

THE COMMISSION HAS THE AUTHORITY TO PREEMPT STATE REGULATION OF VOIP

A number of parties have argued that IP-PSTN VOIP communications are jurisdictionally interstate and therefore subject to the FCC's exclusive jurisdiction.¹ Significantly, however, even if the Commission were to find that IP-PSTN communications are jurisdictionally mixed – and thus that some communications or portions thereof fall within the authority reserved to the states by Section 2(b) of the Communications Act² – the Commission has the power to prospectively preempt state regulation that would negate federal policies for VOIP, including the policy of maximizing the availability and utility of interstate VOIP services to consumers.

This filing begins with a detailed analysis of the cases establishing the relevant preemption test: in short, where it is “not possible to separate the interstate and intrastate components” of a particular subject matter, “the Act sanctions federal regulation of the entire subject matter (which may include preemption of inconsistent state regulation) if necessary to fulfill a valid federal regulatory objective.” *Illinois Bell Tel. Co. v. FCC*, 883 F.2d 104, 114-115 (D.C. Cir. 1989), quoting *Louisiana PSC v. FCC*, 476 U.S. 355, 376 n.4 (1986). We then demonstrate that rule's applicability to the present circumstances. IP-PSTN communications are jurisdictionally mixed, and it is neither feasible nor desirable to attempt to track and segregate those calls between interstate and intrastate jurisdictions for regulatory purposes. State efforts to regulate the intrastate components of VOIP relating to rates, entry, and matters affecting the design and operation of VOIP services, including E911 capabilities, would negate critical federal

¹ See, e.g., Comments of Cisco Systems, Inc. at 4-5; Comments of the High Tech Broadband Coalition at 8-10; Comments of Verizon at 12-13.

² 47 U.S.C. § 152(b) (stating that “nothing in this Act shall be construed to . . . give the Commission jurisdiction with respect to . . . charges, classifications, practices, services, facilities or regulations for or in connection with intrastate communication service by wire or radio”).

regulatory objectives with respect to the intermixed interstate and international VOIP traffic. Accordingly, the Commission has authority to preempt state regulation of those areas under well-established law.³

A. The Case Law Supports Commission Authority to Preempt State Regulation of VOIP that Would Negate Federal Policies.

As a general matter, “a federal agency acting within the scope of its congressionally delegated authority may pre-empt state regulation’ and hence render unenforceable state or local laws that are otherwise not inconsistent with federal law.” *City of New York v. FCC*, 486 U.S. 57, 63-64 (1988), quoting *Louisiana Public Service Comm’n v. FCC*, 476 U.S. 355, 369 (1986). “[T]he inquiry becomes whether the federal agency has properly exercised its own delegated authority.” *City of New York*, 486 U.S. at 64. A federal agency must therefore both have *authority* to preempt and affirmatively *exercise* that authority in order to preempt state regulation.

Here, the extent of FCC authority is governed by Sections 1 and 2 of the Communications Act and the cases interpreting those provisions. Section 1 provides the Commission authority to regulate services that include interstate communications.⁴ Section 2(b) preserves state authority to regulate intrastate telecommunications.⁵ Significantly, however, the Supreme Court has found that the Act does *not* “divide the world of domestic telephone service neatly into two hemispheres – one comprised of interstate service, over which the FCC has

³ Even if the Commission concludes that all IP-PSTN communications are jurisdictionally interstate – and therefore subject only to federal regulation – any ruling on the jurisdiction issue should also rely on the Commission’s preemptive authority. Such a “belt-and-suspenders” approach can only increase the chances that the Commission’s order will survive appellate review.

⁴ See 47 U.S.C. § 151.

⁵ See 47 U.S.C. § 152(b).

plenary authority, and the other made up of intrastate service, over which the States would retain exclusive jurisdiction.”⁶ To the contrary, the case law demonstrates that the Commission has authority – notwithstanding Section 2(b) – to preempt state regulation of *intrastate* matters in some circumstances.

Although no single case comprehensively describes those circumstances, a number of decisions bear close analysis. *Computer Communications Industry Ass’n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982) (“*CCIA*”), involved the FCC’s decision to detariff and unbundle customer premises equipment (CPE) from basic telephone service and to preempt state regulation of CPE. The FCC had found that “unless there were two separate phone systems with one being used wholly intrastate, unbundled cost-based pricing for a piece of equipment at the federal level necessarily precludes any other result by the states.” *Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry)*, 77 FCC.2d 384, 455 (1981). The D.C. Circuit agreed, finding that “when state regulation of intrastate equipment or facilities would interfere with achievement of a federal regulatory goal, the Commission’s jurisdiction is paramount and conflicting state regulations must necessarily yield to the federal regulatory scheme.” 693 F.2d at 214. The court concluded that state regulation of CPE was incompatible with the federal objective of developing a free, competitive market in customer telephone equipment. *CCIA*, 693 F.2d at 214.

