dramatically reduce the ability of carrier's to provide the level of service that they are presently providing to their subscribers. This problem is further exacerbated by the fact that, under Sections 22.163, 22.165 and 22.537 of the Commission's Rules,[24] these fill-ins were permissible in nature and the Commission does not have records of these transmitters. Therefore, the formulas cannot be utilized because they do not take into account the existence of operating fill-in transmitters that are currently being used to provide service to the public.

3. Implementation Of The Formulas Proposed For 900 MHz Paging Channels Would Be An Unlawful Taking

The Commission's suggestion that it will abandon the standard co-channel protection for 900 MHz paging licensees in favor of a separation standard based upon an eight-radial contour method is constitutionally unlawful. The Commission seeks to justify application of the lower band mathematical model to 931 MHz operators on the ground that the radial contour formula is more flexible and precise in predicting interference. In actuality, however, the effect of use of the radial contour methodology will be to reduce the geographical scope of licensed service areas and/or interference protection.[25] Upon implementation of the proposed radial contour formula, the Commission will engage in a "taking" of property interests for which it lacks authority and for which, in any case, it would

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[24] 47 C.F.R. §§ 22.163, 22.165 and 22.537 (1995).

[25] *See* Trott Declaration at Exhibit 1.

face an obligation to pay just compensation pursuant to the Fifth Amendment of the United States Constitution.

By proposing to reduce the level of protection from interference for incumbent 900 MHz paging carriers in this manner, the Commission is contemplating the taking of a portion of the economic benefit on which licensees have relied. In the case of PageNet and all other 900 MHz paging carriers, substantial sums have been expended to design and build-out existing licensed service areas. This design and build-out was predicated upon the standards of co-channel separation and interference protection specified in the rules today. In addition, for 931 MHz systems, fill-in transmitters have been installed based upon the service and interference contours specified in Section 22.537 of the Commission's Rules. The new radial contour formula will eliminate the permissive nature of many hundreds if not thousands of fill-in transmitters currently in operation.

In determining when federal agency action qualifies as a "taking" forbidden by the Fifth Amendment, the Supreme Court has primarily relied on *ad hoc* factual inquiries into the circumstances of each case.[26] To aid in this factually oriented determination, however, the Court has in recent years

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[26] *E.g., Connolly v. Pension Benefit Guaranty Corp.*, 106 S.Ct.

increasingly looked to three factors as bearing particular significance:[27]

- The extent to which the regulation has interfered with distinct investment-backed expectations;
- The character of the governmental action; and
- The economic impact of the challenged regulation on the claimant.

The proposed modification of existing 931 MHz paging licenses through imposition of the radial contour formula would, in the context of these guidelines, qualify as a compensable taking.

(1) Interference with "distinct investment-backed expectations." In articulating this guideline, the Supreme Court has confirmed that a "taking" can occur when the interest at stake is a form of economic benefit to a private party which falls short of full, titled ownership of goods or realty. It has long been recognized that governmental licenses to pursue lines of business qualify as "private property" for purposes of the "taking" clause of the Fifth Amendment, and may not be abrogated or curtailed without just compensation being paid.[28]

In *Shanbaum v. United States*, 1 Ct. Cl. 177 (1982), *aff'd*, 723 F.2d 69 (Fed. Cir. 1982), the U.S. Claims Court recognized

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[27] *Id.; Ruckelshaus v. Monsanto Co.*, 104 S.Ct. 2862, 2874 (1984); *Loretto v. Teleprompter Manhattan CATV Corp.*, 102 S.Ct. 3164, 3171 (1982).

[28] *E.g., Jackson v. United States*, 103 F. Supp. 1019 (Ct. Cl. 1952) (federal government abrogation of state commercial fishing license); *Medical Society of New York v. Sobal*, 153 Misc.2d 815 (S.Ct. Albany 1992)(state curtailment of term of physicians' licenses to practice).

that it had jurisdiction under the Tucker Act for a Fifth Amendment "taking" claim for just compensation resulting from the plaintiff's loss of a television broadcast license as a result of a Commission order. That decision is consistent with the contemporary recognition that FCC license rights, while not constituting a "full-fledged indefeasible property interest," are more than a "non-protected interest, defeasible at will."[29]

