

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition;)	GN Docket No. 12-353
)	
Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution)	
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COMMENTS OF CTIA – THE WIRELESS ASSOCIATION[®]

I. INTRODUCTION AND SUMMARY

CTIA–The Wireless Association[®] (“CTIA”) files these comments in response to the Public Notice (“Notice”) in the above-captioned proceedings.¹ The Notice seeks comment on separate petitions by AT&T Inc.² and by the National Telecommunications Cooperative Association (“NTCA”)³ (together, “Petitioners”) asking the Commission to address a number of issues raised by the ongoing transition of legacy transmission platforms and services (particularly the public switched telephone network, or PSTN) from Time-Division Multiplexing (“TDM”) technology to new services based on Internet Protocol (“IP”) technology. As CTIA explains in these comments, the Commission should take this opportunity to:

- Reiterate that IP-based services are subject to federal (and not to state) jurisdiction;

¹ *Pleading Cycle Established on AT&T and NTCA Petitions*, GN Docket No. 12-353, Public Notice, DA 12-1999 (WCB Dec. 14, 2012) (“Notice”).

² AT&T Inc., Petition to Launch a Proceeding Concerning the TDM-to-IP Transition (filed Nov. 7, 2012) (“AT&T Petition”).

³ Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution (filed Nov. 19, 2012) (“NTCA Petition”).

- Clarify that the market for IP-based services should be subject to a light regulatory regime; and
- Decline invitations to apply inefficient and anticompetitive legacy access charge and universal service rules to IP networks and traffic.

The Petitioners are correct that the deployment of IP-based broadband networks, of which the TDM-to-IP transition is a significant component, is “*the* great infrastructure challenge of the early 21st century” and promises enormous benefits for consumers.⁴ Providers are stepping up and making colossal investments in infrastructure to effectuate this deployment – over \$1 trillion total since 1996,⁵ with wireless providers alone having invested more than \$25 billion from July 2011 to June 2012 in capital projects.⁶ These investments are bringing existing services to new customers and new services to all customers.

However, these investments can only be maximized if the regulatory environment is appropriate; an overbearing or uncertain regulatory environment will discourage or divert investment. Thus, the Commission must embrace a regulatory regime that promotes the TDM-to-IP transition by eliminating regulations that undermine the transition and retaining or adopting regulations that advance it.⁷

⁴ AT&T Petition at 1-2 (quoting the Federal Communications Commission, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN at 3 (2010)(“National Broadband Plan” or “NBP”), available at <http://www.broadband.gov/plan/>);

⁵ AT&T Petition at 3 n.4 (citing Anna-Maria Kovacs, *U.S. Broadband Deployment: The Glass is 98% Full*, FIERCETELECOM (Aug. 27, 2012), available at <http://www.fiercetelecom.com/story/us-broadband-deployment-glass-98-full/2012-08-27>).

⁶ CTIA – The Wireless Association[®], *50 Wireless Quick Facts* (Nov. 2012), <http://www.ctia.org/advocacy/research/index.cfm/aid/10377>.

⁷ AT&T Petition at 2 (The FCC “should now open a proceeding to take the next steps to facilitate the transition away from the legacy TDM-based network to an all-IP network that is capable of supporting broadband Internet access, higher-layer VoIP, and other advanced communications services for all Americans.”)(internal quotations removed); NTCA Petition at i (The FCC should “initiate a rulemaking to examine means of promoting and sustaining the ongoing evolution of the Public Switched Telephone Network from a [TDM]-based platform to an [IP]-based

II. CONSISTENT WITH THE *VONAGE ORDER* AND CTIA'S PRIOR ADVOCACY, IP-BASED SERVICES SHOULD BE UNDER EXCLUSIVE FEDERAL JURISDICTION AND A LIGHT REGULATORY TOUCH

Like Commercial Mobile Radio Services (“CMRS”), IP-based services are fundamentally interstate and international in nature, and subject to competitive market forces. The success of the federal, deregulatory approach for CMRS and existing IP-based services suggest that the Commission should continue that approach as IP-based services replace TDM-based services in the PSTN. IP-based services, to the extent they are regulated at all, should be regulated at a federal level due to their fundamentally interstate/international nature. Additionally, the market for IP-based services is highly competitive, and there is no basis for subjecting such services to economic regulation. Instead, the Commission should adopt a light touch regulatory approach similar to its approach to CMRS. This will permit the competitive marketplace to produce enormous benefits for U.S. consumers and opportunities for innovation for U.S. businesses.