North Carolina Utilities Commission v. FCC, 552 F.2d 1036 (4th Cir. 1977) (“*NCUC*”), was a similar case involving regulation of non-carrier-supplied telephone terminal equipment. The Commission had rules in place allowing the use of such equipment so long as specific requirements were satisfied. Several states planned to forbid interconnection of non-carrier-

⁶ *Louisiana Pub. Serv. Comm’n v. FCC*, 476 U.S. 355, 360 (1986).

supplied terminal equipment altogether, but the FCC ruled that its policy precluded the states from doing so. In the Court of Appeals, the states argued that because terminal equipment was used “predominantly” for local communications, they plainly had jurisdiction under Section 2(b). *Id.* at 1046. The court found that notwithstanding section 2(b), the FCC has “full statutory authority” to regulate terminal equipment used for both local and interstate calls: “FCC regulations must preempt any contrary state regulations where the efficiency . . . of the national communications network is at stake.” *Id.*

Although subsequent cases impose some limitations, in particular limiting preemption when state regulation affected only bookkeeping or accounting requirements, courts have generally upheld preemption when state regulation affected network operations, delivery or marketing of jurisdictionally mixed services. *Louisiana PSC v. FCC*, 476 U.S. 355 (1986), for example, demonstrates the limits placed on the FCC’s authority to revise state accounting requirements. In that case, the Supreme Court addressed a Commission ruling requiring states to apply federal depreciation rates for telephone and plant equipment in setting rates for intrastate telephone service. The Court first rejected the Commission’s argument that Section 2(b)’s reference to “charges” does not include depreciation charges – to the contrary, the Court ruled, Section 2(b) “constitutes . . . a congressional *denial* of power to the FCC to require state commissions to follow FCC depreciation practices.” *Id.* at 374. The Court also rejected the Commission’s argument that “it makes no sense within the context of the Act to depreciate one piece of property two ways.” *Id.* at 374. In fact, the Court ruled, the Act establishes the “jurisdictional separations” process specifically to determine “what portion of an asset is employed to produce or deliver interstate as opposed to intrastate service.” *Id.* at 375. The Court concluded that the existence of the separations process “readily distinguish[ed]” *Louisiana PSC*

from cases like *NCUC* in which “it was *not* possible to separate the interstate and the intrastate components of the asserted FCC regulation.” 476 U.S. at 376 n. 4. The *Louisiana PSC* decision thus indicates that when jurisdictional separation is feasible the courts may reject preemption of state regulation.

In *National Association of Regulatory Commissioners v. FCC*, 880 F.2d 422 (D.C. Cir. 1989) (“*NARUC*”), the court addressed a Commission order that required federal and state detariffing of “inside wiring” used for both interstate and intrastate telephone communication. Although the court rejected “the FCC’s broad position that whenever facilities are physically inseparable, the Commission may preempt state regulation of those facilities,” 880 F.2d at 428, the court held that the Commission may preempt state regulation “when the exercise of that [state] authority *negates the exercise by the FCC of its own lawful authority* over interstate communication.” *Id.* at 429 (emphasis added). The court concluded that the Commission had failed to carry its burden to show that *any* state regulation would “interfere with the benefits of a free market and free choice in the installation and maintenance of inside wiring.” *Id.* at 430-31. The *NARUC* court noted, however, that it would be appropriate for the FCC both to require states to “unbundle inside wiring from basic telephone services,” and to forbid “state tariffs that would result in the subsidization of the installation and maintenance of inside wiring by the general ratepayers” in a manner that would “allow telephone companies to undercut alternative providers of inside wiring services.” *Id.* The Court found that other state tariff provisions could also be preempted if they would “frustrate a free market.” *Id.* *NARUC* thus reaffirms that where state regulation of the intrastate portion of jurisdictionally mixed services would frustrate federal policies that foster free and competitive markets, the FCC can preempt those state regulations.

A number of cases since *NARUC* apply this principle. *Illinois Bell Telephone Co. v. FCC*, 883 F.2d 104 (D.C. Cir. 1989), addressed a Commission order preempting the states from imposing structural separation requirements or other regulation inconsistent with the Commission’s non-structural safeguards on BOC marketing of CPE. The BOCs argued that the Commission lacked authority to regulate BOC marketing of purportedly *intrastate* services such as Centrex. But the court found that Centrex was not purely intrastate – rather, “Centrex and other local exchange services, much like customer telephone equipment . . . support interstate as well as intrastate communications.” *Id.* at 114. Accordingly, the question was whether “federal regulation of the entire subject matter” was necessary to fulfill a valid regulatory objective.” *Id.* at 115. The court distinguished *NARUC* on the ground that the Commission there “had not convincingly explained how state inside wiring tariffs would necessarily ‘thwart [the FCC’s legitimate objective] of a free and competitive inside wiring market.’” *Id.* The court found that the Commission had, in contrast, “adequately explained” its “stated objective of promoting competition in the CPE market,” how its “package of nonstructural safeguards” would “fulfill this objective,” and why those safeguards could not be separated into discrete interstate and intrastate components. *Id.* *Illinois Bell* is thus an example of circumstances in which the Commission did carry its burden to explain why preemption of a specific category of state regulation was necessary to fulfill federal objectives.