The Court of Appeals for the Federal Circuit followed the guidelines established in *Connolly* to find that the federal government's action in allowing a private party's mining rights to expire constituted a compensable "taking."[30] The court did not find material the fact that the plaintiff's claim arose from abrogation of a permit right rather than from loss of real or personal property. Instead, it observed that the petitioner had expended substantial sums in developing the mining rights granted it, and found that the private party's "investment-backed expectations" in its permit had been thwarted by the action of the Secretary of the Interior.[31]

In another case of relevance to the facts at hand, the Claims Court followed *Connolly* and *United Nuclear Corp.* in

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[29] *See also In re Atlantic Business and Community Development Corp.*, 994 F.2d 1069, 1073-76 (3d Cir. 1993); *In re Beach Television Partners*, 38 F.3d 535(11th Cir. 1994). *Orange Park Florida T.V., Inc. v. F.C.C.*, 811 F.2d 664, 674 n.19 (D.C. Cir. 1987).

[30] *United Nuclear Corp. v. United States*, 912 F.2d 1432 (1990)("*United Nuclear Corp.*").

[31] *United Nuclear Corp*, 912 F.2d at 1435.

holding that Congressional legislation authorizing the termination of existing mineral prospecting permits gave rise to a compensable "taking" of the petitioner's rights to exploit the mineral resources. *NRG Co. v. United States*, 24 Ct. Cl. 51 (1991). The court found that the private permit holder had met all conditions of its mineral permits, and hence had a legal "right" to receive a mining lease from the government. In determining that compensation was due for the lost license rights, the court reasoned:

> Here . . . the government chose to modify the established rules after the pertinent agreements were entered. It certainly was not reasonably foreseeable at the time the instant permits were signed that the government would enact legislation canceling them.

24 Ct. Cl. at 62.

Similarly, PageNet and other paging carriers have acted in reliance on the terms of their licenses, as originally issued, to invest in the design and construction of transmitting facilities to provide service within the contours for which it was originally awarded. They have also acted in reliance on the terms of its original licensees to develop "fill-in" transmitters to enhance the level of service in imbedded portions of their service areas. PageNet has met all conditions of its original licenses in acting on these investment-backed expectations. The Commission cannot now reduce these existing service areas through the present rulemaking without incurring to PageNet and similarly affected licensees an obligation to compensation for the reduced value of their investments.

(2) Nature of the Commission's action. The fact that the Commission's proposal for a replacement contour formula is advanced in the context of a rulemaking does not shield it from liability for damages which the proposed new rule would cause to incumbent licensees. The Fifth Amendment "taking" clause is intended to compensate private parties whose interests are adversely affected by the government's exercise of its regulatory authority.[32]

Turning to the specific nature of the proposed Commission action, it is significant that the effect of the new contour formulas would be to reduce the geographic scope of incumbent 931 MHz paging licensees. The Supreme Court has held that an unconstitutional taking may more readily be found when the interference with property "can be characterized as a physical invasion" by the government. In such cases, the governmental action represents more than "interference" which "arises from

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[32] The use of the rulemaking procedure to adopt new contour formulas modifying existing licenses satisfies only procedural Due Process concerns and Administrative Procedure Act rights of the affected licensees, not the separate Constitutional safeguard against a taking of private interests for public use. *Compare WBEN, Inc. v. United States*, 396 F.2d 601, 617-18 (2d Cir. 1968), *cert. denied sub nom King's Garden, Inc. v. F.C.C.*, 89 S.Ct. 238 (1968); *California Citizens Band Ass'n v. United States*, 375 F.2d 43, 52 (9th Cir. 1967). *See also Quincy Cable TV, Inc. v. F.C.C.*, 768 F.2d 1434, 1447 n. 27 (D.C. Cir. 1985), in which the Court of Appeals acknowledged but expressly declined to reach the cable licensee's argument that the Commission's "must-carry" rules constituted a compensable taking of its license rights under the Fifth Amendment. *See, e.g., Florida Rock Industries, Inc. v. United States*, 791 F.2d 893, 898-900 (Fed. Cir. 1986).

some public program adjusting the benefits and burden of economic life to promote the common good."[33] When the effect of governmental regulation is "physical intrusion [which] reaches the extreme form of a permanent physical occupation, a taking has occurred." In such cases, "the character of the government action" becomes "determinative" of whether a taking has occurred.[34] Moreover, the government's invasion of interests in property, other than full ownership, such as an easement, can also give rise to an unconstitutional taking.[35]

These principles of constitutional construction have full applicability here, where the Commission's proposed rule change would effect a diminution in the scope of incumbent paging licensees' exclusive service areas for the benefit of anticipated geographical licensees. Moreover, it is evident that the taking which is here planned would be for a "public use" within the meaning of the Fifth Amendment, as it would advance the Commission's stated purpose of awarding geographic licenses pursuant to competitive bidding.[36]

The Fifth Amendment's guaranty that private property not be taken for public use without just compensation is designed to bar the government from forcing some people to assume burdens

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[33] *Loretto v. Teleprompter Manhattan CATV Corp., supra* n.24 at 3171.