To advance the IP transition, the Commission should affirm that IP-based services are subject to federal (and not to state) jurisdiction. As CTIA observed in the *IP-Enabled Services* proceeding, IP-based services are fundamentally interstate/international in nature and operate without regard to state or national boundaries, similar to CMRS.⁸ Unlike traditional circuit-switched TDM networks, IP networks typically are not configured to identify the originating or terminating point of a data packet. Frequently, users of IP-enabled services can access the service from any point on the public Internet making it impossible to determine the geographic location of the calling and called parties. In addition, IP networks may send data packets in the

infrastructure through targeted regulatory relief and the establishment of tailored near-term economic incentives.”).

⁸ Comments of CTIA – The Wireless Association®, WC Docket No. 04-36, at 2-7 (filed May 28, 2004).

same communication over different, dynamically-established routes from origin to destination, confounding attempts to ascertain whether a data packet on an IP network has been transmitted on an intrastate, interstate, or international basis.

Recognizing the inherent interstate character of IP-based networks, the Commission and Congress have both previously and repeatedly expressed strong preferences for exclusive federal jurisdiction over IP services. For example, the Commission already has concluded that retail IP-based voice services are subject to solely federal jurisdiction, asserting that, because the IP-based service at issue “cannot be separated into interstate and intrastate communication . . . without negating valid federal policies and rules . . . this Commission, not the state commissions, has the responsibility and obligation to decide whether certain regulations apply.”⁹ Congress has also expressed with “unmistakable clarity”¹⁰ a preference for federal preservation of the unregulated nature of IP-based services, stating that it is “the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.”¹¹ This mirrors Congress’s preemption of state authority over CMRS.¹² Thus, exclusive federal regulation of IP-based services will advance the IP transition.

⁹ *Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, WC Docket No. 03-211, Memorandum Opinion and Order, 19 FCC Rcd 22404, 22404-05 ¶ 1 (Nov. 12, 2004), *aff’d sub nom.*, *Minn. Pub. Utils. Comm’n v. FCC*, 483 F.3d 570 (8th Cir. 2007).

¹⁰ *Vonage Holdings Corp. v. Minn. Pub. Utils. Comm’n*, 290 F. Supp. 2d 993, 997 (D.Minn. 2003), *aff’d*, 394 F.3d 568 (8th Cir. 2004).

¹¹ 47 U.S.C. § 230(b).

¹² *See* 47 U.S.C. § 332(c)(3)(A) (“[N]o State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service, except that this paragraph shall not prohibit a State from regulating the other terms and conditions of commercial mobile services.”).

The market for IP services should not be heavily regulated, and retail IP services should not be subject to economic regulation absent evidence of a market failure. Instead the Commission should apply to IP-enabled services the very successful “light touch” regulatory approach it has applied to the CMRS marketplace. This light touch regulatory approach has been enormously successful for CMRS providers and customers. For example, CMRS retail prices have been unregulated since 1993, yet consumers today get far more for less – prices have fallen or remained steady while services and coverage have increased dramatically.¹³ Investment and innovation have surpassed regulators’ wildest expectations, and have resulted in CMRS services being competitively available to nearly every American, with 99.8 percent of all Americans having access to a wireless voice provider, 94.3 percent having access to four or more wireless voice providers, and with wireless broadband available to 98.5 percent of Americans.¹⁴

Similarly, IP-based services – including the major technological triumph of our time, the Internet – have been largely left unshackled by regulation, and as a result have developed into highly competitive and innovative marketplaces. There is every reason to believe that a federalized but light regulatory touch as the PSTN evolves to IP-based technology would bring the innovation and success of other IP-based services and CMRS into the PSTN. The Commission therefore should not impose economic regulation, such as rate regulation or tariffing, absent clear evidence of a market failure and convincing evidence that regulatory intervention would do more good than harm.

