

**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

**COMMENTS OF COMCAST CORPORATION**

Kathryn A. Zachem  
Mary P. McManus  
COMCAST CORPORATION  
300 New Jersey Avenue, NW, Suite 700  
Washington, DC 20001  
(202) 379-7134  
(202) 379-7141

Brian A. Rankin  
Andrew D. Fisher  
COMCAST CABLE COMMUNICATIONS, LLC  
One Comcast Center, 50th Floor  
Philadelphia, PA 19103

April 1, 2011

## **Table of Contents**

I. INTRODUCTION AND SUMMARY .....	2
II. THE COMMISSION SHOULD ADOPT IMMEDIATE REFORMS AIMED AT CREATING INCENTIVES FOR EFFICIENT INVESTMENT AND REDUCING ARBITRAGE OPPORTUNITIES.....	3
A. Intercarrier Compensation for VoIP-Originated Traffic.....	3
B. Rules for Curbing Phantom Traffic .....	9
C. Rules for Reducing Access Stimulation .....	10
III. CONCLUSION.....	12

**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

**COMMENTS OF COMCAST CORPORATION**

Comcast Corporation (“Comcast”) submits these comments in response to Section XV of the Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking issued by the Federal Communications Commission (“FCC” or “Commission”) in the above-captioned proceeding, seeking comment on the appropriate intercarrier compensation treatment of voice over Internet Protocol (“VoIP”) traffic on a going forward basis and how best to reduce inefficiencies and waste by curbing the arbitrage opportunities created by the current intercarrier compensation system.<sup>1</sup>

---

<sup>1</sup> *Connect America Fund; a National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up*, WC Docket No. 10-90, GN Docket

## I. INTRODUCTION AND SUMMARY

Comcast applauds the Commission's commitment to reforming intercarrier compensation and federal universal service. Comcast supports the FCC's efforts to fashion a coherent system that accelerates the deployment of IP-based broadband networks and promotes fiscal responsibility and accountability in the use of federal universal service funds. The economic inefficiencies and pricing anomalies caused by the current patchwork schemes governing intercarrier compensation have been well documented in this proceeding. These inefficiencies have hindered the deployment of IP-based broadband networks, frustrating the Commission's ability to fulfill Congress's goal of ensuring universal access to broadband.

As the National Broadband Plan explained, broadband is "a foundation of economic growth, job creation [and] global competitiveness."<sup>2</sup> Indeed, the benefits of broadband extend to virtually every aspect of life: For example, Americans use broadband to communicate via email, instant messaging, Internet voice and video services and social media. They also rely on broadband to follow news from around the world, gather research, shop for goods and services and access entertainment. Broadband also enables patients in one part of the country to receive medical advice from doctors and experts that practice in other parts of the country. Broadband also allows workers to telecommute, videoconference and collaborate with colleagues in distant locations.

---

No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, and WC Docket No. 03-109, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC 11-13 (rel. Feb. 9, 2011) ("*NPRM*").

<sup>2</sup> FCC, "Connecting America: The National Broadband Plan," at xi (rel. March 16, 2010), *available at*: <<http://download.broadband.gov/plan/national-broadband-plan.pdf>> ("National Broadband Plan").

In sum, the Commission's efforts to promote broadband are vital to the continued growth of the nation's economy and will enhance the quality of life for millions of Americans. As part of those efforts, the Commission should adopt intercarrier compensation rules that encourage the deployment of IP-based services, such as VoIP and that reduce, if not eliminate, the opportunities for regulatory arbitrage. Accordingly, as explained in greater detail below, Comcast urges the Commission to adopt the following reforms expeditiously:

- Promote increased investment in broadband technology by adopting a compensation methodology for VoIP-originated traffic that encourages providers to deploy IP-based networks;
- Curb "phantom traffic" by prohibiting providers from stripping relevant billing information from traffic they hand off to other providers; and
- Deter traffic pumping schemes that cost long distance providers millions of dollars in excessive charges annually and that impose undue costs on consumers.

Adopting these measures would represent a significant and welcome first step in the Commission's efforts to overhaul intercarrier compensation.

