Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 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 a 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 SPRINT NEXTEL CORPORATION

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Sprint Nextel Corporation ("Sprint") hereby respectfully submits its comments on the Notice of Proposed Rulemaking ("NPRM") issued in the above-captioned proceedings on February 9, 2011. In this phase of the proceeding, the Commission has asked for comment on proposals to reform the universal service and intercarrier compensation (ICC) regimes in a comprehensive manner.

I. INTRODUCTION AND SUMMARY.

The Commission has embarked on an ambitious effort to fundamentally and comprehensively reform the universal service fund (USF) and the intercarrier compensation (ICC) regime. Sprint applauds the Commission for its efforts to modernize the USF and ICC mechanisms. Such reforms are long overdue given the rapid shift to IP networks and services, and are critical to promote further broadband deployment, to foster competition, and to ensure the viability of the universal service program.

Sprint sets forth below several proposals to rationalize the ICC system. First, Sprint proposes that the three largest incumbent local exchange carriers (ILECs) and their competitors be required to transition to a bill-and-keep regime over a three-year period (set intrastate access rates equal to interstate access rates on January 1, 2012; reduce those unified access rates by 50% as of January 1, 2013; reduce all ICC rates to \$.0007 on January 1, 2014; and implement full bill-and-keep on January 1, 2015). Other LECs would have a longer period to unify their intra- and interstate access rates (two years for mid-sized LECs and three years for the smallest LECs). During this transition period, the Commission could determine an appropriate length of time to transition these non-BOC LECs to \$.0007 and bill-and-keep levels; there is no reason to delay the initial step (equalizing intra- and interstate access rates) for these non-BOC LECs while the Commission is finalizing the longer-range reform plan. As discussed in some detail in Appendix A, Sprint's proposals fall well within the Commission's clear statutory authority to reform intercarrier compensation for all traffic, including intrastate access charges.

The current ICC regime is asymmetric as regards wireless versus wireline service providers – wireline carriers impose access charges on wireless carriers but do not pay access charges to wireless carriers. To address this unfair arrangement, to bring the ICC regime into compliance with the Act, and to promote intermodal competition, the Commission should make explicit the prohibition on assessing all LEC access charges on mobile traffic.

Second, in addition to reforming ICC rate levels, the Commission should rule that packetized voice traffic is to be exchanged on a bill-and-keep basis. Such a rule will help to ensure that broadband voice traffic is exchanged promptly and efficiently. The Commission

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should also seek expert advice from the Technological Advisory Council (TAC) about locations where packetized voice would be exchanged most efficiently, about minimum specifications that all IP networks should support to facilitate the exchange of packetized voice traffic, and any other network engineering issues the TAC may identify.

Third, the Commission's efforts to reform the USF should focus on fostering competition. Sprint believes that adoption of the following proposals will result in a more effective and sustainable USF: (1) the Commission should add "promoting competition" to its list of cornerstone principles guiding its USF reform efforts; (2) the Commission should phase out existing high-cost support to all eligible telecommunications carriers (ETCs) expeditiously; (3) the Commission should carefully target USF support only where it is genuinely needed -- no support is necessary where there is at least one unfunded competitor or where the carrier seeking support is already able to cover its costs; further, any support that is granted must take into account revenues generated by other services provided over the supported network; and (4) any new broadband fund must be pro-competitive – the performance standards must reflect the differences between various broadband technologies; there should be no "right of first refusal" extended to incumbent carriers; and wholesale unbundling, interconnection and data roaming obligations should be imposed on the carrier that wins a Connect America Fund (CAF) reverse auction bid.

Finally, Sprint comments briefly on some of the mechanics of a new CAF: the need to establish new categories of ETCs; the need to adopt a broad measure of "reasonable comparability" in evaluating rural vs. urban broadband rates, given the wide array of broadband service packages; and the need to establish the ground rules of a reverse auction bidding process before the bidding is initiated.

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II. THE FCC CAN ACHIEVE SIGNIFICANT ICC REFORM BY 2015 BY BASING INITIAL REFORM ON EXISTING INDUSTRY CONSENSUS

Everyone agrees the intercarrier compensation ("ICC") system used with PSTN traffic is "broken and needs to be fixed" (*NPRM*¶ 508). Among other things, this system is "hindering progress to all IP networks" by "creat[ing] the perverse incentive to maintain and invest in legacy, circuit-switched-based . . . networks" (¶ 506). Recognizing that per-minute charges are "inconsistent with peering and transport arrangements for IP networks, where traffic is not measured by minutes" (¶ 40), the *NPRM* seeks comment on how to "gradually phase out the current per-minute ICC system" (¶ 34), and thereby "realign incentives and promote investment and innovation in IP networks" (¶ 508). The Commission specifically seeks comment on how to "begin the transition away from the current per-minute [ICC] rates" (¶ 533), as well as to identify "the end-points for comprehensive reform" (¶ 523).

Sprint encourages the Commission to focus on the *beginning* points of reform rather than the end points so reform can begin without further delay. The FCC recognized a decade ago that the current ICC system is flawed, yet reform efforts "stalled, leaving the current antiquated rules in place" (¶ 501), in part because the end points of reform were so controversial. Sprint instead urges the FCC to focus immediately on beginning reform that is long overdue, and to finalize the end points once the glide path to reform has begun. This approach should be quite feasible, especially since, as discussed below, there is considerable industry consensus over how reform should begin.

Sprint submits below transition plans for incumbent LECs (and their respective competitors) that can – and should – begin next year.¹ If these plans are implemented next year

¹ The plans Sprint submits here are more detailed versions of those it and T-Mobile submitted to the FCC shortly before release of the instant *NPRM*. *See* Letter from Charles W. McKee, Sprint Vice President – Government Affairs, and Kathleen O'Brien Ham, T-Mobile

(as is possible), the Commission could achieve significant reform in three years. Specifically, under Sprint's proposals, by 2015:

- Over 90 percent of all PSTN traffic would be subject to bill-and-keep; and
- The remaining traffic would be subject to unified access charges, as intrastate rates will have been lowered to interstate rate levels.

Sprint proposes three different transitions plans for ILECs (and their respective

competitors), based on the size of the ILEC. Nevertheless, all of Sprint's proposals share four

points in common:

- They can be implemented immediately, as they are not dependent on reforms made to the current high-cost universal service fund;
- They are readily achievable, as they are based on the reform proposals that ILECs have already submitted to the FCC;
- They would result in considerable reform within the timeframes established in the National Broadband Plan ("NBP"); and
- They are not dependent on an FCC ruling whether VoIP services should be classified as a telecommunications service or an information service.

Sprint further demonstrates in Appendix A that the Commission unquestionably possesses the

legal authority to adopt these transition plans – including the authority to eliminate intrastate

access charges.

Finally, it is important to remember that "Congress in the 1996 Act *directed* this

Commission . . . to eliminate implicit subsidies contained in access charges and instead make all

universal service support *explicit*,"² with Congress stating its expectation that continued use of

access charges would be "interim" only.³ The FCC Chairman at the time of the 1996 Act stated

Vice President – Federal Regulatory Affairs, to Ms. Marlene H. Dortch, FCC Secretary, CC Docket No. 01-92 (Jan. 21, 2011).

² Unified ICC Reform NPRM, 16 FCC Rcd 9610, 9623 (\P 32) (2001) (italics in original; bold added).

³ See Joint Explanatory Statement of the Committee of Conference, H.R. CONF. REP. NO. 104-458, at 123 (1996).

"we are to implement the Congress's directive of moving from implicit to explicit subsidies."⁴ Another Commissioner at the time stated that under the Act, "the days of the access charge system are numbered":

In the Act, Congress told the FCC to make implicit universal service subsidies explicit – and thereby create a universal service program that would make sense in the new competitive world.⁵

Thus, when parties in their comments refer to a four-year transition plan, they are really referring to a 19-year plan. With the passage of 15 years, it is time to at least begin reform this year.

A. The FCC Should Adopt This Year a Three-Year Transition Plan for PSTN Traffic Exchanged With the Three Largest Incumbent LECs and Their Competitors

Common sense dictates that the Commission give its highest priority in the near term to adopting a plan that would achieve the most reform over the shortest period of time. Any such plan must involve the three largest ILECs (AT&T, Verizon and CenturyLink/Qwest), as they control 90 percent of all ILEC access lines.⁶ In addition, any plan involving these three companies would also necessarily encompass most of the traffic involving customers of competitive carriers, as most CLEC and wireless subscribers reside in the areas where the three largest ILECs provide their services.

Three of what had been the four largest ILECs have already proposed three-year plans to transition to a unified rate for the PSTN traffic they exchange with others. The difference among the plans is over their end points, with Qwest's plan ending with bill-and-keep (\$0.00);⁷

⁴ Speech of Chairman Reed Hundt before the NARUC Communications Committee (Feb. 25, 1997), *available at* 1997 FCC LEXIS 1023 at * 8.

⁵ Press Statement of FCC Commissioner Rachelle B. Chong re Access Charge Reform (May 7, 1997), *available at* 1997 FCC LEXIS 2331 at *1.

⁶ See Industry Analysis and Technology Division, *Trends in Telephone Service*, at 7-7, Table 7.3 (Sept. 2010).

⁷ See Qwest Comments – NBP Public Notice #19, GN Docket No. 09-51, at 11 and 14 (Dec. 7, 2009) (While this plan included all intrastate mobile-land traffic, it did not include

Verizon's plan ending with the ISP rate (\$0.0007);⁸ and CenturyLink's plan ending with the unified rate of \$0.0065.⁹ What these plans demonstrate, however, is that a three-year transition is practically feasible for these ILECs. As AT&T acknowledged earlier this month at an FCC workshop, the current ICC system is "in a free fall and can't stand a long revamp transition."¹⁰

Sprint questions whether these three enormous firms – which collectively reported profits exceeding \$77 billion in 2010¹¹ – require any transition, given that Congress made clear 15 years ago that continued use of access charges would be "interim" only,¹² and given that a decade ago the FCC put the entire industry on notice that fundamental ICC reform was necessary.¹³ Nonetheless, in the spirit of cooperation toward meaningful reform, Sprint proposes the same three-year transition period that these ILECs have proposed.

Sprint cannot agree, however, that these ILECs (and their competitors) at the end of the

transition should be permitted to impose any per-minute charge for call termination - even the

ISP rate. The Wireline Bureau has already recognized that LECs using digital circuit-based

intrastate access traffic between two LECs). *See also* Qwest Ex Parte Letter, CC Docket No. 01-92 (Aug. 30, 2010), Attachment, "Intercarrier Compensation Reform," at 5 (Aug. 27, 2010) (Reduce all ICC rates to "zero or to a small uniform rate.").

⁸ See Verizon Ex Parte Letter, CC Docket No. 01-92, at 4 (Sept. 12, 2008). See also Verizon Comments – NBP Public Notice #19, GN Docket No. 09-51, at 19 (Dec. 7, 2009).

See CenturyLink Comments – NBP Public Notice #19, GN Docket No. 09-51, at 40 (Dec. 7, 2009).

¹⁰ COMMUNICATIONS DAILY, *Intercarrier Comp in "Free Fall," AT&T Exec Says* (April 7, 2011) ("The intercarrier compensation system is 'in a free fall' and can't stand a long revamp transition," AT&T Vice President Robert Quinn said on Wednesday at an FCC workshop. 'We're in free fall and I don't think anybody can plan on having the kind of transition that's going to provide that sort of certainty.'").

¹¹ This figure is based on operating income before depreciation and amortization contained in the 4Q2010 earnings reports of AT&T, CenturyLink Qwest and Verizon.

¹² See Joint Explanatory Statement of the Committee of Conference, H.R. CONF. REP. NO. 104-458, at 123 (1996).

³ See Unified ICC Reform NPRM, 16 FCC Rcd 9610 (2001).

switches incur no additional costs in call termination that would justify a rate other than zero.¹⁴ Any per-minute charge would be "inconsistent with the peering and transport arrangements for IP networks, where traffic is not measured in minutes" (*NPRM* ¶ 40), and any positive rate would retain many of the problems that exist today with current per-minute rates – including the cost advantage the largest LECs enjoy today over their competitors because they effectively use bill-and-keep with their own IXC, wireless and wireline affiliates. What is more, retaining any per-minute-based regime (even the ISP rate) would preclude all carriers from reducing their current billing operations costs (which would ultimately benefit all consumers) because, regardless of the rate level, every carrier would still need to devote sizable resources to prepare ICC bills; review, audit and pay bills sent by others; and handle the disputes that necessarily arise with any per-minute scheme.

Sprint therefore proposes the following three-year transition plan for these ILECs and their competitors that would end with bill-and-keep for the exchange of all PSTN traffic – subject to one exception:¹⁵

- 1. <u>Year 1- Unify all access rates</u>: On January 1, 2012, all intrastate access charges (both ILEC and CLEC) would be capped at interstate rates, with the result that all access charges would be billed at the same rate;
- 2. <u>Year 2 Reduce access rates</u>: On January 1, 2013, all access charges would be reduced by 50% (from current interstate rate levels);
- 3. <u>Year 3 Exclusive use of ISP rate</u>: On January 1, 2014, all traffic would be billed at the ISP rate (\$0.0007/minute); and

¹⁴ See Virginia Arbitration Cost Order, 18 FCC Rcd 17722, 17877 (¶ 391), 17903-04 (¶¶ 463-65), 17911-13 (¶¶ 484-89) (2003); Virginia Arbitration Cost Compliance Order, 19 FCC Rcd 1259, 1269 (¶ 30) (2004).

¹⁵ Under this exception, the three largest ILECs would not be required to engage in this step down relative to traffic they exchange with other ILECs not subject to the same step-down (or the latter's' competitors). To prevent an unintended financial windfall to these other LECs, the largest ILECs, for traffic exchanged with these other LECs, would instead use any step-down adopted for these other LECs for traffic exchanged between any of these ILECs and their competitors.

4. <u>Year 4 – Exclusive use of bill-and-keep</u>: On January 1, 2015, bill-andkeep would be used for all PSTN traffic that these ILECs exchange with other carriers – as well as for all PSTN traffic exchanged between two competitive carriers operating in the territories of these three incumbents.

These three companies are highly profitable firms, and they cannot reasonably expect to receive additional federal USF subsidies for reforming their ICC rates. Nevertheless, in order to give these firms additional flexibility to price their retail services, Sprint recommends that the Commission lift in its entirety, effective January 1, 2012, the current cap on their Subscriber Line Charges ("SLCs"). The retail market for voice services is competitive and it will become even more competitive by eliminating the market distortions caused by the current ICC system. This competition will limit the ability of these incumbents to raise to unreasonable levels their retail prices for their PSTN-based voice services.