In *Public Service Comm’n of Maryland v. FCC*, 909 F.2d 1510 (D.C. Cir. 1990) (“*Maryland PSC*”), the court addressed preemption of state regulation of the rates charged for a service called “DNP” (“Disconnect for Non-Payment”) offered by LECs to interexchange carriers. DNP involved the disconnection by the LEC of a subscriber’s phone service, both interstate and intrastate, for non-payment of his bill. The case arose from the state of Maryland’s

effort to require the Chesapeake and Potomac Telephone Company (“C&P”) – over C&P’s objections – to impose a \$4.2 million surcharge on AT&T for DNP. The FCC issued an order finding that the surcharge was inconsistent with federal efforts to open the interstate market to competition and to end the cross-subsidy from interstate ratepayers to local ratepayers. *Id.* at 1516. On appeal, Maryland argued that *Louisiana PSC* prevented the FCC from preempting state regulation of the rates charged for DNP because it is essentially an intrastate matter falling into Section 2(b) – “in effect selling control of the local service to the interexchange carrier for use as leverage.” 909 F.2d at 1515. The D.C. Circuit disagreed, holding that “services provided locally by the LECs which support access to the interstate communications network have interstate as well as intrastate aspects.” *Id.* The court cautioned, however, that under *Louisiana PSC* “the FCC may not preempt solely because state regulation of a matter of primarily local interest . . . conflicts with [the FCC’s] ideas of sound federal economic or regulatory policy.” 909 F.2d at 1516. In this case, however, the court found that the FCC *was* entitled to preempt state regulation because “the interstate aspects of DNP” could not be “unbundled” from the intrastate aspects – to the extent that separate regulation of the interstate and intrastate components of DNP was “not practical,” the federal interest in eliminating cross subsidies must prevail over the state’s surcharge mandate. *Id.*⁷

⁷ A decade later, FCC preemption of states’ laws governing “disconnect for non-payment” was again before the courts. In *Texas Office of Public Utility Counsel v. FCC*, 183 F.3d 393 (5th Cir. 1999) (“*TOPUC*”), the states challenged the FCC’s adoption of a regulation prohibiting carriers receiving universal services support from disconnecting low-income consumers who had failed to pay toll charges. The states argued that the federal “no disconnect” rule was inconsistent with state authority under Section 2(b). The court agreed, finding that “the FCC has failed to show why allowing the states to control disconnections from local service would ‘negate the exercise of the FCC’s lawful authority.’” *Id.* at 422. “In contrast to what occurred in *Maryland PSC*,” the court wrote, “the FCC has offered no similar explanation of how protecting interstate service *requires* imposition of a “non disconnect” rule. Taken together, *Maryland PSC* and *TOPUC*

Three Ninth Circuit cases further illustrate that the FCC’s preemption authority, while not unlimited, has a broad reach. In *California v. FCC*, 905 F.2d 1217 (9th Cir. 1989) (“*California I*”), the court addressed the Commission’s effort to preempt *all* state regulation of enhanced services, including services that might be wholly intrastate. As in *Louisiana PSC*, the Commission’s first line of defense was that the subject of regulation – here, enhanced services – did not fall within the scope of Section 2(b). And as in *Louisiana PSC*, the reviewing court rejected that contention – “[a]s long as enhanced services are provided by communications carriers over the intrastate telephone network, the broad ‘in connection with’ language of § 2(b)(1) places them squarely within the regulatory domain of the states.” 905 F.2d at 1240. The court went on to reverse and remand the Commission’s order on the ground that the Commission had failed to carry its burden “to persuade us” that *any* state regulation of enhanced services would “necessarily thwart or impede” valid FCC goals. 905 F.2d at 1243.

On remand, the Commission modified its ruling to preempt state requirements of structural separation for facilities and personnel used to provide the intrastate portion of jurisdictionally mixed enhanced services, but not wholly intrastate services. The FCC explained its view that it would be economically infeasible for the BOCs to offer the interstate portion of jurisdictionally mixed services on an integrated basis while maintaining separate facilities and personnel for the intrastate portion. *California v. FCC*, 39 F.3d 919, 932 (9th Cir. 1994) (“*California II*”). This time, the court held that the FCC had “presented adequate record support for [that] conclusion,” and that “the situation presented here is similar to that presented in [*NARUC* and *NCUC*], which were the cases that the *Louisiana* Court suggested would warrant application of an impossibility exception.” 39 F.3d at 932. The court further found that while it

highlight the need for the Commission, when preempting state regulation in a particular area, to explain how allowing the states to regulate that area would negate federal policy.

would not literally be impossible for BOCs to comply with state structural separations requirements, having to do so would “defeat[] the FCC’s more permissive policy of integration.” *Id.* at 933. Accordingly, the court concluded that “the impossibility exception, as applied in the *NCUC* cases, authorizes the FCC’s preemption of state structural separation requirements here.” *Id.*

The third Ninth Circuit case, *California v. FCC*, 75 F.3d 1350 (1996) (“*California III*”), involved a challenge by the California Public Utilities Commission (“CPUC”) to the Commission’s rule requiring that subscribers who failed to choose a method to prevent disclosure of their nonpublished telephone numbers must be served using a “per call” blocking system. California had a rule in place that certain subscribers failing to choose between “per call” and “per line” blocking should be served with a system blocking disclosure of *all* calls on a given line. The CPUC argued that the Commission’s effort to preempt that state regulation was invalid because the FCC had purportedly failed to demonstrate that the CPUC’s rule “negate[d]” a valid FCC goal. *Id.* at 1358. The court disagreed, quoting at length from the Commission’s explanation that “per line” blocking tends to adversely affect the penetration of Calling Party Number-based (“CPN”) services, and that its “per call” default rule was designed to ensure that as many interstate callers as possible would have access to such services. *Id.* at 1360. *California III* thus indicates that the Commission may properly preempt state regulation tending to limit the utility or penetration of interstate communications services. As further set forth below, this ruling is particularly relevant here because state rules seeking to locate geographically inherently nomadic VOIP services would plainly limit both the utility and penetration of VOIP services.

