesses, the further along the industry gets in its technology transitions. As the Commission has recognized in “some cases it limits the ability of smaller carriers – often those specializing in serving niche markets such as SMBs – to gain access to the necessary inputs to compete.” For example, COMPTEL has a member, Blue Rooster Telecommunications, that serves Farm Supply (a small commercial customer) which has 5 locations each served by DS1s. For the DS1s currently in service, Farm Supply spends a total of approximately $1,320/month. The comparable total charges to serve Farm Supply using AT&T’s ASE service as a replacement for

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31 National Broadband Plan at 47.
the DS1s would be $6,340/month, an increase of more than 480%.\textsuperscript{32} Farm Supply uses the DS1s to support voice service, but it also has a requirement for low-latency interconnection between all of its locations in order to support its private network applications. Again, Farm Supply’s capacity requirements are modest but its connectivity requirements are critical for running its business. This scenario also impacts the small business locations of larger, multi-location customers, such as gas stations, quick-care health facilities, retail stores or other low-volume user locations with modest capacity requirements. The need for connectivity is critical for these businesses to operate. Consequently, it is vital that affordable options that meet these consumers’ needs be available.

Importantly, the limitations (availability of lower capacity levels, pricing or otherwise) are \textit{not} limitations in Ethernet technology. Rather, it is a matter of unjust and unreasonable rates and market failure for Ethernet services. As evidence of the unjust and unreasonableness of the rates, COMPTEL commissioned an analysis that compared the Ethernet prices of AT&T to a comparable service constructed using the wholesale Ethernet offering of smaller rural ILECs in NECA #5.\textsuperscript{33} AT&T is far larger and operates in more dense areas than the carriers concurring in NECA #5 and, accordingly, should enjoy significantly greater economies of scale and scope. Consequently, AT&T’s costs should be \textit{less} than the NECA #5 carriers, which would necessarily imply that their prices should be less as well. Instead, as the analysis demonstrates, AT&T’s prices are often greater by an order of magnitude. For example, AT&T’s Ethernet channel

\textsuperscript{32} See COMPTEL Comments on AT&T Proposed Trial at 17.

termination prices are between 6 (2Mbps) and 11 times (1Gbps) more expensive than the rates in
NECA #5, even with a 3 year contract.\textsuperscript{34}

\textbf{The Commission Should Act on its Authority to Strengthen Competition and Spur
Investment in the Business Broadband Market}

As AT&T’s request seems to recognize, the Commission has the authority to address
wholesale issues with regard to packet-based services/facilities pursuant to section 251 and 271
of the 1996 Act. It also has the authority to address packet-based services, including Ethernet
special access services, under Sections 201 and 202 of the Communications Act, as amended
(“Act”). While the Commission granted incumbent LECs forbearance from its dominant carrier
rules with regard to certain of its non-TDM special access services (such as Ethernet), it
recognized that these services are telecommunication services and declined to grant forbearance
from Title II provisions (\textit{e.g.}, Sections 201 and 202 of the Act) generally. The relief granted to
non-TDM special access services was based to a large degree on the availability of TDM special
access services and unbundled network elements. As those inputs are intended to be
decommissioned, the Commission needs to reconsider its forbearance decisions with regard to
packet-based special access services.

In terms of an ILEC seeking to discontinue a service for which it has found to be a
dominant carrier, such as TDM special access services, the Commission, at a minimum, must
ensure the availability of comparable replacement products at equivalent rates prior to the grant
of discontinuance. The same is true with regard to grants of forbearance for the provisioning of
unbundled network elements. The Commission also needs to confirm IP interconnection rights
for the exchange of managed voice traffic pursuant to Sections 251(c)(2) and 252 of the 1996
Act.

\textsuperscript{34} \textit{Id.} at 10-11.
**Conclusion**

The Commission should strengthen, not weaken per AT&T’s request, its wholesale policies which, as discussed above, enable deployment and competition for broadband services in the business marketplace.

Respectfully submitted,

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