¹³ CTIA – The Wireless Association[®], “Semi-Annual Mid-Year 2012 Top-Line Survey Results” at 9 (showing average monthly wireless bill from June 1988 to June 2012), *available at* http://files.ctia.org/pdf/CTIA_Survey_MY_2012_Graphics-final.pdf.

¹⁴ *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WC Docket No. 10-133, Fifteenth Report, 26 FCC Rcd 9664, 9669-70 ¶ 2 (2011).

CTIA also notes what should be abundantly clear: facilities-based wireless carriers do not possess any “bottleneck facilities” in the IP market that would justify imposing economic regulation on them. As CTIA has demonstrated in other proceedings, American consumers have unprecedented access to mobile broadband services from a range of competitive providers. For example, the Commission has stated that, as of January 2012, 99.4 percent of the U.S. population had access to mobile broadband at 3G or better speeds, and nearly 80 percent had such access from at least four providers.¹⁵ Already more than 75 percent of Americans have access to super-fast 4G LTE mobile broadband service, and the number of customers served – and the number of carriers providing such service – is expanding at a rapid rate.¹⁶ Consumers also increasingly have access to mobile voice and broadband service via WiFi networks that complement carriers’ mobile networks.¹⁷

In sum, the IP-based services which increasingly dominate the communications marketplace are inherently interstate/international in nature and subject to competitive market forces. They should be subject solely to federal jurisdiction and a light regulatory touch.

¹⁵ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended*, GN Docket No. 12-228, Ninth Broadband Progress Notice of Inquiry, 27 FCC Rcd 10523, 10525 n.12 (2012).

¹⁶ Comments of CTIA – The Wireless Association[®], GN Docket No. 12-228 (filed Sept. 20, 2012) at 5-9.

¹⁷ See, e.g., Randall Stross, “Mixing, Matching, and Charging Less for a Phone Plan,” NEW YORK TIMES (Jan. 26, 2013), available at http://www.nytimes.com/2013/01/27/business/republic-wireless-plan-melds-wi-fi-and-network-calling.html?ref=technology&_r=0.

III. INEFFICIENT AND ANTICOMPETITIVE ACCESS CHARGE AND UNIVERSAL SERVICE RULES UNDERMINE THE IP TRANSITION

Consistent with CTIA's prior advocacy and this Commission's direction in the *USF/ICC Transformation Order*, the Commission must guard against the application of inefficient and anticompetitive legacy access charge and universal service rules to IP networks and traffic. In the *USF/ICC Transformation Order*, the Commission took significant steps to rationalize the access charge and universal service rules to make them appropriate for the broadband-IP future.¹⁸ Any future proceeding to address the IP network transition must build on and continue this progress.

A. The Commission Must Continue Its Transition Away From Inefficient Legacy Access Charges and Towards a Bill-and-Keep Regime for the Exchange of Traffic

The *USF/ICC Transformation Order's* adoption of a bill-and-keep regime for the exchange of traffic will be enormously helpful to the IP transition.¹⁹ This change will promote the transition to IP-based services by reducing existing incentives for some providers to delay exchanging traffic in IP format in order to maximize legacy access charge revenues, as the Commission has acknowledged. Indeed, in the *USF/ICC Transformation Order*, the Commission concluded that “[b]ill-and-keep... is consistent with and promotes deployment of IP networks... and best promotes our overall goals of modernizing our rules and facilitating the transition to IP.”²⁰

¹⁸ See generally *Connect America Fund et al.*, WC Docket No. 10-90 *et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011) (“*USF/ICC Transformation Order*”), *pets. for review pending sub nom. In re: FCC 11-161*, No. 11-9900 (10th Cir. filed Dec. 8, 2011).

¹⁹ *USF/ICC Transformation Order*, 26 FCC Rcd at 17676 ¶ 34.