Adoption of this straightforward proposal would result in extensive ICC reform. Wireless carriers already exchange their PSTN traffic with each other on a bill-and-keep basis, and the largest ILECs already effectively use bill-and-keep with their own affiliates. *With this proposal, the overwhelming majority of all remaining PSTN traffic would also be exchanged on a bill-and-keep basis effective January 1, 2015 – with the result that all of the flaws in the current per-minute ICC system would be eliminated <u>in their entirety</u> for the vast majority of the <i>nation's PSTN voice traffic.* There is no reason to defer reform for these three largest ILECs (and their competitors) over differences involving transition plans that might be applied to the *1,400-plus remaining ILECs.*

B. The Commission Should Also Adopt This Year a Phase I Transition Plan for PSTN Traffic Exchanged with the Remaining Incumbent LECs and Their Competitors

A longer transition is proposed for ILECs other than the three largest because they have been allowed to become more dependent on switched access overcharges. While parties will debate the pace and end points of the overall transition, no one disputes what must be done during the first phase of any transition plan for these ILECs. As the FCC has correctly recognized:

There is general industry sentiment that intrastate rates would be reduced first because they are the highest, and because eliminating the discrepancy between intrastate and interstate access charges could reduce arbitrage, such as phantom traffic.¹⁶

Given this consensus, there is no reason to further delay commencement of this first step. The

Commission can consider the appropriate transition for the second and any additional reform

phases once the first step has begun.

Sprint therefore proposes that the Commission adopt this year a transition plan to cap the intrastate access charges of all ILECs (other than the three largest) at their interstate rate levels and structure. As the following table shows, the remaining 10.2 percent of ILEC access lines not controlled by the three largest ILECs are not evenly divided:

	Number of	Percent of Total
<u>ILECs</u>	Access Lines ¹⁷	ILEC Lines
Three Largest	121,809,317	89.8%
Next Six Largest	7,931,861	5.8%
All Other ILECs	6,049,151	4.4%

Because of the significant difference in size among these other ILECs, Sprint

recommends the Commission adopt a two-year transition to unified access charge rates for the

¹⁶ *ICC/USF Reform NPRM* at ¶ 552. *See also* National Broadband Plan at 148 ("The first step of the staged reform should move carrier's intrastate terminating switched access rates to interstate terminating switched access rate levels in equal increments over a period of two to four years."); *id.* at 149, Recommendation 8.11 ("The FCC should begin [a staged reduction] by reducing intrastate rates to interstate rate levels in equal increments over a period of time.").

¹⁷ See Industry Analysis and Technology Division, *Trends in Telephone Service*, at 7-7, Table 7.3 (Sept. 2010).

"next six largest" ILECs (with 5.8% of all ILEC lines),¹⁸ and a three-year transition for the

1,400+ remaining ILECs (with the remaining 4.4% of lines):

- For ILECs serving between 500,000 and 5,000,000 access lines (and CLECs operating in their service areas), current intrastate access rates would be reduced in two years:
 - Year 1: On January 1, 2012, these six LECs would reduce their current intrastate access rates by 33% of the difference between their current intrastate and interstate access charge rates. In addition, these LECs' interstate access rates would be frozen at their existing rate levels during the transition;
 - Year 2: On January 1, 2013, these LECs would reduce their intrastate access rates by another 33%;
 - Year 3: On January 1, 2014, all access charges would be billed at these LECs' current interstate rate levels.
- For ILECs serving fewer than 500,000 access lines (and CLECs operating in their service areas), current intrastate access rates would be reduced in three years:
 - Year 1: On January 1, 2012, these LECs would reduce their current intrastate access rates by 25% of the difference between their current intrastate and interstate access charge rates. In addition, these LECs' interstate access rates would be frozen at their existing rate levels during the transition;
 - Year 2: On January 1, 2013, these LECs would reduce their intrastate access rates by another 25%;
 - Year 3: On January 1, 2014, these LECs would reduce their intrastate access rates by another 25%;
 - Year 4: On January 1, 2015, all access charges would be billed at the LEC's current interstate rate levels.

¹⁸ These six ILECs are Windstream, Citizens, American Movil, Cincinnati Bell, TDS and Hawaiian Telecom. *See id.*

LECs in those states where intrastate access rates are already capped at interstate rate levels obviously would not participate in these transition plans; they and their State commissions can use this time to prepare for or implement additional ICC reform.

A trade association representing 520 of the smallest rural LECs has already proposed "reduc[ing] rural ILECs' ICC rates down to zero over a seven-year transition period."¹⁹ Sprint's proposal to unify smaller LEC access charges over two or three years is consistent with this seven-year plan, as it would give the FCC the flexibility to adopt later an overall transition plan of seven years, as these small ILECs have recommended.

Implementing this transition schedule for the smaller ILECs' intrastate access rates to interstate access levels need not be postponed until USF reform is adopted. The federal USF will continue to provide support to these ILECs pending completion of comprehensive USF reform. Adopting Sprint's proposed transition schedule would also provide States with certainty and an opportunity to take any measures they find necessary to assist providers operating in their states in adapting to reduced intrastate access rates.

These smaller ILECs are capable of adapting to reductions in intrastate access rates. Most have already upgraded the majority of their networks for broadband Internet access and video entertainment services, making available significant sources of new revenue. Those ILECs which have not already made these network investments always have the option of filing rate cases to rebalance the rates of their retail intrastate services.²⁰ In addition, these ILECs can seek

¹⁹ See OPASTCO Comments – NBP Public Notice #19, GN Docket No. 09-51, at 23-24 (Dec. 7, 2009).

²⁰ Many rate-of-return ILECs may not have filed a rate case since the 1984 AT&T divestiture because they are earning above their authorized rate-of-return. It is long overdue for PUCs to review and reassess and rationalize their ILECs' current rate base and financial status.

adjustments, where appropriate, to modify their respective State universal service policies where they can demonstrate an actual and genuine need to take account of changed circumstances.

Finally, to give these ILECs flexibility to price their retail services to adapt to reduced intrastate access rates, Sprint recommends the Commission increase the cap on the primary residential SLC by \$1.00 for each year the incumbent LEC participates in the transition by moving intrastate access rates to interstate rate levels.²¹ Sprint also would not oppose lifting the SLC cap in its entirety on January 1, 2012 – action that would only encourage additional competitive entry (and for consumers, additional choices) and incentives for greater efficiency in these markets.

III. THE FCC SHOULD PROHIBIT LEC ACCESS CHARGES ON MOBILE TRAFFIC

The ICC arrangement between wireline and wireless carriers has never been reciprocal, much less just and reasonable. This is largely because wireline carriers impose access charges on wireless carriers to terminate interMTA mobile-to-land-traffic, but do not pay access charges to wireless carriers when they terminate interMTA land-to-mobile traffic on the wireless network. The result of this asymmetrical arrangement is that wireless carriers and their customers have been compelled to unduly enrich wireline providers.

The Commission proposed to fix this discriminatory arrangement 15 years ago.²² Sprint petitioned the FCC after six years of inaction on this rule proposal. In response, the FCC held that, while wireless carriers "may *seek* to collect access charges," IXCs are not required to pay

²¹ While technically, SLCs pertain to loop costs allocated to the interstate jurisdiction, an increase in SLCs would generate additional revenues and thereby give these ILECs additional flexibility to adapt to changes caused by moving intrastate access rates to interstate rate levels. ²² Sea LEC CMPS Intercomparison NPPM, 11 ECC Red 5020, 5075 ¶ 116 (1006) ("IWIe

See LEC-CMRS Interconnection NPRM, 11 FCC Rcd 5020, 5075 ¶ 116 (1996) ("[W[e tentatively conclude that CMRS providers should be entitled to recover access charges from IXCs, as the LECs do" and that wireless carriers should be treated "no less favorably than neighboring LECs or CAPs.").

such charges until such time as the Commission adopts the rule it had proposed years earlier.²³ The Commission further declined to address Sprint's claims that an IXC's failure to pay access charges in the same circumstances it paid LECs for the same termination function was an unreasonable practice and unreasonably discriminatory, but stated it would still consider fixing the asymmetrical arrangement in its "pending *Intercarrier Compensation* proceeding."²⁴ Nine years later, in the current *NPRM*, the FCC again asks whether it should address "wireless termination charges" so as to place all competitors on an equal footing (*see, e.g.,* ¶ 491).

In fact, under recent FCC precedent the Act can now be reasonably interpreted as precluding LECs from imposing access charges on mobile traffic. LEC access charges are designed to recover the costs LECs incur in providing exchange access, with the Act defining "exchange access" as the offering of facilities for "the purpose the origination or *termination of telephone toll services*."²⁵ However, the Commission has recently recognized that with their nationwide "single rate" calling plans, wireless carriers no longer provide toll services under the Act.²⁶ If wireless carriers no longer provide toll services, it necessarily follows that LECs no longer provide exchange access to wireless carriers under the Act.²⁷ Consequently, as a matter of law, all mobile "single rate" traffic should now be subject to reciprocal compensation rather than access charges.

See Wireless Access Charge Declaratory Ruling, 17 FCC Rcd 13192, 13196 (¶ 8-9)
 (2002) (italics in original).

 $Id. at 13200 (\P 18 and \P 20).$

²⁵ 47 U.S.C. § 153(20) (italics added).

²⁶ See Universal Service Contribution Methodology, 23 FCC Rcd 1411 (2008); see also South Seas Broadcasting, RM-11415, FCC 11-43, at ¶ 11 (March 16, 2011). While the FCC made this finding in the context of universal service, the legal analysis the FCC employed applies fully in the context of intercarrier compensation as well.

See, e.g., AT&T v, YMax, FCC 11-59, at ¶ 27 (April 8, 2011) ("It is widely understood that switched access is a wholesale service provided to IXCs, paid for by them, and used by them as an input to the end-to-end long distance service they provide to their 1+ and 8YY customers.").

Sound public policy compels the same result. Full intermodal competition can never be achieved under a system that permits providers of fixed services to tax providers of mobile services through asymmetrical imposition of access charges. A system that favors fixed service over mobile service distorts the competitive market by simultaneously inflating the cost of providing wireless service and deflating the cost of wireline service, which in turn suppresses demand for mobile service and inflates demand for fixed service. The access regime was created before the advent of mobile wireless service during the monopoly era. While this regime may have served a purpose at that time, it clearly has no place in pro-competition policy and disserves consumers in today's mobile culture.

The Commission asks whether it should address all wireless termination charges or whether it should instead address interstate charges only, deferring to States to address intrastate wireless termination charges (*see* ¶ 539).²⁸ Congress has been clear on this subject. In the 1993 Budget Act, Congress amended the Communications Act specifically to give the Commission plenary authority over all mobile wireless services so it could "establish a Federal regulatory framework to govern the offering of all commercial mobile services."²⁹ Indeed, one of the findings Congress explicitly made was that "State regulation can be a barrier to the development of competition in this [wireless] market" and that as a result, a "uniform national policy is necessary and in the public interest."³⁰ Accordingly, the Commission has both the authority and the Congressional mandate to establish a "Federal regulatory framework" for all mobile services.

Also in response to the question posed in the *NPRM*, the FCC "plainly has the authority" to regulate the rates paid by wireless carriers, including access charges. *See* ¶¶ 511, 539; Appendix A.

²⁹ H.R. CONF. REP. No. 103-213, at 490 (1993).

³⁰ S. 1134, Title IV, § 402(13) (June 22, 1993), *incorporated by reference in* H.R. CONF. REP. NO. 103-213, at 481 (1993).

IV. THE EXCHANGE OF PACKETIZED VOICE REQUIRES A VASTLY DIFFERENT INTERCONNECTION FRAMEWORK THAN THE CURRENT PSTN MODEL

The *NPRM* asks "how IP-to-IP interconnection arrangements for the exchange of packetized voice traffic fit within existing legal and technical interconnection frameworks" (¶ 679). IP network interconnection does not fit within the framework that has been used with PSTN interconnection, with the result that an entirely new interconnection framework must be developed for the exchange of packetized voice.

No one can reasonably expect that the framework needed to exchange packetized voice traffic efficiently would match the framework that has been utilized with circuit switch-based PSTN traffic, given that IP networks use a radically different technology than legacy PSTN networks. Among other things, voice traffic exchanged on an IP basis "involve[s] the exchange of packets, and does not require occupying an entire circuit for the duration of the call as in a circuit-switched network" (¶ 527). Packetized voice calls use a small fraction of the bandwidth compared to that utilized for POTS traffic in the legacy TDM format. And, IP technology can do what TDM networks cannot do – that is, transport and commingle all traffic (voice, data and video) over the same pipes, resulting in enormous cost efficiencies. Given these vast differences between TDM and IP technologies, there is no reasonable basis to believe that the interconnection framework developed with legacy PSTN networks – whether current LATA-based POIs (Points of Interconnection) or the 2004 proposal to begin using "network edges" – would make sense for IP networks. As AT&T stated last week, "If you want an interconnection model, take the Internet one."³¹

³¹ COMMUNICATIONS DAILY, *Regulation, Economy Said Need to be Addressed in Voice Transition* (April 13, 2011) (AT&T Vice President Hultquist "agreed, saying the Internet is far more efficiently interconnected that PSTN. 'If you want an interconnection model, take the Internet one.'").

The key to a new framework for the exchange of packetized voice is to take advantage of one of the chief benefits of IP technology – namely, the ability to transport and commingle IP voice over the same facilities used to transport other IP traffic. According to a recent Cisco white paper, global VoIP traffic in 2009 constituted only 1.4 percent of all consumer IP traffic.³² Cisco further predicts that consumer VoIP traffic globally in 2014 will fall to only 0.3 percent of all consumer IP traffic (because of much higher growth rates for other broadband services, such as video and online gaming).³³

IP network operators almost certainly have sufficient spare capacity in their existing networks to handle the one percent of total capacity needed to transport packetized voice in addition to other IP traffic. The incremental cost to transport voice in addition to other IP traffic should therefore be exceedingly small, if not zero. Accordingly, to achieve all possible efficiencies, the interconnection framework for the exchange of packetized voice should maximize the extent to which VoIP traffic can be exchanged over the same facilities as other IP traffic.

Rural LECs in particular would be a major beneficiary of such an arrangement. Many RLECs today already provide Internet access and other broadband services. To provide these services, these RLECs necessarily have made arrangements to connect their "middle mile" IP facilities to the public Internet – facilities for which they today receive no USF subsidies. If these rural LECs are able to transport IP voice over these same middle mile facilities, their

³² See Visual Networking Index: Forecast and Methodology, 2009-2014, at 10, Table 10 and 12, Table 14 (June 2, 2010) ("Cisco 2009-14 Traffic Forecast"), available at http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c 11-481360.pdf. In 2009, consumer traffic constituted 89.2% of all Internet traffic, while business traffic used the remaining 10.8% of capacity. See id. at 8, Table 7. Cisco's paper does not address the different types of Internet traffic (e.g., VoIP) for businesses.

See id. at 10, Table 10.

incremental cost in transporting packetized voice traffic over these same facilities should be at or near zero.

