The Personal Communications Industry Association

THE INTERCONNECTION OF ONE-WAY MESSAGING NETWORKS AND THE PUBLIC SWITCHED TELEPHONE NETWORK

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ANSWERS TO COMMON QUESTIONS

Second Edition
June 1999

Introduction:
The Personal Communications Industry Association

The Personal Communications Industry Association ("PCIA") has more than 1,500 members worldwide and represents the chief providers of wireless voice and data communications. As the leading international trade association for the personal communications industry, PCIA's member companies include paging and messaging, broadband PCS, LMDS, ESMR, SMR, and mobile data service providers as well as site owners and managers, manufacturers, distributors, technicians, and others providing services and products to the wireless industry.

PCIA's activities are based on an advocacy platform designed to highlight the fundamental public policy goals necessary for the continued growth of wireless technologies -- one of the most productive and competitive segments of our nation's economy. PCIA's advocacy platform, *The Agenda for a Wireless America*, is based on a simple but critical policy goal: achievement of a regulatory environment that fosters a competitive wireless industry by promoting market entry and growth. The tenets of the *Agenda* are:

1. Fair Interconnection
2. Wireless Tax Relief
3. Infrastructure Development
4. Network Coordination
5. Long-Term Spectrum Planning
6. Fostering International Opportunities

The following materials have been prepared by PCIA as part of its continuing effort to lead the charge to forge the regulatory changes necessary to ensure that wireless communications will be a viable alternative to local phone service.

Questions regarding this primer should be referred to Angela Giancarlo, PCIA's director for federal regulatory affairs, at 703-535-7487 or <giancarA@pcia.com>.

Executive Summary

The Commission has under review a series of petitions for reconsideration, applications for review, requests for clarification and motions for a stay of the rules and rulings governing LEC/paging interconnection arrangements as well as complaints against local exchange carriers relating to their interconnection obligations in the paging context. In an effort to assist decision makers in synthesizing the paging industry's position from the ever-growing record of the proceedings, PCIA has prepared the material which follows.

Common questions relating to LEC/paging interconnection are posed and answered. To assist the reader, the questions and answers are organized under broad headings. An extensive index also is provided for ease of reference.

Viewed as a whole, the document establishes a number of fundamental principles that serve to frame the paging industry position. Among the most salient points:

- Paging service providers are telecommunications carriers with substantial obligations under the Communications Act and they are legally entitled to the same statutory rights and protections enjoyed by other telecommunications carriers which provide Commercial Mobile Radio Service ("CMRS").

- Among other rights, paging carriers are entitled to reasonable, non-discriminatory interconnection arrangements with LECs so that paging carriers can compete on a level playing field with other CMRS providers.

- Paging carriers have powerful competitive incentives to establish efficient, cost-effective interconnection arrangements under the current Commission rulings.

- The Commission was correct in ruling that LECs are not entitled to charge paging carriers for the portion of interconnecting facilities used to deliver LEC-originated traffic to paging carriers for local termination. This ruling clearly was given immediate effect by the Commission, which was well within its authority under Section 332 of the Communications Act. Inconsistent state tariff provisions must be deemed preempted.

- Paging carriers are entitled to compensation for communications terminated locally over their paging networks. The claim by some LECs that one-way services don't qualify for reciprocal compensation is completely without merit.

- The interconnection rights of paging carriers derive from multiple statutory provisions, not just from Sections 251 and 252 of the Communications Act. The claim by some LECs that paging carriers can only exercise or enjoy their interconnection rights by proceeding with negotiations under Sections 251/252 is wrong as a matter of law.

- The ruling that paging carriers are entitled to terminating compensation has survived court challenges and has been endorsed by multiple state public utility commissions. Revising the ruling now would create disruption and risk reversal on appeal.

- The actions the Commission has taken to protect and promote paging interconnection rights are well within the Agency's authority under multiple provisions of the Communications Act. This broad scope of the Commission's authority under the Telecommunications Act of 1996 has been resoundingly affirmed by the Supreme Court. The Commission can and should further exercise its lawful authority by establishing a federal forum for setting terminating compensation rates to be paid to CMRS providers if voluntary negotiations fail.

I. Definitions

1. What does the phrase "one-way messaging" encompass?

As used here, "one-way messaging" encompasses tone-only, tone-plus-voice, numeric and alpha-numeric paging in which the end-to-end communication travels in one direction from the initiator of the paging message to the paging unit. The phrase does not refer to talk-back paging, response-paging, two-way paging and other interactive two-way messaging services.

In this series of questions and answers, the terms "paging service provider" and "paging carrier" refer to a provider of one-way messaging services.

2. Are paging service providers "telecommunications carriers" under the Communications Act of 1934, as amended?[1/]

Yes. The Communications Act defines a telecommunications carrier as one which provides, for a fee, a service to the public (or a substantial portion of the public) by which information of the user's choosing is transmitted between or among points.[2/] The Federal Communications Commission (the "FCC" or "Commission") has determined correctly that paging service providers meet this definition.[3/]

3. Does the fact that paging carriers are classified as "telecommunications carriers" under the Communications Act give rise to any obligations and/or benefits?

Yes. Paging carriers are obligated, among other things, to pay into the Universal Service Fund, the Telecommunications Relay Services Fund, the North American Numbering Plan Administration Fund and the Local Number Portability Fund; to abide by restrictions regarding the use of Customer Proprietary Network Information and to interconnect directly or indirectly with other requesting telecommunications carriers. Having assumed these

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[1/] 47 U.S.C. §§ 151 et seq. (1998) (the "Communications Act").

[2/] 47 U.S.C. §§ 153(44) (defining "telecommunications carrier") and 153(46) (defining "telecommunications service").

[3/] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, 11 FCC Rcd. 15,499, para. 1008 (1996) (Local Competition First Report).

responsibilities under the Communications Act, paging companies are legally entitled to receive the benefits accorded to telecommunications carriers, including the right to interconnect with each local exchange carrier ("LEC") on reasonable, non-discriminatory terms and conditions.

4. Do paging service providers offer a "commercial mobile service" as defined in the Communications Act, and "Commercial Mobile Radio Service" ("CMRS") as defined by the Commission?

Yes. The Communications Act defines "commercial mobile service" as any one-way or two-way mobile radio communication service interconnected to the public switched telephone network (the "PSTN") that is provided for a profit to a substantial portion of the public.[4] The Commission has explicitly recognized that paging service providers meet this definition.[5] The Commission adopted the term CMRS when defining the category of carriers who provide "commercial mobile service" under Section 332 of the Communications Act.[6] Thus, there is no difference between "commercial mobile service" as used in the Communications Act and commercial mobile radio service (or CMRS) as used by the Commission.

5. Do paging service providers offer "telephone exchange service" as that phrase is used in Section 251(c)(2) of the Communications Act?

Yes, although the rulings of the Commission in the Local Competition First Report[7] and the Local Competition Second Report[8] failed to confirm earlier rulings to this effect.[9] A long

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[4] 47 U.S.C. §§ 153(27), and 332(d).

[5] Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, Second Report and Order, 9 FCC Rcd. 1411, 1450 (1994) (the "Regulatory Parity Order").

[6] Regulatory Parity Order, at 1413.

[7] Local Competition First Report, 11 FCC Rcd. 15,499 (1996).

[8] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd. 19,392 (1996)

(continued...)

line of Commission decisions predating the Telecommunications Act of 1996 (the "1996 Act")[10] recognize that radio common carrier ("RCC") paging service companies that are interconnected with the PSTN provide exchange service within the meaning of the Communications Act.[11] Similarly, the Federal Court which oversaw the breakup of the Bell System through the Modification of Final Judgment (the "MFJ") ruled that paging was an exchange service and therefore awarded the Bell System's paging assets to the divested Bell Operating Companies (the "BOCs"), rather than to AT&T.[12] Subsequently, the 1996 Act broadened the definition of "telephone exchange service" to encompass other "comparable service."[13] So, the rationale for including paging within the category of telephone exchange service was strengthened as a result of the 1996 Act.

II. Basic Entitlements of Paging Carriers

6. Does it matter whether paging is classified as "telephone exchange service?"

Yes, it could. The classification of paging services as telephone exchange service could be construed — though in the view of the paging industry it shouldn't be — to affect: (a) the obligations of LECs to provide dialing parity; (b) the scope of the protections accorded to paging companies under Section 251(c)(2) of the Communications Act; and (c) the scope of

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[8](...continued)
("Local Competition Second Report").

[9]The Local Competition First Report and Second Report failed to place paging service on the list of wireless services that are considered telephone exchange services. See Local Competition First Report, para. 1013; Local Competition Second Report, para. 333, n. 700. This omission is under reconsideration before the Commission.

[10]Pub. L. No. 104-104; 110 Stat. 56 (codified at 47 U.S.C. §§ 151 et seq.).

