

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

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Establishing Just and Reasonable Rates for Local Exchange Carriers	)	WC Docket No. 07-135
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Developing an Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link-Up	)	WC Docket No. 03-109

**REPLY COMMENTS OF  
CBEYOND, INC., INTEGRA TELECOM, INC., AND TW TELECOM INC.**

WILLKIE FARR & GALLAGHER LLP  
1875 K Street, NW  
Washington, DC 20006  
(202) 303-1000

*Attorneys for Cbeyond, Inc., Integra Telecom, Inc.,  
and tw telecom inc.*

May 23, 2011

**TABLE OF CONTENTS**

	<u>Page</u>
I. INTRODUCTION AND SUMMARY.....	2
II. THE FCC MUST ESTABLISH A SUSTAINABLE REGULATORY FRAMEWORK FOR THE TRANSITION TO IP NETWORKS.....	4
A. The FCC Should Clarify That Incumbent LECs Have The Duty To Establish Direct IP-to-IP Interconnection And To Negotiate VoIP Interconnection Agreements In Good Faith.....	5
B. The FCC Must Adopt Appropriate Regulation Of Incumbent LECs’ Packetized Loop Facilities. ....	12
III. THE FCC SHOULD CLARIFY THAT INCUMBENT LECS HAVE A DUTY TO PROVIDE TANDEM TRANSIT SERVICE AND REQUIRE THAT SUCH SERVICE BE PROVIDED AT TELRIC-BASED RATES. ....	16
IV. THE FCC SHOULD REQUIRE ALL BROADBAND INTERNET ACCESS SERVICE PROVIDERS TO CONTRIBUTE TO THE UNIVERSAL SERVICE FUND.....	19
V. CONCLUSION.....	20

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

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Establishing Just and Reasonable Rates for Local Exchange Carriers	)	WC Docket No. 07-135
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Developing an Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link-Up	)	WC Docket No. 03-109

**REPLY COMMENTS OF  
CBEYOND, INC., INTEGRA TELECOM, INC., AND TW TELECOM INC.**

Cbeyond, Inc. (“Cbeyond”), Integra Telecom, Inc. (“Integra”), and tw telecom inc. (“tw telecom”) (collectively, the “Joint Commenters”), through their undersigned counsel, hereby submit these reply comments on the *USF/ICC Transformation NPRM*<sup>1</sup> in the above-captioned dockets.

---

<sup>1</sup> See *Connect America Fund*, WC Docket No. 10-90; *A National Broadband Plan for Our Future*, GN Docket No. 09-51; *Establishing Just and Reasonable Rates for Local Exchange Carriers*, WC Docket No. 07-135; *High-Cost Universal Service Support*, WC Docket No. 05-337; *Developing an Unified Intercarrier Compensation Regime*, CC Docket No. 01-92; *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45; *Lifeline and Link-Up*, WC Docket No. 03-109, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 26 FCC Rcd. 4554 (rel. Feb. 9, 2011) (“*USF/ICC Transformation NPRM*” or “*NPRM*”).

## **I. INTRODUCTION AND SUMMARY.**

In this proceeding, the Commission seeks to establish a legal framework for the accelerated transition to IP networks and broadband deployment. In order to realize that goal, the Commission should, as the Joint Commenters have advocated, apply the same intercarrier rates to all voice telephone traffic, including interconnected VoIP traffic.<sup>2</sup> Applying the same intercarrier compensation regulations to all telephone services—without regard to the technology used to provide such services (e.g., IP or TDM)—will ensure that regulation does not skew market outcomes and that private firms invest in the deployment of IP and broadband wherever it is efficient to do so.

However, the Commission must also establish other aspects of a sound framework of economic regulation for IP technology. The Commission should reject the utterly meritless arguments by incumbent LECs that the mandates in the Communications Act and the laws of economics no longer apply where IP is used to transmit voice and other traffic. Most importantly for purposes of this proceeding, the Commission must ensure that incumbent LECs comply with their obligation under Section 251(c)(2) to provide direct IP-to-IP interconnection at any technically feasible point for the transmission and routing of facilities-based VoIP traffic on just and reasonable terms and conditions. Absent such a requirement, the incumbent LECs will act on their incentive to protect their dominant market position, derived from their vastly larger base of end-user customers, to deny, delay and degrade IP interconnection. Such conduct would be extremely harmful to competition and to the nation's economic development. The FCC

---

<sup>2</sup> See Cbeyond et al. Section XV Comments at 4-16. Unless otherwise noted, "Section XV Comments" refers to initial comments filed in the above-captioned dockets on April 1, 2011, "Section XV Reply Comments" refers to reply comments filed on April 18, 2011, and "Comments" refers to initial comments filed on April 18, 2011.

should further clarify that incumbent LECs have the duty to negotiate VoIP interconnection agreements in good faith.