Sprint urges the Commission to recognize the considerable improvements IP-to-IP interconnection has over existing PSTN interconnection and the benefits it can provide *regardless* of the compensation scheme applied to the traffic being exchanged. That said, Sprint demonstrates below that any packetized voice traffic exchanged through IP-IP interconnection should be subject to a bill-and-keep arrangement.

In summary, the interconnection rules governing the exchange of packetized voice traffic should more closely resemble the practices governing the exchange of other IP traffic than the rules that have been used with legacy PSTN networks. Indeed, as the Commission has correctly observed, it makes "little sense for providers to maintain different interconnection arrangements for the exchange of VoIP and other forms of Internet traffic" (¶ 679).

V. A TARGETED SET OF DEFAULT RULES IS NEEDED TO ENSURE THAT BROADBAND VOICE IS EXCHANGED BOTH PROMPTLY AND EFFICIENTLY

Some parties (principally the largest ILECs) undoubtedly will argue there is no need for the Commission to get involved in the exchange of packetized voice between IP networks, because industry has successfully negotiated non-voice IP interconnection agreements without any government intervention. As this proceeding is focused on the efficient exchange of voice traffic, Sprint agrees that the Commission need not address the exchange of non-voice IP traffic (and its proposals below are limited in scope to the exchange of packetized voice – as they would not apply to the exchange of non-voice IP traffic). Nevertheless, a targeted set of <u>default</u> rules is necessary to ensure that packetized voice traffic is exchanged both promptly and efficiently.

There is a fundamental difference between the exchange of voice and non-voice IP traffic. With non-voice IP traffic, network operators typically have a choice of IP networks with

which they can interconnect in order to send and receive the IP traffic chosen by their broadband customers. This choice among potential interconnection partners and the resulting competition generally ensures that the terms of interconnection will be reasonable.

The exchange of IP voice traffic is subject to a very different market dynamic. With voice service, call attempts must be sent to the person the calling party is attempting to reach using the telephone number the calling party dials. Because every telephone number is tied to only one service provider, an originating IP network can complete its customers' call attempts only by sending its traffic to the network serving the dialed number. In other words, the "terminating access monopoly problem" that the Commission has recognized in the context of PSTN traffic³⁴ does not disappear simply because network operators begin exchanging voice traffic using IP rather than TDM technologies. And, with this monopoly, terminating carriers (and incumbent LECs in particular) have both the incentive and ability to impose unreasonable terms as a precondition to supporting interconnection.

Use of bill-and-keep, as Sprint proposes below, would do much to limit the ability of terminating carriers to exercise their terminating monopoly over the exchange of packetized voice. But bill-and-keep would not eliminate this monopoly in its entirety. Indeed, some ILECs providing VoIP services to their own retail customers have already begun to impose obstacles to the interconnection and efficient exchange of IP voice traffic with other IP networks – even though such an exchange would benefit their own customers. For example,

• A VoIP provider has advised the FCC that "one RBOC has offered IP interconnection but requires it in each local exchange where a CLEC wishes

³⁴ See, e.g., *ICC/USF Reform NPRM* at ¶ 524; *Qwest Phoenix Forbearance Order*, 25 FCC Rcd 8622, 8664 (¶ 79), 8678-79 (¶ 112); *Unified ICC Further NPRM*, 20 FCC Rcd 4685, 4698 (¶ 24) (2005); *CLEC Access Charge Reform Order*, 16 FCC Rcd 9923, 9935-38 (¶¶ 31-40) (2001); *Unified ICC NPRM*, 16 FCC Rcd 9610, 9616-17 (¶ 13), 9652 (¶ 117) (2001).

to exchange traffic."³⁵ Essentially, it appears this RBOC wants its competitors to use for their IP networks the same network architecture used with TDM networks – an arrangement that would serve no purpose other than to impose new sizable and needless costs on its competitors (as they would be required to install tiny, inefficient VoIP-only circuits to each of the RBOC's local exchanges).

• AT&T recently told the Texas PUC that it was "not possible" and "not technically feasible" for it to interconnect with Sprint and others for the exchange of VoIP traffic – even though it offers a VoIP service to its own retail customers.³⁶ AT&T explained that while it has the technical capability to interconnect with other IP networks, it had no obligation to do so because it made a corporate decision to place these IP assets in an "unregulated" affiliate. In other words, AT&T appears to take the position that it can leverage the terminating monopoly held by its ILEC subsidiaries, without having any interconnection obligations, simply by placing IP assets in an unregulated subsidiary.

The Commission has recognized that its job is not simply to remove "barrier[s] to all IP

networks" (¶ 505), but also to "promote" and "encourage IP-to-IP interconnection" (¶¶ 678-79).

Obviously, IP network deployment and use will not be promoted if ILECs in particular are

allowed either to refuse to interconnect at all or to impose conditions that are patently

unreasonable. Sprint submits that the need for a targeted set of new default rules governing IP-

to-IP interconnection for the exchange of packetized voice is clear.

VI. THE FCC SHOULD TAKE SEVERAL STEPS THIS YEAR TO PROMOTE THE EXCHANGE OF PACKETIZED VOICE TRAFFIC

The Commission seeks comment on the "steps we can take to promote IP-to-IP

interconnection," and when it should take these steps (¶ 678).³⁷ Sprint below identifies four

³⁵ Paetec Ex Parte Letter, Docket No. 01-92, at 2 (Sept. 24, 2010).

³⁶ See Affidavit of Joseph M. Bailey, Lead Product Marketing Manager - Consumer VoIP for AT&T, Texas PUC Docket No. 26381, at ¶¶ 5, 7 and 8 (Oct. 21, 2010), appended to AT&T Texas' Response to Amicus Brief of TW Telecom, Sprint, Cbeyond, and McLeodUSA d/b/a/ Paetec, Texas PUC Docket No. 26381 (Oct. 21, 2010).

³⁷ The NBP similarly encouraged the FCC to "determine what actions it could take to encourage transitions to IP-to-IP interconnection where that is the most efficient approach." Plan at 49.

actions it believes the Commission should take immediately to promote IP-IP interconnection for the exchange of packetized voice traffic.

A. The FCC Should Rule That Packetized Voice Traffic Will Be Exchanged on a Settlement-Free Basis

The intercarrier compensation, if any, applicable to the exchange of voice traffic has been one of the most contentious issues in the industry.³⁸ As the Commission recognized in seeking comment on the ICC system that should be applied to interconnected VoIP (or IP-PSTN) traffic, the absence of an FCC ruling on this type of traffic has led to "numerous billing disputes and litigation" (¶ 604). IP-IP interconnection will not be promoted if this same uncertainty is allowed to develop with respect to the exchange of packetized voice traffic.

Sprint submits that for the exchange of IP-IP voice traffic, the only ICC system that is

feasible is use of a settlements free (or bill-and-keep) arrangement.³⁹ As Sprint demonstrates in

Appendix B:

- It is doubtful IP network operators incur any additional costs in transporting and terminating packetized voice traffic, and under the Act, "if no additional costs are incurred, then there is nothing to pay;"⁴⁰ and
- 2. Policy considerations dictate that per-minute usage charges on the exchange of packetized voice traffic should be prohibited.

Sprint further demonstrates in Appendix B that the Commission possesses ample legal authority to require use of bill-and-keep as the default compensation arrangement.

³⁸ See, e.g., Unified ICC Regime Further NPRM,20 FCC Rcd 4685, 4727-28 (¶ 91) (2005) ("[I]ssues related to the location of the POI and the allocation of transport costs are some of the most contentious issues in interconnection proceedings.").

³⁹ Of course, this would be a default rule only, and two IP network operators could always agree to use a different ICC system for the exchange of their packetized voice traffic.

Ace Telephone v. *Koppendrayer*, 432 F.3d 876, 881 (8th Cir. 2005).

B. The FCC Should Expeditiously Refer to the TAC at Least Two Technical Subjects Where Default Rules Would Accelerate the Interconnection of IP Networks for the Exchange of Packetized Voice Traffic

The Commission seeks comment on the "steps we can take to promote IP-to-IP interconnection" (¶ 678). There are at least two technical issues that the FCC should refer expeditiously to the Technological Advisory Council ("TAC")⁴¹: (1) the locations where packetized voice traffic should be exchanged; and (2) a set of minimum (and default only) technical requirements pertaining to the transport of voice traffic that all IP networks would support.

The TAC is comprised of some of the nation's top business and technology leaders, and it is asked to address a diverse array of issues for the Commission. Because of this, Sprint anticipates that the TAC would form a subcommittee, composed principally of the network engineers who design and operate today's IP networks, to consider initially these two issues and to develop a set of recommendations to the TAC.⁴² The Commission, upon receiving the TAC's report, could then seek public comment on the report before it adopts any rules in these areas.

1. The TAC Should Recommend the Locations Where Packetized Voice Would Be Exchanged Most Efficiently

The Commission asks whether the interconnection of IP networks "may affect our rules concerning POIs," and if so, it further asks parties to "identify the issues [it] should consider" (¶ 682). As Sprint explains below, current POI rules are not useful with regard to IP

⁴¹ The Commission recently reconstituted the TAC to "provide technical advice to [the FCC] and to make recommendations on the issues and questions presented to it by the FCC." *See* Notice, *Federal Advisory Committee Act; Technological Advisory Council,* 74 Fed. Reg. 13208 (March 26, 2009). *See also* Public Notice, *FCC Announced Formation of the Technological Advisory Council* (Oct. 21, 2010).

⁴² It is Sprint's understanding that since the TAC has already been certified under Federal Advisory Committee Act, any subcommittees that it may form need not obtain additional FACA certification.

interconnection, and in fact, their use would affirmatively harm the public interest.⁴³ Rather, an entirely new set of POI rules is needed for IP interconnection.

The POI rules governing PSTN interconnection are based on LATAs, which government antitrust lawyers developed as part of the 1982 AT&T consent decree that prohibited the RBOCs from transporting traffic across LATA boundaries. Although LATAs became irrelevant once the RBOCs obtained § 271 relief from the interLATA restriction, they have continued to be used to determine PSTN interconnection arrangements. Several points bear noting about LATA-based POIs:

- At the time LATAs were created, the consent decree assumed that ILECs possessed a natural monopoly in the provision of local services. As competitive carriers began entering the market, they were required to connect to the ILECs' legacy network architecture. Not surprisingly, this resulted in a new profit center for ILECs as only they had the facilities their competitors needed to connect to the ILEC networks and therefore, to hook up to the PSTN;
- Although current rules give competitive carriers the "option to interconnect at a single POI per LATA" (¶ 682), the RBOCs generally required competitors to connect to dozens of their switches in a LATA (and often to have multiple connections to each of these switches). These ILEC demands required larger competitors in particular to each maintain in each LATA dozens of small inefficient interconnection facilities (*e.g.*, DS1s, DS3s) rather than a handful of larger, more efficient facilities (*e.g.*, OC3s); and
- The effective monopoly ILECs possess over essential PSTN interconnection facilities was then exacerbated when the FCC chose to deregulate ILEC prices for these "special access" trunks. This enabled the ILECs to increase the price of these essential facilities, thereby increasing their profits while concurrently increasing the service costs of their competitors.

The inefficiencies associated with legacy POIs are enormous,⁴⁴ and these costs necessarily are

passed on to consumers.

The *NPRM* further asks parties to address the 2004 proposal to replace LATA-based POIs with "network edges" (*see* ¶¶ 680-82). This "edge" proposal raises the same kind of problems that LATA-based POIs pose if used in the context of IP networks.

The use of IP technology holds the promise of eliminating most of these sizable (and recurring) transport costs – as well as providing an interconnection framework that is competitively neutral. As the Cisco data discussed above demonstrate, the incremental cost of adding voice traffic to other IP traffic is close to, if not equal to, zero. Accordingly, the interconnection points (or "POIs") for the exchange of packetized voice should be located at places that would maximize the ability of IP network operators to transport packetized voice over the same pipes that already are used to transport their other broadband traffic, such as data and video. As the FCC has already – and correctly – observed:

[I]t may make little sense for providers to maintain different interconnection arrangements for the exchange of VoIP and other forms of Internet traffic (¶ 679).

The question then becomes, how should the most efficient POI locations for the exchange of broadband voice be determined? Leaving this subject to bi-lateral negotiations between two network operators is not appealing – especially if the Commission wants to promote IP-to-IP interconnection. Carriers the size of Sprint have hundreds of interconnection agreements ("ICAs"), and even small network operators may have dozens of such ICAs. Negotiating new ICAs with all IP network operators could take years, and resolution of the POI location disputes that invariably will arise would consume even more time – further delaying the interconnection needed to begin efficiently exchanging VoIP traffic. It is significant that even many ILECs have in the past encouraged the FCC to adopt default rules governing the location of POIs.⁴⁵

⁴⁴ Sprint alone incurs annually hundreds of millions of dollars in order to connect to legacy circuit switch locations for the exchange of voice traffic. These PSTN hook-up costs would be reduced significantly (if not eliminated) and those funds could be put to far more productive use with implementation of efficient packet-based interconnection

⁴⁵ See Intercarrier Compensation Forum ("ICF"), Intercarrier Compensation and Universal Service Reform Plan, at 3 ("The Commission shall promulgate rules establishing each carrier's Edges, as defined herein, as the default technically-feasible point within that carrier's network,

POIs have already been developed for the exchange of IP traffic other than voice. Although today's Internet involves the transport of far more traffic than the PSTN (in terms of bandwidth utilized), the nation's largest (Tier 1) Internet backbone networks currently exchange non-voice IP traffic at only 10 or so common locations across the country. Perhaps some efficiencies would be realized by having several more POIs for the exchange of packetized voice traffic. But Sprint is confident that network engineers would agree that it would not be efficient to have 160 broadband POIs (one per LATA) or even 50 POIs (one per State). Redesigning IP networks based on one percent (1%) of the traffic transported over these networks so they accommodate legacy PSTN network architecture makes no sense whatsoever.

As noted above, the current LATA-based interconnection framework for the PSTN was developed for regulatory rather than network engineering purposes, and enabled incumbent LECs to extend their market power to the interconnection facilities competitors needed to hook up to the PSTN. It makes far more sense to allow the engineers who design and maintain IP networks to take the lead in developing an interconnection framework for the exchange of packetized voice between two IP networks. Sprint believes the subject of the locations where packetized voice traffic is exchanged most efficiently is the very type of technical issue about which the Commission should seek the TAC's input and recommendations.⁴⁶

2. The TAC Should Recommend a Core Set of Minimum Specifications That All IP Should Support to Facilitate the Exchange of Packetized Voice Traffic

Agreement over the physical locations where IP voice traffic will be exchanged will not, in itself, result in such traffic being exchanged. Packetized voice traffic cannot be exchanged until the two involved IP network operators agree to the technical specifications that will be

for the transmission and routing of telephone exchange service and exchange access."), *appended as* Appendix A to ICF's Ex Parte Letter, Docket No. 01-92 (Oct. 5, 2004).