²⁰ *Id.*

The Commission should therefore reject proposals that would retreat to backward-looking access charge models that would stunt the transition to IP-based services. Specifically, the Commission should reject NTCA's invitation to develop regulatory mandated rates, like access charges, that would apply to IP traffic,²¹ and should instead continue to transition to bill-and-keep. Irrespective of whether NTCA is correct that IP interconnection in the Internet space "is not 'cost free,'" ²² the Commission has correctly recognized that the tariffed access charge regime is inconsistent with, and a hindrance to, the IP transition.²³ There is nothing in NTCA's petition that should cause the Commission to revisit its determination, made just over one year ago, that this vestige of TDM regulation should be eliminated in the IP world.²⁴

B. There Is No Reason to Provide Additional Universal Service Support for Rural ILECs' IP Networks

The Commission has made clear that universal service support can and should be used to deploy broadband networks.²⁵ Indeed, a central thrust of the *USF/ICC Transformation Order* is that eligible telecommunications carriers will now be able to use high cost universal service support to construct and maintain broadband networks which are capable of supporting IP

²¹ NTCA Petition at 14.

²² *Id.*

²³ *USF/ICC Transformation Order*, 26 FCC Rcd at 17905 ¶ 741, 17910 ¶ 750.

²⁴ Rather than reversing course, the Commission should move forward with additional reforms to further modernize the intercarrier compensation system for the IP world, as discussed in the *USF/ICC Transformation FNPRM*. As CTIA has explained, the Commission should adopt a transition path for remaining rate elements not already subject to a transition, such as tandem transport and termination, as expeditiously as possible. The Commission should adopt simple and competitively neutral default interconnection rules to facilitate carrier negotiations towards the allocation of transport obligations. The Commission should transition away from the tariff regime as quickly as possible, consistent with its adoption of a reciprocal compensation regime under section 251(b)(5). These rules, too, will facilitate the transition to all-IP networks.

²⁵ *See, e.g., USF/ICC Transformation Order*, 26 FCC Rcd at 17722 ¶ 149, 17740 ¶ 206.

services. The Commission therefore should decline NTCA's apparent invitation to provide additional USF support to rural ILECs for their IP networks.²⁶ Support dedicated to IP services would be duplicative of the Commission's historic efforts to fund broadband networks in high cost areas.

Rather than directing additional support to rate-of-return incumbent local exchange carriers ("ROR ILECs"), CTIA believes that consumer demand and marketplace developments warrant further changes to improve the efficiency and innovation inherent in federal universal service support mechanisms. As CTIA has observed, rural ILECs continue to receive the largest single share of high-cost support for their services, despite the fact that consumers are overwhelmingly shifting their usage to mobile and broadband services.²⁷ Despite that shift in consumer preference, the *USF/ICC Transformation Order* directs over \$2 billion of the \$4.5 billion in annual high cost support toward ROR ILEC networks. Moreover, the ROR ILEC support mechanisms already tilt the competitive playing field unnecessarily and deny consumers in high cost areas the benefits of innovative mobile broadband services.

Rather than layering additional and unnecessary funding on those mechanisms, the Commission can better advance the IP transition by moving forward with reforms to the universal service support mechanisms for ROR ILECs that promote efficiency and competition.²⁸ The existing support mechanisms for ROR ILECs still contain too many vestiges of rate-of-return regulation, and therefore undermine the more competitive marketplace in which IP-enabled services operate. Reform of ROR ILECs' USF mechanisms should incorporate the

²⁶ NTCA Petition at 14-16.

²⁷ *See, e.g.*, Comments of CTIA – The Wireless Association[®], WC Docket No. 10-90 *et al.*, at 13-15 (filed July 12, 2010).

²⁸ *Id.* at 16-19.

same market-driven, efficient mechanisms used for other carriers, such as cost models and reverse auctions. Pending such further reform, the Commission should continue to carefully scrutinize ROR ILECs' petitions for waiver of the limited reforms already implemented, and must remain mindful of the "crowding-out" effect of continuing support for obsolete networks on the growth of the market for IP-enabled services.

IV. CONCLUSION

The ubiquitous deployment of IP networks and the incursion of IP-based services into markets traditionally regulated by the Commission create certain regulatory challenges, but these challenges are minor when compared to the spectacular potential for consumer benefits if the Commission correctly fosters an appropriate regulatory environment. The incredible success of the Commission's federalized but light regulatory touch on the CMRS industry is instructive for the market for IP services. The Commission also should prevent the burdens of legacy access charges and skewed universal service subsidies from inhibiting the positive development of the IP marketplace.

Respectfully submitted,

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