Finally, the Eighth Circuit’s recent decision in *Qwest v. Scott*, 380 F.3d 367 (8th Cir. 2004) is, of course, relevant to the Commission’s preemptive authority. There the court

considered whether the FCC’s “10 percent order” – issued through the jurisdictional separations process – preempted *all* state regulatory authority over special access lines based on the 10 percent traffic threshold. WorldCom argued that the 10 percent rule was only a cost allocation measure, and did not preempt state regulation of performance measurements and standards. *Id.* at 371. The court agreed, finding that past court and FCC precedents suggested that “jurisdictional separations procedures are generally designed to allocate costs and regulatory authority over ratemaking, rather than plenary regulatory authority over a telecommunications service.” *Id.* at 373. Moreover, the “10% Order itself [was] plainly concerned with cost allocation,” rather than all state regulation – both the order itself and the regulations codifying it referred “only to costs.” *Id.* The court concluded that “we do not discern an intent of the Commission as yet to preclude all state regulation of these mixed use [special access] services.” *Id.* at 374.

As noted above, no single case sets forth a simplistic rule for determining whether a particular effort by the Commission to preempt state regulation will be upheld. However, the Commission has broad authority to preempt state regulations that thwart and impede legitimate federal interests when:

- *The Commission evinces an affirmative intent to preempt.* Under *City of New York*, Commission authority to preempt is only half the battle. As the *Qwest* case illustrates, the Commission must affirmatively exercise that authority to effectuate a valid preemption.
- *It is impractical or infeasible to separate intrastate from interstate/international service.* Although *Louisiana PSC* and *NARUC* reject the “broad position” that preemption is appropriate whenever facilities are physically inseparable, the Commission may preempt state regulation of those facilities when joint federal-state regulation is impossible or impractical.
- *The Commission confronts Section 2(b) directly and explains why continued state regulation harms federal interests.* *Louisiana PSC* and *California I* both involved efforts by the Commission to “define away” preemption problems by claiming

that the matters at issue did not fall into Section 2(b) at all. Neither effort was successful. However, when the FCC could clearly articulate the federal interest that needed protecting and how state regulation impeded that interest, the FCC was affirmed.

- *State regulation would limit the utility or penetration of interstate services, or interfere with the federal interest in a free and competitive market. California III* demonstrates that when state regulation threatens broad adoption, use, and usefulness of an interstate service, the FCC can preempt state regulations that interfere with such broad adoption, use and utility.

As further set forth below, in the present circumstances, applying these principles leads inescapably to the conclusion that the Commission has authority to preempt, and should preempt, state attempts to impose telecommunications regulation on VOIP.

B. State Regulation of Rates, Entry, and Matters Relating to the Design and Operation of VOIP Services Would Negate Federal Regulatory Policy for VOIP.

Consistent with Congress' requirements,⁸ the Commission has recognized a strong federal interest in ensuring that regulation does not retard the growth of the Internet (including VOIP and other IP-enabled services) or the related growth of competition, and has "established [a] policy of minimal regulation" of the Internet and the services provided over it.⁹ Because it is not practically or economically possible to segregate the intrastate components of VOIP services and regulate them separately, many kinds of state regulation cannot be imposed without contravening this basic federal goal of a "vibrant and competitive free market" for VOIP services. In particular, requiring providers of IP-enabled communications services to qualify as telecommunications carriers under state law, or to endure far-reaching state regulation designed for traditional telecommunications service providers, would inevitably impede investment,

⁸ *See, e.g.*, 47 U.S.C. § 230(b)(1) & (2) (declaring that it is the policy of the United States "to promote the continued development of the Internet and other interactive computer services and to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation . . .")

⁹ *IP-Enabled Services NPRM* at ¶ 2.

product development, and the emergence of a competitive market. Moreover, because IP networks have the inherent capability using the SIP protocol to deliver a call to any IP end-point to which a SIP device is attached, the applicability of state regulations based on the geographic location of IP end points can be essentially random, depending on where the IP-enabled services user attaches its SIP device. Complying with state regulations in the face of this technological reality would be unduly burdensome, essentially forcing any IP service provider offering services anywhere in the country to be certified by and monitor the regulations of every state and territory. Similarly, state-imposed regulation that would force VOIP providers to alter their networks solely for regulatory purposes, rather than to improve the service or efficiency of the networks, would be directly contrary to federal objectives.

1. IP-PSTN Communications Cannot and Should Not Be Segregated Into Interstate and Intrastate Components.

As set forth above, an important factor in analyzing the Commission’s authority to preempt state regulation in a particular realm is the extent to which the subject matter of the regulation is susceptible to division into separate intrastate and interstate components. To the extent that such separation is impossible or impracticable, “federal regulation of the entire subject matter” may be necessary to fulfill a valid federal regulatory objective. *Illinois Bell*, 883 F.2d at 115.