[11]See, e.g., Mobile Tariffs, 1 FCC 2d 830 (1969); Tariffs for Mobile Service, 53 FCC 2d 579 (1975); MTS & WATS Market Structure, Phase I, 49 Fed. Reg. 7810, para. 149 (March 2, 1984).

[12]United States v. AT&T, slip. op. 82-0192 (D.D.C. Nov. 1, 1983) at pp. 4-6.

[13]47 U.S.C. § 153(47)(B).

the rights to most favored nation treatment under Section 252(i) of the Communications Act.[14]

7. Did paging service providers have interconnection rights, and rights to terminating compensation, prior to the adoption of the 1996 Act?

Yes. The Commission long ago ruled under Sections 201 and 202 of the Communications Act that RCCs licensed under Part 22 of the Commission's rules to provide either one-way messaging service and/or two-way radio telephone service were entitled to interconnect with LECs on reasonable terms and conditions. For example, in 1977 and again in 1980, the FCC adopted memoranda outlining principles of fair interconnection between RCCs and LECs.[15] Basically, these long standing rulings provide that paging carriers are entitled to any interconnection arrangement that is economically reasonable and technologically feasible.

Substantial CMRS interconnection rights also arise out of Section 332 of the Communications Act which was modified in 1993 to further empower the FCC to order LECs to interconnect with CMRS carriers on a reasonable, nondiscriminatory basis.

The right of CMRS carriers to receive terminating compensation also was recognized prior to the 1996 Act by the FCC's adoption in 1994 of Section 20.11(a)(1) of its rules. This Section provides that: "A local exchange carrier shall pay reasonable compensation to a commercial mobile radio service provider in connection with terminating traffic that originates on facilities of the local exchange carrier."[16]

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[14]Sections 251(b)(3) and 251(c)(2) of the Communications Act could be read to accord special protections to telephone exchange service providers. Regardless of whether paging carriers are confirmed to be providers of telephone exchange service, the paging industry is of the view that the same protections should be extended to paging carriers under the antidiscrimination provisions of Sections 201 and 202.

[15]See 1976 Memorandum of Understanding, 63 FCC 2d 87 (1977); 1980 Memorandum of Understanding, 80 FCC 2d 357 (1980).

[16]47 C.F.R. § 20.11 (1994).

8. Did one-way paging service providers receive any additional interconnection rights as a result of modifications of the Communications Act by the 1996 Act?

Yes. The Communications Act, as amended by the 1996 Act, accords significant interconnection rights to every "telecommunications carrier." For example, Section 251(b) of the 1996 Act places special obligations upon LECs to interconnect with other telecommunications carriers. As earlier noted, all CMRS providers, including all paging service providers, are telecommunications carriers under the Communications Act, and thus are beneficiaries of these special interconnection provisions.

9. Have LECs generally complied with the FCC's paging interconnection rulings?

No. The Commission repeatedly has found it necessary to intervene because LECs refused to accord paging companies reasonable interconnection. Prior FCC rulings reflect: (a) LEC refusals to treat paging companies as co-carriers rather than end users; (b) LEC unwillingness to offer interconnection arrangements suited to the short messaging lengths of typical pages; (c) discriminatory treatment between paging competitors and the LECs' own paging affiliates; (d) persistent LEC refusals to make Type 2 interconnection arrangements available to paging companies; (e) LEC imposition of excessive numbering charges; (f) refusals to pay terminating compensation as required by repeated FCC rulings; and, most recently, (g) unwillingness to abide by the FCC's requirement that the LECs bear the cost of facilities used to deliver LEC-originated traffic to paging carriers for local termination.[17]

Several state commissions also have found it necessary to confirm the obligations with which LECs must comply in the context of paging interconnection arrangements. Commissions in California, Colorado, Minnesota, Oregon, and Washington all have confirmed that paging carriers are co-carriers entitled to reasonable and fair interconnection, that LECs are prohibited from charging paging carriers for the facilities used to deliver LEC traffic to the paging network, and that paging carriers are entitled to compensation for the transport and termination of local, LEC-originated telecommunications. These rulings have been necessary because LECs have continued to refuse to recognize the reciprocal compensation rights of paging carriers despite repeated legal rulings confirming these rights.

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[17] See Appendix A to the Joint Comments of AirTouch Paging, AirTouch Communications, Inc. and Arch Communications Group, Inc. in Opposition to the Applications for Review in CCB/CPD 97-24 filed February 23, 1998 (offering an historical record of the LEC/paging interconnection relationship and related filings).

10. Does the FCC have jurisdiction to regulate any intrastate aspects of LEC-paging interconnection arrangements?

Yes, under multiple statutory provisions. First, the FCC has plenary jurisdiction under Section 201 to regulate interstate aspects of LEC-CMRS interconnection, and incidental authority over intrastate arrangements to the extent that they are inseparable from the interstate component. Second, the Omnibus Budget Reconciliation Act of 1993[18] amended Section 2(b) of the Communications Act to provide that the authority granted to the FCC under Section 332 of the Communications Act, which includes the power to regulate CMRS interconnection, is an exception to the normal restrictions on federal regulation of intrastate services. As a result, under Section 332(c)(1)(B), the FCC is empowered to regulate intrastate interconnection arrangements, by ordering physical connections "pursuant to Section 201," which means that the FCC can assure that the terms of the interconnection are "just and reasonable."[19] Indeed, the Supreme Court recently confirmed the FCC's broad jurisdiction over local telecommunications matters, stating, *inter alia*, "... the question ... 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."[20]

11. Why can't LECs simply elect to forego the costs associated with delivering traffic to paging service providers based upon their own determination that the ability to initiate such pages is not important to their landline customers?

Section 201(a) of the Communications Act requires that common carriers (such as the LECs) establish physical connections with other telecommunications carriers whenever it is technically feasible and economically reasonable to do so. Section 332(c)(1)(B) of the Communications Act requires that the Commission order a common carrier to establish physical connections with CMRS providers upon reasonable request. Section 251(a)(1) of the 1996 Act imposes a general duty on all telecommunications carriers to interconnect

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[18] Consolidated Omnibus Budget Reconciliation Act, Pub.L.No. 103-66.

[19] In upholding the FCC's LEC/CMRS interconnection rules, the Eighth Circuit expressly recognized that Section 332 of the Communications Act accords the FCC extensive jurisdiction over CMRS interconnection matters. Iowa Utilities Board v. FCC, 120 F.3d 753, n. 21 (8th Cir. 1997).

[20] AT&T v. Iowa Utils. Bd., 119 S. Ct. 721, n. 6 (1999).

directly or indirectly with the facilities and equipment of other telecommunications carriers. And, Section 252(b) of the 1996 Act imposes additional interconnection obligations on incumbent LECs. These statutory provisions establish that the obligation of a LEC to interconnect with a paging service provider is not elective.

III. Preemptive Authority of the FCC Over Interconnection

12. Does the FCC have the authority to preempt state tariff provisions that purport to govern LEC/paging company interconnection arrangements?

Yes. The Supremacy Clause of the U.S. Constitution empowers Congress to preempt state or local laws.[21] A federal agency acting within the scope of its congressionally delegated authority may also preempt state regulation.[22] Preemption may occur either by express provision, by implication, or by a conflict between federal and state law.[23] In the case of LEC/paging interconnection, the authority of the FCC to override state law derives from both Sections 332 and 251 of the Communications Act. As is discussed in response to Question 10, the Supreme Court has upheld the authority of the FCC over local interconnection matters arising under the 1996 Act.

13. Has the FCC ever exercised its authority to preempt state tariffs governing LEC-CMRS interconnection?

Yes. In the Local Competition First Report, which was adopted in 1996, the Commission ruled at paragraph 1042 that:

> As of the effective date of this order, a LEC must cease charging a CMRS provider or other carrier for terminating LEC-originated traffic and must provide that traffic to the CMRS provider or other carrier without charge.

This ruling is embodied in Section 51.703(b) of the FCC's rules which provides:

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[21] Louisiana Public Service Commission v. FCC, 476 U.S. 355 (1986).

[22] Id. at 369.

[23] Fidelity Federal Savings & Loan Assn., 458 U.S. 141, 153 (1982).

> A LEC may not assess charges on any other telecommunications carrier for local telecommunications traffic that originates on the LEC's network.

Because "local" telecommunications traffic is largely intrastate,[24] this regulation constitutes a direct regulation of intrastate interconnection arrangements and prohibits LECs from enforcing state tariffs or pre-existing agreements that impose these prohibited charges.

The FCC also has preempted certain state tariff provisions pertaining to the charges imposed by LECs for telephone numbers used by interconnecting carriers. Recurring number charges are now prohibited and one-time "set-up" charges must be cost-based and limited to the administrative costs associated with setting up numbers in the LEC central office. Notably, several LECs have expressly acknowledged the FCC's authority over such intrastate matters by voluntarily modifying their state tariffs to bring them into conformance with the federal pronouncements.

