

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<br>Local Exchange Carriers | ) | WC Docket No. 07-135 |
|   | ) |                      |
| High Cost Universal Service Support                                   | ) | WC Docket No. 05-337 |
|   | ) |                      |
| Developing a Unified Intercarrier<br>Compensation Regime              | ) | CC Docket No. 01-92  |
|   | ) |                      |
| Federal-State Joint Board on<br>Universal Service                     | ) | CC Docket No. 96-45  |
|   | ) |                      |
| Lifeline and Link-Up  | ) | WC Docket No. 03-109 |
|   | ) |                      |
| Universal Service Reform – Mobility Fund                              | ) | WT Docket No. 10-208 |

REPLY COMMENTS OF COMPTTEL

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**REPLY COMMENTS OF COMPTTEL**

COMPTTEL submits these reply comments in response to the principal arguments raised by parties opposed to IP Interconnection in their comments pursuant to the Federal Communications Commission’s (“Commission”) Further Notice of Proposed Rulemaking released on November 18, 2011 (FCC 11-161)(“*FNPRM*”).<sup>1</sup> In addition, we address parties comments addressing intercarrier compensation for transport (including proposals concerning the network edge) as it relates to the existing, circuit-switched network; the question of forbearance from Section 203; and, AT&T’s request for the Commission to reverse it’s decision, affirmed by

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<sup>1</sup> Report and Order and Further Notice of Proposed Rulemaking, *Connect America Fund et al*, FCC 11-161, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, GN Docket No. 09-51, CC Docket Nos. 01-92, 96-45, and WT Docket No. 10-208 (rel. Nov. 18, 2011)(“*FNPRM*”).

the U.S. Supreme Court, that ILECs' must offer entrance facilities used for interconnection at cost-based rates.

## **I. Introduction and Summary**

The Commission has seldom witnessed as broad a consensus as the comments reveal exists with respects to the legal framework that governs IP-to-IP interconnection.

Representatives from nearly every segment of the industry -- cable providers,<sup>2</sup> rural carrier associations,<sup>3</sup> CLECs,<sup>4</sup> wireless providers,<sup>5</sup> end-users,<sup>6</sup> and edge providers<sup>7</sup> -- recognize the

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<sup>2</sup> National Cable and Telecommunications Association (“NCTA”) at 5 (“[T]he Commission should affirm that the interconnection provisions of section 251 of the Act afford telecommunications carriers the right to establish IP-to-IP voice interconnection with an incumbent LEC network for the provision of telephone exchange service and exchange access.”); Time Warner Cable Inc. at 5 (“[T]he Commission should confirm that negotiating IP-to-IP interconnection agreements under Section 251 of the Act is not merely an aspiration, but rather is a fundamental statutory obligation of ILECs.”); Charter Communications Inc. at 4 (“An ILEC’s duty under Section 251(c)(2) to provide interconnection ... clearly encompasses IP-to-IP interconnection arrangements.”)

<sup>3</sup> Comments of the National Exchange Carrier Association Inc. (NECA), National Telecommunications Cooperative Association (NTCA), The Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO), and the Western Telecommunications Alliance (WTA)(“NECA *et al*”) at 38 (“The Commission should clarify that Sections 251 and 252 of the Act govern all interconnection arrangements, including IP-to-IP Interconnection for the purposes of exchanging traffic between carriers.”); Alaska Rural Coalition (“ARC”) at 17 (“The ARC believes that the Commission’s regulation of IP-to-IP networks should remain consistent with its regulation of traditional interconnection. All carriers should remain obligated to interconnect their networks in the most efficient configuration possible and negotiate those contractual relationships in good faith, consistent with the Telecommunication Act obligations outlined in section 251.”); Nebraska Rural Independent Companies (“NRIC”) at 27 (“NRIC respectfully suggests that the only prudent and legal basis for resolving the issues in Section XVII.P [of] the *FNPRM* is to apply the time-tested Sections 251/252 interconnection framework. This step will ensure that any migration from TDM to IP-based transmission technologies and then to IP-to-IP technologies is not hampered by those entities with the ability to exercise market power under a new, untried regulatory framework.”).

<sup>4</sup> COMPTTEL at 13-28; XO at 12-15; Cbeyond, EarthLink, Integra Telecom, and tw telecom (“Cbeyond *et al*”) at 20-25; U.S. TelePacific Corp. and Mpower Communications Corp. (“TelePacific”) at 7-14; HyperCube Telecom, LLC at 2.

<sup>5</sup> Sprint Nextel Corp. at 6-7 (“The FCC unquestionably possesses such authority under Title II of the Act if retail IP voice applications are deemed to be telecommunications services.

Commission's statutory authority over IP-to-IP interconnection, almost all referencing the ILECs' obligations under Sections 251 and 252 of the Communications Act, as amended by the 1996 Act ("the Act").

In opposition to this broad consensus stands a (numerically) small minority of the very largest carriers, the most vocal of which are AT&T and Verizon. These very large ILECs argue that the Commission should disregard the mandates of the Act, and allow these carriers to dictate the terms of so-called "commercial agreements" for IP to IP interconnection.