The Commission must also reject AT&T's absurd proposal that packetized loops (including Ethernet loops) should be entirely free of economic regulation once the transition to IP is complete. While this is not the proceeding in which to address this issue comprehensively, AT&T's baseless proposal cannot go entirely unaddressed. The incumbent LECs derive their market power over loops from their ownership and control of the only physical connections, either copper or fiber optic, to business end users. Changing the electronics attached to such underlying physical connections from TDM to IP has no effect on the incumbent LECs' market power. Moreover, the FCC has essentially eliminated all economic regulation of Ethernet and other packetized loops based largely on the rationale that competitors would continue to have access to regulated TDM loops. Once the transition to IP is complete, the incumbent LECs' market power will remain, but the TDM loops will not. Competitors will be unable to compete in most markets and will be relegated to a limited fringe in others. Consumer welfare will be harmed. It is therefore critical that the Commission adopt both unbundling and dominant carrier special access regulation for packetized, including Ethernet, incumbent LEC loop facilities.

In addition to establishing the appropriate regulatory framework for an IP environment, the Commission must address the immediate need to regulate incumbent LEC tandem transit service. The evidence in this proceeding fully supports the conclusion that the incumbent LECs have market power in the provision of this service and that they are using this market power to charge supra-competitive prices. The FCC can and should rely on its authority to regulate local exchange carriers' "compensation arrangements" for the "transport" of traffic under Section 251(b)(5) of the Act to require that incumbent LECs charge TELRIC-based prices for tandem

transit service. After all, it would be senseless for the Commission to reduce access charges on the ground that they are above cost but allow incumbent LECs to charge tandem transit service rates that are multiples in excess of cost when that service includes almost all of the exact same functionalities.

Finally, while the Joint Commenters applaud the Commission's initiative to reform the system for distributing USF resources, it is baffling that the Commission has not at the same time initiated a proceeding for the reform of USF contributions. As the Joint Commenters have explained, the current contribution system systematically discriminates against competitors that rely on incumbent LEC special access as an input into downstream broadband Internet access services. Moreover, there is widespread agreement that the FCC must expand the base of USF contributors. It is therefore critical that the Commission initiate the process for reforming USF contributions as soon as possible.

## **II. THE FCC MUST ESTABLISH A SUSTAINABLE REGULATORY FRAMEWORK FOR THE TRANSITION TO IP NETWORKS.**

Several incumbent LECs, most notably AT&T, argue that the progression from TDM to IP technology should be accompanied by the elimination of economic regulation designed to address incumbent LECs' substantial and persisting market power. There is no basis—economic, legal or otherwise—for these assertions. Changes in technology have no bearing on the incumbent LECs' bedrock obligations under the Communications Act or their market power. That market power is derived from, among other things, the incumbent LECs' massive end-user customer bases and their ownership and control over the only network facilities serving hundreds of thousands, possibly millions, of business customers. These sources of market power exist in an IP environment just as they do in a TDM environment. Rather than treating the transition to IP as a reason to ignore the basic laws of economics and competition policy, the Commission

must instead update its regulations to ensure that competition can exist during and after the transition to IP.

**A. The FCC Should Clarify That Incumbent LECs Have The Duty To Establish Direct IP-to-IP Interconnection And To Negotiate VoIP Interconnection Agreements In Good Faith.**

A number of commenters argue that, in order to achieve its stated goal of accelerating the transition from circuit-switched to IP networks,<sup>3</sup> the Commission must ensure that incumbent LECs provide direct IP-to-IP interconnection at any technically feasible point and negotiate VoIP interconnection agreements in good faith, as required by Sections 251 and 252 of the Act.<sup>4</sup> The Joint Commenters wholeheartedly agree.

As the Commission recognizes in the *NPRM*, IP-to-IP interconnection can yield significant efficiencies and cost savings.<sup>5</sup> Incumbent LECs, however, are refusing to provide IP-

---

<sup>3</sup> See *NPRM* ¶¶ 10, 14.

<sup>4</sup> See COMPTTEL Comments at 4 (“The most important action the Commission can take to attain its overarching goal of promoting the deployment of broadband and IP technology is to confirm in no uncertain terms that IP-to-IP interconnection is subject to Sections 251 and 252 of the Communications Act.”); Cox Comments at 3; PAETEC Comments at 4 (arguing that “[i]n order to achieve the FCC’s objectives, stated in the [National] Broadband Plan and the *NPRM*, of fostering the expansion of broadband services to all areas of the U.S. as rapidly as possible,” the Commission should “confirm immediately that provision of [IP-to-IP] interconnection falls within incumbent LECs’ duty under section 251(c)(2), and that the terms of such interconnection can be arbitrated under the process set forth in section 252”); see also Sprint Comments at 20 (“Obviously, IP network deployment and use will not be promoted if ILECs in particular are allowed either to refuse to interconnect at all or to impose conditions [on IP-to-IP interconnection] that are patently unreasonable.”); Time Warner Cable Section XV Comments at 11.

