

State Commission Staff Numbering Concerns Related to the Federal Communications Commission's Universal Service-Intercarrier Compensation Order and FNPRM

December 12, 2011

On November 18, 2011, the Federal Communications Commission (FCC) released the Universal Service-Intercarrier Compensation Transformation Order and FNPRM (USF-ICC Order)¹, comprehensively restructuring the existing universal service fund and intercarrier compensation systems so that voice and broadband services are available to all Americans.

Section N of the USF-ICC Order (pages 452-457, paragraphs 1315-1325) raises several important questions regarding points of interconnection (POI) (beginning at paragraph 1316) and the network edge (beginning at paragraph 1320), related to the implementation of a bill-and-keep pricing methodology. As the USF-ICC order noted, current rules require an ILEC to allow a requesting telecommunications carrier to interconnect at any technically feasible point. Over time this provision has been interpreted to mean that CLECs have the option to interconnect at a single POI per LATA.

A local routing number (LRN) is assigned to uniquely identify a provider's switch or POI in each LATA. The creation of a new LRN usually means the assignment of a new central office code. The establishment of multiple LRNs for each provider within a given LATA would create an increased demand for central office code assignments for reasons other than increased consumer demand for numbering resources. If the current POI standards were to change, and multiple POIs in each LATA were eventually required to accommodate ICC issues, it would exacerbate the existing inefficiencies of the current numbering system, dramatically impacting the rate of area code exhaust across the country and accelerating the anticipated exhaust of the North American Numbering Plan (NANP).

States reviewing the USF-ICC order are concerned with the potential expanded use of telephone numbering resources, which would result in tens of thousands of stranded telephone numbers nationwide. Therefore, state public service commission staff request that the North American Numbering Council (NANC) direct NeuStar, in its role as North American Numbering Plan Administrator and Pooling Administrator, to review the USF-ICC Transformation Order and FNPRM documents and report back all potential effects this order will have on the NANP, including any changes to the anticipated exhaust date. A February 1st reporting date would accommodate State comment filing timelines as prescribed by the Order from the FCC.

¹ Universal Service-Intercarrier Compensation Transformation Proceeding, Report and Order and Further Notice of Proposed Rulemaking, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket No. 01-92, 96-45, GN Docket No. 09-51, DA 11-1966, Released: November 18, 2011. <http://www.fcc.gov/document/fcc-releases-connect-america-fund-order-reforms-usficc-broadband>.

owner does not own the end office,²³⁷⁰ which, under section 251 framework is typically considered a transit service. As part of the transition for price cap carriers, the Order provides that bill-and-keep will be the pricing methodology for all traffic and includes the transition for transport and termination within the tandem serving area where the terminating carrier owns the serving tandem switch. However, the Order does not address the transition in situations where the tandem owner does not own the end office. NCTA states that in this regard the “ABC Plan is unclear” and may “attempt[] to significantly undermine competition by suggesting that such services would fall outside of the regulatory regime.”²³⁷¹ As a result, commenters suggest that these services are transit services and should be provided pursuant to section 251 at “cost-based and reasonable rates.”²³⁷²

1313. We seek comment on the need for regulatory involvement and the appropriate end state for transit service.²³⁷³ Given that transit service includes the same functionality as the tandem switching and transport services subject to a default bill-and-keep methodology, should the Commission adopt any different approach for transit traffic given that providers pay for transit for IP services and transit may apply to get traffic to a network “edge” in a bill-and-keep framework? We invite parties to comment on the current market for these services.²³⁷⁴ Does the transit market demonstrate the hallmarks of a competitive market? If transit services are not being offered competitively, how prevalent is this? How might the market evolve in light of the reforms adopted in the Order? If the Commission were to regulate these charges, what legal framework is appropriate and what pricing methodology would apply during the transition?

1314. *Other Charges.* Our transition to a bill-and-keep framework may implicate other charges. For example, commenters have highlighted that the ABC Plan and Joint Letter fail to specify what transition applies to dedicated transport or to other flat-rated charges.²³⁷⁵ We invite parties to comment on any rate elements or charges that require additional reform. What transition should apply to these charges?