[34] *Id.*

[35] *Kaiser Aetna v. United States*, 100 S.Ct. 383, 393 (1979).

[36] *See Ruckelshaus v. Monsanto Co., supra* n.24 at 2878-79.

which should be borne by the public as a whole.[37] As proposed, the Commission's application of its radial contour formula to incumbent 931 MHz paging licensees would do just that. The Commission should not attempt to secure a public financial benefit at the expense of individual licensees who have relied in good faith and have made investment decisions on the basis of existing license terms.

(3) The "economic harm" to PageNet. PageNet and other 931 MHz licensees can demonstrate that the new radial contour formula, as applied to their existing licenses, will result in economic harm to them. PageNet has proceeded diligently to build-out its existing licenses in reliance on the service contours originally defined. If the new rule is adopted, it will circumscribe the geographic region in which PageNet understood it had exclusive rights to provide services and to enjoy interference protection, and may, in some cases, require PageNet to dismantle existing transmitting facilities which will now fall outside redefined service areas or will no longer qualify as "imbedded" areas susceptible to installation of "fill-in" transmitters. With the eligible population covered by its existing licenses reduced through application of the new service contours, PageNet would, during the life of its existing licenses, suffer a shortfall in revenues in relation to its original investment-backed expectation. Redesign and

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[37] *Armstrong v. United States*, 80 S.Ct. 1563, 1569 (1960).

redeployment of transmitting facilities necessitated by the new service contours would represent further monetary damages to PageNet. Affected licensees would have an opportunity to prove such damages after the taking has been effected.[38]

More importantly, however, the constitutional implications of the planned adoption of a new contour formula call into question the Commission's statutory authority to effect such modification of incumbent 931 MHz operators' licenses. The Supreme Court follows the "cardinal principle" of interpreting statutes and administrative decrees in a manner which avoids, where "fairly possible," constitutional infirmities. In the case of *United States v. Security Industrial Bank*,[39] the Court held:

> [W]e decline to construe the [Bankruptcy] Act in a manner that could in turn call upon the Court to resolve difficult and sensitive questions arising out of the guarantees of the 'Taking's Clause'.

In following this precept, the Court of Appeals has ruled, "within the bounds of fair interpretation, statutes will be construed to defeat administrative orders that raise substantial constitutional questions."[40] Applying this principle to the Commission, the Court held that the Commission does not have authority under the Communications Act to order physical collocation of a competitive access provider's equipment on a

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[38] *See Ruckelshaus v. Monsanto Co., supra* 104 S. Ct. at 2880.

[39] 103 S.Ct. 407, 414 (1982).

[40] *Bell Atlantic Telephone Co. v. FCC*, 24 F.3d 1441, 1445 (D.C. Cir. 1994)("*Bell Atlantic*").

local exchange carrier's property because such physical intervention upon the LEC's property would constitute a "taking" without compensation.[41]

The teaching of *Bell Atlantic* is strongly relevant to the situation at hand threatened by the Commission's radial formula proposal for 931 MHz paging operators. Here, the Commission's action would also give rise to a "taking," and no provision has been made for compensation of potentially affected licensees. Because the Communications Act cannot be interpreted to authorize the Commission to effect an uncompensated taking, it is unlikely that the Commission has authority to impose the new radial formula proposal. The constitutional impediments to the proposed contour rule could be obviated by grandfathering the service areas and interference contours of incumbent licensees, or taking other remedial steps to avoid modification of such licenses which circumscribe previously awarded rights on which licensees have relied and have made investment decisions.