## **II. THE COMMISSION SHOULD ADOPT IMMEDIATE REFORMS AIMED AT CREATING INCENTIVES FOR EFFICIENT INVESTMENT AND REDUCING ARBITRAGE OPPORTUNITIES**

### **A. Compensation for VoIP-Originated Traffic<sup>3</sup>**

Virtually all segments of the industry that have commented on the FCC's previous efforts to reform intercarrier compensation have supported the need for a comprehensive overhaul. In Comcast's view, the optimal approach would involve the prompt implementation of a plan that would produce substantial reductions in current access

---

<sup>3</sup> These comments address the appropriate treatment of VoIP-originated traffic solely on a prospective basis. They do not purport to address or affect the compensation applicable to VoIP traffic today.

charges and the integration of VoIP traffic into a single compensation regime that treats all traffic in a uniform way. The *NPRM*, however, seeks comment on the possibility of adopting a new set of rules applicable to the treatment of VoIP traffic that conceivably could remain in effect for a substantial period of time if the plan ultimately adopted for comprehensive reform involves an extended transition period. In that circumstance, the Commission must ensure that its VoIP rules do not perpetuate the problems inherent in the current system of intercarrier compensation.

Comcast, therefore, proposes that the Commission require domestic VoIP-originated traffic to be assessed interim per-minute termination charges for a short transition period while it implements more comprehensive reforms that would apply to all forms of traffic.<sup>4</sup> Comcast further recommends that the Commission set the default rate for the transport and termination of VoIP-originated traffic during that period equal to the rate the terminating carrier assesses on local traffic pursuant to the reciprocal compensation provision of section 251(b)(5) of the Communications Act. This proposal is consistent with Comcast's previous support of a brief transition period for moving all existing intercarrier compensation rates to uniform, more economically efficient levels.

Comcast's proposed approach would promote the FCC's goal of encouraging increased deployment of IP-based, broadband networks,<sup>5</sup> while offering TDM-based providers an opportunity to continue generating revenues from terminating IP-originated

---

<sup>4</sup> VoIP-originated traffic that is destined for – and terminated from – international locations should be excluded from this transition plan. The appropriate treatment of that traffic will have to be considered as part of a more comprehensive intercarrier compensation reform that addresses all forms of traffic and accounts for the limitations of the Commission's authority to regulate traffic that originates or terminates in a foreign country.

<sup>5</sup> *See, e.g., NPRM* ¶ 505 (“it is important that intercarrier compensation rules create the proper incentives for carriers to invest in new broadband technologies”).

voice traffic as they transition to IP-based networks. And, as explained below, the Communications Act grants the FCC the authority to establish the VoIP-specific pricing rules that would apply during the transition period.

It would be counter-productive to subject VoIP-originated traffic to the current patchwork of inefficient and unsustainable intercarrier compensation arrangements.<sup>6</sup> As the Commission notes in the *NPRM*, the current intercarrier compensation system appears to be “hindering progress to all IP networks” by, for example, creating a “perverse incentive [for providers] to maintain and invest in legacy, circuit-switched-based” networks.<sup>7</sup> Indeed, as far back as 2008, the FCC recognized that the existing intercarrier compensation regime reduces providers’ incentives to upgrade their networks to IP.<sup>8</sup>

In contrast, a key advantage of Comcast’s approach is that it would encourage voice service providers to invest in expanding the reach of their IP-based local broadband networks in order to convert their originating traffic to VoIP. Specifically, Comcast’s proposed approach would create an economic incentive for voice service providers to upgrade their local networks to IP-based broadband facilities. Such investments would enable providers to originate voice traffic in IP, thereby reducing the charges they incur to have their traffic terminated on another provider’s network.<sup>9</sup> Thus, this approach not

---

<sup>6</sup> See, e.g., *Id.* ¶¶ 524-526 (discussing the problems caused by the current intercarrier compensation system).

<sup>7</sup> *NPRM* ¶ 506; see also *Id.* ¶ 40; National Broadband Plan at 142 (noting that the current intercarrier compensation system creates disincentives for providers to migrate to IP-based networks and “hinders the transformation of America’s networks to broadband.”).