N. Bill-and-Keep Implementation

1315. In the *USF/ICC Transformation NPRM* the Commission also sought comment on issues related to the implementation of a bill-and-keep pricing methodology.²³⁷⁶ Now that the end point to comprehensive intercarrier compensation reform has been determined, we seek comment on any interconnection and related issues that must be addressed to implement bill-and-keep in an efficient and equitable manner. As discussed in the Order, we expect that the reforms adopted today will not upset existing interconnection arrangements or obligations during the transition.

²³⁷⁰ NCTA August 3 PN Comments at 19-20.

²³⁷¹ *Id.* at 20.

²³⁷² *Id.*; Cox August 3 PN Comments at 15.

²³⁷³ We note that commenters have previously suggested a range of regulatory outcomes. See Charter *USF/ICC Transformation NPRM* Comments at 13 (proposing a cost-based pricing standard); Level 3 *USF/ICC Transformation NPRM* Comments at 19 (proposing a just and reasonable pricing standard); MetroPCS August 3 PN Comments at 21-22 (proposing a default rate).

²³⁷⁴ Compare Cox October 19, 2011 *Ex Parte* Letter at 3-4, with Neutral Tandem October 20, 2011 *Ex Parte* Letter at 1.

²³⁷⁵ See Level 3 August 3 PN Comments at 11-12; COMPTTEL August 3 PN Comments at 18-20.

²³⁷⁶ See *USF/ICC Transformation NPRM*, 26 FCC Rcd at 4774-76, paras. 680-82.

1316. *Points of Interconnection.* Currently, under section 251(c)(2)(B), an incumbent LEC must allow a requesting telecommunications carrier to interconnect at any technically feasible point.²³⁷⁷ The Commission has interpreted this provision to mean that competitive LECs have the option to interconnect at a single point of interconnection (POI) per LATA.²³⁷⁸ As a threshold matter, does the Commission need to provide new or revised POI rules at some later stage of the transition to bill-and-keep or provide one set of rules to be effective at the end of the six-year transition for price cap carriers and nine-year transition for rate-of-return carriers described above and maintain the current regime until that time?²³⁷⁹ For instance, do commenters anticipate potential arbitrage schemes²³⁸⁰ emerging as a result of maintaining the current POI rules until the transition is complete, or will the defined transition path and accompanying rate reductions we adopt in this Order prevent such practices?

1317. Also, section 251(c) does not currently apply to all rural LECs or non-incumbent LECs.²³⁸¹ How do commenters envision POIs functioning for these carriers? We seek to better understand the nature of interconnection arrangements with rural carriers today. For example, is interconnection typically pursuant to negotiated agreements, rules, or another type of framework? Is indirect interconnection the primary means of interconnection with small, rural carriers? If the Commission needs to mandate the use of POIs for rural LECs and non-incumbent LECs, should this requirement begin during or after the transition to the stated end point?

1318. We seek comment on whether the Commission needs to prescribe POIs under a bill-and-keep methodology. One possible approach could be to permit interconnection at “any technically feasible point” on the other providers’ network with a default POI being used for compensation purposes when there is no negotiated agreement between the parties.²³⁸² What are the pros and cons of such an approach? To what extent does the Commission’s regulatory authority over interconnection allow it to prescribe POIs as described above? Alternatively, CenturyLink proposes the use of traffic volumes to “dictate the number of POI locations for traffic exchanged with an ILEC (including traffic flowing in both

²³⁷⁷ 47 U.S.C. § 251(c)(2)(B). IP-to-IP interconnection is addressed later in this FNPRM section. See *infra* Section XVII.P.

²³⁷⁸ *Application of SBC Communications Inc., Southwestern Bell Tel. Co., and Southwestern Bell Communications Service, Inc., d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas*, CC Docket No. 00-65, Memorandum Opinion and Order, 15 FCC Rcd 18354, 18390, para. 78, n.174 (2000).