14. Has the FCC fully exercised its jurisdiction under Section 332 of the Communications Act with respect to CMRS interconnection?

No, but it should. The public interest justification for the preemption of state authority over CMRS rates and entry is that CMRS services operate without regard to state boundaries, and the proliferation of these services will be inhibited by a patchwork of inconsistent state regulatory requirements. The same public interest considerations support a federal solution to paging terminating compensation rates rather than leaving the determination of such rates to 50 separate state commissions. Further, the recent Supreme Court decision reaffirming the Commission's jurisdiction over interconnection should instill confidence in the Commission that any such exercise of jurisdiction is well within its authority.

IV. The FCC Rules Governing LEC/CMRS Interconnection

15. When did Section 51.703(b) of the interconnection rules take effect?

Section 51.703(b) was adopted in the Local Competition First Report, which was released on August 8, 1996, and printed in the Federal Register on August 28, 1996. The rules

[24] Section 51.701(b)(2) of the FCC's rules defines "local" telecommunications traffic in the LEC/CMRS context as traffic that originates and terminates in the same "Major Trading Area" ("MTA"). Many MTAs are wholly encompassed within a single state.

adopted therein took effect on September 30, 1996. On October 15, 1996, the United States Court of Appeals for the Eighth Circuit temporarily stayed Section 51.703 along with certain other rules, pending appeal.[25] Fifteen days later, the Court lifted the stay of Section 51.703 based upon a showing that the rule had mistakenly been deemed a "pricing" rule.[26] On July 18, 1997, the Court issued a decision on the merits of the challenge to the LEC/CMRS interconnection rules and, in the process, upheld Section 51.703 as it applies to interconnection between LECs and CMRS providers.

Thus Section 51.703(b) has been in effect continuously since November 1, 1996. Moreover, because the circumstances indicate that the brief stay of this rule was granted in error, the effective date should be deemed to revert back to the original effective date of September 30, 1996.[27]

16. On what statutory basis did the Commission regulate LEC/CMRS interconnection in general, and adopt Section 51.703(b) of the rules in particular?

The FCC adopted the interconnection rules promulgated in the Local Competition First Report under authority of Sections 251 and 252 of the 1996 Act, but also recognized that Section 332 of the Communications Act provided an independent basis of authority with respect to the CMRS interconnection rules.[28] Ultimately, the U.S. Court of Appeals for the Eighth Circuit found the Commission's LEC/CMRS interconnection rules to have been within the Commission's authority under Section 332 of the Communications Act.[29]

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[25] Iowa Utilities Board v. FCC, 109 F.3d 418 (8th Cir. 1996).

[26] Order Lifting Stay in Part, No. 96-3321 (8th Cir. Nov. 1, 1996).

[27] Middlewest Motor Freight Bureau v. U.S., 433 F.2d 212, 226 (8th Cir. 1970), cert. denied, 402 U.S. 999 (1971).

[28] Local Competition First Report, para. 1023.

[29] Iowa Util. Bd. v. FCC, supra 120 F.3d 753 at n. 21. The Court ruled: "Because Congress expressly amended Section 2(b) [of the Communications Act] to preclude state regulation of entry of and rates charged by [CMRS] providers . . . and because Section 332(C)(1)(B) gives the FCC the authority to order LECs to interconnect with CMRS carriers, we believe that the Commission has the authority to issue the rules of special concern to the CMRS providers [including Section (continued...)

Subsequently, the Commission released a Public Notice[30] specifically identifying the rules which were in effect pursuant to the FCC's authority under Section 332 of the Communications Act following the Eighth Circuit decision. Section 51.703(b) of the rules was specifically listed.

17. Were the LEC/CMRS interconnection rules appealed to the Supreme Court?

No. While several aspects of the Eighth Circuit decision were appealed to the Supreme Court,[31] no party challenged the portion of the decision upholding the LEC/CMRS interconnection rules.

V. Paging As Local Service

18. With the growth of wide-area, regional, and nationwide paging systems, have these services become predominantly interstate in nature, thereby eliminating the entitlement of paging carriers to receive local terminating compensation?

No. As is the case with other communications traffic, the jurisdictional nature of a call depends upon the points of origination and termination of the call, not upon the scope of the network or the manner in which the call happens to be routed. This fundamental principle was recently reiterated and reaffirmed in the FCC's decision to view internet-bound traffic on an end-to-end basis, finding that intermediate switching and routing points are irrelevant to this analysis.[32] While many paging customers want to be reached on occasions when they are traveling out of their local area, the overwhelming majority of pages — even those to

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[29](...continued)
51.703(b)]." Id.

[30]Public Notice, Summary of Currently Effective Commission Rules for Interconnection Requests by Providers of Commercial Mobile Radio Service, FCC 97-344, released Sept. 30, 1997.

[31]AT&T Corp., et al. v. Iowa Utilities Board, et al., Case No. 97-826, and related cases (Case Nos. 97-829, 97-830, 97-831, 97-1075, 97-1087, 97-1099 and 97-1141).

[32]Implementation of the Local Competition Provisions in the Telecommunications Act of 1996: Inter-Carrier Compensation for ISP-Bound Traffic, Declaratory Ruling in CC Docket No. 96-98 and Notice of Proposed Rulemaking in CC Docket No. 99-68, 14 CR 3015, 1999 FCC LEXIS 821 (1999).

subscribers to nationwide or multi-state systems — are initiated and terminated in the same MTA; thus they constitute local telecommunications traffic.

19. How can a determination be made concerning the percentage of pages that constitute "local telecommunications traffic" when the location of the paging unit at the time the page is received is not always known?

The percentage of calls to pagers that originate and terminate within the same local transport area can be ascertained by a good faith estimate, as is done in a variety of other related regulatory contexts. For example, the nature and extent of a paging company's obligations to the Telecommunications Relay Service Fund[33] and the Universal Service Fund[34] depend upon a calculation of interstate revenues, and the Commission has relied upon the carriers to make reasonable, good faith estimates of the portion of their revenues that pertain to interstate as compared to intrastate services. The same approach is appropriate with regard to ascertaining the extent of paging traffic that is terminated on a local basis.

20. Traffic delivered by LECs to Internet Service Providers ("ISPs") has been found by the Commission to be largely interstate in nature. Does it follow that paging traffic should also be characterized as interstate?

No. A paging message terminates at a specific location at a discrete point in time and thus can be characterized as being either local or non-local depending upon the points of origination and termination. A call to an ISP can be routed over time to one or more computer servers at diverse locations throughout the world wide web which means that the ability of the call to be characterized based upon the point of termination and point of origination is compromised. Because of the unique nature of ISP traffic, the recent FCC ruling that it is predominantly interstate does not apply to paging traffic.

Further, many negotiated and arbitrated interconnection agreements reflect the fact that paging calls are predominantly local in nature. For example, significant agreements have been reached with GTE,[35] Bell Atlantic,[36] Ameritech,[37] Sprint,[38] Pacific Bell[39] and

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[33] See 47 C.F.R. § 64.604(c)(4)(iii).

[34] See 47 C.F.R. §§ 54.703 and 54.709.

[35] Interconnection Agreements between GTE and AirTouch Paging operating companies in (continued...)

BellSouth[40] which recognize that between 70% and 95% of all paging traffic is compensable traffic. These percentages reflect the fact that paging traffic is predominantly local. Again, these percentages are based both on the common understanding of the parties regarding the nature of traffic to paging customers as well as record evidence in the context of a paging-specific arbitration.

VI. LEC Responsibility for Certain Facilities Charges

21. Why should LECs now be required to bear a portion of the costs of paging interconnection facilities for which they have long been paid by paging carriers?

For multiple reasons. First, the historical relationship was dictated by the LECs through their monopoly control of essential bottleneck local exchange facilities. Paging service providers were unfairly accorded the status of mere end users rather than the co-carrier status they deserved. The 1996 Act was specifically designed to allow non-LEC telecommunications carriers, such as paging companies, to overcome the vestiges of government sanctioned

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[35](...continued)
the states of California, Kentucky, Virginia, Florida, Texas, Ohio, Washington, and Indiana.

[36]Interconnection Agreements between Bell Atlantic and Paging Networks operating companies in the states of New York, Massachusetts, Pennsylvania, New Jersey, Delaware, Rhode Island, Maryland, West Virginia, Virginia, New Hampshire, Maine, Washington, D.C., and Vermont.

[37]Interconnection Agreements between Ameritech and Paging Networks operating companies in the states of Illinois, Indiana, Michigan, Ohio, and Wisconsin.

[38]Interconnection Agreements between Sprint and Paging Networks operating companies in the states of Minnesota, Florida, Indiana, Kansas, Missouri, Nevada, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Washington.

[39]Interconnection Agreement between Pacific Bell and Cook Telecom, Inc. in the state of California.

[40]Interconnection Agreements between BellSouth and AirTouch Paging operating companies in the states of Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.

monopolies by guaranteeing their right to interconnect with incumbent LECs on terms that are just and reasonable.