As an initial matter, neither the Commission – nor these ILECs – can ignore the mandates of the statute. Moreover, while AT&T (and others) devote significant portions of their comments to discussing the transit and peering arrangements for exchanging Internet traffic, the fact is that the AT&T and Verizon voice services (specifically, U-verse and FiOS) that are at issue in the *FNPRM* – and the type of services COMPTTEL and others focus on in their comments – are *not* a part of the open Internet, and the subscribers to these services are not reachable through Internet peering and transit arrangements.

U-verse and FiOS are *managed* services, which are segmented from Internet traffic within the AT&T and Verizon networks to assure quality and reliability. Access to these customers will be through agreements that differ from transit or peering arrangements. The question before the Commission is whether these *non-Internet* voice traffic exchange agreements

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But as Sprint has previously demonstrated, if IP voice applications are instead classified as information services, then the FCC still possesses the authority, under its Title I ancillary jurisdiction, to adopt and enforce interconnection rules for the exchange of IP voice traffic.”)

<sup>6</sup> Ad Hoc Telecommunications Users Committee (“Ad Hoc”) at i (“Any attempt to undermine regulatory protections simply because network transmission protocols change over time is misguided and arbitrary.”)

<sup>7</sup> Google Inc. at 4 (“There is little doubt that the FCC has ample statutory authority over IP-to-IP interconnection.”)

will be subject to the competitive protections of Sections 251 and 252 of the Act. As we explain below, these very large ILECs remain dominant and are unambiguously leveraging the fundamental advantages of incumbency – substantial market share and an extensive infrastructure inherited from their monopoly past – to offer these voice services. The interconnection obligations imposed by Congress in the Act are just as relevant today as they were when the Act was passed.

Additionally, the Commission must reject ILEC attempts to subvert the application of the section 251(b)(5) to transport by narrowing the scope of the provision through their proposed definition of network “edge;” ILEC requests for forbearance (none of which amount to a petition for forbearance) from provisions of the statute that the ILECs merely find inconvenient to them, without providing justifications in accordance with Section 10 of the Act; and, AT&T’s requests to reconsider the Commission’s decision - upheld by the U.S. Supreme Court - that competitors are entitled to entrance facilities for purposes of interconnection pursuant to Section 251(c).

## **II. The Act Applies to IP-to-IP Interconnection**

The claims, by the largest ILECs, that the Act is not applicable to IP interconnection are specious. As COMPTTEL and others have explained VoIP services are telecommunication services,<sup>8</sup> IP interconnection will be used for the provision of exchange access and telephone exchange service,<sup>9</sup> and the ILEC section 251(c) obligations continue to apply in an IP world,<sup>10</sup> even as with regard to their affiliates.<sup>11</sup> Now these large ILECs argue that VoIP is only an

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<sup>8</sup> COMPTTEL at 17-24; *See also, e.g.,* Cbeyond *et al* at 20-234.

<sup>9</sup> COMPTTEL at 24-26; *See also, e.g.,* Cbeyond *et al* at 20-23.

<sup>10</sup> COMPTTEL at 28; *See also, e.g.,* Cbeyond *et al* at 20-23.

<sup>11</sup> COMPTTEL at 26-28; *See also, e.g.,* TelePacific at 14-15.

interstate service and, consequently, not subject to section 251(c)(2); IP interconnection is a format not point of interconnection (“POI”); and, that the Commission should conclude that IP interconnection is not technically feasible (even as they argue it will be widely available through commercial agreements). These arguments have no more merit than the earlier arguments seeking to evade the law.

AT&T posits a remarkable theory that the Commission’s finding in the *Vonage Order* – that interstate and intrastate interexchange service are indistinguishable in VoIP service - causes section 251(c)(2) to be unavailable to VoIP providers. AT&T makes this leap by citing the Commission’s finding in the *Local Competition Order* that carriers seeking interconnection *only* for interexchange service are not entitled to interconnection pursuant to section 251(c)(2).

AT&T argues, that VoIP is only an interexchange service and, therefore, excluded from Section 251(c)(2). But the Commission never found VoIP providers to only be capable of providing interexchange service, and *Local Competition Order* does not preclude interexchange service providers that also provide local service from obtaining interconnection pursuant to section 251(c)(2).

First, the Commission never found VoIP service to *only* be an interexchange service. Rather it found that because there was no “practical means to separate the service, the *Minnesota Vonage Order* unavoidably reaches the interstate components of the DigitalVoice service that are subject to exclusive federal jurisdiction.”<sup>12</sup> Local calls are feasible using a VoIP service and, in fact, the AT&T and Verizon U-verse and FiOS services provide local calling (as do the VoIP services of most providers). The Commission has repeatedly found that consumers view

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<sup>12</sup> Memorandum Opinion and Order, *Vonage Holdings Corporation Petition for a Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, 19 FCC Rcd 22404, ¶ 23 (2004)(“Vonage Order”).

facilities-based VoIP services (that are typically managed services, as we use the term here)<sup>13</sup> as a substitute for traditional local service and, therefore, belong in the same product market.<sup>14</sup> As COMPTTEL discussed in the initial round of comments, the service provided to an originating circuit-switched subscriber (whether local or long distance) experiences no change just because the call is to a customer of a VoIP provider. Likewise, a called party can receive a local or long distance call from a VoIP customer that is indistinguishable from every other local and long distance call that they receive, without any knowledge that the originating subscriber may be served by IP technology.