Both in this docket and in the *IP-Enabled Services* proceeding, many parties have demonstrated the difficulties of attempting to identify discretely intrastate IP-PSTN communications – we accordingly offer only a brief overview here. First, as Verizon has explained, “[b]y their very nature, IP-enabled services ignore state boundaries, and the efficient routing of IP traffic depends on the free flow of packets irrespective of the kind of point-to-point routing characteristics of circuit-switched networks. The web servers and soft-switches that

allow for the provision of IP-enabled services will, in many cases, be located outside the particular state in which a user of those services is located.”¹⁰ Moreover, IP technology allows a single call to be directed simultaneously to multiple devices at multiple geographic endpoints – some of which may be intrastate and some of which may be interstate. The Commission itself acknowledged this aspect of IP technology in the *IP-Enabled Services NPRM*, noting that “[p]ackets routed across a global network with multiple access points defy jurisdictional boundaries.”¹¹

In the *Pulver Order*, the Commission took the logical next step, finding Pulver’s Free World Dialup (“FWD”) – an IP-IP VOIP application – to be an interstate information service subject to the Commission’s exclusive jurisdiction.¹² The Commission explained that because FWD “members’ physical locations can continually change,” the “capabilities FWD provides its members are not purely intrastate capabilities.”¹³ Moreover, “it would be impractical to determine whether there was any [purely] intrastate component to FWD”¹⁴ – even if possible, forcing Pulver to track the bit streams associated with FWD solely for jurisdictional purposes “would make little sense and would almost certainly be significant and negative for the development of new and innovative IP services and applications.”¹⁵

¹⁰ Verizon IP-Enabled Services Comments at 33.

¹¹ *IP-Enabled Services NPRM* at ¶ 4.

¹² Although the issue is outside the scope of this filing, extending that “information service” holding to IP-PSTN communications would bar state (as well as federal) regulation of such communications to the extent that they are not purely intrastate. *Cf. California II*, 905 F.2d at 932.

¹³ *In re Petition for a Declaratory Ruling that pulver.com’s Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, Memorandum and Order, 19 FCC Rcd 3307 ¶ 20 (2004) (“*Pulver Order*”).

¹⁴ *Id.*

¹⁵ *Id.* at ¶ 24.

The same points hold true in the IP-PSTN VOIP context. As with all forms of telecommunications and information services – and as was the case in the *Pulver Order* – an IP-enabled services end user will at times contact other parties within the same state, and at times contact other parties in other states or countries. Unlike most PSTN traffic, however, IP technology creates the capability for that contact to be made by an IP end user employing an IP-enabled service from any IP connection in any geographic location. Indeed, an IP-enabled service customer’s telephone number (if he or she has one at all) at most only identifies the carrier and LATA to which circuit-switched traffic bound to (not from) that IP-enabled service customer must be routed before the number is translated into an IP address. Accordingly, IP-enabled services intermingle “interstate” and “intrastate” traffic, providing no ready means to discretely identify each set.

More specifically, using traditional circuit switches on the PSTN, a telephone number is associated with a specific line port or ports on a switch. Calls routed to that telephone number are routed only to that line port, and thus only to the loop connected to that line port. This is true even for 8XX numbers, which are translated by the toll-free database to a geographically-specific telephone number. The exceptions prove the rule: a traditional foreign exchange line may be assigned a “local” number even though it is connected to a private line that carries the traffic to its out-of-area destination, which identifies the geographic location of the remote endpoint of the FX line.

The geographical association between specific telephone numbers and specific line ports/loops has been incorporated and engineered into the information technology infrastructure supporting the operation of the PSTN. SS7 passes calling and called party telephone numbers among carriers, and switches capture and record that information. Using the assumption,

generally valid on the PSTN, that these numbers are connected to line ports in loops in the geographic areas with which those numbers are associated, carriers apply intrastate charges to calls between two numbers associated with geographic end points within the same state, and apply interstate charges to calls between two numbers associated with geographic end points in different states or countries. Because the networks are engineered to distinguish intrastate calls from interstate calls, carriers can determine which calls are specifically intrastate in nature, and design service offerings that address only those calls, which states can then regulate as intrastate service. By the same token, carriers can determine which calls are specifically interstate and international in nature, and design service offerings that address only those calls, which the FCC can then regulate as an interstate/international service.

IP networks bear none of these geographic markers engineered into the PSTN, lack the same capability to distinguish the geographic location of the IP end of the call, and do not integrate such information into the network information technology infrastructure in a way that allows an IP-enabled service provider to separately identify and offer its intrastate services from its interstate services. On the IP end of a call, IP-enabled services are routed to or from IP addresses, not traditional ten-digit telephone numbers. These IP addresses are not assigned in a geographically-specific manner, and are not assigned in any manner that corresponds with state boundaries. An IP device (for example a SIP phone or a lap top computer) can be plugged into an IP network in San Francisco or into an IP network in New York without changing its IP address. By contrast, a circuit switched telephone in San Francisco cannot be plugged into a circuit switched line in New York and receive its San Francisco calls without being re-addressed in San Francisco with the New York telephone number: on a circuit switched network, the

number is associated with a specific physical connection (i.e., for wireline technologies, a specific line), and not with the devices used over the network.

Indeed, a consumer of IP-enabled services need not have a ten-digit telephone number at all to complete calls to the PSTN. Skype Out is just one example of an IP-enabled service that allows an IP-based end user to reach a circuit-switched telephone. But because that call moves from the IP network to the PSTN, there is no need for the originating IP-enabled service user to have its own ten-digit PSTN telephone number. And hence there is no geographic marker of any kind transmitted as part of the call signaling.

Accordingly, because the IP end users are generally free to change their locations without changing their phone numbers, such communications cannot be considered purely intrastate. Forcing VOIP providers to track bit streams for jurisdictional purposes “would improve neither service nor efficiency” and thus would be directly contrary to the public interest.¹⁶ Indeed, with VOIP services, the negative effects of attempting to super-impose physical geography on IP networks are particularly apparent. For example, many customers find the ability to choose an area code – regardless of the customers’ geographic location – an attractive feature of VOIP, allowing them to establish a virtual “presence” in desirable areas without having to bear the expense of a physical location. At the same time, these calls do not consume more circuit-switched PSTN resources than a local call. Artificially imposing real-world geography on IP networks would destroy this and other benefits of IP technology.