⁴⁶ Network IP network operators would, of course, be free to negotiate POI locations that differ from TAC-identified locations.

utilized with the traffic. There is no one industry IP voice standard that all IP network operators have agreed to follow.

These kinds of details could be addressed in ICAs negotiated between two IP network operators. But as discussed above in connection with the IP POI location issue, the sheer number of ICAs that would need to be negotiated, coupled with the additional time inherent in dispute resolution, will significantly delay when packetized voice traffic can begin to be exchanged.

Sprint believes it is possible that the industry could agree on a core set of minimum requirements that would greatly facilitate the ability to exchange packetized voice traffic promptly. In Appendix C, Sprint lists the some of the specific subjects it believes the TAC should examine. Commission adoption of such a core set of technical default rules would greatly facilitate the negotiation of ICAs – which, in turn, would accelerate the dates when packetized voice traffic is exchanged.⁴⁷

Other parties may identify additional issues for referral for the TAC. Moreover, the TAC itself may identify further issues that it believes warrant the Commission's consideration. Sprint therefore encourages the Commission to give the TAC considerable flexibility to identify, analyze, prioritize and submit recommendations regarding the IP interconnection issues it believes are important. The TAC should, however, be encouraged to act expeditiously and, if appropriate, submit each recommendation as it is developed.

⁴⁷ It is again important to emphasize that the rules Sprint is proposing would be default rules only. Two IP network operators would remain free – and encouraged – to agree to additional or different terms to those contained in the default rules. Such agreements would be especially important when one or both network operators discover new developments would improve the efficiency of their traffic exchange.

C. The FCC Should Make Clear That Any Network Operator Providing Retail VoIP Services Must Negotiate in Good Faith Upon Receiving a Request to Interconnect for Purposes of Exchanging Packetized Voice

FCC data show that 29 million wireline customers are already using interconnected VoIP service.⁴⁸ Yet, very little voice traffic is being exchanged today on an IP basis, especially with ILECs. This is due partly to the fact that many ILECs have been slow to embrace IP technology (*e.g.*, ILECs currently serve only 6.2 percent of all interconnected VoIP customers).⁴⁹ But even ILECs that provide retail VoIP services have been reluctant, even unwilling, to discuss IP-IP interconnection with other IP network operators – even though their own customers would benefit by such interconnection.

IP-IP interconnection will not be promoted if facilities-based VoIP providers can refuse to discuss interconnection with other IP network operators. Accordingly, the Commission should to make clear that if an ILEC provides retail VoIP services, it must, upon receiving a bona fide request for IP interconnection, negotiate in good faith with other IP network operators. The Commission should further confirm that it will seriously consider any complaints that an IP network operator is not negotiating in good faith.⁵⁰

D. The Commission Should Encourage All TDM Network Operators to Begin Preparing for IP-IP Interconnection

The Commission has correctly recognized that the current ICC regime "creates the perverse incentive to maintain and invest in legacy, circuit-switched-based [TDM] networks to collect [ICC] revenue, hindering 'the transformation of America's networks to broadband'"

⁴⁸ See Industry Analysis and Technology Division, *Local Telephone Competition: Status as of June 30, 2010, at 3, Figure 2 (March 2011).*

See id. at 5, Figure 4.

⁵⁰ Assuming that IP voice applications are deemed to be an information service, the FCC has ample legal authority to take these steps under its ancillary jurisdiction, coupled with the directive in Section 706(a) of the 1996, which specifies that the "Commission . . . *shall encourage* the deployment of advanced telecommunications capability to all Americans." *See* 47 U.S.C. § 157, note (italics added).

(¶ 506).⁵¹ Actually, the situation is even worse. A consultant to over 100 rural LECs recently advised the Commission that "many" of its clients have installed "soft switches" – equipment that would enable these LECs to receive VoIP traffic directly – but that its clients "will likely" offer only TDM interconnection "throughout the phase down of switched access services."⁵² In other words, "many" of this consultant's clients apparently are equipped to receive IP voice traffic but are taking the position they will not use this equipment for years (until a prohibition on current pre-minute charges takes effect).

Again, IP-IP interconnection will not be facilitated if LECs install IP equipment in their networks but then refuse to use it. At minimum, the Commission should in the immediate future (a) encourage all TDM network operators to investigate the steps they need to take to support IP-IP interconnection, and (b) put all TDM network operators on notice that they will be likely required to support IP-IP interconnection before any phase down of current ICC rates is complete.

The Commission should also consider whether USF recipients should be eligible for continued support if they buy IP equipment but then choose not to use it. Competitive carriers that would benefit by IP interconnection should not be asked to subsidize a LEC's purchase of IP equipment when the LEC is unwilling to use the equipment.

VII. THE COMMISSION SHOULD EXPEDITIOUSLY COMPLETE ITS SIX-YEAR-OLD INVESTIGATION OF SPECIAL ACCESS RATES

The National Broadband Plan recommends that the Commission "ensure that special access rates, terms and conditions are just and reasonable."⁵³ The Plan correctly observes that

⁵¹ See also NPRM at ¶ 527 ("[C]ertain carriers may require an interconnecting carrier to convert IP traffic to time-division-multiplexed traffic even if IP-to-IP interconnection would be more efficient, to ensure continued collection of intercarrier compensation.").

⁵² TCA Comments, Docket No. 09-51, at 2 (April 1, 2011).

⁵³ NBP pp. 36, 48, Recommendation 4.8, and pp 145.

special access facilities play a "significant role in the availability and pricing of broadband service" and that the cost of acquiring these facilities constitutes a "significant expense of offering broadband service" (p. 48).

The *NPRM* does not ask parties to address special access issues in these comments; rather, it notes these issues are being addressed in a "pending proceeding" (*i.e.*, WC Docket No. 05-25) (*NPRM* n.789). That proceeding, however, has been pending for six years. Moreover, special access prices are made relevant in this proceeding because ILECs continue to refuse to provide interconnection for the exchange of traffic at TELRIC-based rates and instead insist on imposing special access rates.

The Broadband Plan recommends that "the FCC's review of its special access policies... be completed in concert with other aspects of this reform plan" because of "the link between middle and second-mile costs and special access policies" (p. 143). Given the "significant role" special access facilities play in broadband service "availability and pricing," Sprint urges the Commission to complete expeditiously this six-year-old investigation, consistent with the urgency and interrelatedness of special access and universal service reform highlighted in the NBP.

VIII. THE COMMISSION SHOULD ENSURE THAT USF REFORMS ARE PRO-COMPETITIVE, THAT LEGACY HIGH-COST SUPPORT IS PHASED OUT EXPEDITIOUSLY, AND THAT ANY NEW SUPPORT IS CAREFULLY TARGETED.

The Commission is here undertaking an ambitious, and long overdue, overhaul of its universal service policies and mechanisms. Sprint is optimistic about the likelihood of meaningful reform and, ultimately, a more viable and effective universal service program. However, success can be achieved only with concessions from all interested parties, and a shift away from the attitude of entitlement which has characterized the universal service arena for so many years.

Sprint comments below on several key issues raised in the NPRM, and recommends changes to the USF reform proposals which we believe will result in a more effective and sustainable fund. First, the Commission should add "promoting competition" to its list of cornerstone principles guiding its USF reform efforts. Second, the Commission should phase out existing high-cost support to all eligible telecommunications carriers (ETCs) expeditiously. Third, the Commission should carefully target USF support only where it is genuinely needed -no support is necessary where there is at least one unfunded competitor or where the carrier seeking support is already able to cover its costs; further, any support that is granted must take into account revenues generated by other services provided over the supported network. Fourth, any new broadband fund must be pro-competitive – the performance standards must reflect the differences between various broadband technologies; there should be no "right of first refusal" extended to incumbent carriers; and wholesale unbundling, interconnection and data roaming obligations should be imposed on the carrier that wins a Connect America Fund (CAF) reverse auction bid. Fifth, Sprint comments on some of the mechanics of a new CAF: the need to establish new categories of ETCs; the need to adopt a broad measure of "reasonable comparability" in evaluating rural vs. urban broadband rates, given the wide array of broadband service packages; and the need to establish the ground rules of a reverse auction bidding process before the bidding is initiated.

A. Promoting Competition Should Remain A Key Goal In the Commission's USF Reform Efforts.

Sprint applauds the Commission's plan to reduce, and eventually eliminate, the legacy high-cost universal service fund and urges the Commission to ensure that any new programs 1)

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promote competition, 2) focus on consumers rather than carriers, and 3) be narrowly targeted to areas and consumers that genuinely need support. As the Commission notes, today's high cost USF primarily targets traditional voice services,⁵⁴ even though Americans are migrating to IP-based networks and services at a rapid pace.⁵⁵ As a result, the high cost fund is increasingly mismatched to the needs of American consumers and their growing dependence on an array of fixed and mobile broadband services, such as high-definition remote medical consultations, "telepresence" videoconferencing, and video-based distance learning.⁵⁶ The existing high cost funding mechanisms have not only outlived their usefulness in a broadband world, they also are riddled with "fundamental inefficiencies," such as overpayments or incentives that favor one technology or platform over another.⁵⁷

The Commission has appropriately recognized the need to reform the existing USF, subject to four key principles: (i) modernizing USF by shifting its focus to broadband; (ii) controlling the size of the USF; (iii) requiring accountability from companies receiving support; and (iv) transitioning to market-driven policies.⁵⁸ Sprint supports each of these principles, and urges the FCC to add a fifth principle to ensure consistency with the dictates of Section 706 -- promoting competition among providers. Section 706 of the Act requires the Commission to encourage deployment of advanced services "…by utilizing, in a manner consistent with the

⁵⁴ NPRM, ¶ 6.

As the Commission notes, for instance, from 2008 to 2009, switched access lines decreased by 10 percent while interconnected VoIP subscriptions increased by 22 percent. NPRM, ¶ 8 (citing *Trends in Telephone Service* at 10-1 (Sept. 2010)). More recent data confirm this shift, showing that interconnected VoIP traffic increased by 21 percent between June 2009 and June 2010, while traditional wireline connections fell by 8 percent over that time. *Local Telephone Competition: Status as of June 30, 2010*, Industry Analysis and Technology Division, Wireline Competition Bureau (March 2011).

⁵⁶ NPRM, ¶ 4.

⁵⁷ NPRM, ¶ 7.

⁵⁸ NPRM ¶ 10.

public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." There is no mention of using a fund to encourage deployment. Sprint urges the Commission to act, consistent with the dictates of Section 706, to phase out legacy high-cost USF and to ensure that any new broadband fund is narrowly targeted and pro-competitive.

The benefits of competition here are indisputable: robust competition advances marketdriven outcomes; is more effective than government fiat in expanding broadband capabilities to meet growing consumer demand; and, to the extent that the presence of an unfunded (by USF) competitor precludes the distribution of a USF subsidy, would help to control the size of the USF (and thus the burden on consumers) and protect the viability of the fund.

B. Existing High-Cost USF Support Should Be Phased Out Expeditiously.

The Commission should phase out existing high cost support mechanisms expeditiously to foster competition and eliminate the burden these mechanisms place on consumers. The FCC's proposed "near-term" reforms to reduce existing support to wireline carriers are a moderate and necessary first step in a quick and orderly phase-out. As the Commission acknowledges, its proposal to decrease the current High Cost Loop Support ("HCLS") for incumbent LECs operating 200,000 or fewer loops is quite "modest,"⁵⁹ and its proposal to eliminate HCLS for carriers with more than 200,000 working loops would have little impact since "there are only five rural incumbent LECs with more than 200,000 working loops and all

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Id. (proposing to reduce HCLS for smaller carriers by ten percentage points).
five incumbent LECs have costs per loop that are well below the [national average cost per loop]."⁶⁰ These proposed near-term reforms are much-needed and long overdue.⁶¹

The current rules also include support mechanisms that are either unnecessary or, worse, provide perverse incentives, creating waste and misdirecting resources away from the areas where they are most needed. The FCC should rapidly transition away from these rules, particularly for the largest LECs. For instance, the FCC should eliminate Interstate Access Support ("IAS") immediately. IAS was originally due to expire in 2005, and its perpetuation "does not appear necessary to provide voice service at affordable and reasonably comparable rates and does not appear to be effectively structured to promote broadband deployment."⁶² Moreover, since the inception of IAS over a decade ago, LECs have been on notice that the IAS was meant to provide only temporary support and would eventually be eliminated.⁶³ Eliminating IAS not only would reduce waste, but would allow competitive carriers that are not eligible to receive IAS to better compete with price cap LECs without the distortive effect of this subsidy.

HCLS, Local Switching Support ("LSS") and Interstate Common Line Support ("ICLS") also have outlived their usefulness. Since these mechanisms "often do not provide incentives for controlling capital and operating costs,"⁶⁴ and often mismatch the amount of support to a

⁶⁰ NPRM, ¶¶ 180 - 181.

⁶¹ Id., ¶ 162 (explaining that many of the existing rules "have not been comprehensively examined in more than a decade, and prioritize funding in ways that may no longer make sense in today's marketplace.").

⁶² NPRM, ¶ 233.

⁶³ The \$650 million IAS fund was initially created in 2000 as part of the CALLS plan and was meant to be a transitional support mechanism to cushion the impact of making explicit certain universal service subsidies that were implicit in interstate access charges, implemented in conjunction with increases in subscriber line charges. Price cap carriers that have been receiving IAS have had years to address any remaining shortfalls, and there is no principled reason to continue providing this subsidy. *See CALLS Order*, 15 FCC Rcd 12962, 13046 (¶ 201) (2000). ⁶⁴ NPRM, ¶ 162.

carrier's need in a particular area,⁶⁵ it would be in the public interest to phase out these programs as quickly as possible.

In addition to reducing legacy USF support to incumbent LECs, the Commission should also phase out existing high-cost support to competitive Eligible Telecommunications Carriers ("CETCs").⁶⁶ Sprint and Verizon Wireless have already committed to phasing out their existing high-cost USF support by 2013. Sprint recommends that the Commission phase out high-cost support to all other ETCs by the end of 2014, or three years after the adoption of an order mandating such phase outs, whichever is later.⁶⁷ A prompt phase-out of ETC support would ease the financial burden on USF contributors and consumers, and will promote competitive parity by eliminating the inequities that result from continuing to support some but not all service providers.

C. The FCC Should Avoid Wasteful Measures that Would Undermine Its Reforms

In crafting its near- and long-term reforms, the Commission should make every effort to avoid wasteful rules that would increase the cost of support without advancing the statutory goals of universal service. Sprint discusses three examples below.

1. Support Is Not Warranted Where Unsubsidized Competition Already Exists

USF support should be directed to areas where providers would not deploy and maintain network facilities absent a USF subsidy. The Commission should not provide high cost or CAF subsidies in areas where unsubsidized facilities-based providers already are competing for

⁶⁵ Id.

⁶⁶ NPRM, ¶ 248-260.