<sup>8</sup> *High-Cost Universal Service Support*, Order on Remand and Report and Order and Further Notice of Proposed Rulemaking, 24 FCC Rcd 6475, ¶ 189 (2008) (“*2008 Order and ICC/USF FNPRM*”).

<sup>9</sup> Over time, TDM providers seeking to take advantage of the intercarrier compensation rules will upgrade their networks so that they can exchange voice traffic in IP and benefit

only would represent an important first step toward comprehensive reform of intercarrier compensation, it also would advance the Commission's goal of accelerating the deployment of broadband networks by encouraging providers to move from circuit-switched networks to more efficient IP-based broadband networks.<sup>10</sup>

Other possible approaches to the treatment of VoIP traffic would not create the incentives necessary to encourage the deployment of IP-based broadband networks.<sup>11</sup> For example, applying the proposed interim rates only to traffic that terminates as VoIP, even if it originates in TDM, would offer no incentive for operators of the originating TDM-based networks to invest in IP-based broadband networks. On the contrary, such a regime likely would encourage providers to maintain their existing TDM networks in order to continue to assess interstate and intrastate access charges on traffic that terminates on their networks.<sup>12</sup> Applying the interim rates to all VoIP traffic (including

---

from the greater efficiency of IP-based networks. Moving to IP-based networks will allow TDM-based providers to reduce costs and provide more robust service to customers at the lowest possible rates.

<sup>10</sup> The FCC's long-standing practice has been to treat an originating call that is billed to the called party, *e.g.*, toll-free calls, as the terminating end of the call. *See, e.g., Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing End User Common Line Charges*, First Report and Order, 12 FCC Rcd 15982, ¶ 366 (1997) ("We continue to believe that 'open end' originating minutes should be treated as terminating minutes for access charge purposes."). Consistent with this practice, during the transition period, such calls that are destined for a toll-free customer that is not served by a VoIP network would be assessed a "terminating" access charge. This approach would create an incentive for the carrier serving the toll-free customer to deploy a broadband IP network in order to avoid paying access charges.

<sup>11</sup> Although the *NPRM* seeks comment on a proposal to adopt a VoIP-specific solution immediately, it does not include a detailed proposal regarding implementation (*e.g.*, whether the new methodology would apply to all VoIP traffic, only to traffic that originates as VoIP, or only to traffic that terminates as VoIP).

<sup>12</sup> *Cf. NPRM* ¶ 506 (explaining that "the current [intercarrier compensation] regime creates the perverse incentive to maintain and invest in legacy, circuit-switched-based,

VoIP-terminated traffic) also would not encourage providers to invest in IP-based networks, as the incentive to avoid access charges by originating traffic in VoIP would be counterbalanced by a disincentive to terminate traffic in IP in an effort to preserve terminating access charge revenues.

In sum, Comcast proposes that the Commission mandate that, pending reform of the overall intercarrier compensation regime, all domestic VoIP-originated traffic be assessed a per-minute rate for transport and termination equal to the rate the terminating carrier assesses on local traffic pursuant to the reciprocal compensation provision of section 251(b)(5) of the Communications Act.<sup>13</sup> At the end of the transition period, VoIP-originated switched traffic would be integrated into the unified intercarrier compensation regime that the Commission adopts for all forms of traffic.

The Commission has ample legal authority to adopt Comcast's proposed approach to VoIP-originated traffic. Section 251(b)(5) applies generally to the transport and termination of all forms of telecommunications traffic exchanged with a local exchange carrier ("LEC"), without regard to whether the traffic is classified for regulatory purposes as interstate access, intrastate access, or local.<sup>14</sup> And, as the Commission points out in

---

time-division multiplexing (TDM) networks to collect intercarrier compensation revenue, hindering" the move to broadband networks).

<sup>13</sup> 47 U.S.C. §§ 251(b)(5), 252(d)(2). These rates have been established by state commissions after appropriate review and reflect a "reasonable approximation" of the additional costs providers incur to transport and terminate traffic that originates on another provider's network. 47 U.S.C. § 252(d)(2)(ii). The "reciprocal compensation" rates are generally lower than the access charges that apply to most toll traffic today. Accordingly, setting the rate for transporting and terminating VoIP traffic equal to the reciprocal compensation rate is a sensible interim step.

