

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

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In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Developing a Unified Intercarrier	)	CC Docket No. 01-92
Compensation Regime	)	
	)	
_____	)	

**REPLY COMMENTS OF AT&T SERVICES, INC. TO REFRESH THE RECORD**

Pursuant to the Commission’s Public Notice, dated September 8, 2017, in the above-captioned proceeding,<sup>1</sup> and its order dated November 9, 2017, AT&T Services, Inc. (“AT&T”) submits these reply comments to refresh the record.

In the *Refresh Notice*, the Commission sought comment to refresh the record on how to establish the network edge. A default network edge is essential to any comprehensive reform effort , because it defines the point at which the financial responsibility for transporting a call shifts from the originating carrier to the terminating carrier.<sup>2</sup> The Commission has long acknowledged,

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<sup>1</sup> Public Notice, *Parties Asked to Refresh the Record on Intercarrier Compensation Reform Related to the Network Edge, Tandem Switching and Transport and Transit*, WC Docket No 10-90; CC Docket No. 01-92 (Sept. 8, 2017) (“*Refresh Notice*”).

<sup>2</sup> See, e.g., *Connect America Fund, et al.*, 26 FCC Rcd. 4554, ¶ 680 (2011) (“*Transformation NPRM*”) (“proposals to treat traffic under a bill-and-keep methodology typically assume the existence of a network edge, beyond which terminating carriers cannot charge other carriers to transport and terminate their traffic. This approach requires that the calling party’s service provider transmit, route and otherwise perform all the network functions necessary to deliver traffic to the network edge of the called party’s service provider.”).

however, that there are “numerous options” for defining an appropriate edge,<sup>3</sup> and the *Refresh Notice* seeks comment specifically on three general approaches: (1) an edge in which the point of interconnection would be defined in a “competitively neutral location” for all networks;<sup>4</sup> (2) an edge that is “a point in each Local Access and Transport Area (LATA) determined by a terminating carrier” for mutual exchange;<sup>5</sup> and (3) a rule requiring all carriers to set their edges (and permit interconnection) at the terminating carrier’s end office or its equivalent.<sup>6</sup>

The most recent round of comment shows that there is still no consensus about how the Commission should establish the network edge, and indeed, the commenters’ edge proposals are all over the map. On one side, commenters like CenturyLink argue that the edge should in all cases be the end office: “the switch that serves the end user (i.e. the end office or its equivalent) should be the default financial edge. . . .”<sup>7</sup> Indeed, CenturyLink argues that the Commission should *undo* the *Transformation Order*’s initial transition to bill-and-keep to the extent those rules

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<sup>3</sup> See *Connect America Fund, et al.*, 26 FCC Rcd. 17663, ¶ 1320 (2011) (“*FNPRM*”).

<sup>4</sup> See *FNPRM* ¶ 1321. This “edge” proposal derives from a passage in the *Transformation NPRM*’s section on network edges in which the Commission was specifically seeking comment on how the edge rules would affect mandatory points of interconnection. See *Transformation NPRM* ¶ 682.

<sup>5</sup> See *FNPRM* ¶ 1321 (seeking comment on a proposal originally offered by CTIA, see Comments of CTIA—The Wireless Association, *Connect America Fund, et al.*, WC Docket No. 10-90, *et al.*, at 39 (filed April 18, 2011); see also Comments of CTIA—The Wireless Association, *Developing a Unified Inter-carrier Compensation Regime*, CC Docket No. 01-92, at 7-45 (filed May 23, 2005).

<sup>6</sup> See *FNPRM* ¶ 1320 & n.2386 (citing, *inter alia*, Patrick DeGraba, *Bill and Keep at the Central Office as the Efficient Interconnection Regime* (FCC, OPP Working Paper No. 33, Dec. 2000) (“DeGraba COBAK Paper”). The *FNPRM* also noted that the “edge could be ‘the location of the called party’s end office, mobile switching center (MSC), point of presence, media gateway, or trunking media gateway.’” *FNPRM* ¶ 1320 (quoting *Transformation NPRM* ¶ 680).

<sup>7</sup> Comments of CenturyLink, *Connect America Fund, et al.*, WC Docket Nos. 10-90, *et al.*, at 9 (filed Oct. 26, 2017) (“CenturyLink Comments”); see also Comments of ITTA—The Voice of America’s Broadband Providers, *Connect America Fund, et al.*, WC Docket No. 10-90, *et al.*, at 4 (filed Oct. 26, 2017).

required certain tandem and transport charges to be reduced to zero.<sup>8</sup> On the other side, T-Mobile argues that the Commission should establish a small number (“8 to 15”) of region-wide “Safe Harbor POIs” for the exchange of PSTN traffic.<sup>9</sup> Under T-Mobile’s proposal, such “safe Harbor POIs” would function as network edges, because “[w]hen a competitive carrier requests interconnection with any other carrier (including an ILEC) at a Safe Harbor POI, each carrier is responsible for the cost of the interconnection facilities on its side of the Safe Harbor POI,” even when the POI is outside of the terminating carrier’s service area or LATA.<sup>10</sup>

To be sure, the network edge is merely a default, and a number of parties would likely negotiate alternative edges in the context of individual agreements, whichever approach the Commission takes. Nonetheless, the selection of the default will inevitably influence those negotiations (as well as the arrangements carriers must make to offer interconnection as a default), and the varying proposals in the record could influence those negotiations (and arrangements) in dramatically different ways. Ideally, the Commission would select a set of default edges that minimizes the need to create new TDM-focused interconnection arrangements, minimizes opportunities for arbitrage, and optimizes incentives to transition to IP-based arrangements—in light of *current* marketplace realities and foreseeable trends as TDM traffic continues to decline.