⁶⁷ See Sprint Comments, WC Docket No. 10-90 at 14 (July 12, 2010).

customers.⁶⁸ As NCTA has shown, in many cases incumbent LECs are receiving high cost support to offer service in areas that are also served by facilities-based voice providers that do not receive government subsidies.⁶⁹ If providers are willing and able to serve an area without support, then USF subsidies to the incumbents in those locales serve only to deter competition and/or allow the subsidized provider to earn artificially inflated profits.⁷⁰ It is both inefficient and anti-competitive to provide subsidies to incumbent carriers that allow them to undercut the market-based rates charged by unsubsidized competitors in that market.

2. USF Support Levels Should Reflect Regulated and Unregulated Revenues

In calculating universal service support levels, the Commission should take into account all revenues available to providers to cover their costs.⁷¹ Thus, the Commission should consider the revenues a carrier can earn from its own end users for both regulated and unregulated services that are provided over the supported facilities, as well as continuing intercarrier compensation flows, some of which – most notably, special access – are generating extraordinary, supracompetitive profits.⁷²

Companies are able to provide narrowband and broadband services over a single network, and the Commission should weigh all such revenues in determining whether a universal service subsidy is necessary to maintain affordable rates.⁷³ As the Free Press has observed, "the

⁶⁸ NPRM, ¶ 391 (citing NCTA Petition for Rulemaking).

⁶⁹ NCTA Petition at 6-8.

⁷⁰ Rural LECs have already used high-cost support to upgrade their networks to provide broadband services, without risking any reduction in the subsidies they receive.

⁷¹ NPRM, ¶ 439.

⁷² NPRM, ¶ 392. Although many broadband-based services are subject to FCC regulations, they are relatively unregulated in comparison to traditional telecommunications services (*e.g.*, they are not subject to pricing rules or tariffing requirements).

⁷³ As the National Regulatory Research Institute (NRRI) pointed out, "[m]odern telecommunications networks provide multiple services, only some of which are regulated in the traditional sense. States should consider whether to include revenue from unregulated operations

unregulated revenue streams of rate-of-return and price cap Local Exchange Carriers serving in high-cost areas" are the "500 pound gorilla in the room" and should be "considered in the discussions of 'need' for the purposes of universal service."⁷⁴ Indeed, broadband networks already are generating significant revenues and there is significant additional revenue growth potential, given the current gap between deployment and adoption. These revenue streams, as well as any supplemental support flows (such as loans or grants received pursuant to the American Recovery and Reinvestment Act or by the Rural Utilities Service) associated with the USF-supported network, reduce the amount of support needed to provide service or deploy a broadband network in an unserved area. Indeed, the guaranteed revenues provided by the current Universal Service Fund may well be stifling the incentive to the ILECs to encourage and enable their customers to adopt broadband. The Commission should factor these streams into the equation used to determine the need for and level of universal service support, and should conclude that no subsidy is necessary if the total revenues generated by a network would offset the costs of providing service.⁷⁵ In those situations, the FCC should allow the marketplace to function without the distortions created by unnecessary subsidies.

3. The FCC Should Reform its Special Access Rules in Order to Reduce Middle-Mile Costs

"Middle-mile" connectivity is provided over dedicated facilities, usually purchased as special access services. The high cost of middle-mile connections is a direct result of the supra-

in the *Revenue* term of any cost-based support mechanism." See NRRI Report by Peter Bluhm, Phyllis Bernt and Jing Liu, *State High Cost Funds: Purposes, Design and Evaluation*, released January 19, 2010, p. 48.

⁷⁴ See ex parte letter from Ben Scott and S. Derek Turner, Free Press, to Marlene Dortch, FCC, filed in WC Docket No. 05-337, CC Docket No. 96-45, WC Docket No. 06-122 and CC Docket No. 01-92 on October 13, 2008, p. 5.

⁷⁵ The Commission's calculus also should take into account the exorbitant profits that many incumbent LECs (particularly price cap LECs) generate from their excessively priced – and largely unregulated – special access services.

competitive special access rates charged by incumbent LECs. Providing universal service support for middle-mile costs would mask one of the many harms caused by the misguided pricing flexibility rules that allow incumbent LECs the freedom to charge unreasonably high prices for special access services.⁷⁶ The Commission should control middle-mile costs through the long-overdue reform of its special access pricing, rather than merely mitigating for only one category of carriers the harmful effects of those above-cost prices through USF subsidies.

4. Revenue Replacement Would Be Unwarranted and Ill-Advised

There is no statute that guarantees LECs a steady revenue stream, and it would be counter-productive to adopt a mechanism that would allow LECs to "recover" (or, more accurately, retain), on a dollar-for-dollar basis, current revenues that may be reduced through the reform of the USF.⁷⁷ As an initial matter, calling such a mechanism a form of "recovery" is misleading, since the existing revenues may bear little or no relationship to underlying cost and in many cases are the result of outdated government subsidy mechanisms rather than savvy marketing or efficient, effective business practices.

Nomenclature aside, allowing carriers to "recover" all of the revenues previously provided through universal service support would defeat one of the principal objectives of comprehensive reform of the current system. Such an approach would merely shift the mechanism by which consumers and competitors subsidize the supported carriers without examining whether there is even any need for the subsidy. Parties have been on notice for many years about impending reforms that could significantly reduce their existing ICC and USF

⁷⁶ See, e.g., Comments of Sprint Nextel Corporation, GN Docket No. 09-47 at 13-20 (Nov. 4, 2009) (discussing the lack of affordable middle-mile connectivity and the inflated rates that incumbent LECs charge for special access services); Reply Comments of Sprint Nextel Corporation, WC Docket No. 05-25 at 20-33 (Feb. 24, 2010) (explaining that the FCC's current rules have failed to ensure just and reasonable rates for special access services).

NPRM, ¶43.

subsidies,⁷⁸ and many LECs have taken steps to address the potential impact of reduced subsidies, including:

- i. Investing in more efficient, lower cost, more productive networks (such as upgrading to fiber transport and/or packet technology);⁷⁹
- ii. Developing new revenue streams and opportunities, such as broadband services, video entertainment, and bundled service offerings;⁸⁰ and
- iii. Obtaining state commission approval to reform local service rates.

Reform of the current system should not reward carriers that have not pursued similar initiatives. In fact, where needed, regulatory requirements can serve as a "stick" to encourage desired outcomes. For example, to the extent the Commission and/or state regulators do not mandate equalization of intra- and interstate access rates, the FCC could and should withhold legacy high-cost funding and any new CAF support from those carriers that continue to impose intrastate access charges that exceed their corresponding interstate rates.⁸¹

The Commission should be mindful that the maintenance of unnecessary subsidies and

adoption of revenue replacement mechanisms will come at a cost – they will prolong market

⁷⁸ See, e.g., Sean Buckley, Fierce Telecom, CenturyLink Sees Qwest Merger as Path to Facilitate Business, Broadband Growth, March 3, 2011, quoting CenturyLink

EVP/CFO/Assistant Secretary Stewart Irving as he explained CenturyLink's "vision . . . toward diversifying ourselves from the regulated revenues we depended on all of our history, including USF revenues and higher access revenues, realizing that there would come a day when those started to disappear and be redirected," and discussed the strategy the company followed to reduce the risk posed from "a regulated revenue standpoint"

⁽http://www.fool.com/investing/general/2011/03/03/centurylink-sees-qwest-merger-as-path-to-facilitat.aspx).

⁷⁹ See NASUCA Comments to Refresh the Record, WC Docket No. 05-337 *et al.*, filed July 7, 2008, p. 6 (explaining that LECs are now using their common loop platform to generate "billions of dollars in digital subscriber line ("DSL") revenues that they did not generate five or ten years ago.")

⁸⁰ See, e.g., AT&T's 2010 Annual Report, p. 37 (discussing AT&T's strategy for "increasing non-access line-related revenues from customer connections for data, video and voice.").

⁸¹ NPRM, ¶ 297.

distortions and reduce the likelihood of competition. Carriers that do not benefit from existing subsidies, or even worse, that are forced to subsidize their competitors, will be placed at a substantial competitive disadvantage. The Commission should not introduce such a distortion of the marketplace into the very reform effort that is intended to eliminate such anomalies. At a minimum, any revenue replacement mechanism that the Commission adopts should be extremely limited in size and duration.

D. The FCC Should Ensure that the CAF Promotes Competition

As the Commission has correctly recognized, any new CAF mechanisms should promote competition by allowing recipients to "use any technology platform, or combination of technology platforms, that satisfies the specified metrics," including any type of wireline or wireless technology.⁸² In achieving this goal, the Commission should be mindful of (i) the need to define broadband in a flexible way that accommodates the differences and trade-offs between various broadband technologies, (ii) the risks of awarding incumbent LECs a right of first refusal, and (iii) the need to impose pro-competitive conditions on supported providers.

1. Any Minimum Speed Requirement for Eligible Broadband Services Should Reflect the Differences Between Various Technologies

Conditioning receipt of USF support on meeting speed or bandwidth requirements associated with landline technology will limit, if not eliminate, the ability of wireless and satellite providers to compete for such support.⁸³ Bandwidth is an important aspect of broadband deployment, but is hardly the only factor that consumers consider in defining the attributes of the broadband services they select. As the Commission notes, other factors – such as throughput,

⁸² NPRM, ¶ 104.

⁸³ NPRM, ¶ 105 (seeking comment on whether to characterize broadband by its speed).

latency, jitter, or packet loss – are also important.⁸⁴ Perhaps even more significant, the dramatic increase in "smart" wireless devices demonstrates that tens of millions of consumers need and want *mobile* broadband, in conjunction with, or even in place of, fixed broadband connections.⁸⁵ For users on the move, the advantages of mobility often outweigh the benefits of higher speeds available with many fixed broadband connections. As the popularity of smart phones and mobile broadband modems push mobile broadband subscription levels ever closer to (perhaps even above) fixed broadband levels, there is no rational basis for giving fixed broadband – or the speeds associated with it – priority over mobile broadband in the distribution of CAF subsidies.⁸⁶ Indeed, if one imagines an alternative universe in which wireless broadband had been deployed first, and wireline carriers were now attempting to enter the market, offering possibly greater speeds but at the cost of being able to access broadband at only one physical location, it is not entirely clear what choice consumers would make. But it is clear that the choice should be left to the consumers, not to a desire to protect the existing service provider from an alternative business model.

The Commission also should be cautious about setting minimum "actual" speeds because it is difficult to maintain consistent mobile broadband speeds, as available bandwidth can vary

⁸⁴ *Id.* Aggressive speed level requirements might also hinder the deployment of broadband to remote rural areas. Wireless options may be the only economically feasible means of bringing broadband to rural populations in the near term, but the incentive for wireless providers to serve these populations might be dampened if the FCC establishes overly aggressive minimum speed requirements based on the capabilities of wireline technologies.

⁸⁵ See, e.g., Aaron Smith, Pew Internet & American Life project, "Mobile Access 2010," rel. July 7, 2010 (59% of adults now access the Internet wirelessly using a laptop or cell phone, up from 51% in April 2009), available at http://www.pewinternet.org/Reports/2010/Mobile-Access-2010.aspx.

⁸⁶ Section 254(c)(1)(B) of the Act requires the FCC, in evaluating what services should be supported by universal service funds, to consider what services "have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers."

for many reasons beyond the carrier's control, *e.g.*, the amount of traffic on a tower at any given time, environmental factors such as weather or foliage, the extent to which the user is on the move (and thus is being transferred from cell site to cell site) or remains in one location, the user's distance from the cell site, the type of handset or device used, and the type of activity being conducted (large versus small file transfers). For these reasons, making eligibility for CAF support dependent on a rigid measure of "speed" would likely discriminate heavily in favor of fixed networks at the expense of mobile broadband carriers.

2. The FCC Should Not Award Incumbent LECs a Right of First Refusal

In the second stage of its reform (in which all high-cost programs would be transitioned to CAF), the Commission should award all on-going support through a competitive, technology-neutral bidding mechanism, including using technology-neutral geographic areas.⁸⁷ The Commission should not award incumbent LECs "a right of first refusal to serve an area as the broadband provider of last resort for an ongoing amount of annual support based on a cost model.^{**88}

A mechanism that allows equal opportunity for all types of providers would increase competition among bidders, ensuring that funds are distributed at efficient levels of support. By contrast, giving incumbent LECs a right of first refusal would remove the discipline of bidding, eliminate the incumbent LECs' incentive to provide service efficiently by basing the support on the carriers' "costs," and effectively preclude consumers from subscribing to supported services from providers that have adopted platforms and technologies different from those used by the incumbent LEC.

NPRM, ¶ 31; *see infra*, section II.E.3 (discussing the mechanics of the bidding process).
NPRM, ¶ 31, 400, 431.

3. The FCC Should Impose Pro-Competitive Conditions on Supported Providers

If the Commission chooses to award support to only one bidder per geographic area, it should, at a minimum, require the winner to agree to certain conditions that would foster competition among different technology platforms.⁸⁹ For example, requiring the winner to provide backhaul and wholesale data roaming at forward-looking economic rates, collocation, and IP packet-based -interconnection, would help to foster competition in markets in which entry by multiple service providers in competition with the subsidized carrier might otherwise be economically infeasible. The Commission also should require the winning bidder to offer wholesale services on a non-discriminatory basis so that potential rivals can make use of the USF-subsidized inputs at rates that may permit competitive entry.

E. Recommendations Regarding the Mechanics of A New Broadband Fund

1. The Commission Should Create New Categories of ETCs to Avoid Unfunded Mandates

The Commission currently requires all high-cost ETCs to provide the full range of USFsupported services. If the Commission were to add broadband and mobility to the list of supported services, it should create separate designations for each category of supported service (voice, Lifeline, broadband, and mobility) so that a provider need not offer all of the supported services to be eligible for support in a subset of USF categories.⁹⁰ Imposing new broadband deployment mandates on existing high-cost ETCs would be unfair, and could drive some of

⁸⁹ The FCC's rules must make allowances for the fact that providers may submit bids covering different, but overlapping, geographic areas. A CMRS provider may bid to serve a major trading area ("MTA") or cellular marketing area ("CMA"), for example, while a wireline carrier might bid to serve an MSA or a group of customers served by a particular serving wire center, some of which may be within the MTA or CMA the wireless provider proposes to serve. If both providers win their respective auctions, the areas where they overlap would have multiple subsidized providers.

⁹⁰ NPRM, ¶ 65.

those ETCs from the marketplace (or at least limit their activity in that market), reducing both competition and choices for consumers. The Commission should address these potential mismatches between the support being provided and the requirements that ETCs must meet by establishing new categories of ETCs. For example, the FCC could establish a new process for providers seeking to become broadband ETCs. Although broadband ETCs presumably would be able and required to meet requirements governing legacy services (since voice would be just another application provided over the broadband network), legacy high-cost voice ETCs would not have to meet the broadband-based requirements that would apply to recipients of CAF funding.⁹¹

The FCC also should tailor its ongoing reporting and certification requirements to match the type of support a particular provider receives. For example, the CAF and Mobility Fund would provide support for capital expenditures. Thus, it would make little sense to subject Mobility Fund or CAF participants to operating expense-focused reporting requirements that currently apply to high-cost ETCs, such as the submission of an annual progress report and fiveyear forecasted service improvement plans, or the submission of line counts in areas in which they receive support. The FCC may choose instead to adopt new reporting requirements that ensure that CAF or Mobility Fund support is being used for legitimate capital projects. Any new broadband reporting requirements should not apply to legacy high-cost ETCs (whose support may also be applied towards operating expenses).