In the *Local Competition Order*, the Commission found that “all carriers (including those traditionally classified as IXCs) may obtain interconnection pursuant to section 251(c)(2) for the purpose of terminating calls originating from their customers residing in the same telephone exchange (*i.e.*, non-interexchange calls).”<sup>15</sup> Consequently, VoIP providers are not excluded from section 251(c)(2) as AT&T claims.

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<sup>13</sup> Unlike in Europe, where a common term (Next Generation Network) is used to describe managed IP services, the nomenclature in the US has not settled on a single, accepted term for networks that segment and/or manage IP services to ensure quality, security and reliability.

<sup>14</sup> See, Memorandum Opinion and Order, *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, 25 FCC Rcd 8622, ¶ 54 (2010) (“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.”); Memorandum Opinion and Order, *SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control*, 20 FCC Rcd 18290, ¶ 87 (2005) (“[W]e find that facilities-based VoIP services clearly fall within the relevant service market for local services.”); Memorandum Opinion and Order, *Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control*, 20 FCC Rcd 18433, ¶ 88 (2005).

<sup>15</sup> First Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, FCC 96-325, 11 FCC Rcd 15499, ¶ 190 (1996) (“*Local Competition Order*”).



Verizon argues that the Communications Act does not require interconnection in any particular format.<sup>16</sup> The Commission rules and interpretation of the Act, they argue, only provide for interconnection at any “technically feasible points” or “technically feasible methods” and, they argue, that these “points” “are simply the physical facilities [or equipment] at which interconnection occurs.”<sup>17</sup> Without agreeing that the Act is as limited as Verizon asserts, as COMPTEL has explained, that the rules only identify *as examples* several TDM-based locations that are known technically-feasible points (or “methods” in the case of Rule 51.321) of interconnection (*e.g.*, the line side of a local switch, the trunk side of a local switch, central office cross-connect points, out-of-band signaling transfer points necessary to exchange traffic at these points).<sup>18</sup> Significantly, these examples are not an exhaustive list of technically-feasible POIs (or methods). COMPTEL further conveyed that the interface port of a Session Border Controller (or its equivalent) is also a physical piece of equipment and a technically feasible point of interconnection.<sup>19</sup> Indeed, as AT&T explains: “The Border Controller is the first entry point in the AT&T network and includes both security and transport functions, with SIP being a signaling protocol.”<sup>20</sup> Thus, as a practical matter, the technically feasible *point* of interconnection also effectively defines the *format* of the traffic.

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<sup>16</sup> Verizon at p. 26.

<sup>17</sup> *Id.* at p. 30.

<sup>18</sup> COMPTEL at 31; *See also*, 47 CFR § 51.305(a)(2).

<sup>19</sup> COMPTEL at n. 103.

<sup>20</sup> *AT&T's Common Architecture for Real-Time Services (CARTS)*, Prepared by AT&T Architecture and Network Realization and AT&T Architecture and Planning, at 9 (revised Aug. 2010). Available at [http://www.business.att.com/content/whitepaper/w\\_ATT\\_CARTS.pdf](http://www.business.att.com/content/whitepaper/w_ATT_CARTS.pdf)

The fact that the ILECs themselves are moving to an IP architecture makes clear that they have an obligation to exchange traffic in IP. Commission Rule 51.305(a)(3) requires that the ILEC must provide interconnection:

That is at a level of quality that is equal to that which the incumbent LEC provides itself, a subsidiary, an affiliate, or any other party. ***At a minimum, this requires an incumbent LEC to design interconnection facilities to meet the same technical criteria and service standards that are used within the incumbent LEC's network.*** This obligation is not limited to a consideration of service quality as perceived by end users, and includes, but is not limited to, service quality as perceived by the requesting telecommunications carrier.

Verizon seeks to ignore its obligations under this rule, arguing that “the mere fact that a facility is IP-enabled or capable of recognizing IP protocol traffic does not ‘demonstrate that IP-to-IP interconnection is technically feasible’ at that facility.”<sup>21</sup> The Commission Rules and the statute, however, unambiguously requires that the ILECs provide interconnection “that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection.” 47 U.S.C. § 251(c)(2)(C). The Eighth Circuit found that, although the ILEC may not be required to alter their networks substantially to provide *superior* quality interconnection, ILECs are required to make modifications to their facilities to the extent necessary to meet the obligations imposed by sections 251(c)(2) and 251(c)(3).<sup>22</sup> Thus, the ILECs that have IP facilities (including through their affiliates) must make modifications to accommodate IP interconnection.