Second, paging service providers are competing against other telecommunications carriers who are not paying the LEC to deliver LEC-originated traffic for local termination. In order to be able to compete on a level playing field, paging carriers also should not be required to pay for interconnecting facilities to the extent they are used to deliver LEC-originated traffic.

Third, it is a long-standing and fundamental principle that the landline telephone customer who initiates a page is the cost causer. For this reason, it is sound from a rate making and public policy perspective to have the originating carrier look to its own subscriber (in this case the LEC landline customer) for payment to cover the traffic sensitive costs associated with delivering traffic to a paging end-user. Both this Commission and several state commissions have addressed this cost causation issue and have resolved it consistently with this principle.[41]

22. Does the long-standing principle that the party placing the call is the cost causer make sense in the paging context?

Yes. Regardless of the balance of traffic flow between the networks of two carriers, one principle holds firm - - the originator of a call causes the terminating carrier to incur costs. This being the case, it is appropriate for the originating carrier, who has the billing relationship with the calling party, to pay a terminating compensation rate based upon the traffic sensitive costs associated with terminating the call.

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[41] Local Competition First Report, para. 1042; 47 C.F.R. §51.703(b); Letter from A. Richard Metzger, Jr., Chief, Common Carrier Bureau, to Mr. Keith Davis, et. al., dated December 30, 1997, Docket No. CCB/CPD 97-24; Petition for Arbitration of an Interconnection Agreement Between AirTouch Paging and US WEST Communications, Inc. Pursuant to 47 U.S.C. Section 252, Docket No. UT-990300, Arbitrator's Report and Decision (Wa. Utils. and Transp. Comsn. 1999); Application of Cook Telecom, Inc. for Arbitration Pursuant to Section 252 of the Federal Telecommunications Act of 1996 to Establish an Interconnection Arrangement with Pacific Bell, Application No. 97-02-003 (Cal PUC 1997) (Interim Decision).

23. Does the fact that paging customers generally don't publish their numbers in directories, but rather selectively distribute them to specific persons, mean that paging customers have assumed the role of "cost causer" by soliciting calls?

No. There are many categories of telecommunications customers who have unpublished numbers, including most cellular telephone subscribers, all holders of "unlisted" landline telephone numbers and most end users who have a second telephone line brought into their house. Indeed, most employees - - including many persons working at the FCC - - exercise personal control over the distribution of unpublished direct dial telephone numbers that ring at their desks. Yet, none of these end users is considered to be a cost causer who must pay for calls it receives.[42] This is because the calling party - - the person with a pressing need to reach someone who then takes the initiative to pick up the telephone and place a call - - is properly viewed as the one requesting the service being rendered and is therefore the primary beneficiary of the communication.

Indeed, the concept that the voluntary distribution of a phone number encourages calls and renders one a cost causer is nonsensical. Under this theory, every LEC customer who volunteers to have a number published would have to be deemed to have assumed the role of cost causer for incoming calls.

24. Does the LEC obligation to bear a portion of the costs associated with the delivery of LEC-originated traffic to paging carriers for local termination pertain to both traffic sensitive and non-traffic sensitive costs?

Yes. This issue was specifically addressed in the December 30, 1997 letter from Common Carrier Bureau Chief A. Richard Metzger, Jr. to Mr. Keith Davis and others.[43] The conclusion that the obligation extends to both traffic sensitive and non-traffic sensitive costs is consistent with the sound regulatory principle that the originator of the call (in this case, the LEC landline customer who initiates a page) bears the traffic sensitive costs associated with delivering the call.

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[42] Although some cellular customers may pay for the airtime associated with incoming calls, the cellular carrier is not expected to pay for the interconnection facilities used to deliver the call from the LEC to the cellular carrier.

[43] The letter was issued with reference to the proceedings in Docket No. CCB/CPD No. 97-24.

25. Is there any regulatory benefit to having the LEC pay for the connecting facility rather than having the paging company do so and then recoup the cost through terminating compensation payments?

Yes. Having the LEC pay for what is in fact a dedicated facility results in a precise allocation of costs. Recovery of the cost of the facility through terminating compensation payments is less precise, and less likely to be purely "cost-based."

26. Do paging carriers have an incentive to order inefficient, "gold plated" interconnection facilities under the FCC's rulings?

No. Paging carriers receive relief only from the portion of facilities charges related to the delivery of local, LEC-originated traffic. To the extent that interconnection facilities are used to deliver transit traffic, the paging carrier pays. To the extent that the interconnection facilities are used to deliver traffic that originates outside of the Major Trading Area (the "MTA"), the paging carrier pays. To the extent that the interconnection facility is used to deliver traffic that terminates outside of the MTA, the paging carrier pays. The paging industry is so competitive that the obligation to pay a portion of the facilities charges creates powerful economic incentives for the paging carrier only to request essential cost-effective interconnection facilities. Also, the addition of facilities between the LEC's and paging carrier's networks requires a significant investment by the paging companies.[44] The significant expenses associated with the addition of facilities provides an additional disincentive to paging carriers from ordering facilities which would not be efficient.

27. If LECs must bear the cost of interconnection facilities to the extent they are used to deliver local LEC-originated traffic, do they have the right to configure these facilities as they see fit?

The LECs have a legitimate interest in seeing that paging interconnection facilities are configured in an efficient and cost-effective fashion. This does not mean that they have the unfettered unilateral right to dismantle existing facilities if doing so would disrupt service

[44] For example, paging networks and equipment must be configured to accommodate new interconnection facilities, and new equipment must be installed, *e.g.*, trunk cards, to connect the paging network to the interconnection facilities.

to the public.[45] Rather, the LEC and the paging company should enter into good faith co-carrier discussions in order to agree upon an interconnection arrangement that is reasonable from both parties' points of view. If existing arrangements are appropriately reconfigured, a transition plan should be adopted to minimize service disruptions.

28. What benefits do LECs receive from interconnecting with paging companies?

LECs benefit in multiple ways. First, they receive substantial payments from paging carriers for that portion of interconnection facilities which deliver transit or non-local traffic. Second, they avoid costs because paging carriers terminate calls for them and thus relieve the LEC of significant costs of termination. Third, more often than not, a paging message leads to a return landline call that can generate revenue for the LEC.

29. Should a paging service provider have an obligation to serve upon the LEC a formal request for a new or modified interconnection agreement pursuant to Section 251 of the Communications Act, and be subject to the negotiation, arbitration and mediation procedures of Section 252, as a precondition to being relieved of charges by LECs for connecting facilities used to deliver LEC-originated traffic to the paging carrier?

No. Paragraph 1042 of the Local Competition First Report expressly held that LECs must cease charging for the delivery of LEC-originated traffic as of the effective date of the order (September 30, 1996). The statutory scheme supports this ruling. Sections 251(a) and (b) establish certain "minimum requirements" that must be honored by the LECs without further negotiation, mediation or arbitration. The requirement that LECs cease charging for the delivery of LEC-originated traffic falls into this category.

Moreover, Section 51.703(b) of the rules was upheld by the Eighth Circuit under Section 332 of the Communications Act, which means that this rule can and should be given effect outside of the negotiation, arbitration and mediation provisions of Sections 251 and 252.

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[45] Any reconfiguration which would result in the involuntary change in an end user's telephone number should be considered unduly disruptive.

30. By requiring LECs to bear the costs of delivering LEC-originated traffic to CMRS carriers for local termination, and establishing the local area as the MTA for CMRS traffic, was the Commission lifting the limitation on the RBOCs to haul traffic over LATA boundaries?

No. The Local Competition First Report did not alter the interLATA restrictions to which the RBOCs are subject.

31. Do paging carriers expect RBOCs to deliver intra-MTA calls across LATA boundaries?

No. Paging companies are willing to establish a meet point at the LATA boundary. However, if a paging company is deemed to pick up a call at this point, then the terminating compensation it receives should be calculated to allow the paging company to recover the traffic-sensitive costs of transporting and terminating the call from that point.

32. Are paging service providers entitled to be relieved of all charges for the facilities used to deliver paging traffic from the LEC, and to be paid terminating compensation for every completed page?

No. Under the FCC's rulings, paging carriers only are relieved of facilities charges, and only receive terminating compensation, with respect to that portion of the traffic they receive which qualifies as "local LEC-originated traffic." To the extent that traffic delivered to paging companies (i) originates outside of the local area; (ii) terminates outside of the local area; or (iii) originates on the facilities of a carrier other than the LEC who delivers it to the paging carrier, then it does not qualify as "local LEC-originated traffic," and paging companies are prepared to bear a pro-rated portion of the facility charges associated with this traffic and to forego local terminating compensation associated with this traffic.

33. Who should bear the burden of proof with respect to the percentage of traffic that should be exempt from reciprocal compensation obligations?