In addition, the FCC should permit any entity that has applied for designation as an ETC to participate in a reverse auction, and should permit applications to be submitted on a contingent

⁹¹ Similarly, to the extent a carrier is designated only as a Lifeline ETC, it should not be subject to new broadband requirements, even for existing Lifeline customers. If a Lifeline ETC also wants to provide broadband, it should apply for a separate designation as a broadband Lifeline provider.

basis, with the designation as an ETC to become effective only if the entity wins support for a given area.⁹² These steps will increase the pool of potential bidders by, for example, assuring bidders that they will not be subject to the obligations that go along with being designated in areas where they do not win support. Limiting administrative burdens in this manner, combined with limiting the supported services to be provided by the winner(s) for each designation, would maximize participation in reverse auctions, leading to robust competition across a range of platforms.

2. The FCC Should Use a Broad Measure of "Reasonable Comparability"

Section 254(b) requires universal service policies to be designed to make services in rural areas available at rates that are "reasonably comparable" to rates in urban areas.⁹³ For the purpose of determining high-cost support for non-rural carriers, the Commission has defined "reasonably comparable" in terms of a national rate benchmark.⁹⁴ For voice service, the national rate benchmark is currently set at two standard deviations above the average urban rate, as reported in the most recent annual rate survey published by the Wireline Competition Bureau.⁹⁵

Sprint believes that a broader measure may be warranted for determining "reasonable comparability" for broadband support. As the NPRM explains, broadband offerings already encompass an extensive range of products (*e.g.*, PCs, laptops, handsets) and platforms (*e.g.*, fixed or mobile) that have widely differing capabilities. As noted above, for example, mobile broadband speeds can differ widely depending on whether the consumer is using a fixed or mobile device, and the ability to use one or the other may vary depending on whether the user is in a rural or urban area. Given this broad spectrum of products, capabilities, and availability, any

⁹² NPRM, ¶ 319.

⁹³ 47 U.S.C. § 254(b)(3); see also NPRM, ¶¶ 144, 486.

⁹⁴ NPRM, ¶ 144.

⁹⁵ NPRM, ¶ 144.

"national benchmark rate" under the CAF program must be broadly defined and allow multiple standard deviations above the average for USF support purposes.⁹⁶ Adopting an overly narrow definition, or too few standard deviations, could make it uneconomic to provide certain forms of broadband, even with support.

3. Prior to Conducting Reverse Auctions, the FCC Should Publish the Specifics of the Bidding Process and the Obligations To Be Assumed by Winners

In conducting reverse auctions to award Phase I CAF support, it is critical that the Commission explicitly prescribe the specifics of the bidding process, as well as the obligations that accompany a winning bid, to ensure that competing bids are comparable and that each bidder is working off the same baseline population, coverage, and legal assumptions.⁹⁷ The Commission must set forth such factors as:

- the "per unit" basis on which all bids are to be submitted (*e.g.*, the minimum number of housing units that must be served in an area);⁹⁸
- the total number of "units" in each census block or aggregation of blocks;
- each census block grouping that is to be bid upon; and
- the extent to which cost (the lowest bid) will be the primary factor in determining the winning bidder.⁹⁹

In order to calculate the cost of a bid accurately, it also is important that bidders know in

detail the substance and timing of the legal obligations and benefits that will apply to a winning

bidder, including any conditions that will apply (particularly in winner-take-all bids) and whether

⁹⁶ For the Mobility Fund, Sprint suggested that rates be considered "reasonably comparable" if they are within three standard deviations from a provider's average urban rate. Sprint's Mobility Comments at 8.

⁹⁷ NPRM, ¶¶ 24, 331-37.

⁹⁸ NPRM, ¶ 333. Allowing bidders to specify the minimum coverage they will provide in an area would make it difficult or impossible to compare bids and create unnecessary complexity, leading to inefficient outcomes. *See* NPRM, ¶¶ 334-35.

NPRM, ¶ 338-41.

bidders will be able to receive additional support if they exceed their coverage requirements.¹⁰⁰ Bidders also need to know what accountability and performance standards will apply and the extent to which such standards might increase a winner's administrative costs.¹⁰¹

While such standards need to be in place, if they are too onerous they will discourage providers – especially those that might bid in only a few areas – from participating in the reverse auctions. One reasonable solution would be to tie the accountability requirements to the amount of support won by a particular bidder: *e.g.*, to impose lesser reporting requirements on providers that receive only a *de minimis* amount of support.¹⁰² For example, the FCC could establish "short form" reporting requirements for providers whose support totals less than a threshold dollar amount.

IX. CONCLUSION.

The Commission is faced with an opportunity here to adopt comprehensive ICC and USF reforms that will promote broadband deployment, foster competition, and help ensure the viability of the universal service program. Sprint urges the Commission to adopt rules to enable the three largest LECs to achieve a rational, bill-and-keep intercarrier compensation regime within three years; to take the first steps to move mid-size and smaller LECs towards a unified intra- and interstate access charge regime within two and three years respectively, and to consider an appropriate longer-term reform plan for these LECs during that time; to make explicit the prohibition on assessing access charges on mobile traffic; to rule that packetized voice traffic is to be exchanged on a bill-and-keep basis; and to consider, with input from the TAC, network engineering issues such as appropriate POIs and minimum IP network

¹⁰⁰ NPRM, ¶ 336.

¹⁰¹ NPRM, ¶ 27.

¹⁰² NPRM, ¶ 474-75 (seeking comment on whether to impose additional audit and reporting requirements on CAF support recipients, beyond those applicable under existing USF rules).

specifications for packetized voice. On the USF side, the Commission should add "promoting competition" as a key element to its reform efforts; phase out legacy high-cost USF to all carriers expeditiously; carefully target support only where it is genuinely needed; and ensure that any new broadband fund is pro-competitive and technologically neutral.

Respectfully submitted,

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Appendix A

THE COMMISSION HAS CLEAR STATUTORY AUTHORITY TO REFORM INTERCARRIER COMPENSATION FOR ALL TRAFFIC – INCLUDING INTRASTATE ACCESS CHARGES CC Docket No. 01-92

The Commission in its *NPRM* concludes it possesses the authority to phase out intrastate access charges, but nonetheless asks for comments on this conclusion.¹ Sprint demonstrates below that Congress clearly has given the Commission the authority to reform intercarrier compensation for all traffic – including intrastate access charges.

Congress, in Section 251(b)(5) of the Act, imposed on all LECs the "duty to establish re-

ciprocal compensation arrangements for the transport and termination of telecommunications."

This statute, the FCC has held, "[o]n its face" requires LECs to establish reciprocal compensa-

tion arrangement for "all 'telecommunications' they exchange with another telecommunications

carrier, without exception":

Unless subject to further limitation, section 251(b)(5) would require reciprocal compensation for transport and termination of *all* telecommunications traffic – *i.e.*, whenever a local exchange carrier exchanges telecommunications traffic with another carrier.²

The Commission later rejected arguments that the scope of Section 251(b)(5) is limited to certain services, noting correctly that the statute's scope is "not limited geographically ('local,' 'intrastate,' or 'interstate') or to particular services ('telephone exchange service,' 'telephone toll service,' or 'exchange access')":

See A National Broadband Plan for Our Future, GN Docket No. 09-51 et al., Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC 11-13, at ¶¶ 509, 510, 513 (Feb. 9, 2011), summarized in 76 Fed. Reg. 11632 (March 2, 2011 ("ICC/USF Reform NPRM").

² 2001 ISP Remand Order, 16 FCC Rcd 9151, 9165-66 ¶¶ 31-32 (2001)(italics in original; underscoring added), remanded on other grounds, WorldCom v. FCC, 288 F.3d 429 (D.C. Cir. 2002), cert. denied, 538 U.S. 1012 (2003).

We find that the traffic we elect to bring within this framework fits squarely within the meaning of "telecommunications." We also observe that had Congress intended to preclude the Commission from bringing certain types of telecommunications traffic within the section 251(b)(5) framework, it could have easily done so by incorporating restrictive terms in section 251(b)(5). Because Congress used the term "telecommunications," the broadest of the statute's defined terms, we conclude that section 251(b)(5) is not limited only to the transport and termination of certain types of telecommunications traffic, such as local traffic.³

This Commission order was affirmed on appeal.⁴

Congress, in Section 201(b) of the Act, has authorized the FCC to "prescribe such rules

and regulations as may be necessary in the public interest to carry out the provisions of this Act."

As the Supreme Court confirmed in its seminal Iowa Utilities Board decision, this rulemaking

authority is not limited to jurisdictionally interstate matters, but rather extends to all provisions

of the Act, including those added by the 1996 Act that encompass matters that, before 1996, gen-

erally fell within the exclusive jurisdiction of the States:

We think that the grant in § 201(b) means what it says: The FCC has rulemaking authority to carry out the "provisions of this Act," which include §§ 251 and 252, added by the Telecommunications Act of 1996. * * * We hold, therefore, that the Commission has jurisdiction to design [an intercarrier compensation] pricing methodology.⁵

Simply put, Congress in the 1996 Act "federalized" the subjects of interconnection and

intercarrier compensation.⁶ The Supreme Court, in affirming the FCC's authority to adopt na-

³ 2008 ISP Remand Order, 24 FCC Rcd 6475, 6479-80 ¶ 8 (2008).

⁴ See Core v. FCC, 592 F.3d 139 (D.C. Cir. 2010), cert. denied, 131 S. Ct. 597 (Nov. 15, 2010).

⁵ *AT&T* v. *Iowa Utilities Board*, 525 U.S. 366, 378, 385 (1999).

⁶ See Illinois Bell v. Global NAPS, 551 F.3d 587, 594 (7th Cir. 2006)(The 1996 Act "directly controls intrastate issues that were once the exclusive province of the states. To that extent, the Act federalizes these local interconnection issues."); *MCI* v. *Bell Atlantic-Pennsylvania*, 271 F.3d 491, 509 (3d Cir. 2001)("[W]ith the 1996 Act, Congress federalized the regulation of competition for local telecommunications service.").

tional rules concerning these subjects, acknowledged that the 1996 Act "fundamentally restructure[d] local telephone markets":

But the question in these cases is not whether the Federal Government has taken the regulation of local telecommunications competition away from the States. With regard to the matters addressed by the 1996 Act, it unquestionably has.⁷

Sprint respectfully submits that Congress has given the Commission clear authority to

reform intercarrier compensation for all traffic – including all intrastate traffic.

A. SECTIONS 251(B)(5) AND (G) EMPOWER THE FCC TO MODIFY OR ELIMINATE INTRASTATE ACCESS CHARGES

Despite the foregoing, States have taken the position (at least in the past) that "the FCC

lacks authority to preempt State authority over intrastate access."⁸ The States' core argument is

that intrastate access charges are encompassed by Section 2(b) of the Act and are thereby beyond

the FCC's regulatory authority, because "nowhere in the 1996 amendments did [Congress] in-

clude State authority over intrastate access charges as one such exception" to Section 2(b).⁹ But

the Supreme Court has already considered, and rejected, this argument:

The local-competition provisions are not identified in § 152(b)'s "except" clause. Seizing on this omission, respondents argue that the 1996 Act does nothing to displace the presumption that States retain their traditional authority over local phone service. * * The fallacy in this reasoning is that it ignores the fact that § 201(b) *explicitly* gives the FCC jurisdiction to make rules governing matters to which the 1996 Act applies.¹⁰

States have countered by contending this Section 201(b) rulemaking authority does not

apply to reforming intrastate access charges because Section 251(b)(5) supposedly does "not ap-

⁷ AT&T v. Iowa Utilities Board, 525 U.S. 366, 371, 380 n.6 (1999).

⁸ See National Association of Regulatory Utility Commissioners Comments, CC Docket No. 01-92, at 4 (May 23, 2005)("NARUC 2005 Comments").

⁹ *Id.* at 5.

¹⁰ *Iowa Utilities Board*, 525 U.S. at 379-80 (italics in original). The FCC had earlier rejected the same argument. *See Local Competition Order*, 11 FCC Rcd 15499, 15547-48 ¶ 93 (1996).

ply to intrastate interexchange access service."¹¹ The simple response is that the Commission has already considered, and rejected, this very argument, and this order has been affirmed on appeal.¹² As the FCC has explained, in Section 251(b)(5) "Congress used the term 'telecommunications," the broadest of the statute's defined terms" and that as a result, this statute is "not limited only to the transport and termination of certain types of traffic, such as local traffic."¹³ No one can credibly claim that intrastate exchange access falls outside of the scope of the term, telecommunications.¹⁴

The States' past position is not only incompatible with the plain language of the statute, it also cannot be squared with the Congressional purpose in enacting Section 251 and the rest of the 1996 Act: "provide for a pro-competitive, de-regulatory *national policy framework* designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by *opening <u>all</u> telecommunications markets* to competition."¹⁵ Despite this unambiguous Congressional intent to establish a "national policy framework," the States would have the FCC believe that Congress really intended for Section 251(b)(5) to apply to local and interstate access traffic only, but not to intrastate access traffic. But as the Supreme Court has observed, "We think it most unlikely that Congress created such a strange hodgepodge."¹⁶

¹⁶ *Iowa Utilities Board*, 525 U.S. at 382 n.8.

¹¹ NARUC 2005 Comments at 6.

¹² See A.1-A.2, supra. See also 2008 ISP Remand Order, 24 FCC Rcd 6475, 6480 ¶ 8 (2008), aff'd. Core v. FCC, 592 F.3d 139 (D.C. Cir. 2010), cert. denied, 131 S. Ct. 597 (Nov. 15, 2010).

¹³ 2008 ISP Remand Order, 24 FCC Rcd 6480 ¶ 8. See also ICC/USF Reform NPRM at ¶ 513.

¹⁴ *Compare USTA* v. *FCC*, 359 F.3d 554, 592 (D.C. Cir. 2004)("The argument that long distance services are not 'telecommunications services' has no support."), *cert. denied*, 543 U.S. 925 (2004).

¹⁵ Joint Explanatory Statement of the Committee of Conference, Conf. Rep. No. 104-458, 104th Cong., 2d Sess, at 1 and 113 (Jan. 31, 1996)(emphasis added).

Even if there was ambiguity over whether Section 251(b)(5) encompasses intrastate

access services (and there is not), that ambiguity is removed by Section 251(g). This statute, the

FCC has recognized, "temporarily grandfathered the pre-Act rules governing 'exchange access' .