<sup>5</sup> See *NPRM* ¶ 506 (“The record also suggests that IP interconnection can be more efficient. In particular, the transition to IP can result in cost savings, including reductions in circuit costs, switch costs, space needs, and utility costs, as well as the elimination of other signaling overhead.”).

to-IP interconnection.<sup>6</sup> As Cablevision explains, incumbent LECs are forcing interconnecting competitive LECs to convert IP calls to TDM format, thereby depriving competitors of the efficiencies of IP technology and increasing competitors' costs.<sup>7</sup> Incumbent LECs' refusal to provide IP-to-IP interconnection thus discourages investment in and broadband deployment of IP networks.<sup>8</sup> It also allows incumbent LECs to "effectively pass the costs of their legacy networks back on to more efficient competitors" and to delay upgrade of those networks to IP.<sup>9</sup>

The Commission should therefore clarify that competitors have the right to IP-to-IP interconnection and negotiated VoIP interconnection agreements under Sections 251 and 252 of

---

<sup>6</sup> See Verizon Florida LLC's Response to Bright House Networks Information Services (Florida), LLC's Petition for Arbitration of Interconnection Agreement, Florida PSC Dkt. No. 090501-TP, at 6 (filed Dec. 7, 2009) (rejecting Bright House Network's request for IP-to-IP interconnection but stating that "Verizon is willing to continue exchanging traffic with Bright House as it does today under existing arrangements in TDM format"); Sprint Comments at 20 & n.36 ("AT&T recently told the Texas PUC that it was 'not possible' and 'not technically feasible' for it to interconnect with Sprint and others for the exchange of VoIP traffic – even though it offers VoIP service to its own retail customers. AT&T explained that while it has the technical capability to interconnect with other IP networks, it had no obligation to do so because it made a corporate decision to place these IP assets in an 'unregulated' affiliate.") (citing Affidavit of Joseph M. Bailey, Lead Production Marketing Manager – Consumer VoIP for AT&T, ¶¶ 5, 7-8 (Oct. 21, 2010), *appended to* AT&T Texas' Response to Amicus Brief of tw telecom, Sprint, Cbeyond and McLeod USA d/b/a/ PAETEC, Texas PUC Dkt. No. 26381 (filed Oct. 21, 2010)); *see also* COMPTTEL Comments at 7 ("In an apparent effort to shield their IP networks and SIP termination services from negotiated or arbitrated interconnection agreements with other carriers, AT&T, Verizon and CenturyLink/Qwest offer their Internet/IP services through various affiliates . . . rather than through their regulated local exchange carrier operating companies . . .").

<sup>7</sup> See Cablevision Comments at 3-4; *see also id.* at 6-7 (explaining that much of the efficiencies of IP networks are lost without IP-to-IP interconnection).

<sup>8</sup> See Connecting America: The National Broadband Plan, at 142 (Mar. 16, 2010) ("National Broadband Plan") (recognizing that requiring carriers to make unnecessary protocol conversions "hinders the transformation of America's networks to broadband"); EarthLink Comments at 3 (explaining that "the incumbents' refusal to negotiate IP interconnection terms can cause a significant increase in the cost of a project to upgrade a carrier's internal network facilities to IP").

<sup>9</sup> Cablevision Comments at 4.

the Act. It is critical that the FCC make this clarification immediately. As Cox explains, “many interconnection agreements will expire in the next twelve to eighteen months” and absent such a clarification from the Commission, “it is likely that competitive providers will be forced to fight the issue of the right regulatory framework for [IP-to-IP] interconnection on a state-by-state basis.”<sup>10</sup> Such a setback would only further delay the transition to IP networks.

**1. The Act Clearly Requires Incumbent LECs To Provide IP-to-IP Interconnection At Any Technically Feasible Point And To Negotiate VoIP Interconnection Agreements In Good Faith.**

Section 251(c)(2) of the Act requires incumbent LECs to offer interconnection at any technically feasible point “for the transmission and routing of telephone exchange service and exchange access.”<sup>11</sup> Therefore, the relevant question is whether facilities-based VoIP services<sup>12</sup> qualify as telephone exchange services or exchange access services.<sup>13</sup>

---

<sup>10</sup> Cox Comments at 18.

<sup>11</sup> 47 U.S.C. § 251(c)(2)(A).

<sup>12</sup> While the Joint Commenters used the term “managed VoIP” services in their Section XV Comments to describe the VoIP services at issue (*see* Cbeyond et al. Section XV Comments at 10 & n.28), the Joint Commenters use the term “facilities-based VoIP” services herein to conform with the Commission’s usage of that term. *See, e.g., The Proposed Extension of Part 4 of the Commission’s Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers*, Notice of Proposed Rulemaking, FCC 11-74, n.66 (rel. May 13, 2011) (“Facilities-based interconnected VoIP service providers own and operate the broadband access communications infrastructure required to deliver VoIP services. . . . Unlike Vonage or several other non-facilities-based VoIP services, facilities-based VoIP is not an application that is issued ‘over-the-top’ of a high-speed Internet access service purchased by a consumer. Significantly, facilities-based VoIP customers do not need to subscribe to broadband Internet service, and their providers do not route their respective traffic over the public Internet. Rather, the facilities-based VoIP service is based on specifications that typically involve the use of a managed IP network.”).