Of course, services may exist as to which the geographical location of the IP endpoint does not “continually change.” For example, providers may choose to offer VOIP services marketed as “fixed” services – *i.e.*, the IP end of the communication is restricted to a particular

¹⁶ *Id.*

location. But it makes no sense to require providers of such services to segregate intrastate and interstate calls and to submit to state regulation of the former. First, while these services may be marketed as non-nomadic, that may not be strictly true when the service as a whole is considered. For example, if a managed network provides its customer with a SIP interface (even if the managed portion of the network uses a different protocol), that customer could use its SIP device anywhere in the world where it gains Internet access. IP technology inherently allows for this flexibility. Indeed, part of the federal interest in VOIP is the extent to which innovative applications and service arrangements will develop that will allow consumers to send and receive communications from many points – including interstate and international points – some of which may be fixed end points on managed networks, and some of which may be “nomadic” end-points over a variety of IP networks.

Second, even if an IP-enabled service provider were to allow its customers to make and receive IP communications only from a single fixed end point, that still does not mean that it is commercially practicable to build into an IP-based service the full information technology infrastructure necessary to transmit and capture geographical identification information. IP networks still would break the engineering link between geographic location and assigned ten digit telephone numbers, rendering the ten digit geographic numbering system unreliable for distinguishing interstate from intrastate traffic. Moreover, the technology for recording call data for every single call is expensive, and it is not apparent that there is any long-term commercial need for such capabilities. VOIP service providers, whether “over-the-top” services such as Vonage and AT&T CallVantage or cable-based services, are moving to geographically undifferentiated plans with rate structures that are not based on geography. In such a commercial environment, it would be senseless to require the installation of an expensive information

technology infrastructure to distinguish intrastate from interstate and international calls based on telephone numbers that may not even correlate with geography. Indeed, where it did not stop deployment of services altogether, the costs of building such an information technology infrastructure would translate into increased charges for consumers, reducing the benefits and usefulness of the service to consumers. Accordingly, as further set forth below, the federal interests in ensuring a vibrant, innovative, competitive market for these services and in maximizing the availability, use and utility of the interstate and international components of these services justifies preemption of state regulation even with respect to a wholly fixed, non-nomadic, fully managed VOIP service.

2. Because IP-PSTN Communications Cannot Be Practically Segregated into Intrastate and Interstate Components, Much State Regulation Must be Preempted to Preserve Federal Objectives.

As set forth in Part A, *supra*, the courts have endorsed federal preemption of the states' exercise of their authority under Section 2(b) when "necessary to fulfill a valid federal regulatory objective." *Illinois Bell*, 883 F.2d at 114-15. The courts have specifically recognized that federal efforts to ensure broad penetration of interstate services and to foster a free and competitive market in such services represent "valid federal regulatory objectives." *See, e.g., CCIA*, 693 F.2d at 214-15 (upholding Commission decision forbidding state tariffing of CPE because state tariffs would "influence the consumer's choice of CPE" and such influence would be inconsistent with the Commission's goal of a free and competitive market for CPE); *California III*, 75 F.3d at 1360 (upholding preemption of state regulation of CPN services on the ground that such regulation would tend to limit the widespread adoption of services with maximum utility to consumers). In addition, the courts have acknowledged that preemption may be "necessary" to preserve federal objectives not only when separate federal and state regulation

is literally impossible, but also when dual regulation is impracticable because it would “negate” or “defeat[] the FCC’s” policies. *California II*, 39 F.3d at 933; *see also Maryland PSC*, 909 F.2d at 1516. As further set forth below, in the VOIP context, the case law thus supports federal preemption of – at a minimum – state tariffing requirements, entry, exit and transfer of control regulation, E911 requirements, and access charges.

In areas related to VOIP, the Commission has repeatedly recognized that state tariffs and rate regulation may be inconsistent with federal policies designed to foster penetration of new interstate services and the development of a competitive market for such services. “Several decades ago, the Commission recognized in its *Computer Inquiry* proceeding that enhanced services would continue to develop best in an unregulated environment.”¹⁷ The *Computer Inquiries* decisions therefore sought to preempt the states from applying “common carrier tariff regulation” and “public-utility type regulation” to information services,¹⁸ because such requirements would “deprive consumers of increased opportunities to have services tailored to their individual needs.”¹⁹ Similarly, in the *GTE DSL Tariffing Order*, the Commission found that pursuant to the “mixed-use” rule, GTE’s DSL product should be subject exclusively to federal tariffing where more than a *de minimis* amount of jurisdictionally inseparable interstate traffic is carried.²⁰ More recently, the *Pulver Order* found that “economic or entry/exit regulation” would “not only run counter to our decades old goals and objectives to enable

¹⁷ *Pulver Order* ¶ 17.

¹⁸ *See, e.g., Amendment of Section 64.702 of the Commission’s Rules and Regulations, Further Reconsideration Order*, 88 F.C.C.2d 512, *id.* at ¶ 83 n.34 (1980).

¹⁹ *See id.* at ¶ 108. As discussed in Part A, *supra*, *California I* rejected the FCC’s effort to preempt *all* state regulation of enhanced services, but *California II* upheld preemption with respect to jurisdictionally mixed enhanced services.