Although competitive providers may be leading the transition to IP-based networks and services, AT&T and Verizon have, for years, touted the extent of their IP networks.<sup>23</sup> Indeed, in

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<sup>21</sup> Verizon at p. 33.

<sup>22</sup> *Iowa Util. Bd. v. FCC*, 120 F.3d 753, 813, n. 33 (8<sup>th</sup> Cir. 1997).

<sup>23</sup> See, e.g., *Petition of AT&T, Inc. for Interim Declaratory Ruling and Limited Waivers*, WC Docket No. 08-152, at 11 (filed July 23, 2008) (“AT&T is among the nation’s leading IP-

a letter to Congressional leaders, AT&T and Verizon (among others) state that “an ever-increasing proportion of voice traffic will originate or terminate in IP format and on IP networks.”<sup>24</sup> Moreover, the extent of their IP network poses a factual question (i.e., identifying how many wire centers are reachable by each of the ILEC IP transport networks) and, if there is a dispute on such facts, the arbitration provisions of the Act establish an appropriate forum for resolution.<sup>25</sup>

The Commission must be guided by the statute and the facts in establishing the legal framework for IP Interconnection. The exceptionally broad consensus that IP-to-IP interconnection is subject to Sections 251 and 252 underscores the recognition that the PSTN of the future will rely upon IP technology. As such, the most core obligations of the Act – the right to interconnection – must not disappear as the technological platform changes to IP.

### **III. IP Interconnection Does Not Implicate the Internet and Enforcement of the Act is Needed**

A common theme echoed by AT&T and Verizon is that the mere existence of Internet peering and transit agreements demonstrates that unregulated interconnection agreements for managed voice services will allow competition to flourish. But the existence of these agreements for the exchange of public Internet traffic does not suggest – much less prove – that

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enabled service providers, with increasing amounts of traffic originating in IP, a firm expectation that this trend will continue.”); Press Release, *Verizon Wireless and FiOS Growth Fuels Continued Strong Cash Flow at Verizon in 3Q* (Oct. 26, 2009)(Verizon Chairman and then CEO Ivan Seidenberg stated that “[t]he Verizon network is now an engine for next-generation communications services that will create new short- and long-term opportunities for us.”) Available at <http://investor.verizon.com/news/view.aspx?NewsID=1019>

<sup>24</sup> Letter from AT&T, *et al.*, to Rep. Henry Waxman, Chairman, Committee on Energy and Commerce, *et al.*, available at: <http://www.techamerica.org/Docs/fileManager.cfm?f=lettertohillonipenableservicesnov2009.pdf>

<sup>25</sup> State Commission proceedings routinely include discovery.

nondiscriminatory traffic exchange agreements involving managed voice services (such as U-verse and FiOS) will emerge. Indeed the comments to this proceeding demonstrate the lack of interest these large carriers have in negotiating reasonable IP interconnection agreement. For example:

- “To date, large carriers have shown minimal interest in negotiating IP interconnection agreements with RLECs or other smaller carriers. Essentially, the perceived attitude is ‘you need us much more than we need you’ and critical matters such as interconnection points, middle mile capacity and middle mile prices are often provided on take-it-or-leave-it terms.”<sup>26</sup>
- “In Windstreams’s experience as a competitive carrier commercial negotiations with the largest carriers for deregulated services can be contentious and difficult. Larger carriers often are unwilling to come to reasonable terms with smaller carriers that lack comparable ‘purchasing power,’ and they are even less interested in offering reasonable terms to a carrier that they perceive as a stronger competitor for large business customers.”<sup>27</sup>
- “T-Mobile has faced the arbitrary exercise of ILEC interconnection dominance in its negotiations with one incumbent that insist that T-Mobile negotiate an interconnection agreement with each of the incumbent’s affiliates, rather than a corporate-wide agreement, in every state in which they exchange traffic.”<sup>28</sup>
- “NRIC respectfully submits that the Commission should reject notions that the rates, terms and conditions for IP interconnection and services are subject to commercial agreements...NRIC has already demonstrated that such arrangements simply amplify the market power and lop-sided bargaining positions of the largest carriers.”<sup>29</sup>

It is important to emphasize at the outset what AT&T and Verizon neglect to plainly state: The Internet agreements they cite so freely cannot be used to terminate traffic to their FiOS and U-verse customers. While both services use IP *technology*, neither is part of the public Internet. As Verizon explains to potential FiOS customers (emphasis added):

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<sup>26</sup> NECA *et al* at 41.

<sup>27</sup> Windstream Communications, Inc. at 15.

<sup>28</sup> T-Mobile USA, Inc. at 7.

<sup>29</sup> NRIC at 29.

To understand the features and quality of FiOS Digital Voice, you first need to know that the service is not the same as the services you get with a little Internet adapter for your modem and phone, and it does not ever touch the public Internet.