<sup>13</sup> This discussion focuses on facilities-based VoIP services because direct IP-to-IP interconnection is a necessary input for the provision of facilities-based VoIP services. This is not true of so-called “over-the-top” VoIP services, which are applications provided via broadband Internet access service. As such, over-the-top services can be transmitted via the web

The Act defines telephone exchange service as either traditional local telephone service<sup>14</sup> or a “comparable” service that is “provided through a system of switches, transmission equipment, or other facilities (or combination thereof), by which a subscriber can originate and terminate a telecommunications service.”<sup>15</sup> There is no question that facilities-based VoIP services are comparable to traditional local telephone service and therefore qualify as telephone exchange services. As the Joint Commenters have already explained, facilities-based VoIP services should be classified as “telecommunications services” because they offer end users the same functionality—voice transmission—as traditional, circuit-switched telephone service.<sup>16</sup> In fact, the Commission has repeatedly recognized that interconnected VoIP providers (including facilities-based VoIP providers) offer end users the capability to make and receive ordinary telephone calls and that consumers view facilities-based VoIP services as a substitute for traditional telephone service.<sup>17</sup>

---

of interconnection arrangements that are the underpinning of the public Internet. These issues are discussed in more detail in Part II.A.2.

<sup>14</sup> See 47 U.S.C. § 153(47)(A) (defining telephone exchange service as “a service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge”).

<sup>15</sup> *Id.* § 153(47)(B).

<sup>16</sup> See Cbeyond et al. Section XV Comments at 9-12.

<sup>17</sup> See *id.* n.32; see also *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, Memorandum Opinion and Order, 25 FCC Rcd 8622, ¶ 54 (2010) (“*Phoenix MSA Forbearance Order*”) (“As in the past, we find that mass market consumers view facilities-based VoIP services, such as those offered by cable providers, as sufficiently close substitutes for local service to include them in the relevant product market.”); *SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control*, Memorandum Opinion and Order, 20 FCC Rcd 18290, ¶¶ 86-87 (2005); *Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control*, Memorandum Opinion and Order, 20 FCC Rcd 18433, ¶¶ 87-88 (2005).

The Act defines exchange access as “the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services.”<sup>18</sup> In other words, exchange access includes the offering of facilities for the purpose of origination or termination of traditional standalone long distance service.<sup>19</sup> The Joint Commenters and other competitive LECs offer their facilities for the purpose of terminating standalone long distance service through their access tariffs and their facilities-based VoIP services include the offering of this termination service. Accordingly, facilities-based VoIP services qualify as exchange access.

Because facilities-based VoIP services constitute telephone exchange service and exchange access, incumbent LECs have a duty under Section 251(c)(2)<sup>20</sup> to provide interconnection at any technically feasible point—including at an IP interconnection point within the incumbent LEC’s network—for the routing and transmission of competitors’ facilities-based VoIP services.<sup>21</sup> As a consequence, incumbent LECs also have a duty under Section 251(c)(1)<sup>22</sup>

---

<sup>18</sup> 47 U.S.C. § 153(16).

<sup>19</sup> Under Section 3(48) of the Act, telephone toll service is defined as “telephone service between stations in different exchange areas for which there is made a separate charge not included in contracts with subscribers for exchange service.” *Id.* § 153(48).

<sup>20</sup> *Id.* § 251(c)(2)(A)-(B).

<sup>21</sup> As the record makes clear, there is no question that IP-to-IP interconnection is technically feasible. *See* Cablevision Comments at 8-9; EarthLink Comments at 4-6; PAETEC Comments at 5-8.

<sup>22</sup> 47 U.S.C. § 251(c)(1).

to negotiate in good faith, and in accordance with the procedures set forth in Section 252,<sup>23</sup> the particular terms and conditions of VoIP interconnection agreements.<sup>24</sup>

**2. Contrary to Incumbent LECs' Arguments, Market Forces Alone Will Not Ensure That Competitors Can Obtain VoIP Interconnection Agreements.**

Notwithstanding their clear statutory duties to provide IP-to-IP interconnection at any technically feasible point and to negotiate VoIP interconnection agreements in good faith, incumbent LECs assert that IP interconnection obligations are unnecessary. According to Verizon, “[t]he efficient way to allow IP interconnection arrangements to develop would be to follow . . . the tremendously successful example of the Internet, which relies upon voluntarily negotiated commercial agreements developed over time and fueled by providers’ strong incentives to interconnect their networks.”<sup>25</sup> Similarly, AT&T asserts that IP interconnection obligations are not needed because Internet traffic exchange arrangements have developed through “market forces alone, in the form of negotiated contracts between IP networks”<sup>26</sup> and “the Internet backbone market remains competitive.”<sup>27</sup> But the state of the Internet backbone market is irrelevant for at least two reasons.

*First*, Internet backbone networks cannot be relied upon to exchange facilities-based VoIP traffic. For example, facilities-based VoIP services sold to business customers must be subject to low latency, but best efforts public Internet traffic—the kind of traffic that Internet

---

<sup>23</sup> *Id.* § 252.

<sup>24</sup> *See* PAETEC Comments at 9.

<sup>25</sup> Verizon Comments at 16.

<sup>26</sup> AT&T Comments at 17.

<sup>27</sup> *Id.* at 25.

backbones transmit—may traverse numerous hops before it reaches its destination, resulting in high latency. Indeed, much like the exchange of circuit-switched voice traffic between TDM networks, the exchange of facilities-based VoIP traffic requires the use of dedicated transmission facilities between IP networks that support the necessary Quality of Service (“QoS”) needed to provide facilities-based VoIP services. Best efforts Internet backbone facilities are simply incapable of doing this. Accordingly, whether or not the Internet backbone market is competitive is irrelevant to the exchange of facilities-based VoIP traffic.