²⁰ *In re GTE Telephone Operating Cos.*, Memorandum Opinion and Order, 13 FCC Rcd 22466, 22480 (1998)

information services to function in a freely competitive, unregulated environment, but would directly contravene Congress’s express directives in sections 706 and 230 of the Act that services such as FWD not be subject to such regulation.”²¹ Clearly, the Commission would be on solid ground in extending both the “decades old” federal “goals and objectives” and the congressional directives discussed in the *Pulver Order* to IP-PSTN VOIP communications.

State obligations to file intrastate tariffs or to provide advance notice of changes in rates, terms, and conditions of VOIP service would negate or defeat these federal policies. As set forth above, it is currently infeasible to track packets to determine the geographic origin of each and every call: unlike the information technology infrastructure supporting the operation of the PSTN, including SS7, IP network infrastructure is not designed to distinguish intrastate calls from interstate calls. Nor do IP networks allow service providers to identify and offer intrastate services separately from interstate services. State regulatory mandates requiring that engineering changes be made to allow such distinctions would plainly be “significant and negative for the development of new and innovative IP services and applications” and would undercut federal efforts to ensure a “dynamic market . . . for Internet applications.”²²

Significantly, however, even if it were possible for IP-enabled service providers to comply with state tariffing, rate regulation and billing/customer relationship requirements, such requirements would still negate federal policies. In particular, even if a geographic location could be determined for the IP end of every call to and from an IP-enabled service user, state tariffing, rate and billing/customer relationship regulation of any service capable of being provided from multiple Internet end points in multiple states (regardless of whether one end

²¹ *Pulver Order* ¶ 19 n.69. Although the Commission made this finding in the course of holding Pulver’s service to be an “information service,” the underlying federal policy would be relevant to a preemption analysis as well.

²² *Pulver Order* ¶ 24.

point may be fixed) would create a monstrous regulatory burden. An IP-enabled service provider taking advantage of the consumer-based control and flexibility that IP technology provides could be compelled by 51 states to file tariffs, and be subject to varying rate review, notice and other rate and billing/customer relationship regulation requirements in 51 different jurisdictions, on the off-chance that one of its consumers might choose to make a call from one place in that state to another place in that state.²³ Certification requirements and tariffing are time consuming and expensive, and limit providers' flexibility to tailor their service offerings – including both interstate/international and intrastate components – in the manner best able to enhance availability, use and usefulness of the service. Furthermore, for wholesale VoIP providers, as CLEC and non-dominant IXC experience has shown, the tariffing requirements are pointless because service is never provided to consumers under tariff, but only to other providers under contracts. With respect to rate and billing/customer relationship regulations, when the IP end user has the capability to make or receive calls from geographic locations in multiple states using anywhere to anywhere calling plans, applying regulation based on the end points of each call means that within a single month a single customer's account could be subject to the laws and regulation of every state – with the likely result that those regulations will materially conflict.

²³ Sprint argues that most users would limit their calls to their “homes or offices,” and “the fact that the origination of an unknown, but likely small, number of calls” not made from those locations “may be difficult to determine does not justify characterizing all calls as inherently interstate.” Letter from Richard Juhnke to Marlene Dortch (October 22, 2004), at 1. That argument is both wrong and irrelevant here. It is wrong because it is not merely a “small number of calls” for which origination would be uncertain – it is *all* calls. For while some customers might *choose* to confine calls to their “homes or offices,” the very nature of IP services is that they may also be used nomadically, and service providers would not – given current technologies – know which of those two things a particular customer was actually doing at a particular time. Moreover, state-mandated network changes ensuring that a service provider *would* know would, as discussed directly above, negate federal policies. *See supra* at ___.

In short, these unnecessary regulatory costs would discourage the entry of IP providers, the innovative use of the flexible, geographically non-specific, and even nomadic capabilities of IP-based service, and the availability, use and usefulness of interstate IP enabled services to consumers. These developments would, in turn, plainly thwart federal policies designed to foster penetration of new interstate services and the continued growth of a competitive market for such services. *See, e.g., CCIA*, 693 F.2d at 214 (state regulation of CPE incompatible with the federal objective of developing a free, competitive market in customer telephone equipment); *California III*, 75 F.3d at 1360 (state regulation of CPN services would tend to limit the widespread adoption of services with maximum utility to consumers). VOIP providers should therefore be subject only to the federal regime, which promotes a free and competitive market for information services and interexchange telecommunications services by eschewing all tariffs.²⁴

For similar reasons, state entry, exit, and transfer of control requirements should also be preempted; just as with state tariffing, rate regulation and billing/customer relationship regulation, even if a geographic location could be determined for the IP end of every call to and from an IP-enabled service user, state entry regulation of any service capable of being provided from multiple Internet end points in multiple states (regardless of whether one end point may be fixed) would create a monstrous regulatory burden. State certification processes vary greatly, but many states still require service providers not only to register, but to file tariff and financial information, comply with bonding requirements, and satisfy other entry requirements that were originally designed for monopoly providers. Oftentimes, the approval process requires a lengthy evidentiary hearing before the relevant state commission. In contrast, the FCC has pursued policies of free entry and exit with respect to information services, and free entry with only

²⁴ 47 C.F.R. § 61.19(a).

limited exit restrictions for telecommunications services.²⁵ Unfortunately, as for tariffing requirements, an IP-enabled service provider taking advantage of the consumer-based control and flexibility that IP technology provides could be compelled by the states to comply with entry and exit requirements in all 51 jurisdictions on the off-chance that one of its consumers might choose to make a call from one place in a particular state to another place in that state.²⁶ Although it might theoretically be possible for providers to comply with all of these requirements, such compliance would plainly “negate” the valid federal regulatory objectives of a free and competitive market in VOIP services, and of maximizing the availability, use and usefulness of interstate VoIP services. *See, e.g., CCIA*, 693 F.2d at 214-15; *California III*, 75 F.3d at 1360. Preemption is therefore appropriate.