The LEC. The LEC whose network transit traffic traverses is in a unique position and has access to the information necessary to determine the percentage of traffic which is not originated by the LEC. By using SS7 technology, which the LEC employs, it can track the percentage of traffic that does not originate on its network. Also, LECs possess Automatic Number Identification ("ANI") information which can be used to determine this percentage. In most instances, the LEC is the only party in the LEC-paging interconnection relationship with access to, and the ability to evaluate, this information.

VII. Reciprocal Compensation

34. Has the Commission specifically ruled whether paging companies are entitled to "reciprocal compensation?"

Yes. The Local Competition First Report specifically holds that one-way paging carriers are entitled to reciprocal compensation.[46]

35. Can a terminating compensation arrangement between a LEC and a paging service provider properly be deemed "reciprocal" when all the traffic (and hence all the payments) flow in only one direction?

Yes. Under the 1996 Act, a "reciprocal" compensation arrangement is one which provides for the "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."[47] Thus, the statute requires a mutuality of obligation only to the extent that traffic is delivered and costs are incurred. If a paging carrier delivers no traffic to the LEC, then the LEC incurs no costs of transport or termination, and is entitled to no compensation under a fully reciprocal arrangement. Notably, several state public utility commissions have concurred with the FCC in the conclusion that one-way traffic is compensable[48] and at least

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[46] Local Competition First Report, paras. 1008, 1093.

[47] 47 U.S.C. § 252(c)(2)(A)(i).

[48] Petition for Arbitration of an Interconnection Agreement Between AirTouch Paging and US WEST Communications, Inc., Docket No. UT-990300 (WA UTC 1999) (Arbitrator's Report and Decision); Petition of AirTouch Paging, Inc. for Arbitration of an Interconnection Agreement with US WEST Communications, Inc., Docket No. 99A-001T, Decision No. C99-419 (CO PUC 1999) (Decision Regarding Petition for Arbitration); Application of Cook Telecom, Inc. for Arbitration Pursuant to Section 252 of the Federal Telecommunications Act of 1996 to Establish an Interconnection Arrangement with Pacific Bell, Application No. 97-02-003 (Cal. PUC 1997) (Interim Decision); Petition of AT&T Wireless Services, Inc. for the Arbitration of an Interconnection Agreement with US WEST Communications pursuant to 47 U.S.C. § 252, Docket ARB16, Order No. 97-290 (OR PUC, 1997); Petition of AT&T Wireless Services, Inc. for Arbitration of an Interconnection Agreement with US WEST Communications, Inc. pursuant to 47 U.S.C. § 252 OAH Docket No. 3-2500-11080-20, MPUC Docket No. P-421/EM-97-371 (MN PUC

(continued...)

one federal court has reached the same conclusion in the course of a *de novo* review of the paging compensation entitlement issue.[49]

36. Is it fair to the LECs to impose the payment obligation on the originator of the traffic when there is a complete imbalance in the traffic flow?

Yes. The mix of traffic does not alter the fact that it is appropriate to have the originator of traffic, who is the cost causer, pay traffic-sensitive costs associated with delivering traffic to the terminating carrier. The LECs have themselves been proponents of assigning payment obligations in proportion to traffic origination in LEC/CMRS interconnection arrangements. For example, LECs succeeded in convincing the Commission to abandon its "bill & keep" proposal for two-way CMRS providers by arguing that the vast majority of traffic was mobile-to-land traffic and that therefore the LECs should get a proportionately higher percentage of the terminating compensation.[50] The same equitable principle justifies having LECs pay paging companies termination compensation in proportion to the traffic flow.

37. Was the determination that paging service providers qualify for reciprocal compensation challenged in the appeal to the Eighth Circuit of the Local Competition First Report?

Yes, and the Court rejected the challenge. An appellant group calling itself the Mid-Sized Incumbent Local Exchange Carriers specifically challenged the ruling that paging companies

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[48](...continued)
1997) (Recommended Arbitration Decision); Petition for Arbitration of an Interconnection Agreement Between AT&T Wireless Services, Inc. and US WEST Communications, Inc., Docket No. UT-960381 (WA UTC 1997) (Arbitrator's Report and Decision); Petition of AT&T Wireless Services, Inc. for Arbitration of an Interconnection Agreement with US WEST Communications, Inc. Pursuant to 47 U.S.C. §252, Docket No. 97A-110T, Decision No. C97-656 (CO PUC 1997) (Commission Decision Regarding Petition for Arbitration). Were the FCC now to change its determination that paging traffic is compensable, it would seriously discourage states in the future from giving deference to FCC rulings under the 1996 Act.

[49]Pacific Bell v. Cook Telecom, Inc. et. al., Order Denying Plaintiff's Motion for Summary Judgement and Granting Defendants' Cross Motions for Summary Judgement, No. C97-03990 CW (N.D.CA. 1998).

[50]See, Local Competition First Report, paras. 1009, 1118.

were entitled to compensation. The appeal claimed that the one-way nature of paging traffic prevented the arrangement from being "reciprocal." An opposing brief was filed by the wireless interveners, including PCIA. Based on this record, the Eighth Circuit upheld the LEC/CMRS interconnection rules without singling the paging companies out for separate, disparate treatment.[51]

38. Is the entitlement of paging carriers to receive reciprocal compensation still at issue at the Commission?

Yes, but the Commission should not disturb the prior rulings which have been upheld on appeal. When the Local Competition First Report was adopted, some parties filed petitions for reconsideration at the FCC challenging the entitlement of paging carriers to receive reciprocal compensation.[52] The Mid-Sized Incumbent LECs raised the same issue in a court challenge. The reconsideration petitions remained pending before the Commission without action while the court challenges were adjudicated in the Eighth Circuit. Since the Eighth Circuit did not disturb the finding that paging carriers are entitled to compensation, the Commission may affirm this conclusion on reconsideration with confidence that its ruling will be upheld. In contrast, altering the decision risks snatching defeat from the jaws of victory.

39. Are paging companies seeking terminating compensation payments sufficient to recover the costs of their entire radio frequency ("RF") network?

No. The Commission has ruled that terminating compensation payments should be calculated to enable the terminating carrier to recoup its usage-sensitive network costs. Fixed-costs associated with the terminating carrier's "local loop" are to be recovered from the terminating carrier's customers through basic service access fees. State commissions have ruled consistently with this principle.

Two parties benefit from the completion of a page: (1) the person who initiates the page, and (2) the person who receives it. It is therefore appropriate to have each pay a portion of the costs associated with a paging communication. Consequently, the FCC's rules require that the originator pay for the transport and termination of a call, which includes delivery of the

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[51] Iowa Utilities Board v. FCC, 120 F. 3d 753 at n. 21.

[52] See, e.g., Petitions for Reconsideration of Kalida Telephone Company and the Local Exchange Carrier Coalition in CC Docket No. 96-98 as listed at 61 Fed. Reg. 53, 922 (1996).

page to the end office (or functional equivalent thereof) and switching of the call. The called party pays for the "local loop" to terminate the call. FCC decisions support the view that the "wireless local loop" in the one-way paging context should be the portion of the paging network after the last point of switching and call disaggregation. Using this definition, the radio frequency (rf) system (*e.g.*, the towers, transmitters, receivers and other rf infrastructure) would be considered part of the local loop and the costs of these components would not be included in a calculation of a compensation rate. Notably, most of the network costs are tied up in the local loop, which means that the paging customer is paying the vast majority of the total expenses associated with the completion of a page.

40. Who should be the arbiter of the terminating compensation rates charged to LECs by paging service providers - - the FCC or state PUCs?

The FCC. Section 332(c)(3) of the Communications Act provides that "no state or local government shall have any authority to regulate...the rates charged by any commercial mobile service" provider. A paging terminating compensation rate is a rate charged by a CMRS provider, and should be deemed within the exclusive jurisdiction of the FCC. Several public policy considerations compel the conclusion that the FCC should fully exercise its jurisdiction in this regard. First, certain state commission decisions with respect to paging compensation have proven to be inconsistent with federal requirements,[53] which may reflect the fact that state commissions have little familiarity with or expertise concerning paging. Second, experience indicates that LECs are seeking to exploit the current scheme by refusing to engage in system-wide interconnection discussions and forcing paging companies to undergo multiple proceedings in multiple states. This not only increases the costs and delays associated with getting agreements in place, but also increases the risk of inconsistent decisions.[54] Third, creating a federal forum will facilitate the development of national standards which are sorely needed since paging carriers do not now get the benefit of the proxy rate or symmetrical rate enjoyed by other CMRS carriers with which paging companies compete.

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[53] Petition of AirTouch Paging, Inc. for Arbitration of an Interconnection Agreement with US WEST Communications, Inc. Pursuant to 47 U.S.C. §252, Docket No. 99A-001T, Decision Regarding Petition for Arbitration (CO PUC 1999) ("AirTouch Colorado Decision").