*Second*, the inability to rely on an intermediate transport provider, like Internet backbone providers, forces competitors to seek direct IP-to-IP interconnection with incumbent LECs, but incumbent LECs have no rational incentive to establish such interconnection. Incumbent LECs have many more end-user customers than competitors like tw telecom. This means that competitors need to interconnect with incumbent LECs much more than incumbent LECs need to interconnect with competitors.<sup>28</sup>

Accordingly, incumbent LECs must be required to provide IP-to-IP interconnection at any technically feasible point and to negotiate VoIP interconnection agreements in good faith. Moreover, to the extent that technical issues arise (e.g., how to determine point of interconnection (“POI”) locations for the exchange of VoIP traffic), such issues should be resolved through bilateral negotiations between the parties in the first instance and then by the relevant standards-setting bodies if necessary. This way, there will be no risk, as Verizon fears,

---

<sup>28</sup> *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection Between Local Exchange Carriers and CMRS Providers*, First Report and Order, 11 FCC Rcd. 15499, ¶ 10 (1996) (“*Local Competition Order*”) (describing incumbent LECs’ incentive to refuse to interconnect with competitors).

that policymakers will “[g]uess[] wrong about the ‘right’ IP interconnection standards” and “profoundly retard the industry’s future development.”<sup>29</sup>

**B. The FCC Must Adopt Appropriate Regulation Of Incumbent LECs’ Packetized Loop Facilities.**

In its comments, AT&T urges the Commission to undertake a “fundamental reimagining of its regulatory role” in order to accelerate the transition to all-IP networks and “fully realize its broadband goals.”<sup>30</sup> Specifically, AT&T proposes that on January 1, 2017, the FCC should eliminate, among other things, “service obligations, tariffing, and unbundling.”<sup>31</sup> According to AT&T, common carrier regulation is unnecessary in “an all-IP end state.”<sup>32</sup>

This is not the proceeding in which to consider the full range of regulatory requirements that should apply in an IP environment, but AT&T’s rather fatuous assertions should not go unanswered. Again, incumbent LECs will continue to exercise control over the fiber or copper last-mile facilities needed to reach end-user business customers, regardless of whether the services riding on top of those facilities utilize TDM or IP technology. Competitive LECs will also continue to face the same barriers to entry in the business broadband market that they face today. For example, competitive LECs must dig the same trenches and lay the same fiber to provide packetized services such as Ethernet as they do to provide TDM-based services.<sup>33</sup> Thus, rather than eliminating virtually all regulation, as AT&T suggests, the FCC should impose

---

<sup>29</sup> Verizon Comments at 17.

<sup>30</sup> AT&T Comments at 3.

<sup>31</sup> *Id.* at 32.

<sup>32</sup> *See id.* at 26-27.

<sup>33</sup> *See* Letter from Thomas Jones, Counsel for Time Warner Telecom Inc. and One Communications Corp., to Marlene H. Dortch, Secretary, FCC, WC Dkt. No. 05-25, at 13 (filed Aug. 10, 2007).

targeted regulations to address the failures in the wholesale inputs market that exist today and that will otherwise continue in an all-IP world.

*First*, the Commission should require incumbent LECs to provide unbundled access under Section 251(c)(3) of the Act<sup>34</sup> to the packetized capabilities of fiber and hybrid-copper loops.<sup>35</sup> With unbundled access to the packetized capabilities of these loops, Cbeyond, Integra, and other competitive LECs will be able to provide, among other things, “big business” applications and services to small and medium-sized businesses that require both greater bandwidth and more sophisticated features than those which can be provided using TDM-based DS1 loops.<sup>36</sup>

As the Joint Commenters have previously explained, one of the bases for the Commission’s decision to eliminate unbundling requirements for these elements—that doing so would remove disincentives to invest in next-generation broadband facilities and spur broadband deployment—has proven to be false.<sup>37</sup> The Commission also eliminated unbundling for these elements on the basis that competitive LECs could rely on the continued availability of

---

<sup>34</sup> 47 U.S.C. § 251(c)(3).

<sup>35</sup> *See generally* Cbeyond, Inc. Petition for Expedited Rulemaking to Require Unbundling of Hybrid, FTTH, and FTTC Loops Pursuant to 47 U.S.C. § 251(c)(3) of the Act, WC Dkt. No. 09-223 (filed Nov. 16, 2009) (“Cbeyond Petition for Expedited Rulemaking”).

<sup>36</sup> *See* Comments of Cbeyond, Inc., Integra Telecom, Inc., MegaPath, Inc., Covad Communications Company and tw telecom inc., WC Dkt. No. 10-188, at 16-18 (filed Oct. 15, 2010) (“Cbeyond et al. Business Broadband Marketplace Comments”).

<sup>37</sup> *See* Cbeyond Petition for Expedited Rulemaking at 15-16; *see generally id.*, Attachment B, Lee L. Selwyn et al., Economics and Technology, Inc., *The Role of Regulation in a Competitive Telecom Environment: How Smart Regulation of Essential Wholesale Facilities Stimulates Investment and Promotes Competition* (Mar. 2009).

unbundled copper loops and TDM-based DS1 and DS3 loops to provide broadband services.<sup>38</sup>

But—notwithstanding that the availability of unbundled copper loops, DS1, and DS3 loops does not compensate for the elimination of unbundled fiber and hybrid loops<sup>39</sup>—if TDM networks are replaced with all-IP networks, then there would be no basis for the FCC to retain its decision to eliminate unbundled fiber and hybrid loops.