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The SIP signaling is made over Verizon's private IP-based network to new "softswitches," which provide the service and control to establish voice communications to other FiOS Digital Voice customers, or to traditional phone customers.<sup>30</sup>

AT&T is equally clear that its U-verse service is not part of the Internet (emphasis added):

AT&T U-verse Voice service is provided over AT&T's world-class managed network and not the public Internet. Using one network to provide U-verse services enables AT&T to provide high quality service. Voice over IP ("VoIP") providers who utilize the public Internet are less able to control the traffic and ensure voice quality.... With AT&T U-verse Voice, although you can use your high speed Internet service to manage your AT&T U-verse Voice features, the voice packets do not traverse the public Internet.<sup>31</sup>

Neither the AT&T U-verse nor the Verizon FiOS VoIP services are provided over the Internet. Rather, they are provided over customer access physical facilities that are designed to deliberately isolate the VoIP services from Internet traffic.<sup>32</sup> There is no question that these managed VoIP services differ from the public Internet, nor is there any question that the exchange of this traffic will be subject to agreements that differ from the Internet contracts that AT&T and Verizon continuously cite. The only relevant question is whether these contracts and network arrangements will be nondiscriminatory, reciprocal and public (which are the core

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<sup>30</sup> <http://newscenter.verizon.com/press-releases/verizon/2010/fios-digital-voice-heres.html>

<sup>31</sup> <http://www.att.com/u-verse/explore/home-alarm.jsp>. See also AT&T Comments at 18 ("Traditionally, arrangements for differential IP packet handling have been mostly—though not exclusively—confined to communications that begin and end on a single IP network, such as corporate LANs or residential IP access networks like AT&T's U-verse.")

<sup>32</sup> The Internet is defined by a common addressing structure administered by the ICANN. The fact that each end point is publicly addressable by any other end point is what makes it a *public* Internet.

requirements of Sections 251 and 252), or offered only to favored partners, distorted by one-sided compensation obligations, and secret.

The evidence thus far suggests that without enforcement of the Act, the latter will prevail. Despite the popularity of U-Verse and FiOS, AT&T seems to acknowledge that IP interconnection is not yet occurring,<sup>33</sup> in part (it suggests) because it is awaiting a “QoS-aware” compensation mechanism.<sup>34</sup> Even as the Commission seeks to eliminate ICC by moving to bill-and-keep (a move supported by AT&T for its old network), AT&T here foreshadows the intent to impose intercarrier charges on carriers seeking traffic exchange agreements that would preserve quality voice services. For its part, Verizon admits that it has *one* agreement in place,<sup>35</sup> but offers no information regarding the identity of its partner, nor explanation as to why the arrangement is not generally available.

In an effort to distract the Commission from these facts on the ground, AT&T and Verizon try to argue that they are no longer dominant firms and that the inherited advantages of incumbency – a substantial preexisting customer base and established infrastructure – suddenly disappear because IP technology is “new.”<sup>36</sup> First of all, a Commission assessment of dominance is not a prerequisite for the application of section 251(c). Moreover, *the size and ubiquity of the ILEC network does not change by virtue of their upgrades to include IP facilities in their network*. And, their portrayal completely ignores the extensive leveraging of

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<sup>33</sup> AT&T at 18-19.

<sup>34</sup> *Id.* at 19.

<sup>35</sup> Verizon at 14 (“Verizon currently has one agreement in place covering its FiOS Digital Voice VoIP traffic, and we are negotiating others.”)

<sup>36</sup> *See, e.g.,* Verizon at 9 (“The technology that drives the Internet, and the network facilities that route and carry IP traffic, are not add-ons to the legacy circuit-switched PSTN. They are wholly new networks and wholly new technologies.”)

existing assets by these incumbents as they introduce packet technology into their networks.<sup>37</sup> If evaluating the ILEC advantages, as Ad Hoc concisely explained:

The relevant inquiry for the Commission is not whether the public network is shifting from a circuit-switched to an IP environment but whether the deployment of IP can somehow change the fundamental economics of the network facilities on which IP technologies (and TDM or any other transmission protocol) depend – such as trenches, poles, rights of way, conduit, fiber runs, copper loops, spectrum licenses, municipal permitting for disruptions of streets and pavements, easements, rights of access to buildings, and all the other mundane but necessary inputs for any network.<sup>38</sup>

Ad Hoc is absolutely correct when it explains that the largest investment costs associated with deploying an IP network (as with any network) exist at Layer 1 (the Physical Layer) with the infrastructure and facilities costs, not with higher layers that electronically define and control traffic flows. And there is no question that the large ILECs are fully exploiting the advantages of incumbency to achieve a cost structure that no entrant could achieve.

For instance, the FiOS fiber network not only shares the same infrastructure that houses its copper facilities, its copper network sometimes *becomes* the supporting infrastructure (by lashing the fiber directly to the copper cable). As Verizon has explained to the California Commission:

Over the years pole lines and conduit systems have been constructed as a means to support copper cable placements. Placement of FTTP cables have taken advantage of the existing infrastructure, with fiber cables being placed alongside existing copper cables. It is not uncommon for fiber cables to be lashed to copper cables.<sup>39</sup>

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<sup>37</sup> From the time the telephone was invented over 125 years ago, the network has seen a constant evolution in technology and new investment. The introduction of IP based packet networks represents just the latest innovation being introduced to the network.