. . until explicitly superseded by regulations prescribed by the Commission."¹⁷ Section 251(g)

provides in relevant part:

On or after February 8, 1996, each local exchange carrier . . . shall provide exchange access . . . in accordance with the same equal access and nondiscriminatory interconnection restrictions and obligations (including receipt of compensation) that apply to such carrier on the date immediately preceding February 8, 1996 under any court order, consent decree, or regulation, order, or policy of the Commission until such restrictions and obligations are explicitly superseded by the regulations prescribed by the Commission after February 8, 1996.

The Commission has held that "[n]otwithstanding section 251(b)(5)'s broad scope, ... traffic

encompassed by section 251(g) is excluded from section 251(b)(5) except to the extent that the

Commission acts to bring that traffic within its scope."18

Section 251(g) on its face applies to all "exchange access" services; Congress did not

limit its scope to "interstate" exchange access only, nor did it exempt "intrastate" access from the

scope of the statute. As the Commission has stated in this regard:

[A]lthough section 251(g) does not directly refer to intrastate access charges mechanisms, it would be incongruous to conclude that Congress was concerned about the effects of potential disruption to the interstate access charge system, but had no such concerns about the effects on analogous intrastate mechanisms.¹⁹

¹⁷ 2008 ISP Remand Order, 24 FCC Rcd at 6480 ¶ 9; see also ICC/USF Reform NPRM at ¶ 514. In this regard, Congress repeatedly stated its expectation that the provisions in Section 251(g) would be "interim" only. See Joint Explanatory Statement of the Committee of Conference, Conf. Rep. No. 104-458, 104th Cong., 2d Sess, at 123 (Jan. 31, 1996).

¹⁸ 2008 ISP Remand Order, 24 FCC Rcd at 6483 ¶ 16. See also 2001 ISP Remand Order, 16 FCC Rcd at 9165-70 ¶¶ 31-41.

¹⁹ Local Competition Order, 11 FCC Red 15499, 15869 ¶ 732 (1996).

This reading of Section 251(g) is further made clear by the reference to a "consent decree," because it was the AT&T consent decree that had the effect of requiring States to establish intrastate access charges. Specifically, that Decree provided that the "BOCs are ordered and directed to file . . . tariffs for the provision of exchange access Such tariffs shall replace the division of revenue process used to allocate revenues to a BOC for exchange access provided for the interexchange telecommunications of BOCs or AT&T."²⁰ As the antitrust court stated with regard to this provision:

> Under the proposed decree, state regulators will set access charges for intrastate interexchange service and the FCC will set access charges for interstate interexchange service.²¹

As both interstate and intrastate access charges were borne of the same "consent decree,"²² both types of access charges are, in the FCC's words, "temporarily grandfathered" under Section 251(g).

Congress has, moreover, also made clear in Section 251(g) that it would be "the Commis-

sion" - and not the FCC for interstate access and State regulators for intrastate access - that

would determine when and how access charges should be eliminated - including intrastate

access charges.²³ In fact, the Commission has already exercised this Section 251(g) access

²⁰ United States v. AT&T, 552 F. Supp. 131, 233 (D.D.C. 1982), aff'd, Maryland v. United States, 460 U.S. 1001 (1983).

²¹ *Id.* at 169 n.161.

²² See ICC/USF Reform NPRM at \P 514 ("The intrastate access charge regime, like its interstate counterpart, was established by the 1982 AT&T consent decree. Given that fact, section 251(g) appears to cover intrastate as well as interstate access obligations.").

Of course, States have always possessed the authority to eliminate their intrastate access charges. But after 15 years, many States still have not modified their intrastate access charges in any meaningful way. Given this inaction and given the clear need to engage in ICC reform now, it is imperative that the FCC act in this area. After all, "Congress in the 1996 Act <u>directed</u> this Commission . . . to eliminate implicit subsidies in access charges." *Unified Intercarrier Compensation NPRM*, 16 FCC Rcd at 9623 ¶ 32 (emphasis added).

charge modification authority when, shortly following enactment of the 1996 Act, it adopted the intraMTA rule for LEC-wireless traffic that prohibited LECs from imposing access charges – including intrastate access charges – on intraMTA wireless traffic:

We reiterate that traffic between an incumbent LEC and a CMRS network that originates and terminates within the same MTA (defined based on the parties' locations at the beginning of the call) is subject to transport and termination rates under section 251(b)(5), rather than interstate or *intrastate* access charges.²⁴

The National Broadband Plan recognized that the FCC has "the authority to establish a new methodology for ICC [intercarrier compensation]."²⁵ The FCC in its *NPRM* likewise concludes it possesses the legal authority to modify or eliminate intrastate access charges.²⁶ As demonstrated above, the plain language of Sections 251(b)(5) and (g) both make apparent that intrastate access charges are encompassed within both statutes. The Commission thus possesses ample statutory authority to phase out all access charges – including intrastate access charges.

B. SECTION 332(C) INDEPENDENTLY GIVES THE FCC AUTHORITY TO PROHIBIT LEC ACCESS CHARGES ON MOBILE PSTN TRAFFIC

The Commission in its NPRM asks whether it possesses "authority under sections 201

and 332 to take measures to reduce wireless termination charges for both intrastate and interstate

traffic."²⁷ Section 332(c) unquestionably authorizes the Commission to prohibit LEC access

charges (both intrastate and interstate) for terminating mobile-to-land PSTN traffic. The Com-

²⁴ Local Competition Order, 11 FCC Rcd at 16016 ¶ 1042 (italics added). See also 47 U.S.C. § 51.701(b)(2).

²⁵ National Broadband Plan at 148 (March 16, 2010).

²⁶ See ICC/USF Reform NPRM at ¶ 509, 513.

²⁷ *ICC/USF Reform NPRM* at ¶ 511. The FCC defines "wireless termination charges" to include "intercarrier compensation charges paid by or to CMRS or wireless providers, including intrastate and interstate access charges." *Id.*

mission has already exercised this authority in prohibiting LECs from imposing intrastate access charges on wireless intraMTA traffic.

Congress, in the Omnibus Budget Reconciliation Act of 1993,²⁸ amended Sections 2(b) and 332(c) of the Communications Act to revise the way in which commercial mobile radio services ("CMRS") are regulated. Congress took this action so the Commission could "establish a Federal regulatory framework to govern the offering of all commercial mobile services."²⁹ One of the findings Congress explicitly made was that "State regulation can be a barrier to the development of competition in this [wireless] market" and that as a result, a "uniform national policy is necessary and in the public interest."³⁰

These 1993 amendments changed in three ways the historic line of demarcation between federal and State authority over mobile wireless services:

 Congress expanded FCC authority over wireless to include not only interstate wireless traffic but also intrastate wireless traffic. Congress accomplished this by adding Section 332 to the opening clause of Section 2(b) of the Act, which had the effect of exempting wireless traffic from Section 2(b)'s general prohibition on the FCC exercising regulatory authority over intrastate traffic.³¹

As a result, the FCC and the States now share regulatory authority over intrastate wireless, while the FCC continues to possess exclusive authority over interstate wireless services. In other words, the historical distinction – the FCC exclusively controls interstate services while State commissions generally control intrastate services³² – no longer applies to wireless services, as Congress expressly gave the FCC plenary authority over all wireless services.

³¹ See 47 U.S.C. § 152(b); H.R. CONF. REP. NO. 103-213 at 497.

²⁸. See PUB. L. NO. 103-66, Title VI, § 6002(b), 107 Stat. 312, 392 (1993).

²⁹ H.R. CONF. REP. NO. 103-213, at 490 (Aug. 4, 1993).

³⁰ S.1134, Title IV, § 402(13)(June 22. 1993), *incorporated by reference in* H.R. CONF. REP. NO. 103-213 at 481.

³² Compare 47 U.S.C. § 152(a) with § 152(b)(1992). State authority over intrastate services was not exclusive, however, as the FCC always retained authority to preempt State law under the conflicts preemption doctrine. See, e.g., Louisiana PSC v. FCC, 476 U.S. 355 (1986).

2. Congress reduced State authority over intrastate wireless services by prohibiting States from regulating CMRS entry or rates:

Notwithstanding sections 152(b) and 221(b) of this title, no State . . . shall have any authority to regulate the entry of or rates charged by any [CMRS] . . . 33

This statute had the effect of giving the FCC exclusive authority over CMRS entry and rates, including entry and rates pertaining to intrastate wireless services. The FCC has further held this prohibition of State rate regulation applies not only to wireless retail services, but also to the charges wireless carriers impose on other carriers:

> With respect to state jurisdiction over the intrastate interconnection rates charged by CMRS providers, the *CMRS Second Report* determined that the Budget Act preempts any state regulation of CMRS interconnection rates.³⁴

3. While States still possess regulatory authority over intrastate wireless "other terms and conditions,"³⁵ exercise of that authority must be consistent with the terms and conditions the FCC establishes for wireless services, as only the FCC was given the Congressional mandate to establish a "Federal regulatory framework" for CMRS. Accordingly, since the 1993 Act, any regulation that the FCC adopts for the wireless industry necessarily applies to all wireless services – including intrastate wireless services.

15 years ago the Commission prohibited LECs from imposing access charges on intraM-

TA mobile traffic,³⁶ and this decision was affirmed on appeal.³⁷ The Commission's authority un-

der Sections 201(b), 332(c) and 251(g) are not limited to intraMTA traffic only. Consequently,

these statutes give the Commission the unquestioned authority to affirmatively prohibit LEC

access charges on interMTA mobile wireless traffic as well (including interMTA intrastate traf-

fic). In fact, there is no Commission rule in effect today that authorizes the imposition of access

charges by LECs on CMRS carriers on interMTA traffic. Given the blatantly discriminatory

³³ 47 U.S.C. § 332(c)(3)(A).

³⁴ *CMRS Interconnection Obligations*, 9 FCC Rcd 5408, 5468-69 ¶ 143 (1994).

³⁵ See 47 U.S.C. § 332(c)(3)(A).

³⁶ See 47 C.F.R. § 51.701(b)(2).

³⁷ Se Iowa Utilities Board v. AT&T, 120 F.3d 753, 800 n.21 (8th Cir. 1997), rev'd and remanded in part on other grounds, AT&T v. Iowa Utilities Board, 525 U.S. 366 (1999).

compensation arrangement that has been followed relative to traffic exchanged by wireless and wireline carriers, the Commission should act promptly to explicitly declare that LECs are prohibited from imposing access charges on all mobile traffic.

Appendix B

THE COMMISSION SHOULD PROHIBIT PER-MINUTE CHARGES ON THE EXCHANGE OF PACKETIZED VOICE TRAFFIC Docket Nos. 01-92 and 09-51

Sprint demonstrates below that bill-and-keep is the only rational, competitively neutral, and practically feasible intercarrier compensation ("ICC") regime that can be applied to the exchange of packetized voice traffic.

A. CPNP-BASED REGIMES ARE NOT APPROPRIATE BECAUSE IT APPEARS THAT IP NETwork Operators Incur No "Additional Costs" in Transporting and Terminating Packetized Voice Traffic

Several parties are taking the position that the Commission should develop a unified rate (*e.g.*, the ISP rate) that would be applied to all traffic, including packetized voice traffic. Sprint submits that use of any positive rate for call termination (including a unified rate) would not be appropriate unless there is evidence that IP network operators incur "additional costs" in call termination. Available evidence suggests that IP network operators incur no additional costs, and if this is the case, federal courts have held that bill-and-keep is the only compensation arrangement that is consistent with the Act.

Packetized voice traffic appears to fall within the scope of the reciprocal compensation statute – at least to the extent the service is provided by a LEC.³⁸ This is because even if such traffic is deemed to be an information service, packetized voice traffic has a telecommunications component and § 251(b)(5) applies to the exchange of "telecommunications."³⁹ The standard

³⁸ Section 251(b)(5) does not apply to non-LECs, including wireless carriers and firms that provide information services exclusively.

³⁹ See 47 U.S.C. § 251(b)(5); *ICC/USF Reform NPRM* at \P 615 (VoIP traffic is subject to § 251(b)(5) "regardless of whether interconnected VoIP service were classified as a telecommunications service or information service.").

Congress developed for implementing § 251(b)(5), at least as applied to incumbent LECs, is the "additional cost" standard.⁴⁰

It is highly unlikely that any IP network operator incurs any "additional costs" in terminating packetized voice traffic originating on other IP networks. The Wireline Bureau determined long ago that with regard to their digital circuit switches, LECs incur no additional costs in call termination because such switches have so much capacity.⁴¹ The routers IP network operators use in their broadband networks typically have far more capacity than do digital circuit switches. Indeed, the FCC noted six years ago that some routers in the market at that time contained so much capacity that they can "transfer the entire collection of the U.S. Library of Congress in 4.6 seconds."⁴² With such routers, the cost of terminating VoIP traffic, if not zero, is miniscule.

Nor is it likely that any IP network operator incurs any additional costs in transporting packetized voice traffic. According to a recent Cisco white paper, global VoIP traffic in 2009

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Unified Intercarrier Compensation Further NPRM, 20 FCC Red 4685, 4718 n.236 (2005).

⁴⁰ See 47 U.S.C. § 252(d)(2))A)(ii). This "additional cost" standard applies to ILECs only because Congress determined that only disputes involving ILECs should be eligible for § 252 PUC arbitrations. For purposes of this paper only, Sprint assumes this same standard may potentially be applied to competitive VoIP providers as well. It certainly is not reasonable to assume that Congress intended to use a more generous (above cost) standard for competitive providers – when the purpose of competition is to reduce prices, not increase them. Rather, given the regime it established, it is more reasonable to believe Congress intended for disputes between two new entrant competitors without market power be resolved like any other ordinary dispute when two parties cannot agree on the terms of a contract. Consequently, if two competitive carriers cannot agree on a positive per-minute charge, then the carriers must use bill-andkeep, which Congress made clear is a legitimate way for LECs to satisfy their reciprocal compensation duty.

See Virginia Arbitration Cost Order, 18 FCC Rcd 17722, 17877 ¶ 391, 17903-04 ¶¶ 463-65, 17911-13 ¶¶ 484-89 (2003); Virginia Arbitration Cost Compliance Order, 19 FCC Rcd 1259, 1269 ¶ 30 (2004). Admittedly, these rulings were made in the context of Verizon only. But there is no basis to believe this ruling would not apply as well to all other LECs that use circuit-switched digital switches.

constituted only 1.4 percent of all consumer IP traffic.⁴³ Cisco further predicts that consumer VoIP traffic globally in 2014 will fall to only 0.3 percent of all consumer IP traffic (because of much higher growth rates for other broadband services, such as Internet video and online gaming).⁴⁴

IP network operators almost certainly have sufficient spare capacity in their current IP networks to handle the one percent of total capacity needed to transport voice traffic in addition to other broadband traffic. Thus, the incremental cost to transport voice, in addition to other IP traffic, if not zero, is exceedingly small.