*Second*, the FCC should reestablish dominant carrier regulation for wholesale Ethernet and other packetized special access services offered by incumbent LECs.<sup>40</sup> As a result of the Commission’s decisions to forbear from Title II requirements for non-TDM-based, packetized and optical special access inputs (including inputs used to provide Ethernet services), competitors such as tw telecom and Cbeyond have been unable to obtain Ethernet loops at wholesale on just, reasonable, and nondiscriminatory rates, terms, and conditions.<sup>41</sup> In those

---

<sup>38</sup> See *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 16978, ¶¶ 289, 291 & 294 (2003) (“*TRO*”) (subsequent history omitted); *Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c)*; *SBC Communications Inc.’s Petition for Forbearance Under 47 U.S.C. § 160(c)*; *Qwest Communications International Inc. Petition for Forbearance Under 47 U.S.C. § 160(c)*; *BellSouth Telecommunications, Inc. Petition for Forbearance Under 47 U.S.C. § 160(c)*, Memorandum Opinion and Order, 19 FCC Rcd. 21496, ¶ 26 (2004) (“*Section 271 Broadband Forbearance Order*”) (“[W]e conclude in light of the evidence before us that even if the BOCs were not required to provide competitors unbundled access to the broadband elements at issue under section 271, competitive LECs would still be able to access other network elements to compete in the broadband market . . .”).

<sup>39</sup> See Cbeyond Petition for Expedited Rulemaking at 18-20; Cbeyond et al. Business Broadband Marketplace Comments at 25-28 (explaining that while existing unbundled network elements can in some cases be used to provide broadband services to small and medium-sized business customers, there are many situations in which competitors cannot rely on such facilities).

<sup>40</sup> See Cbeyond et al. Business Broadband Marketplace Comments at 34.

<sup>41</sup> See, e.g., *id.* at 30-31 (citing Letter from Thomas Jones, Counsel for tw telecom inc., to Marlene H. Dortch, Secretary, FCC, GN Dkt. Nos. 09-47 et al., at 7-9 (filed Dec. 22, 2009) (“tw telecom Dec. 22, 2009 Letter”)).

*Broadband Forbearance Orders*, the Commission eliminated rate regulation, in particular, of non-TDM-based special access inputs on the basis that it was retaining rate regulation of TDM-based DS1 and DS3 special access services.<sup>42</sup> But as tw telecom has explained, contrary to the Commission’s conclusions in the *Broadband Forbearance Orders*,<sup>43</sup> competitors can only partially rely on TDM-based inputs as a substitute for wholesale Ethernet inputs due to the expense and inefficiency of translating TDM signals to Ethernet.<sup>44</sup> Moreover, if TDM networks are replaced with all-IP networks, then there would be no reason for the FCC to continue to forbear from dominant carrier regulation of Ethernet and other packetized and optical special access inputs.

If the FCC fails to undertake these targeted market reforms, it risks not only impeding competition and innovation in the short term, but also increasing the scope and complexity of regulation that will be required in the long term. Specifically, preventing competitors from obtaining the wholesale inputs needed to deliver broadband services to consumers and businesses will cause competitors to exit the relevant downstream retail markets. The result will be monopoly or duopoly retail markets whose participants have overwhelming market power. The

---

<sup>42</sup> See *Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services et al.*, Memorandum Opinion and Order, 22 FCC Rcd. 18705, ¶ 25 (2007) (“*AT&T Broadband Forbearance Order*”); *Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S.C. § 160(c) from Application of Computer Inquiry and Certain Title II Common-Carriage Requirements et al.*, Memorandum Opinion and Order, 22 FCC Rcd. 19478, ¶ 24 (2007) (“*Embarq & Frontier/Citizens Broadband Forbearance Order*”); *Qwest Petition for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Broadband Services*, Memorandum Opinion and Order, 23 FCC Rcd. 12260, ¶ 28 (2008) (“*Qwest Broadband Forbearance Order*”).

<sup>43</sup> See *AT&T Broadband Forbearance Order* ¶ 26; *Embarq & Frontier/Citizens Broadband Forbearance Order* ¶ 25; *Qwest Broadband Forbearance Order* ¶ 29.

<sup>44</sup> See Cbeyond et al. Business Broadband Marketplace Comments at 31 (citing tw telecom Dec. 22, 2009 Letter at 8-9).

Commission will then be forced to impose even more regulation than it otherwise would have needed.<sup>45</sup>

### **III. THE FCC SHOULD CLARIFY THAT INCUMBENT LECS HAVE A DUTY TO PROVIDE TANDEM TRANSIT SERVICE AND REQUIRE THAT SUCH SERVICE BE PROVIDED AT TELRIC-BASED RATES.**

The record in this proceeding confirms that the market for tandem transit service is not effectively competitive.<sup>46</sup> In particular, the record confirms the Joint Commenters' experience<sup>47</sup> that in most markets, competitive LECs have few viable alternatives to the incumbent LEC for tandem transit service.<sup>48</sup> To begin with, service provided by Neutral Tandem—the leading non-incumbent LEC tandem transit service provider—“is not ubiquitous across the country and is not available in many Tier 2 and Tier 3 markets.”<sup>49</sup> Moreover, even in those markets served by one

---

<sup>45</sup> This is precisely what may happen in the retail mobile wireless market. The Commission's failure to sufficiently regulate critical wholesale inputs such as special access has likely contributed to the need for increased consolidation and will likely lead to a duopoly in the downstream retail market that will require increased regulation to protect consumers.