<sup>14</sup> 47 U.S.C. § 251(b)(5); *2008 Order and ICC/USF FNPRM* ¶ 15 (explaining that the "broad language of section 251(b)(5) . . . supports our view that the transport and termination of all telecommunications traffic exchanged with LECs is subject to the

the *NPRM*, regardless of whether VoIP is classified as a telecommunications service or an information service, it is clear that VoIP traffic is “telecommunications,” as that term is defined in the Communications Act.<sup>15</sup> Thus, section 251(b)(5) grants the FCC the authority to establish a compensation methodology for the transport and termination of *all* domestic VoIP traffic, regardless of whether the traffic is classified jurisdictionally as interstate or intrastate.<sup>16</sup>

As part of its authority under section 251(b)(5), the Commission has the authority to require that the methodology used to establish current rates for traffic subject to section 251(b)(5) be applied to the transport and termination of VoIP-originated traffic.<sup>17</sup> Thus, the Commission has the authority to implement Comcast’s proposal for the treatment of VoIP-originated traffic.

---

reciprocal compensation regime in sections 251(b)(5) and 252(d)(2).”); *id.* ¶ 7 (finding that “section 251(b)(5) is not limited to local traffic”).

<sup>15</sup> *NPRM* ¶ 615; *see also Universal Service Contribution Methodology*, Report and Order and Notice of Proposed Rulemaking, 21 FCC Rcd 7518, ¶¶ 39-41 (2006) (finding that interconnected VoIP traffic is “telecommunications” traffic, regardless of whether interconnected VoIP service is classified as a telecommunications service or an information service).

<sup>16</sup> *See, e.g., NPRM* ¶ 615.

<sup>17</sup> *See* 47 U.S.C. § 252(d)(2). To the extent that VoIP traffic is interstate, the FCC has the authority to set a specific rate. *See, e.g., Core Commc’ns, Inc. v. FCC*, 592 F.3d 139 (D.C. Cir. 2010) (affirming the FCC’s authority to set rates for jurisdictionally interstate ISP-bound traffic). To the extent that some of the VoIP-originated traffic may be intrastate, the FCC can rely on the rates state commissions have established to govern the exchange of local traffic. *Cf., e.g., Verizon Commc’ns, Inc. v. FCC*, 535 U.S. 467, 476-477 (2002) (discussing the interplay between sections 251 and 252 and explaining that section 251 granted the FCC authority to prescribe methods for state commissions to use in setting rates pursuant to section 252); *Iowa Utils. Bd. v. FCC*, 219 F.3d 744, 757 (8th Cir. 2000) (explaining that the FCC has the authority to design a pricing methodology, but not to set the actual prices).

## **B. Rules for Curbing Phantom Traffic**

As the Commission explained in the *NPRM*, the differences among the rates charged now for terminating traffic have created an incentive for providers to avoid or reduce transport or termination payments to other providers by sending “phantom traffic” that lacks the information needed to enable the proper billing of transport and termination charges.<sup>18</sup> Comcast agrees that the Commission should curb this type of arbitrage and supports the rules proposed in the *NPRM* to ensure that providers receive sufficient information to identify the originating provider for each call terminated on their networks.<sup>19</sup> Specifically, Comcast favors: (1) requiring all providers involved in transmitting a call to pass along the calling party’s North American Numbering Plan number – or other information needed to enable correct billing – to the next provider in the transmission path; and (2) barring providers from stripping or altering call signaling information.<sup>20</sup> Implementing these measures should drastically reduce, if not eliminate, the problems created by phantom traffic.

A provider should not, however, be held financially responsible for traffic it receives from another provider that does not include the information needed to ensure proper billing. Thus, the Commission should make clear that a provider involved in transmitting a call that does not receive the calling party’s number or other pertinent information from the preceding provider in the transmission path is not responsible for

---

<sup>18</sup> *NPRM* ¶¶ 605, 620-624.

<sup>19</sup> *Id.* ¶ 620.