²³⁷⁹ See CenturyLink *USF/ICC Transformation NPRM* Comments at 74 (the Commission “should clarify now the rules for POIs and network edges for purposes of any transitional TDM ICC rate reform”). As discussed in the *USF/ICC Transformation NPRM*, and noted by commenters, flexible proposals to accommodate evolving network architectures and IP networks are the preferred approach. See e.g., *USF/ICC Transformation NPRM*, 26 FCC Rcd at 4775, para. 681.

²³⁸⁰ “If the Commission fails to adequately address POI and network edge issues in connection with TDM-ICC plans, carriers will be prevented from having adequate cost recovery and new forms of arbitrage will arise. For example, bad actors will no doubt seek to free ride on transport and transit networks.” CenturyLink *USF/ICC Transformation NPRM* Comments at 74.

²³⁸¹ See 47 U.S.C. § 251(c) “Additional Obligations of Incumbent Local Exchange Carriers.” Section 251(f)(1) of the Act details the exemption to interconnection obligations for rural telephone companies. See 47 U.S.C. § 251(f)(1).

²³⁸² See, e.g., *U.S. West v. Jennings*, 304 F.3d 950, 961 (9th Cir. 2002); *MCI Telecomm. Corp. v. Bell Atl.-PA*, 271 F.3d 491, 517-18 (3d Cir. 2001).

directions).²³⁸³ We seek comment on this proposal and any other alternatives concerning POI obligations under a bill-and-keep regime.

1319. We seek comment below on how to promote IP-to-IP interconnection and facilitate the transition to all-IP networks.²³⁸⁴ Some of these questions may affect the POI issues raised here. For instance, if the Commission were to adopt its proposal to require a carrier that desires TDM interconnection to pay the costs of any IP-TDM conversion, how would that affect commenters' opinions or responses to the POI questions herein? How would they be affected if the Commission adopted other IP-to-IP interconnection obligations?

1320. *The Network Edge*. A critical aspect to bill-and-keep is defining the network "edge" for purposes of delivering traffic. The "edge" is the point where bill-and-keep applies, a carrier is responsible for carrying, directly or indirectly by paying another provider, its traffic to that edge. Past "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."²³⁸⁵ In the *USF/ICC Transformation NPRM* we recognized that there are numerous options for defining an appropriate network edge.²³⁸⁶ For example, 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."²³⁸⁷ We have not received significant comment on the network edge issue up to this point.

1321. As discussed in the Order, we believe states should establish the network edge pursuant to Commission guidance. We seek comment on this and other options for defining the network edge. Assuming that defining the network edge remains a critical aspect of the transition to bill-and-keep, we seek comment on the appropriate network edge and related issues. For instance, should the Commission adopt a "competitively neutral" location for the network edge, such as "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?"²³⁸⁸ In its comments, CTIA describes a Mutually

²³⁸³ CenturyLink *USF/ICC Transformation NPRM* Comments at 75. CenturyLink includes four additional rule clarifications to facilitate proper traffic exchange. See *id.*

²³⁸⁴ See *infra* Section XVII.P.

²³⁸⁵ *USF/ICC Transformation NPRM*, 26 FCC Rcd at 4774, para. 680.

²³⁸⁶ See *USF/ICC Transformation NPRM*, 26 FCC Rcd at 4775, para. 681. The Commission has previously sought comment on alternative schemes for intercarrier compensation premised on bill-and-keep approaches underpinned by default interconnection rules. See, e.g., *Inter-carrier Compensation NPRM*, 16 FCC Rcd at 9620-22, paras. 22-30. First, Patrick DeGraba's "Central Office Bill and Keep" (COBAK) proposal relied on two principal rules: (1) no carrier may recover any costs of its customer's local access facilities from an interconnecting carrier; and (2) the calling party's network is responsible for the cost of transporting the call to the called party's central office. For interexchange calls, the second rule would be modified to make the calling party's LEC responsible for delivering the call to the IXC's point of presence and the IXC responsible for delivering the call to the called party's central office. *Id.* at 9620-21, para. 23 & n. 41 (citing Patrick DeGraba, *Bill and Keep at the Central Office as the Efficient Interconnection Regime* (FCC, OPP Working Paper No. 33, Dec. 2000)). Second, Jay Atkinson and Christopher C. Barnekov's "Bill Access to Subscribers-Interconnection Cost Split" (BASICS) proposal was also premised on two rules: (1) networks should recover all intra-network costs from their end-user customers; and (2) networks should divide equally the costs that result purely from interconnection. See *id.* at 9621, para. 25 (citing Jay M. Atkinson & Christopher Barnekov, *A Competitively Neutral Approach to Network Interconnection* (FCC, OPP Working Paper No. 34, Dec. 2000)).