<sup>46</sup> See Cbeyond et al. Comments at 20-21; Charter Comments at 9-10; Cox Comments at 17. It is worth noting that while Neutral Tandem claims that “[a] number of other [non-incumbent LEC] wholesale carriers provide local tandem transit service in competition with Neutral Tandem throughout part or much of the country,” Neutral Tandem fails to provide any support for this claim. See Neutral Tandem Comments at 4. Indeed, as Charter points out, Neutral Tandem has told its own investors that it is “unable to provide accurate market share information” for the tandem transit service market. See Charter Comments at 10 (quoting Neutral Tandem, Inc., Annual Report (Form 10-K), at 8 (filed Mar. 16, 2011)). Furthermore, the fact that Neutral Tandem's tandem transit rates have decreased in recent years (see Neutral Tandem Comments at 5 & 10) is not, by itself, evidence of a competitive tandem transit service market. For example, it does not demonstrate that tandem transit service providers are setting rates at competitive levels. In fact, as the Commission has recognized, markets with only a few firms are likely to yield supracompetitive prices. See *Phoenix MSA Forbearance Order* ¶¶ 30-31.

<sup>47</sup> See Cbeyond et al. Comments, Attachment A, Declaration of Greg Darnell on behalf of Cbeyond, Inc., ¶ 6 (“Darnell Declaration”); *id.*, Attachment B, Declaration of Douglas K. Denney on behalf of Integra Telecom, Inc., ¶ 6 (“Denney Declaration”).

<sup>48</sup> See Charter Comments at 10; Cox Comments at 17.

or more alternative tandem transit service providers, the alternative service providers' networks often do not extend to the surrounding suburban and rural areas and alternative tandem transit service providers' networks are often not interconnected with many local telephone service providers even in the areas the tandem transit providers do serve.<sup>50</sup>

As a result of the limitations of the competitive tandem transit service providers' service offerings, competitors remain dependent on incumbent LECs' tandem transit service. Such dependency gives incumbent LECs the power to set prices for tandem transit service at supra-competitive levels in most areas. As the Joint Commenters have explained, incumbent LECs have often exercised this pricing power.<sup>51</sup> In addition, some incumbent LECs have refused to provide competitive LECs with tandem transit service.<sup>52</sup>

---

<sup>49</sup> Charter Comments at 10; *see also* Denney Declaration ¶ 6 (stating that Neutral Tandem's network does not reach Integra's smaller markets).

<sup>50</sup> *See* Charter Comments at 10; Cox Comments n.24 ("Some companies like Neutral Tandem do offer indirect interconnection in some areas, but many providers do not choose to [inter]connect with non-ILEC tandem services, so those companies do not provide a complete solution."); *see also id.* at 17 ("[A]ll carriers interconnect with the local incumbent LEC, and so the incumbent LEC is the only provider in a position to offer the ability to interconnect indirectly with every other provider."); *see also* Darnell Declaration ¶ 6 (explaining that "Neutral Tandem's service does not reach all of the networks . . . that subtend the RBOC's local tandem switch to which Cbeyond needs to route traffic"); Denney Declaration ¶ 6 ("Neutral Tandem's network does not reach all of the networks (such as rural incumbent LEC networks) to which Integra needs to route traffic.").

<sup>51</sup> *See* Cbeyond et al. Comments at 20 & Darnell Declaration ¶¶ 4-5 (explaining that in legacy BellSouth territory, AT&T offers competitive LECs such as Cbeyond tandem transit service at a rate nearly two-and-a-half times legacy BellSouth's average TELRIC rate for tandem transit service); *see also id.* & Denney Declaration ¶¶ 4-5 (explaining that legacy Qwest offers tandem transit service at a rate that is more than three times Qwest's average TELRIC rate for tandem transit service).

<sup>52</sup> *See, e.g.,* Cox Comments at 17 (explaining that Qwest had refused to provide tandem transit service to Cox in Nebraska).

For these reasons, the Commission should clarify that incumbent LECs have a duty to provide tandem transit service, and it should require that such service be provided at TELRIC-based rates. There is no question that incumbent LECs have the duty to provide tandem transit service under the Act. Although the FCC held in the *Local Competition Order* that Section 251(c)(2) of the Act “refers only to the physical linking of two networks”<sup>53</sup> for the transmission and routing of telecommunications traffic, this duty to interconnect (i.e., to provide the physical linking) would be pointless if incumbent LECs did not also have a statutory duty to transmit and route traffic. After all, the networks subject to this interconnection duty are the very networks that perform the transmission and routing functions. Indeed, in the *Local Competition Order*, the FCC expressly held that all LECs have “a duty to route and terminate traffic”<sup>54</sup> under Section 251(b)(5) of the Act.<sup>55</sup> Accordingly, incumbent LECs have the duty under Section 251(b)(5) to route or “transport” telecommunications traffic, including between carriers that lack direct interconnection.