Based on the foregoing, the Commission should also preempt state efforts to impose 911 requirements that would require network or design changes on providers of VOIP services.

There is no question that 911 and E911 are critical capabilities for services that would substitute

²⁵ Currently, under the Commission’s rules, a carrier can provide *interstate* domestic telecommunications service *without* having to obtain pre-authorization from the Commission, and an interstate information service provider can enter and exist markets at will. *See* 47 C.F.R. § 63.01. Likewise, depending on telecommunications carriers’ market positions, most can simply discontinue service by providing advance notice to their customers and the Commission. *See* 47 C.F.R. § 63.71. Finally, the commission has adopted procedures by which a carrier may obtain expeditious review and approval of transfer of control applications. *See* 47 C.F.R. §§ 63.03-63.04.

²⁶ If there is any doubt that such requirements will erect a substantial barrier to the deployment of VOIP services, the Commission need look no further than Vonage’s pending Petition for Declaratory Ruling, which seeks relief from similar certification requirements imposed by the Minnesota Public Utilities Commission. Likewise, the Washington Utilities and Transportation Commission recently concluded that VOIP provider LocalDial is a “telecommunications company doing business in Washington” and thus should be regulated in the same manner as other interexchange carriers that provide functionally similar services. *Washington Exchange Carriers Ass’n, et. al. v. Local Dial Corp.*, Final Order Granting Motions for Summary Determination, Docket No. UT-031472 at 3 (June 11, 2004). But in response to the Washington commission’s decision, LocalDial ceased providing all VoIP services in *all* states because “it’s not possible for the company to comply with the commission's order and continue to stay in business.” “LocalDial to cease providing VoIP services,” TR State News Wire, June 24, 2004.

completely for basic POTS lines. At the same time, because of the inherently nomadic capabilities of VOIP technology (and thus the services that can be delivered over that technology) 911 and E911 functionalities need national, rather than state or PSAP-specific standards. A proliferation of inconsistent requirements (whether as to capabilities, interfaces, or the other details that need to be resolved for successful implementation) could slow the full implementation of 911 and E911 services by VoIP providers offering basic POTS substitute services, thereby impeding the federal interest in nationwide 911 and E911 deployment,²⁷ as well as the broader interest in the development, use, and usefulness of interstate VOIP services. *See supra* at 18-20. The Commission should accordingly develop a *federal* approach to deliver emergency services to VOIP customers and preempt multiple state regulations that undermine this approach.

Finally, the Commission should not allow state commissions to impose intrastate access charges on VOIP services. Significantly, as a number of parties have argued, that decision need not rely on preemption at all – Section 251(b)(5)’s mandate of cost-based “reciprocal compensation” extends without limitation to *all* telecommunications traffic, whether interstate or intrastate.²⁸ Thus, with the exception of pre-1996 Act compensation rules temporarily grandfathered by section 251(g), section 251(b)(5) is properly read to bar the imposition of all charges, including both interstate *and* intrastate access charges, for the “transport and termination of telecommunications.” Carrier-to-carrier payments for VOIP services therefore fall under the reciprocal compensation regime of Section 251(b)(5); there is no need for FCC “preemption” of state regulation because such regulation is already barred by federal statute.

²⁷ *See Wireless Communications and Public Safety Act of 1999*, Pub. L. No. 106-81, 113 Stat. 1286 (codified at 47 U.S.C. §§ 222, 251(e)).

²⁸ 47 U.S.C. § 251(b)(5).

If the Commission believes preemption of access charges necessary, however, it is clearly appropriate. The absence at this time of any practical means to track the geographic location of the IP endpoint of each call to or from an IP endpoint – as well as the fact that geographical information is not currently incorporated into the data signaling and recording information technology infrastructure – makes it nonsensical and wholly impractical to apply the access charge regime to IP-enabled services. That regime is predicated on distinguishing “local” from “toll” service, which requires that the endpoints of a communication be known, and that the information regarding those endpoints be transmitted as part of the call signaling – which IP networks do not do. *See supra* at 14-17. Moreover, to apply access charges to all VOIP communications originating or terminating on the PSTN, including those between two “local” points, would be blatantly discriminatory. It would force VOIP service providers to pay access charges even for local traffic not subject to access charges on circuit switched networks, thereby discouraging investment in these technologies, and correspondingly discouraging the availability, use and utility of interstate and international VOIP services to consumers. Once again, such a regime would obviously negate the federal policies of ensuring broad penetration of VOIP services and of enabling the continued development of a free, competitive market for such services. *Cf. CCIA*, 693 F.2d at 214-15; *California III*, 75 F.3d at 1360.

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The Commission should apply the fundamental pro-competitive federal policy underlying its prior decisions to the context of IP-PSTN VOIP communications. Allowing state commissions to impose public-utility style rate and entry regulation, or requirements that would affect the basic design and operation of VOIP services, would be flatly inconsistent with that federal policy. Such state requirements would, in conflict with decisions such as *CCIA* and

Computer III, restrict consumers' choice of VOIP services, limit widespread adoption of such services, and undercut the development of a vibrant free market for VOIP.