²³⁸⁷ See *USF/ICC Transformation NPRM*, 26 FCC Rcd at 4774, para. 680 (citing *2008 Order and ICC/USF FNPRM*, 24 FCC Rcd at 6619-20, App. A, para. 275; *id.* at 6818-19, App. C, para. 270).

²³⁸⁸ *USF/ICC Transformation NPRM*, 26 FCC Rcd at 4775-76, para. 682.

Efficient Traffic Exchange (“METE”) proposal “pursuant to which carriers would bear their own costs to deliver traffic to each other at specified network ‘edges.’”²³⁸⁹ Is this an appropriate way to define the network edge under a bill-and-keep approach? Do commenters have alternative suggestions on how best to define carrier obligations under a bill-and-keep approach? We seek comment on these questions and on any alternative proposals regarding the network edge.²³⁹⁰

1322. *Role of Tariffs and Interconnection Agreements.* We believe that generally continuing to rely on tariffs while also allowing carriers to negotiate alternatives during the transition is in the public interest²³⁹¹ because it provides the certainty of a tariffing option, which historically has been used for access charges, while still allowing carriers to better tailor their arrangements to their particular circumstances and the evolving marketplace than would be accommodated by exclusively relying on “one size fits all” tariffs.²³⁹² We seek comment on whether the Commission needs to forbear from tariffing requirements in section 203 of the Act and Part 61 of our rules²³⁹³ to enable carriers to negotiate alternative arrangements pursuant to this Order.²³⁹⁴

1323. As carriers transition from the existing access charge regime to the section 251(b)(5) framework and bill-and-keep methodology adopted in this Order, we believe they will rely primarily on negotiated interconnection agreements rather than tariffs to set the terms on which traffic is exchanged. Specifically, section 251(b)(5) imposes on all LECs the duty to enter reciprocal compensation arrangements, and section 252 outlines the responsibility of incumbent LECs to negotiate interconnection agreements upon receipt of a request for interconnection pursuant to section 251.²³⁹⁵ Although we maintain a role for tariffing as part of the transition, we believe the reliance on interconnection agreements is most consistent with this Order’s application of reciprocal compensation duties to all carriers. We seek comment on this view. If so, do commenters believe we need to modify or eliminate any of our interconnection rules?

²³⁸⁹ CTIA *USF/ICC Transformation NPRM* Comments at 39. CTIA continues that “[u]nder the METE proposal, the originating carrier would be responsible for assuming the costs of delivering a call, including securing any necessary transport services, to the terminating carrier’s network edge, and could determine how to do so. Each carrier, including wireless carriers, would be required to designate at least one edge to receive traffic in every LATA it serves. For the direct exchange of traffic, originating and transiting carriers could select a delivery point from among the terminating carrier’s designated edges in the LATA, but would be required to use different trunk groups for each of the terminating carrier’s terminating switching facilities in the LATA.” *Id.*

²³⁹⁰ In Section XV above we establish an interim default rule allocating responsibility for transport costs applicable to non-access traffic exchanged between rural, rate-of-return LECs and CMRS providers. We found that such an interim rule was necessary because we establish bill-and-keep as an immediate default methodology for this category of traffic. We make clear however that with the adoption of this rule we do not intend to prejudice any outcome or otherwise affect the ability of states to define the network edge for intercarrier compensation under bill-and-keep as a general matter. *See supra* Section XV.