Given that tandem transit service involves the “transport” of telecommunications,<sup>56</sup> the Commission can rely on Section 251(b)(5) to exercise jurisdiction over tandem transit service

---

<sup>53</sup> *Local Competition Order* ¶ 176.

<sup>54</sup> *See id.* (“We also reject CompTel’s argument that reading section 251(c)(2) to refer only to the physical linking of networks implies that incumbent LECs would not have a duty to route and terminate traffic. That duty applies to all LECs and is clearly expressed in section 251(b)(5).”).

<sup>55</sup> *See* 47 U.S.C. § 251(b)(5) (imposing on LECs the “duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications”).

<sup>56</sup> Tandem transit service is comprised of the transmission and tandem switching functions and “transport” is defined in Section 51.701(c) of the Commission’s rules as “the transmission and any necessary tandem switching of telecommunications traffic subject to section 251(b)(5) of the Act from the interconnection point between two carriers to the terminating carrier’s end office switch that directly services the called party.” 47 C.F.R. § 51.701(c).

rates. The FCC can also rely on its rulemaking authority under Section 201(b) of the Act<sup>57</sup> to interpret the term “compensation” in Section 251(b)(5) and establish TELRIC-based pricing for the “compensation” paid to incumbent LECs. It would be illogical for the FCC to reduce access charges on the basis that they are above cost and at the same time permit tandem transit service providers to charge above-cost rates when that service includes nearly all of the exact same functionalities.

#### **IV. THE FCC SHOULD REQUIRE ALL BROADBAND INTERNET ACCESS SERVICE PROVIDERS TO CONTRIBUTE TO THE UNIVERSAL SERVICE FUND.**

While the Joint Commenters commend the Commission in its effort to reform intercarrier compensation and the distribution of USF resources, the need for reform of the USF *contribution* system is equally pressing. As the Joint Commenters have explained, the current contribution rules systematically discriminate against carriers that rely on special access circuits as inputs to downstream retail broadband Internet access service.<sup>58</sup> This distortion skews market outcomes and harms consumer welfare. It is critical that the Commission initiate a proceeding to reform its USF contribution rules as soon as possible and, in the process, eliminate the discrimination caused by those rules.

Numerous commenters agree that the Commission should address contribution reform in addition to distribution reform.<sup>59</sup> In particular, the record makes clear that the existing

---

<sup>57</sup> 47 U.S.C. § 201(b).

<sup>58</sup> See Cbeyond et al. Comments at 19-20 (explaining that under current contribution rules, competitive LECs such as tw telecom that purchase special access as inputs to broadband Internet access services are indirectly subject to universal service contribution requirements, but incumbent LECs that rely on their own special access facilities to provide such services are not subject to such requirements).

<sup>59</sup> See, e.g., Ad Hoc Telecommunications Users Committee Comments at 10-11; COMPTTEL Comments at 16; EarthLink Comments at 19-23; XO Comments at 35-36 (“While the

contribution base cannot support a broadband-focused Connect America Fund.<sup>60</sup> Accordingly, as Ad Hoc Telecommunications Users Committee and COMPTTEL advocate,<sup>61</sup> the Commission should require all broadband Internet access service providers to contribute to the USF. As the Joint Commenters have explained, this reform would serve the dual purposes of reducing the contribution burden on consumers and businesses and eliminating the distortions in the broadband Internet access services market resulting from the existing contribution system.

## V. CONCLUSION

For the foregoing reasons, the Commission should take the actions recommended herein by the Joint Commenters.

---

Commission considers restructuring the USF to subsidize broadband deployment, the Commission *must at the same time* determine whether and how sufficient funds can be raised . . . to support the altered funding requirements.”) (emphasis in original).

<sup>60</sup> See, e.g., Ad Hoc Telecommunications Users Committee Comments at 10 (explaining that the “current methodology for assessing USF contributions will make the USF and successor CAF unsustainable”); Comcast Comments at 12 (agreeing that “the continuing increase in the contribution factor in conjunction with the ongoing decline in the assessable revenue base jeopardizes the stability and sustainability of the USF”); COMPTTEL Comments at 17 (arguing that unless the FCC addresses contribution reform, “the universal service assessment factor on the declining base of voice revenues will remain in the double digits and continue to climb for the foreseeable future as the Commission uses universal service funds collected from voice customers to subsidize both fixed and mobile broadband”); XO Comments at 33-36.

<sup>61</sup> See Ad Hoc Telecommunications Users Committee Comments at 11 (arguing for “reform [of] the USF and the successor CAF in a way that requires equitable contributions from providers of telecommunications and broadband”); COMPTTEL Comments at 2 (calling for the Commission to expand the USF contribution pool to include broadband Internet access service revenues).

Respectfully submitted,

*/s/ Thomas Jones* \_\_\_\_\_

Thomas Jones

Nirali Patel

WILLKIE FARR & GALLAGHER LLP

1875 K Street, NW

Washington, DC 20006

(202) 303-1000

*Attorneys for Cbeyond, Inc., Integra Telecom, Inc.,  
and tw telecom inc.*

May 23, 2011