<sup>38</sup> Ad Hoc at 2-3.

<sup>39</sup> Panel Declaration of Richard L. Fowler, John C. Mannix, Louis D. Minion, and Warren E. Thomas on Behalf of Verizon-California, Before the Public Utilities Commission of California, Rulemaking Regarding Whether to Adopt, Amend, or Repeal Regulations Governing

AT&T's U-verse architecture exploits the preexisting network to an even greater extent, as it relies on the existing local copper loop (albeit shortened) to connect individual subscribers to its U-verse fiber. As AT&T explains:

AT&T does not have two separate outside plant networks. For its high-speed U-verse services, AT&T deployed fiber from central offices to specialized field terminals, after which U-verse services travel to the customer's location over copper facilities. The copper and fiber infrastructures combine to make a single seamless network.<sup>40</sup>

AT&T's cable and wire facilities were deployed over a period of decades and protected by regulatory policy and subsidies.<sup>41</sup> The costly physical assets that underlie the IP networks of Verizon and AT&T are the same assets that have underlay the PSTN for years.

In addition to these physical assets, these ILECs are using the other great benefit of incumbency, a still massive customer-base.<sup>42</sup> Verizon freely admits that it is shifting customers from its copper network to fiber, thereby increasing the fill rate on its FiOS network (and reducing per unit costs):

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the Retirement by Incumbent Local Exchange Carriers of Copper Loops and Related Facilities Used to Provide Telecommunications Services, 08-01-005 March 14, 2008, at ¶ 29.

<sup>40</sup> Reply Declaration of Betsy Farrell Supporting Comments of AT&T California, Before the California Public Utilities Commission, Rulemaking to Evaluate Telecommunications Corporations Service Quality Performance and Consider Modification to Service Quality Rules, Rulemaking 11-12-0001, filed March 1, 2012, at ¶ 43.

<sup>41</sup> Although the Commission's ICC reform seeks to end the system of access support, the fact is that the system went on for decades and the local networks of the ILECs are largely fully depreciated. Nationally, in 2007, which is the last year the FCC required that this information be made public, 73% of the Total Plant in Service had been depreciated, and nearly 75% of the Cable and Wire Facilities had been recovered. 2007 ARMIS 43-04, Total Large ILECs, Rows 2260, 3080, 1530 and 3060.

<sup>42</sup> AT&T serves over 39 million wireline voice connections, while Verizon serves over 24 million total voice connections. AT&T data available at <http://www.att.com/gen/investor-relations?pid=262>, 4Q2011, Financial and Operating Results (PDF), page 13 of 21. Verizon data available at [http://www22.verizon.com/investor/qreport\\_quarterly\\_earnings\\_verizon\\_4q\\_2011\\_01242012.htm](http://www22.verizon.com/investor/qreport_quarterly_earnings_verizon_4q_2011_01242012.htm), 4Q2011, Financial and Operating Information (PDF), page 16.



Rather than invest valuable capital resources in a duplicate and underutilized copper network that is inherently less reliable than fiber, it makes more sense to migrate copper customers to fiber, particularly in areas with chronic copper network problems. To that end, Verizon recently launched a program to proactively migrate customers in chronic trouble areas onto the Verizon's fiber platform, at no additional cost to the customer.<sup>43</sup>

In California alone, Verizon's initial plan is to move *thousands* of customers onto its fiber network in 2012.<sup>44</sup> At least today, Verizon intends to continue to serve such customers using their TDM switches,<sup>45</sup> but once placed on the fiber, the formatting of the digital signals from the home can be easily reconfigured to IP by remotely reconfiguring the Optical Network Terminal (ONT) at the customer's home. There is no rationale economic basis to the claim that IP eliminates the advantages of incumbency when one incumbent is leveraging its extensive copper loop network to deploy IP (AT&T), another is transferring thousands (and ultimately millions) of customers to its network to achieve scale (Verizon), and both are building the entire system using the same rights-of-ways, poles, conduits, and wire centers that underlie the traditional network. No entrant comes to the market with this set of advantages.

Finally, AT&T and Verizon claim that the "terminating monopoly" disappears, vaguely suggesting that there are multiple paths to U-verse and FiOS subscribers. Whether or not the terminating monopoly problem is diminished (or irrelevant) in the public Internet, the fact is that the only path to U-verse and FiOS subscribers are the private IP networks of AT&T and Verizon. The ILEC is the only vendor of (what is otherwise called) terminating access to these subscribers

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<sup>43</sup> Reply Declaration Of Thomas Maguire, on Behalf of Verizon-California, Before the Public Utilities Commission of California, Rulemaking 11-12-001, Rulemaking to Evaluate Telecommunications Corporations Service Quality Performance and Consider Modification to Service Quality Rules, March 2, 2012 ("*Verizon Maguire Declaration*"), at ¶ 26.

<sup>44</sup> *Id.*, at ¶ 19.