[54] Compare AirTouch Colorado Decision with AirTouch Washington Decision

41. Should a paging service provider be obligated to file a formal request for a new or modified interconnection agreement pursuant to Section 251 of the Communications Act, and be subject to the negotiation, mediation and arbitration procedures of Section 252, as a precondition to being paid terminating compensation?

No. The obligation of LECs to interconnect with paging carriers arises not just out of Sections 251 and 252, but also out of Sections 201, 202 and 332 of the Communications Act. Notably, the Commission adopted rule Section 20.11(b)(1), which requires LECs to pay reasonable compensation to a CMRS provider which terminates LEC-originated traffic, prior to the adoption of Sections 251 and 252 of the 1996 Act. Thus, formal negotiations under Sections 251 and 252 should be viewed as one avenue a paging company can pursue, but not the exclusive avenue.

VIII. Section 252(i) Most-Favored-Nation ("MFN") Rights

42. Do paging carriers have an alternative to voluntarily negotiating or arbitrating an interconnection agreement?

Yes. Section 252(i) requires that LECs make available any interconnection, service or network element contained in a previously approved agreement to another requesting carrier on the same terms and conditions as the original agreement. Thus, paging carriers can adopt another carrier's agreement in whole or in part in lieu of negotiating or arbitrating their own agreement. Rights conferred by Section 252(i) are commonly referred to as "most favored nations" ("MFN") rights.

43. Can paging carriers invoke the right to opt into terms from another approved interconnection agreement during the term of their existing interconnection agreement?

Yes. The Commission and multiple state commissions have confirmed that a requesting carrier can invoke the MFN rights of Section 252(i) to modify the terms of an existing agreement.

44. If disputes arise concerning the nature and extent of a requesting carrier's rights under Section 252(i), must these disputes be taken to the state PUC, and must a carrier wait until the 135 to 160 day arbitration window opens before going to the state?

No. Complaints concerning violations of Section 252(i) can be filed directly in the federal district court or at the FCC.[55] Even if a requesting carrier opts to go to the state PUC for a ruling concerning its Section 252(i) rights, it need not wait 135 days, since the filing window pertains to agreements negotiated under Section 252(a) and arbitrated under Section 252(b), not to agreements adopted under Section 252(i).

45. Can the term of an agreement adopted pursuant to Section 252(i) of the 1996 Act extend beyond the initial term of the approved agreement upon which the Most-Favored-Nation request is based?

Yes. Absent changed circumstances, a LEC should be obligated to offer a requesting carrier an agreement that accords the requesting carrier the same economic benefit as was enjoyed by the original party to the agreement. This may result in an agreement that has an end date later than that specified in the original approved agreement.

46. If an agreement adopted pursuant to Section 252(i) is allowed to extend beyond the term of the approved agreement, isn't a "daisy chain" created in which a series of successive Section 252(i) requests can act to perpetuate a single agreement forever?

No. A Section 252(i) MFN request can only be made based upon an agreement approved by the state commission under Section 252(e) of the Act. Section 252(e) only requires approval of agreements adopted by negotiation (*i.e.*, those arising under Section 252(a)) or by arbitration (*i.e.*, those arising under Section 252(b)); not adopted agreements (*i.e.*, those arising under Section 252(i)). So, MFN agreements themselves are not subject to approval under Section 252(e) and thus cannot form a link in the so-called "daisy chain."

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[55] AirTouch Paging v. Pacific Bell, Case No. 3:98-CV-02216 MHP, Memorandum and Order (N.D. CA. 1999).

47. Is the terminating compensation rate that a LEC agrees to pay a paging carrier an "interconnection, service or network element" which is subject to a Section 252(i) MFN request?

Yes. The terminating compensation rate paid by the LEC to the paging carrier is an integral part of the overall reciprocal compensation arrangement arising out of the interconnection relationship.

The inclusion of reciprocal compensation provisions within the scope of Section 252(i) is apparent from the Local Competition First Report. The portion of the order discussing Section 252(i) and adopting Section 51.809 of the rules reflects that the Commission has interpreted Section 252(i) as permitting the adoption of any provision within a previously approved agreement *or the adoption of the agreement in its entirety*. By this all-inclusive interpretation, the Commission intended that all provisions of an interconnection agreement, including those pertaining to reciprocal compensation, would be subject to the rights conferred by Section 252(i). The right to adopt an interconnection agreement *in toto* was upheld both at the Eighth Circuit and the Supreme Court.

IX. Point of Interface Between the LEC and Paging Networks

48. How is the point of connection ("POC") or point of interface ("POI") between a LEC and a paging company determined?

Historically, LECs dictated the location of the POC or POI, and generally required that it be located at the paging company switch, while insisting that the paging company pay for the connecting facilities utilized to deliver the traffic all the way to that location.[56] Under the new interconnection paradigm, the paging company should be able to select the POI or POC at any technically feasible location, including at the paging company switch if desired.

[56] Standard Bellcore interconnection schematic drawings confirm that the POC or POI is considered by the LECs to be at the paging company switch.

49. If LECs are obligated to deliver their paging traffic to the POI with the paging service provider without charge, doesn't this mean that paging companies are getting "free" service?

No. It is commonplace for the originator of a communication to pay the traffic-sensitive costs associated with delivering the call. When a telephone customer picks up a landline telephone to initiate a page, that person is the originator of the call, and is properly charged (through a cost-based local access phone rate) for delivering the call. The paging company is not getting "free" service, but rather is being relieved of the unfair burden of paying charges that are properly borne by the customer of the originating carrier.

50. Assuming no other changes in the interconnection arrangement, what is the financial consequence of moving the POI from one location to another (*e.g.* from the paging switch to the LEC end office)?

In a perfect world, there would be no practical difference. With the POI at the paging switch, the LEC would be obligated to pick up the cost of the connecting facility used to deliver local LEC-originated traffic to the paging company. With the POI at the LEC end office, the paging carrier would be obligated to pick up the cost of the connecting facility to the paging switch but would be entitled to recoup this cost through terminating compensation payments.

51. If the POI is located at the paging carrier's switch, should compensation be denied because the paging carrier is performing termination functions, but no transport functions?

No. Telecommunications carriers are entitled to be compensated for transport and termination, but there is no requirement and no compelling reason that a particular call must be both transported and terminated by the terminating carrier in order for the entitlement to compensation to arise.[57] Indeed, Section 20.11(a)(1) of the rules makes clear that CMRS

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[57] In the Cook Telecom proceeding, the California Public Utilities Commission found that Cook (a paging service provider) was not entitled to compensation for transport because it did not provide the facilities used to deliver LEC-originated traffic to its paging switch, but nor should Cook be charged for that transport. In that same order, the PUC also found that Cook is entitled to compensation for the termination of local LEC-originated telecommunications. See Application of Cook Telecom, Inc. for Arbitration Pursuant to Section 252 of the Federal Telecommunications Act of 1996 to Establish an Interconnection Arrangement with Pacific Bell, Application No. 97-02-003, (continued...)

carriers are entitled to compensation for terminating traffic and makes no reference at all to transport. Whether the POI is located one mile from the paging switch or at the paging switch may properly affect the amount of compensation that is due, but does not affect the basic entitlement to payment.

52. Should an end-to-end paging message be considered, for regulatory purposes, as two distinct calls: one call originating at the landline phone which initiates the page and terminating at the paging switch, and a second call originating at the paging switch and terminating at the paging unit?

No. An end-to-end communication path is established when the paging message is accepted. While the message may be placed in storage for delivery in sequence with other pages, this is not done unless and until the page is validated and the availability of the transmission path to the paging customer's service area is verified. And the storage is an automated call processing function the sole purpose of which is to facilitate completion of the transmission, not to provide any enhanced service. In other similar contexts, the FCC properly has recognized that call processing mechanisms used in connection with basic services are properly viewed as "adjunct to basic" services that are not deemed to alter the character of the service.[58]

The fact that a call must be classified based upon the nature of the end-to-end communication has been upheld in other contexts as well. For example, the FCC specifically rejected the "two-call" theory when it ruled that calls placed using debit calling cards which originate and terminate in the same state are intrastate calls, even though such calls had two components: one interstate communication via an 800 number to a remote switch and a second communication back to the state from the remote switch location.[59] More recently, the FCC

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[57](...continued)
Decision 97-05-095, (Cal. PUC 1997) (Interim Decision).

[58]NATA Centrex Order, 101 FCC 2d 349 (1985), recon., 3 FCC Rcd. 4385 (1988).

[59]Time Machine, Inc., Request for Declaratory Ruling Concerning Preemption of State Regulations of Interstate 800-Access Debit Card Telecommunications Services, 11 FCC Rcd. 1186 (CCB 1995).

found that internet-bound calls constitute "one call," and should be viewed on an end-to-end basis without reference to intermediate switching or routing points.[60]

Moreover, a paging network could be configured to establish a real-time, end-to-end connection between the calling party and the paging unit. However, this configuration would be much less efficient than using the sophisticated store and forward switching techniques that are now available. The Commission should not adopt regulatory treatments that discourage the use of state-of-the-art technology. Rather, the Commission should recognize the equivalence of a modern page to other end-to-end calls.