These facts are significant because if IP network operators incur no additional costs in terminating packetized voice traffic, then the policy debate over the type of ICC system that should be applied to such traffic becomes irrelevant (as Congress has already made the applicable policy judgment). If, as federal appellate courts have held, a terminating network operator incurs no additional costs, then any rate other than zero would "directly contract the plain meaning of" the Act, stating that "if no additional costs are incurred, then there is nothing to pay."⁴⁵

B. POLICY CONSIDERATIONS OVERWHELMINGLY DICTATE USE OF BILL-AND-KEEP

The Commission has observed that "per-minute [ICC] charges . . . make little sense for IP traffic," given the nature of packet technology and current practices for exchanging other IP traffic" (¶ 527). Sprint wholeheartedly agrees, and it submits that policy considerations overwhelmingly favor use of bill-and-keep over any ICC system incorporating per-minute charges:

⁴³ See Visual Networking Index: Forecast and Methodology, 2009-2014, at 10, Table 10 and 12, Table 14 (June 2, 2010)("Cisco 2009-14 Traffic Forecast"), available at

http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_cl1-481360.pdf. In 2009, consumer traffic constituted 89.2% of all Internet traffic, while business traffic used the remaining 10.8% of capacity. *See id.* at 8, Table 7. Cisco's paper does not address the different types of Internet traffic (*e.g.*, VoIP) for businesses.

⁴⁴ See *id.* at 10, Table 10.

⁴⁵ *Ace Telephone* v. *Koppendrayer*, 432 F.3d 876, 881(8th Cir. 2005).

- Any per-minute regime is incompatible with elementary economic principles that it is inefficient to recover costs on a per-minute basis when costs are not incurred on a per-minute basis. The FCC recognized this basic point nearly 40 years ago when it eliminated use of per-minute charges to recover the cost of local loops.⁴⁶
- Any per-minute system rests on a faulty assumption of cost causation namely, only the caller benefits from a call, while the called party receives no benefit whatsoever. In contrast, bill-and-keep is "premised on the assumption that both parties may benefit from any given call," and that as a result, the originating and terminating networks "should share the costs associated with the call by recovering their costs from their own end-user customers."⁴⁷
- Any per-minute approach is "problematic in a competitive marketplace because it allows networks to shift costs" to their competitors.⁴⁸ As a result, any per-minute approach "distorts pricing signals received by customers [and] does not serve the Commission's goal of competitive neutrality."⁴⁹ In contrast, bill-and-keep "encourages the development of competition by rewarding carriers based on their ability to serve customers efficiently rather than their ability to shift costs to other carriers."⁵⁰
- Bill-and-keep best promotes innovation and efficiency, because it puts "all carriers in the position where they must recover their own costs from their own retail customers. Under this regime, success in the marketplace will reflect a carrier's ability to serve customers efficiently, rather than its ability to extract payments from other carriers."⁵¹
- "Per-minute charges are inconsistent with peering and transport arrangements for IP networks, where traffic is not measured in minutes" (NPRM ¶ 40), with non-voice IP traffic rather exchanged "based on charges for the amount of bandwidth consumed per month" (¶ 505). Especially since voice traffic will constitute such a tiny fraction of total traffic transported over IP networks, the FCC, at minimum, should not entertain any per-minute ICC system until it understands the costs IP network operators would incur to install and maintain per-minute billing systems, so the FCC can undertake a cost-benefits analysis.

⁴⁶ Third MTS/WATS Market Structure Order, 93 F.C.C.2d 241, 278 ¶ 121 (1983)(finding that an end-user who does not use a loop to place or receive calls imposes the same non-traffic sensitive costs as a user who does use her line).

⁴⁷ Wireline Competition Bureau Report, *A Bell-and-Keep Approach to Intercarrier Compensation Reform,* at 98 and 101, Appendix C to *Unified ICC Regime Further NPRM*, 20 FCC Rcd 485 (2005)("Wireline Bureau ICC Analysis Report").

⁴⁸ See Wireline Bureau ICC Analysis Report at 101.

⁴⁹ *Id.* at 103.

⁵⁰ *Id.* at 104.

⁵¹ Wireline Bureau ICC Analysis Report at 103.

- Only bill-and-keep would ensure competitive neutrality. Any per-minute charges would be imposed pursuant to § 251(b)(5), but this statute applies to LECs only and does not apply to firms not classified as LECs, including mobile wireless licensees and firms that provide information services only. Thus, the situation may arise where per-minute charges would be used for packetized voice traffic exchanged between two LECs, while bill-and-keep would be used for the same traffic a LEC exchanges with a non-LEC. The FCC also needs to examine the ICC system that would be used for the traffic originated by "over the top" VoIP providers, since they are able to provide a robust set of services without owning or operating an IP network. Finally, with any per-minute system proposal, the FCC would need to consider new arbitrage schemes that might be developed to bypass per-minute charges (*e.g.*, routing traffic using email addresses rather than NANP-based telephone numbers). In the end, only bill-and-keep ensures that all competing providers of packetized voice are being treated equally.
- Bill-and-keep is "more deregulatory" than all per-minute approaches and would require "substantially less regulatory intervention" than per-minute approaches.⁵² "[O]ur experience with CPNP regimes demonstrates the need for substantial regulation of terminating charges because of the terminating access monopoly."⁵³ Under any per-minute regime, "regulators must ensure that terminating rates are cost-based, *and the need for regulation continues indefinitely*."⁵⁴
- Only bill-and-keep would reduce the costs of service that would benefit all consumers. Currently, all service providers incur sizable cost to bill and pay each other and to handle the disputes that invariably arise with any per-minute ICC system. These operational costs do not change significantly even if the per-minute is lowered to, for example, the ISP rate. In contrast, bill-and-keep would eliminate these operational and transaction costs in their entirety, and all consumers would benefit by reducing the cost of service.

In summary, Sprint urges the Commission to determine this year the appropriate ICC sys-

tem that should be applied to the exchange of packetized voice traffic between two IP networks,

and further, to hold that bill-and-keep should be the default arrangement.

C. THE COMMISSION HAS AMPLE LEGAL AUTHORITY TO ORDER USE OF BILL-AND-KEEP FOR THE EXCHANGE OF ALL TELECOMMUNICATIONS TRAFFIC, INCLUDING PACKETIZED VOICE TRAFFIC

⁵² See Wireline Bureau ICC Analysis Report at 106 and 108.

⁵³ *Id.* at 106.

⁵⁴ *Id.* at 106-107 (emphasis added).

The Supreme Court, in its seminal *Iowa Utilities Board* decision, held that Section 201(b) of the Act empowers the Commission to adopt rules implementing Sections 251 and 252, even though some of these provisions apply to intrastate traffic.⁵⁵ The Court further held that the Commission possesses the authority to adopt rules implementing the statutory "pricing standards" in Section 252(d), rules that States must follow in Section 252 arbitration proceedings.⁵⁶ Congress itself made clear that Section 252(d) permits use of a "range of compensation schemes, such as an in-kind exchange of traffic, without cash payment (known as bill-and-keep arrange-ments)."⁵⁷

Congress defined reciprocal compensation in Section 252(d)(2) as an arrangement that provides for "the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier."⁵⁸ Calling-party's-network-pay ("CPNP") regimes are one methodology for complying with this standard – so long as the intercarrier rate is set no higher than the "additional costs of terminating such calls."⁵⁹ Bill-and-keep is a different methodology for the mutual recovery of termination costs. With bill-and-keep, the terminating carrier, instead of recovering its "additional costs" from its competitors, recovers any such costs from its own end users (and where appropriate, universal service).⁶⁰ Congress made clear in its bill-and-keep

⁵⁵ See AT&T v. Iowa Utilities Board, 252 U.S. 366, 377-82 (1999).

⁵⁶ See id. at 384-85 ("We hold, therefore, that the [FCC] has jurisdiction to design a pricing methodology.").

⁵⁷ H.R. CONF. REP. NO. 104-458, at 120 (1996).

⁵⁸ 47 U.S.C. § 252(d)(2)(A)(i).

⁵⁹ *Id.* § 252(d)(2)(A)(i).

⁶⁰ Thus, bill-and-keep is a methodology, not a "rate," just as CPNP is a methodology. The end user recovery approach utilized with bill-and-keep does not amount to a rate prescription simply because the charge to a carrier under this arrangement is zero.

savings clause that bill-and-keep is an arrangement that also "afford[s] the mutual recovery of costs through the offsetting of reciprocal obligations."⁶¹ The Commission itself has recognized that "bill-and-keep arrangements also provide for the 'mutual and reciprocal recovery of costs associated with the transport and termination of traffic' *when traffic is <u>not</u> in balance.*"⁶²

If, as the Supreme Court has held, the Commission is empowered to adopt rules requiring use of a CPNP reciprocal compensation methodology, it necessarily follows that the Commission also possesses the authority to require a different methodology, such as bill-and-keep. In this regard, it is noteworthy that the reason the D.C. Circuit remanded, rather than vacated, the FCC's 2001 *ISP Remand Order* is because of the "non-trivial likelihood that the Commission has the authority to elect such a [bill-and-keep] system."⁶³

Some parties undoubtedly will point to the *Local Competition Order*, where the Commission permitted States to impose bill-and-keep only when the traffic exchanged is "roughly balanced,"⁶⁴ further suggesting that the FCC interpreted the Act as precluding use of bill-and-keep when traffic is not balanced. In fact, there is nothing in the Act that limits use of bill-and-keep only when traffic is balanced.⁶⁵ Rather, the decision the Commission made in 1996 was largely based on policy considerations. Specifically, it believed at the time that (1) carriers "incur costs in terminating traffic that are not de minimis;" and (2) bill-and-keep is "not economically efficient" except when traffic is roughly balanced.⁶⁶

⁶¹ Id. at § 252(d)(2)(B)(i).

⁶² Unified ICC NPRM, 16 FCC Rcd 9610, 9636 ¶ 75 (2001) (emphasis added).

⁶³ WorldCom v. FCC, 288 F.3d 429, 434 (D.C. Cir. 2002).

⁶⁴ See Local Competition Order, 11 FCC Red 15499, 16055 ¶ 1112 (1996).

⁶⁵ In fact, traffic balance is relevant only if (1) carriers have positive costs in call termination and (2) two carriers happen to have the identical termination costs.

⁶⁶ Local Competition Order, 11 FCC Rcd at 16055 ¶ 1112.

Traffic balance is no longer relevant when it is doubtful any network operator incurs any traffic sensitive costs in call termination. *See* Part B, *supra*. Moreover, proponents of traffic balance as the determinative factor to use of bill-and-keep would have the Commission believe that the calling party's network should bear all the additional costs of a call because only the calling party benefits by voice communications (while the called party receives no benefit at all) – an assumption that defies market reality.

Perhaps most importantly, though, the Commission now has 15 years of experience with the CPNP regime it adopted immediately following enactment of the 1996 Act. As discussed above in Part C, this experience confirms that it is CPNP regimes, not bill-and-keep arrangements, that are "not economically efficient," cause market distortions, and inhibit, rather than promote, broadband deployment and use.

Although Section 252(d), like the 1996 Act as a whole, is "in many important respects a model of ambiguity or indeed even self-contradiction," Congress is "well aware that the ambiguities it chooses to produce in a statute will be resolved by the implementing agency."⁶⁷ The position of those parties claiming that bill-and-keep may be used only when traffic is balanced would have the Commission believe that Congress intended to limit FCC authority to using CPNP regimes only – even though experience has shown, again and again, that any CPNP-based system is flawed in so many ways, and even though the Commission becomes convinced that bill-and-keep would be a superior compensation methodology that would better promote the purposes of the Act. Sprint submits that this type of argument is not credible.

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Iowa Utilities Board, 525 U.S. at 397.

Appendix C

INITIAL LIST OF TECHNICAL ISSUES TO DEVELOP BASELINE MINIMUM STANDARDS FOR THE EXCHANGE OF PACKETIZED VOICE

Sprint below provides a list of subjects that it submits the Technological Advisory Council ("TAC") should address in order to develop, for recommendation to the Commission, a set of minimum, default standards for the exchange of packetized voice traffic. The establishment of such standards would benefit interconnecting parties by minimizing the scope of, if not eliminating the need for, interconnection agreements between two IP network operators:

A. IP Transport Layer:

- 1. Should physical connectivity Optical vs Ethernet be specified?
- 2. What security design should be included:
 - (a) Session Border Controllers;
 - (b) IP Security ("IPSec");
 - (c) Access Control Lists;
 - (d) Private addressing; and
 - (e) Message Digest algorithm 5 ("MD5") authenticated routing?
- 3. What IP Addressing approach public vs private should be used?
- 4. Should IPv6 addressing be specified? As a requirement?
- 5. What minimum connectivity requirements for redundancy/diversity (*e.g.*, alternate routing, physically diverse interconnections, *etc.*) should be specified?
- 6. Should Border Gateway Protocol ("BGP") support be a requirement?
- 7. Should an interior gateway routing protocol, such as Intermediate System to Intermediate System ("IS-IS"), be specified for the purpose of faster routing convergence?
- 8. Whether the potential to exchange video and multimedia traffic over the same IP peer point should be considered?

B. IP Signaling Layer:

- 1. Would Session Initiation Protocol ("SIP") be the standard signaling protocol?
- 2. What minimum SIP specifications should be supported (e.g., RFC 3261)?

- 3. What should be the minimum supported SIP headers and methods?
- 4. What alternate routing design for redundancy/diversity of signaling path should be used?
- 5. What Routing Loop Prevention (*e.g.*, mandatory History-Info header or other options) method should be supported?
- 6. What security mechanisms (*e.g.*, IPSec, Transport Layer Security ("TLS"), Communications Assistance for Law Enforcement Act ("CALEA"), Lawful Intercept ("LI")) should be supported?

C. IP Media Layer:

- 1. Should Real-Time Transport Protocol (RTP) / RTP Control Protocol (RTCP) be specified as the standard media protocol for voice?
- 2. What voice codec minimum standard should be specified (*e.g.*, G.711 is the minimum with discussion regarding other possible codecs)?
- 3. How should secure RTP be handled?
- 4. How should Dual-tone Multi-frequency ("DTMF") (e.g., RFC2833) be handled?
- 5. How should Fax transmission handoff (*e.g.*, T.38 or some other mechanism) be handled?
- 6. What Quality of Service ("QoS") packet prioritization approach (Type of Service ("TOS") / Differentiated Services Code Point ("DSCP"), etc.) should be specified?
- 7. What should be the minimum latency standards?
- 8. Should consideration be given for eventual multimedia and video traffic exchange as well?

D. IP Routing Information Management:

- 1. What method should be used (*e.g.*, VoIP Registry, individual company spread-sheets)?
- 2. Who should handle routing information management: each individual company or use third party administration?
- 3. What query methodology (e.g., ENUM vs other options) should be supported?

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Comments of Sprint Nextel Corporation was filed electronically or via US Mail on this 18th day of April, 2011 to the parties listed below.

/s/ Norina T. Moy

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