<sup>45</sup> *Id.*, at ¶ 8.

– that is, the only way to complete calls to these customers is by connecting to these private networks (or continuing to use TDM interconnections). It is interconnection with these *private* networks (and not the public Internet) that is the subject of the FNPRM and unquestionably the subject of the interconnection provisions of Sections 251 and 252 of the Act.

#### **IV. The Commission Should Adopt the COMPTTEL Transport/Edge Proposal**

In its Comments, COMPTTEL proposed a timetable to reform transport consistent with the general structure the Commission adopted for end-office switching.<sup>46</sup> Transport is coequal with the termination (essentially end-office switching) obligation under 251(b)(5), and the Commission cannot adopt one pricing methodology for termination, while ignoring transport.<sup>47</sup> COMPTTEL also proposed the network “edge” - which defines the scope of the section 251(b)(5) pricing methodology (which, under the Order, ultimately reaches bill and keep) - as the CLEC’s single point of interconnection (POI) in the LATA. This is consistent with the Commission’s finding that the statute means that CLECs have the option to interconnect at a single POI per LATA.<sup>48</sup>

We respond here to two similar proposals, one from AT&T and a second from CenturyLink as to what should constitute the network “edge.” The network “edge” is the point where section 251(b)(5) rates and obligations begin and end. Carriers are responsible for carrying (directly or indirectly by paying another provider) its traffic to that edge.<sup>49</sup> Both AT&T

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<sup>46</sup> COMPTTEL at 10-13.

<sup>47</sup> CenturyLink goes so far as to recommend that all transport used to reach the Network Edge should be immediately deregulated, without a single datum in support (much less bothering with the standards for forbearance from 251(b)(5)’s direction that rates *must be* cost-based). CenturyLink at 14.

<sup>48</sup> FNPRM at ¶ 1316 (citations omitted).

<sup>49</sup> FNPRM at ¶ 1320.

and CenturyLink seek to subvert the application of the section 251(b)(5) to transport by narrowing the scope of section 251(b) through their proposed definition of network “edge.”

As stated above, COMPTTEL put forward a pragmatic compromise solution to the Network Edge issue. Consistent with prior Commission precedent, entrants are entitled to a single POI per LATA.<sup>50</sup> This single POI defines where the transitional and final rates pursuant to section 251(b)(5) apply. In other words, this single POI approach establishes the LATA as the geographic area within which these reformed prices would be apply, and the POI becomes the Network Edge.

In contrast, both AT&T and CenturyLink seek to shrink the 251(b)(5) pricing standard to traffic terminated within the area served by an individual tandem or, once certain traffic levels are reached, the end-office.<sup>51</sup> As we explained in our Comments, however, such a system imposes new and higher costs (for dedicated transport) on the entrant.<sup>52</sup> Neither CenturyLink or AT&T explain how Section 251(b)(5)’s obligation to transport and terminate traffic at cost-based rates can collapse to the end-office just because a carrier has reached a certain threshold of traffic.<sup>53</sup> Under the AT&T/ CenturyLink view, transport is an optional obligation that they can avoid simply through the device of a redefined network edge, completely ignoring the clear language of section 251(b)(5). The COMPTTEL proposal, on the other hand, consistently reforms

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<sup>50</sup> Memorandum Opinion and Order, *Application by SBC Commc 'ns Inc.*, 15 FCC Rcd 18354, ¶ 78 (2000)(“Section 251, and our implementing rules, require an incumbent LEC to allow a competitive LEC to interconnect at any technically feasible point. This means that a competitive LEC has the option to interconnect at only one technically feasible point in each LATA... Thus, new entrants may select the ‘most efficient points at which to exchange traffic with incumbent LECs, thereby lowering the competing carriers’ costs of, among other things, transport and termination.”)(citations omitted).

<sup>51</sup> AT&T at 68; CenturyLink at 22.

<sup>52</sup> COMPTTEL at 3-5.

<sup>53</sup> Under the AT&T and CenturyLink proposals, there is *never* an obligation to reform dedicated transport prices to be consistent with Section 251(b)(5).

both dedicated and common transport and respects the requirement of 251(b)(5) to provide transport and termination.

There is no question that existing Commission rules permit a CLEC to establish a single POI per LATA and it is from this single POI that the 251(b)(5) pricing rule should apply. AT&T opposes using the actual POI as a Network Edge, claiming:

First, a regime that transformed physical POIs into default network Edges would eliminate any incentive for carriers to build out facilities, even where it is highly efficient to do so; it would simply freeze today's interconnection arrangements in place. Second, existing interconnection arrangements vary enormously from state to state and city to city, depending on the divergent policy goals of fifty-one state commissions.<sup>54</sup>

AT&T's characterization is economic nonsense and revisionist history. It makes no sense for the Commission to adopt a policy (such as the one proposed by AT&T) that would create an incentive to "build out" TDM transport facilities. Rather, the Commission should affirmatively favor a "freeze" on today's TDM interconnection arrangements, so that resources can be devoted to replacing these interconnection arrangements as quickly as possible with ones that exchange traffic in IP. The very goal that AT&T is encouraging the Commission to embrace – new and more numerous TDM interconnections – is *exactly* the outcome the Commission should avoid in designing its transport pricing (which is what the network edge partially defines).