53. Is a real-time connection between the calling party and the called party necessary in order for the terminating carrier to be deemed to have performed a "switching" function?

No. While some definitions of switching refer to making a "connection" between the calling and called party, there is no requirement that this connection be instantaneous or be accomplished in real time. Nor is there any reason to consider a real time connection as a necessary component of switching. State utility commission decisions confirm that real time connections are not required.[61]

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[60] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996: Inter-Carrier Compensation for ISP-Bound Traffic, Declaratory Ruling in CC Docket No. 96-98 and Notice of Proposed Rulemaking in CC Docket No. 99-68, 1999 FCC LEXIS 821 (1999).

[61] See, Petition for Arbitration of an Interconnection Agreement Between AirTouch Paging and US WEST Communications, Inc., Docket No. UT-990300 (WA UTC 1999) (Arbitrator's Report and Decision); Petition of AirTouch Paging, Inc. for Arbitration of an Interconnection Agreement with US WEST Communications, Inc., Docket No. 99A-001T, Decision No. C99-419 (CO PUC 1999) (Decision Regarding Petition for Arbitration); Application of Cook Telecom, Inc. for Arbitration Pursuant to Section 252 of the Federal Telecommunications Act of 1996 to Establish an Interconnection Arrangement with Pacific Bell, Application No. 97-02-003 (Cal. PUC 1997) (Interim Decision).

X. Competitive Neutrality Between One-Way and Two-Way Service Providers

54. Are paging companies entitled to the same terminating compensation payments as two-way service providers who are providing paging as an integrated component of their service offerings?

They should be, but unfortunately the Commission's rulings have not achieved this result. In the Local Competition First Report, the Commission tentatively concluded that paging network architecture was sufficiently different from LEC network architecture to disallow paging companies from relying upon the LECs' cost-based termination rates as a surrogate.[62] In contrast, two-way CMRS providers were granted the right to be paid a rate symmetrical to the rate charged them by the LEC. Ultimately, the FCC rule that singled paging companies out for disparate treatment was vacated by the Eighth Circuit,[63] but most LECs are, nonetheless, declining to offer one-way carriers the same symmetrical rate offered to two-way carriers.

55. Was the Commission correct in determining that paging company networks are sufficiently different from the networks of two-way CMRS and other telecommunications carriers to warrant separate consideration in terms of the basis for determining compensation?[64]

No. Paging networks consist of similar components, perform similar functions and have similar architectures to other telecommunications networks. Moreover, while the FCC decided that it did not have sufficient information before it to conclude that paging termination costs are comparable to the termination costs of other carriers, in the period of time since the Local Competition First Report was issued, new information has become available which supports the conclusion that paging companies should get the same symmetrical terminating compensation rate that is offered to other CMRS carriers. For example, Ameritech, BellSouth, Bell Atlantic and Sprint have reached voluntary agreements with paging carriers in which the paging carrier is paid terminating compensation

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[62] 47 C.F.R. § 51.711(c).

[63] Iowa Utilities Board v. FCC, 120 F.3d 753, 800.

[64] Local Competition First Report, para. 1093.

comparable to that paid other CMRS carriers.[65] And the Washington Utilities and Transportation Commission has found, after a full evidentiary hearing, that the LEC end office compensation rate provides a reasonable surrogate for establishing a paging terminating rate.[66] These developments support the view that paging carriers should be paid terminating compensation comparable to that received by other telecommunications carriers without being singled out to prove their own TELRIC costs.

56. Are there any negative competitive implications of treating paging terminating compensation differently from other CMRS terminating compensation?

Yes. Paging companies are unable to compete on a level playing field since CMRS carriers who offer paging service over their two-way networks are able to receive higher terminating compensation payments for the paging traffic they terminate, and, due to the symmetry requirement, are in a position to reach agreement on the rate at an earlier date. This disparity cannot be solved by having the two-way CMRS carriers be paid less for a call that terminates as a page than a call that terminates as a mobile call since the network cannot distinguish between these two types of communications. Singling paging companies out for disparate treatment also deters voluntary negotiations between LECs and paging companies. At this time, only the largest paging companies have successfully reached interconnection agreements with only some LECs. Some of those agreements were reached only after initiation of arbitration proceedings. Most paging carriers do not have the resources necessary to undertake the proceedings required and therefore are not able to realize their rights under the 1996 Act. Similar treatment of paging carriers would remedy much of this problem.

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[65] Interconnection Agreements between Ameritech, Bell Atlantic and Sprint and Paging Networks operating companies, supra., notes 36-38; Interconnection Agreements between BellSouth and AirTouch Paging, supra., note 40.

[66] AirTouch Washington Decision.

57. Do paging carriers really "switch" telecommunications?

Yes. This Commission, several state commissions, and federal courts have concluded correctly that paging carriers switch telecommunications and therefore are entitled to termination compensation.[67]

Notably, there are many forms of switching (*e.g.*, circuit switching, message switching, packet switching, etc.). The common element in all these types of switching is that a telecommunications carrier performs various call processing and routing functions in order to deliver the call to the called party. Paging switches provide answer supervision, perform call validation functions, provide message prompts, generate appropriate transport protocols with routing instructions, subscriber unit identification and message content, and perform various batching, formatting and disaggregation functions to deliver calls to the called party. These are the functional equivalent of end office switching within the meaning of Sections 51.701(c) and (d) of the rules which define "transport" and "termination."

58. Are there any circumstances in which paging carriers should be considered to be performing the equivalent of tandem switching as compared to end office switching?

Yes. The proper determinant of whether an interconnecting carrier's switch should be considered the functional equivalent of a tandem as compared to an end office is the geographic area that the switch serves. Specifically, if the competing carrier is switching calls throughout an area that equates in size to that of a LEC end office, then its switching should be deemed the functional equivalent of an end office switch. If, on the other hand, the competing carrier is switching calls throughout a larger geographic area that better equates to the LEC's tandem service area, then the competing carrier's switching should be deemed the functional equivalent of a tandem switch.[68]

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[67] Local Competition First Report, paras. 1008, 1092; *see also*, n. 3, *supra*.

[68] Local Competition First Report and Order, at para. 1090.

XI. Types of Interconnection Arrangements

59. What are the differences between so-called "Type 1" and "Type 2" interconnection arrangements in the LEC/paging context?

Type 1 provides an interconnection to the telephone company's end office ("EO"). The telephone numbers reside at the EO. Type 2 provides an interconnection to the telephone company's Tandem. In this configuration, the telephone numbers reside at the paging company's switch.

60. Does the paging carrier perform any switching functions in a Type 1/End Office interconnection arrangement?

Yes. Notwithstanding the type of interconnection arrangement the paging carrier has, the paging carrier is required to perform the same switching functions with respect to a call in order to terminate that call to the called party.

61. Why would a paging company opt for Type 1/End Office interconnection as compared to Type 2/Tandem interconnection?

Historically, the nature of the interconnection arrangement was dictated by LEC policies over which paging companies had no control. Many EO arrangements were established when LECs simply refused to offer Tandem level interconnection[69] to paging companies. Even when Tandem interconnection was offered, the terms often made it prohibitively expensive. A paging carrier establishing a Tandem level interconnection must use a complete NXX code (10,000 numbers), and it was commonplace for LECs to charge exorbitant one-time and monthly recurring charges for each number in this large block.[70] In contrast, numbers in EO arrangements could be purchased in blocks of 100, thereby reducing (but not eliminating) the paging companies' obligation. Also, the shortage of telephone numbers in some areas can mean that the full NXX codes necessary to implement Tandem connections are not available.

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[69]The recent decision in William G. Bowles Jr. PE v. United Telephone Company of Missouri, DA 97-1441, 1997 FCC LEXIS 3662, released July 11, 1997 indicates that these restrictive policies still exist.

[70]For example, a one-time charge of $36,000 per NXX was imposed in some instances.

62. Now that number charges have been eliminated or reduced by the Local Competition Second Report, why don't paging companies convert all existing interconnection arrangements to Type 2/Tandem level?

Not all LECs have reduced their number-related charges as they are obligated to do under the FCC rulings. Even more important, converting existing services from an EO to a Tandem level arrangement would require that each paging customer relinquish its existing telephone number and substitute a number within the range of the new dedicated NXX assigned to the paging carrier. Like other telecommunications customers, paging customers generally do not want to relinquish a paging number that has been distributed, published or advertised to callers and become familiar to those who seek to initiate pages. Many paging companies are negotiating transition plans with LECs that will replace EO connections with Tandem connections over time, but it will take some time to effect these transitions without disrupting existing services. Carriers also are exploring the possibility of using local number portability technology to port telephone numbers from EOs to LEC Tandems to achieve an interconnection arrangement in a Type 2 configuration. In the meantime, paging carriers should not be required to pay for the LEC facilities used to deliver local, LEC-originated traffic and should not be denied terminating compensation payments to which they are entitled.