²³⁹¹ *See* 47 U.S.C. § 160(a)(3).

²³⁹² *See, e.g.,* paras. 963-967; *see also* para. 1362.

²³⁹³ *See* 47 U.S.C. § 203; 47 C.F.R. §§ 61.31-.59.

²³⁹⁴ *See* Letter from Heather Zachary, Counsel to AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, 04-36, GN Docket No. 09-51, CC Docket Nos. 01-92, 96-45 at 8 (filed Oct. 19, 2011) (suggesting that the Commission grant forbearance from tariffing requirements insofar as necessary to allow carriers to negotiate alternatives to a default rate).

²³⁹⁵ *See* 47 U.S.C. §§ 251(b)(5), 252.

1324. Given the potential primary reliance on interconnection agreements, we seek comment on the possibility of extending our interconnection rules to all telecommunications carriers to ensure a more competitively neutral set of interconnection rights and obligations. As discussed in Section XII.C.5, the *T-Mobile Order* extended to CMRS providers the duty to negotiate interconnection agreements with incumbent LECs under the section 252 framework to address interconnection and mutual compensation for non-access traffic.²³⁹⁶ We seek comment on whether we should extend the interconnection agreement process adopted in the *T-Mobile Order* to all telecommunications carriers, including competitive LECs or other interconnecting service providers such as interexchange carriers. Competitive LECs have requested that the Commission expand the scope of the *T-Mobile Order* and require CMRS providers to negotiate agreements with competitive LECs under the section 251/252 framework.²³⁹⁷ In addition, rural incumbent LECs urged the Commission to “extend the T-Mobile Order to give ILECs the right”²³⁹⁸ to require all carriers to negotiate interconnection agreements under the section 252 framework. These requests stem largely from concerns about payment of intercarrier compensation charges.²³⁹⁹ Thus, we seek comment on whether, in light of the reforms adopted herein, any further modification to our interconnection rules is still warranted for the end of the transition period, and the legal basis of any such modifications.

1325. *Possible Arbitrage Under a Bill-and-Keep Methodology.* We note that several commenters to the *USF/ICC Transformation NPRM* suggest that a bill-and-keep approach may promote arbitrage opportunities in the industry. For example, some commenters suggest that a bill-and-keep framework may promote traffic dumping on terminating carriers’ networks.²⁴⁰⁰ Based on the current record, we disagree with these concerns, which we find speculative.²⁴⁰¹ Nonetheless, to the extent our predictive judgment is incorrect, we take this opportunity to establish a record to ensure that the Commission is prepared to act swiftly to address any potential arbitrage situations. We ask parties to provide more detail on traffic dumping and its negative effects. Have there been incidents of traffic dumping in the wireless industry that operates largely under bill-and-keep today? How should we define traffic dumping for purposes of analyzing its effect on the network. Are there concerns of traffic congestion or other harm to the network?²⁴⁰² If so, we note in the Order that carriers may include traffic grooming language in their tariffs to address such concerns.²⁴⁰³ Are there any additional measures the Commission can and should take to prevent such practices? Other commenters suggest that this practice

²³⁹⁶ See *supra* Section XII.C.5.

²³⁹⁷ See, e.g., Pac-West *USF/ICC Transformation NPRM* Comments at 3; Letter from Michael B. Hazzard, Counsel for Xspedius Communications, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-92, Attach. at 7 (filed Aug. 10, 2005); *Supra* Telecommunications and Information Systems *Ex Parte* Comments and Cross-Petition for Limited Clarification, CC Docket No. 01-92 at 10 (filed July 14, 2005).

²³⁹⁸ Rural Associations Section XV Comments at 29 n.67, 30.

²³⁹⁹ See *id.* at 30 (“Small carriers often have difficulty convincing other carriers to negotiate interconnection agreements with them, particularly where those other carriers can easily terminate their traffic via a transit or tandem provider and thus have no direct contact with the terminating rural carrier at all. In such circumstances, sending carriers are increasingly arguing that because there is no interconnection agreement, they can pay the terminating rural carrier whatever rate they deem appropriate, if anything at all.”).