<sup>20</sup> *Id.* ¶ 626 & Appendix B, proposed § 64.1601(a).

tracking down the missing information or for paying transport and termination charges.<sup>21</sup>

The responsibility – and liability – should lie with the party that failed to provide the necessary information, or that stripped the call-identifying information from the traffic before handing it off.<sup>22</sup>

For the new rules to be effective, the Commission must ensure that the consequences of violating those rules are severe enough to deter providers from stripping call-identifying information. In addition, the Commission will have to develop enforcement measures designed to ensure compliance with the new rules.<sup>23</sup> The combination of clear rules, adequate remedies and effective enforcement should substantially reduce, if not eradicate, phantom traffic.

### **C. Rules for Reducing Access Stimulation**

Comcast supports the FCC's efforts to reduce access stimulation (or "traffic pumping"). This problem, which costs providers – and, indirectly, their customers – hundreds of millions of dollars each year, plainly is attributable to the obsolete interstate and intrastate intercarrier compensation regime. The Commission's proposal to subject LECs that enter into revenue sharing agreements to modified access charge rules is a step

---

<sup>21</sup> See *NPRM* ¶ 626 (explaining that "the best way to ensure that complete and accurate information about a call gets to the terminating service provider for that call is to require all providers involved in transmitting a call from the originating to the terminating provider to transmit the calling parties' telephone number to the next provider in the call path").

<sup>22</sup> See *Id.* (proposing to require the originating service provider to provide the calling party's number and to prohibit providers from stripping or altering call signaling information).

<sup>23</sup> See *Id.* ¶ 632 (asking whether the FCC should adopt any "enforcement mechanisms" to ensure compliance with its proposed rules).

in the right direction.<sup>24</sup> Although the remedies proposed by the FCC are unlikely to eliminate completely all forms of traffic pumping, the proposed rules should lessen the incentives for carriers to enter into access stimulation agreements by reducing the payoff for those schemes.<sup>25</sup>

Trigger-based approaches, such as triggers tied to specified increases in minutes of use over a particular period might be a more effective deterrent to traffic pumping.<sup>26</sup> Comcast recognizes, however, that the Commission has concerns about the administrative burdens that may be associated with trigger-based approaches.<sup>27</sup> Thus, Comcast supports the proposal in the *NPRM* as an administratively feasible means of deterring traffic pumping schemes. Comcast also would be receptive to other proposals that might prove more effective, while also not imposing undue administrative burdens on the Commission or on providers.

As the Commission has noted, traffic pumping “imposes undue costs on consumers” and “harms competition.”<sup>28</sup> Thus, whatever rules the FCC adopts, it is imperative that the Commission act swiftly to curtail access stimulation.

---

<sup>24</sup> *Id.* ¶ 659.

<sup>25</sup> *See Id.* ¶¶ 635-637. The problem will not be resolved completely until the Commission completes its reform of intercarrier compensation and eliminates the arbitrage opportunities that traffic pumpers are currently exploiting.

<sup>26</sup> *See Id.* ¶ 668.

<sup>27</sup> *Id.* ¶ 658.

<sup>28</sup> *Id.* ¶ 637.

### III. CONCLUSION

For the foregoing reasons, the Commission should adopt Comcast's approach to the treatment of VoIP-originated traffic. The Commission also should adopt the proposals set forth in the *NPRM* for addressing the problems of phantom traffic (with the modest clarifications suggested by Comcast) and access stimulation.

Respectfully submitted,

/s/ Kathryn A. Zachem

Kathryn A. Zachem

Mary P. McManus

COMCAST CORPORATION

300 New Jersey Avenue, NW, Suite 700

Washington, DC 20001

(202) 379-7134

(202) 379-7141

Brian A. Rankin

Andrew D. Fisher

COMCAST CABLE COMMUNICATIONS, LLC

One Comcast Center, 50th Floor

Philadelphia, PA 19103

April 1, 2011

### **Certificate of Service**

I hereby certify that on this 1st day of April, 2011, I caused a true and correct copy of the foregoing Comments of Comcast Corporation to be mailed by electronic mail to Best Copy and Printing, Inc., at [fcc@bcpiweb.com](mailto:fcc@bcpiweb.com).

/s/ Erica A. Carrales

Erica A. Carrales