AT&T's second claim – that is, that the existing ICAs vary enormously from state to state and city to city based on policy goals – ignores the fact ICAs are the end-product of a highly scrutinized regulatory process governed by federal rules. These contracts are not some random collection of acts. They have (in many cases) been fully litigated, typically by AT&T in its role as a competitive entrant prior to its acquisition by SBC. Moreover, with respect to the Bell

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<sup>54</sup> AT&T at 70.

Operating Companies, many of the most contentious issues decided by the state commissions were reviewed by the FCC as part of the Section 271 approval process. The Commission's goal for this proceeding should be to benefit from the hard work of these state commissions, not override it with a one-size-fits-none solution.

COMPTEL's transition for transport is a reasonable and limited solution. Moreover, COMPTEL's proposal would reform both dedicated and common transport prices. COMPTEL's proposal also addresses AT&T's concern that "carriers never exchange compensation no matter where they interconnect,"<sup>55</sup> as COMPTEL's transport proposal is limited by the LATA. In short, COMPTEL's transport proposal seeks balance within a policy framework we never endorsed (bill and keep), by proposing a reasonable geographic boundary for transport reform that is not tied to the historically inefficient design of the local tandem serving areas.

## **V. Miscellaneous**

### ***(a) Section 203 Forbearance***

In the *FNPRM*, the Commission had asked if it should forbear from tariffing requirements in Section 203 of the Act and Part 61 of its rules to enable carriers to negotiate alternative arrangements pursuant to *ICC/USF Transformation Order*. No party has provided an explanation for forbearance that satisfies the dictates of Section 10 of the Act, *i.e.*, that enforcement is unnecessary to ensure just and reasonable charges, practices and classification; that enforcement is not necessary for the protection of consumers; and that forbearance is consistent with the public interest.<sup>56</sup> In addition, Section 203 and Commission regulations cover more services than those that would be addressed by an ICA, e.g. certain special access services. Consequently, in addition to an analysis consistent with the above statutory requirements,

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<sup>55</sup> AT&T at 69.

<sup>56</sup> 47 U.S.C. 160(a).

specificity as to the products and services for which forbearance is sought would have to be provided. Therefore, the Commission should take no action at this time with regard to forbearance of section 203.

**(b) Entrance Facilities**

AT&T asks the Commission to reverse its conclusion, upheld by the U.S. Supreme Court, that competitors are entitled to entrance facilities, for purposes of interconnection, at cost-based rates pursuant to section 251(c)(2). AT&T offers no change in circumstance or rationale argument to justify a reversal in the Commission’s interpretation of the statute. In its comments, AT&T misleadingly claims that the Supreme Court “noted” that “the statute makes clear that an incumbent LEC need not provide access to any facilities—much less entrance facilities—to provide interconnection...”<sup>57</sup> What the Supreme Court “noted,” however, was AT&T’s contention that the ILECs need not provide access to any facilities—a contention the Supreme Court rejected.<sup>58</sup> Indeed, the Court disagreed “with AT&T’s argument that entranced facilities are not a part of incumbent LECs’ networks ... [finding instead that] the Commission’s view on this question is *more than reasonable*”<sup>59</sup> and that “[e]ntrance facilities, at least when used for the mutual exchange of traffic, []fall *comfortably* within the definition of interconnection.”<sup>60</sup>

Not only does AT&T ask the Commission to reverse its decision on entrance facilities but it seeks forbearance from section 252(d) cost-based pricing standards just in case a reviewing court does not agree with the alternate interpretation of section 251(c)(2) AT&T puts forth (as

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<sup>57</sup> AT&T at 65.

<sup>58</sup> *Talk America, Inc. v. Michigan Bell Telephone Co.*, 131 S.Ct. 2254, 2260 (2011)(“AT&T contends that the statute makes clear that an incumbent LEC need not provide access to any facilities—much less entrance facilities—to provide interconnection... We do not find the statute so clear.”)(Emphasis added and deleted.)

<sup>59</sup> *Id.* at 2262 (emphasis added).

<sup>60</sup> *Id.* at 2263 (emphasis added).

well as the bill-and-keep standard for section 251(b)(5) the Commission adopted). But the fact that A&T's legal arguments cannot withstand legal scrutiny, or that AT&T does not *like* a provision of the statute, are not grounds for the Commission to forbear from enforcing that provision. There is a standard the Commission must meet to grant forbearance, and AT&T has provided no justification that meets that standard.

**Conclusion**

The Commission should swiftly confirm its intend to enforce the provisions of the Act with regard to IP-to-IP Interconnection and the reciprocal compensation rates for transport (including the establishment of a transition plan that mirrors tandem switching rates). The Commission should not consider any forbearance as part of this proceeding.

Respectfully submitted,

/s/

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