²⁴⁰⁰ See Verizon *USF/ICC Transformation NPRM* Comments at 13-14; Level 3 *USF/ICC Transformation NPRM* Comments at 9.

²⁴⁰¹ See *supra* Section XII.A.1.

²⁴⁰² See Verizon *USF/ICC Transformation NPRM* Comments at 13.

²⁴⁰³ See *supra* para. 754.

could result in carriers having “every incentive to keep traffic from terminating on their networks.”²⁴⁰⁴ Do commenters agree?

O. Reform of End User Charges and CAF ICC Support

1326. We seek comment below on a number of questions related both to the recovery mechanism adopted in this Order as well as the pre-existing rules regarding subscriber line charges (SLCs). In particular, with respect to the recovery adopted in this Order, we seek comment on the long-term elimination of that transitional recovery mechanism beyond the provisions for reduction and elimination of elements of that recovery already adopted in the Order. In addition, some commenters question whether existing SLCs—which we do not modify in this Order—are set at appropriate levels under pre-existing Commission rules²⁴⁰⁵ or whether they should be reduced, particularly for price cap carriers where the Commission has not evaluated the costs of such carriers in nearly ten years. We therefore seek comment on the appropriate level and, longer-term, the appropriate regulatory approach to such charges, as carriers increasingly transition to broadband networks.

1327. *ARC Phase-Out.* As part of our recovery mechanism, we allow incumbent LECs to impose a limited access replacement charge (ARC).²⁴⁰⁶ Because the ARC is, among other constraints, limited to the recovery of Eligible Recovery, and because we define Eligible Recovery to decline over time, the ARC will phase down and approach \$0 under the terms of the Order.²⁴⁰⁷ This will take some time, however, under the ten percent annual reductions in Price Cap Eligible Recovery, and smaller annual percentage reductions in Rate-of-Return Eligible Recovery. We note, by contrast, that intercarrier compensation-replacement CAF support for price cap carriers is subject to a defined sunset date.²⁴⁰⁸ Should we likewise adopt a defined sunset date for ARC charges? Should those charges sunset at the same time price cap carriers’ intercarrier compensation-replacement CAF support sunsets,²⁴⁰⁹ or at some other time? Similarly, as with intercarrier compensation-replacement CAF support for price cap carriers, should the ARC be phased out after the end of intercarrier compensation rate reforms or, given that it already is subject to an independent phase-down, should it simply be eliminated? Would other modifications be appropriate for the ARC charges adopted in this Order, given carriers’ transition to broadband networks and associated business plans relying more heavily on revenues from broadband services?

1328. *CAF ICC Support Phase-Out.* Although the intercarrier compensation-replacement CAF support for price cap carriers is already subject to a defined phase-out under the Order, should we modify the phase-out period based on a price cap carrier’s receipt of state-wide CAF Phase II support?²⁴¹⁰ If so,

²⁴⁰⁴ NASUCA contends that if the Commission adopts bill-and-keep “carriers will have every incentive to dump traffic on to other carriers’ networks, and likewise, carriers will have every incentive to keep traffic from terminating on their networks.” NASUCA *USF/ICC Transformation NPRM* Comments at 101. We note that the Commission has a clear prohibition on call blocking practices. See generally *Call Blocking Declaratory Ruling*, 22 FCC Rcd 11629 (issued to remove any uncertainty surrounding the Commission’s prohibition on call blocking).

²⁴⁰⁵ See, e.g., NASUCA *USF/ICC Transformation NPRM* Comments at 98; Free Press *August 3 PN* Comments at 12-13.

²⁴⁰⁶ See *supra* XIII.F.1.

²⁴⁰⁷ See *supra* XIII.E.

²⁴⁰⁸ See *supra* para. 920.

²⁴⁰⁹ *Id.*

²⁴¹⁰ See *supra* Section VII.C.2.