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<sup>8</sup> See *id.* at 3 (“[t]he Commission should correct this asymmetry by adopting rules permitting all tandem owners to be compensated equally for the use of their networks – thereby establishing the end office as the proper default network edge for all providers”).

<sup>9</sup> Comments of T-Mobile USA, Inc., *Connect America Fund, et al.*, WC Docket Nos. 10-90, *et al.*, at 11 (filed Oct. 26, 2017) (“T-Mobile Comments”) (“[i]deally, the entire country would be served by a maximum of 8 to 15 Safe Harbor POIs, but the best way to determine both the total number and location of Safe Harbor POIs is through joint work among the industry, the FCC, and the states as part of the Conference or Board”).

<sup>10</sup> *Id.* at 14.

In that regard, each of the three general approaches in the *Refresh Notice* has significant advantages and disadvantages.

For example, Option #3—the end office proposal—has been the theoretical foundation for the Commission’s push for a transition to a bill-and-keep system since the beginning.<sup>11</sup> Indeed, in 2012, AT&T submitted a detailed network edge proposal that was a version of the end office approach.<sup>12</sup> One of the principal advantages of the end office approach is that it provides incentives (and the space) to negotiate a wide variety of alternative edges, which allows the parties (rather than the government) to establish the most efficient arrangements for splitting the cost of transport to each party’s terminating end offices.<sup>13</sup> As some commenters note, however, the end office approach assumes that all terminating carriers stand ready to offer interconnection at a potentially large number of interconnection points, and that originating carriers are generally willing, as a default, to build (or purchase) transport deep into the networks of terminating carriers.<sup>14</sup> Such assumptions may not comport with prevailing trends in today’s marketplace, in which carriers are increasingly seeking to rely on fewer points of interconnection (including carrier hotels) as TDM traffic continues to decline.<sup>15</sup>

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<sup>11</sup> The foundational template was the “Central Office Bill and Keep” (“COBAK”) proposal put forward in 1999. *See* DeGraba COBAK Paper; *see also* *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Notice of Proposed Rulemaking, 16 FCC Rcd. 9610 ¶¶ 23-24, 46-50 (2001).

<sup>12</sup> *See* Comments of AT&T, *Connect America Fund, et al.*, WC Docket No. 10-90, *et al.* (filed Feb. 24, 2012) (“AT&T 2012 Comments”).

<sup>13</sup> *See, e.g.*, DeGraba COBAK Paper at 21-22 (¶ 73).

<sup>14</sup> *See, e.g.*, T-Mobile Comments at 6.

<sup>15</sup> Parties would of course be free to negotiate alternative edges that fit these present-day trends (which the early COBAK theorists did not foresee), but setting the default edge at the end office would give terminating carriers additional leverage in such negotiations to push the edge closer to the end office.

Option #2—in which the terminating carrier would pick one or a limited number of edges in each LATA in which it offers voice service—also has much to recommend it. Instead of the government mandating default interconnection at specified pieces of equipment, each carrier could choose the most efficient edge or edges that fit its traffic profile, which would allow each carrier to balance the default interconnection arrangements it is willing to offer and the costs it can recover from its end users. By permitting only a relatively small number of edges per LATA, such an approach would also be more consistent with prevailing trends in favor of a smaller number of points of interconnection placed higher in the network. That, in turn, could increase the incentives to transition to IP-based arrangements by reducing reliance on legacy TDM-based intercarrier services. The trade-off, of course, is that carriers would be expected to recover more local network costs from their end-users, and thus the Commission may have to make corresponding adjustments to recovery mechanisms such as the Connect America Fund. The many complex details of a LATA-based approach—such as how many edges a carrier could designate and the rules that would apply to different types of edges—would be vitally important to whether AT&T could support any such proposal.

Of the three approaches, Option #1—the “competitively neutral location” approach—would likely be the most administratively challenging. To the extent the Commission has explained the concept, it has sought comment on whether it should “locate the [mandatory] POI where interconnecting carriers have competitive alternatives—other than services or facilities provided by the terminating carrier—to transport traffic to the terminating carrier’s network.”<sup>16</sup> Implementation of such a rule, therefore, would require the Commission to develop some test or

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<sup>16</sup> *Transformation NPRM* ¶ 682. As noted above, the “competitively neutral location” originated in a passage seeking comment on how the selection of an edge might affect obligations or the location of mandatory points of interconnection. *Id.*

otherwise collect data on points of interconnection with “competitive alternatives.” The record here shows that carriers today already have competitive alternatives in most instances—which means that the Commission would be developing and implementing a complex and intrusive “competitive locations” test for limited benefit—although one advantage of this approach is that the Commission could more directly identify, and intervene to stop, any lingering situations involving traffic stimulation schemes.

In short, virtually all parties in this proceeding recognize that there is an urgent need to complete the transition to a bill-and-keep regime and eliminate the inefficiencies and abuses that continue to flourish in the current, half-reformed system. Each of the three general approaches to a network edge identified in the *Refresh Notice* could, if properly designed, constitute an appropriate foundation for an end-state bill-and-keep regime, although the details will be important. Much work remains to resolve those details, and AT&T looks forward to continued engagement in this proceeding to help move the intercarrier compensation regime to a bill-and-keep system that accords with the realities of today’s marketplace and maintains incentives to transition to IP-based arrangements.

## CONCLUSION

For the foregoing reasons, the Commission's deliberations on the appropriate network edge and the related reforms to the intercarrier compensation regime should take into account today's marketplace realities and the need to encourage the IP-transition.

Respectfully submitted,

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