63. Should the Commission's rules governing the financial relationship between paging service providers and LECs depend upon whether the interconnection is Type 1/End Office or Type 2/Tandem?

No. The entitlement to termination compensation is based upon the fact that paging carriers terminate calls and incur costs in such termination. The amount of compensation is based upon the terminating carrier's (*i.e.*, the paging carrier's) costs of terminating the telecommunications. The functions performed by paging carriers are identical in both the Type 1 and Type 2 context. Thus, the paging carrier's costs of terminating Type 1 and Type 2 calls do not differ. Consequently, neither should the compensation.

Further, because paging companies became locked into EO arrangements by now-discredited LEC policies, and altering them would disrupt service to the public, the paging companies should not be forced to pay for the LECs' connecting facilities or relinquish the right to terminating compensation in order to maintain existing arrangements.

64. Is a "reverse billing" arrangement by which a paging carrier agrees to pay certain charges to the LEC so that the paging carrier's end users will not incur toll charges properly considered a form of interconnection which is subject to statutory protections?

Yes. Though often characterized by LECs as a mere "billing option," a reverse billing arrangement has direct consequences in terms of the manner in which physical interconnections are configured, and the alteration or withdrawal by a LEC of reverse billing options can have direct adverse consequences on interconnection arrangements. As a result, actions taken by LECs with regard to reverse billing offerings are so inextricably tied to the interconnection arrangement as to be subject to the same standards.

65. Are there any Commission precedents that require Type 1/End Office interconnections to be treated less favorably than Type 2/Tandem interconnections?

No. There is language in a couple of pre-1996 Act decisions that equates a Type 1/End Office interconnection to a connection with a private branch exchange ("PBX"), which has been seized upon by certain LECs to argue that paging companies should be treated as end users to the extent that they utilize Type 1 arrangements. These isolated references do not overcome the long line of holdings indicating that paging carriers are entitled to co-carrier treatment. Considerations of functionality, fairness and proper statutory interpretation prevent the Commission from treating a paging carrier like a PBX.

XII. Dedicated Transport Facilities Between Serving Areas

66. What is a foreign exchange or "FX" line?

An FX line is a dedicated facility that allows a call in one calling area to be transported to another calling area.

67. Do paging companies use FX lines?

In the past, LECs refused to treat paging companies as co-carriers and forced them to order FX lines out of end-user tariffs whenever the paging company wanted to draw telephone numbers out of an exchange other than the exchange where the paging switch (and POI) was located. For example, if a paging system expanded to cover multiple calling areas, situations would arise in which calls to pagers which originated and terminated in the same local

calling area would give rise to intrastate toll charges if the customers' numbers were rated elsewhere. To overcome this anomaly, some paging carriers ordered FX lines to enable them to draw telephone numbers out of other exchanges, and to assign a telephone number to the paging customer that correlates to the area where most of the calls to that customer will originate and terminate.

Under the new interconnection paradigm, paging carriers are to be considered co-carriers, not end-users. Rather than being forced to order FX lines under end-user tariffs, they must be allowed to utilize dedicated co-carrier transport facilities.

68. Does the use of dedicated transport facilities between a LEC and a paging carrier unfairly prevent the LEC from collecting intraLATA toll charges to which it is entitled?

No. As noted above, the typical effect of the use of a dedicated connecting facility is to avoid the imposition of a toll charge when a paging communication in fact originates and terminates in the same local serving area. This is equitable. For example, if a paging carrier which interconnects in San Francisco uses a dedicated facility to draw numbers out of a Eureka exchange and assigns a Eureka number to a Eureka-based paging customer, no toll would be incurred if a Eureka landline customer calls that number. However, a San Francisco area landline customer who calls the Eureka number would pay a toll. As such, toll charges would be paid to the LEC only when the call originated and terminated in different local calling areas, which is the way it should be.

69. Are LECs obligated to bear the costs of dedicated facilities used to deliver traffic to paging carriers in other exchanges within the MTA?

In some instances, yes. If a paging company were to install a dedicated switch in the foreign exchange and interconnect there, the LEC would be obligated to make terminating compensation payments sufficient to allow the paging carrier to recoup the resulting switching costs. If it is more cost-effective to provide an equivalent service in the foreign exchange by using a dedicated connecting facility, then it is to the benefit of both the paging carrier and the LEC to do so. At this point, the cost of the dedicated facility becomes a substitute for the switching cost, which is properly charged to the LEC. Thus, it is appropriate for the LEC to bear the cost of the connecting facility provided that the lines represent an economically efficient means of serving the foreign exchange area.

70. Are there alternatives to the use of dedicated transport facilities between carriers?

Yes. LECs can provide a Tandem level interconnection arrangement by which calls to certain designated blocks of numbers are all routed via the tandem to the paging company switch but are rated out of a different LEC EO which subtends the tandem. This separation of rating and routing would allow the paging company to assign a customer a number rated out of the nearest EO without the use of a dedicated transport facility. Instead the call would be routed over the LEC's common inter-office transport facilities. At least one state public utility commission has ruled that the LEC should separate rating and routing in this fashion, in order to achieve technical and economic efficiencies.[71]

71. Is the separation of rating and routing in this fashion new?

No. LECs have long had the ability to rate and route calls separately, and many existing interconnection agreements explicitly recognize the right of the requesting carrier to select a rating point for a particular telephone number that is different from the routing location, provided that they are in the same LATA.

XIII. Future Regulatory Rulings

72. Does the fact that both paging carriers and ISPs generally receive traffic but do not originate traffic require that the traffic directed to each be treated the same for compensation purposes?

No. There are significant differences between paging carriers and ISPs that may properly result in different treatment of the traffic to each. Paging service providers are telecommunications carriers and exchange co-carriers with all of the regulatory obligations that attend those classifications. In contrast, ISPs have been specifically exempted from classification as telecommunications carriers,[72] and the FCC repeatedly has ruled that ISPs are to be treated as "end-users" for regulatory purposes. This distinction can serve to alter

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[71] Petition for Arbitration of an Interconnection Agreement Between AirTouch Paging and US WEST Communications, Inc., Docket No. UT-990300 (WA UTC 1999) (Arbitrator's Report and Decision).

[72] Local Competition First Report at para. 995.

rights to compensation.[73] Additionally, a paging message terminates at a specific location which can be characterized as being either local or non-local. A call to an ISP enters the "Internet cloud" which means that the point of termination of the communication defies easy categorization in terms of locality. In light of these significant differences, the Commission need not treat traffic to paging companies and ISPs in identical fashion.

73. What should the Commission do on reconsideration in the paging interconnection proceeding?

The Commission should: (a) affirm its prior rulings regarding the basic entitlement of paging carriers to reciprocal compensation; (b) confirm the obligation of LECs to bear the usage sensitive and non-usage sensitive costs associated with the delivery of LEC-originated traffic to paging companies for local termination; and (c) abandon forevermore the rule which singles paging companies out as the only CMRS carriers obligated to perform their own Total Element Long Run Incremental Cost ("TELRIC") studies in order to receive terminating compensation.

74. What other actions should the Commission take to resolve paging/LEC interconnection issues?

The Commission should exercise the full limit of its jurisdiction under Section 332 of the Communications Act and establish a federal forum for setting the rates that CMRS carriers charge LECs for terminating traffic. Since the states are preempted under Section 332 of the Communications Act from regulating CMRS rates, and since the charge imposed by a paging carrier on a LEC for termination service is a CMRS rate, it should be deemed within the exclusive domain of the FCC.

Also, the Commission should act promptly to adopt rules or policies confirming carriers' rights under Section 252 (i) of the 1996 Act. These rights are critical to the achievement of fair interconnection arrangements between LECs and paging carriers, particularly in light of the current disparate treatment to which paging carriers are subject in the context of reciprocal compensation. Paging carriers have experienced difficulties in exercising their Section 252(i) rights. LECs have interposed delay in responding to requests to adopt previously negotiated agreements, have attempted to modify prior agreements when

[73] For example, when a call involves a pager, the paging company is the terminating carrier. When a call involves an Internet user, the LEC or competitive LEC serving the ISP, not the ISP, is the terminating carrier.

providing them to subsequent carriers, and have out and out rejected paging carrier requests to adopt *in toto* previously approved agreements.[74] Swift Commission action affirming carriers' rights under Section 252(i) and supporting flexibility in the exercise of those rights will go a long way to rectifying the current difficulties carriers are experiencing.

The recent Supreme Court unconditional affirmation of the Commission's jurisdiction over interconnection issues demonstrates that Commission action in this regard is appropriate.

[74] Such refusals were the subject of litigation between AirTouch Paging and Pacific Bell (in federal court in California) and BellSouth (in federal court in Georgia).

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