VI. Service And Interference Contours For 900 MHz Paging Systems Should Be Standardized

The purpose of the proposed formulas is to allow the geographic licensee more flexibility in the placement of transmitters in areas in which an incumbent exists. PageNet strongly opposes the use of the proposed formulas because they will needlessly complicate the design, construction and build-out of geographic 931 MHz and 929 MHz paging systems. The result of

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[41] *Id.* at 1447.

the more complicated engineering process for the geographic area systems will culminate in higher costs for system design and may result in higher prices to subscribers.

In addition, even if the Commission adopted formulas that were actually reflective of actual service and interfering contours, PageNet is not convinced that formulas hold any greater practical application for the geographic licensee than standard mileage separations. As an example, attached hereto as Exhibit 2 is a depiction of PageNet's regional 929.1375 MHz system with a 70-mile composite contour. As the map demonstrates, even if formulas were used by a geographic licensee to place co-channel transmitters, the geographic licensee would not be able provide any meaningful service within the areas covered by this system.

PageNet has had extensive experience in the build-out of 900 MHz paging systems and believes that a simple methodology in the placement of co-channel facilities would benefit the geographic licensee more than the formulas proposed in the NPRM. The most simple methodology to employ is a minimum 70-mile co-channel separation standard for all 931 MHz and 929 MHz facilities, regardless of antenna height and power. Under this methodology, the geographic licensee need only know one fact about the incumbent facility -- the geographic location of the co-channel facilities -- so that a simple distance calculation may be made.

This standard co-channel separation methodology obviates the need for formulas and provides the geographic licensee with an accurate and inexpensive standard for determining how close co-channel facilities may be placed to an incumbent transmitting

site. In addition, because 70 miles is currently the minimum co-channel separation standard for both 931 MHz and 929 MHz paging facilities, the Commission can be confident that this separation standard unerringly protects co-channel facilities from interference. Further and equally compelling, under this standard method, the Commission would be assured that it would not have to arbitrate the numerous interference disputes that would be generated by the use of the formulas.

Under the 70-mile co-channel separation standard, all 931 MHz and 929 MHz facilities should be treated as having a circular service contour of 20 miles and a circular interference contour of 50 miles. Modifications to incumbent facilities would be permissible without prior notification to the Commission if the modification did not extend past the composite interference contour of the system. If the composite interference contour is not altered in any manner, the modification to the system need not be reported to the Commission. This type of modification would naturally relate to the additions or deletions of totally encompassed transmitting sites commonly referred to as 100% fill-ins.

The other permissible type of modification to the incumbent systems would be modifications that affect the composite interference contour. Because incumbent licensees will not be able to expand their composite interference contour, this type modification would naturally relate to a reduction of the composite interference contour by the relocation of what would be an external transmitter site. In this instance, the modification

should be considered permissible, but the incumbent licensee should be required to notify the Commission of the reduction of the composite interference contour and the incumbent's license should be modified accordingly. The area given back by the incumbent licensee should be made available for service by the geographic licensee as long as the 70-mile co-channel separation standard is met.

It should be emphasized that this simple 70-mile co-channel protection standard is consistent with the current rules. Under Sections 22.537 and 90.495 of the Commission's Rules, the minimum co-channel separation standard for 931 MHz and 929 MHz facilities is 70 miles. Under Section 22.537, the service contour of a 931 MHz facility is 20 miles and its interference contour is 50 miles. Currently, there is no interference contour for 929 MHz facilities. Because both 931 MHz and 929 MHz facilities enjoy the same minimum co-channel separation, and their services and operations are indistinguishable, these systems should also be subject to the same service and interference contours. Therefore, a 20-mile service contour and a 50-mile interference contour should also be adopted for all 929 MHz systems.

Both Part 22 and Part 90 of the Commission's Rules provide for a greater than 70-mile co-channel separation for stations that have greater antenna height and/or power. PageNet believes that the number of these stations is *de minimis*. However, to account for these greater height and/or power stations in the context of incumbent systems within a geographic area, the Commission should grandfather the existing co-channel separation

enjoyed by these systems. For greater height and/or power stations that are internal to multi-transmitter wide-area systems, the existence and need to protect these stations is transparent because the stations do not form the outer interference composite contour of the system. For the very few greater antenna height and/or power stations that actually comprise the composite interference contour of a system, meaning they are an external transmitting site, grandfathering the co-channel separation distance will be an effective means of protecting these systems from co-channel interference.

VII. Geographic License Construction Requirements

The Commission should establish construction requirements that will provide prompt service to the public and deter speculation in the paging auctions. Although the paging industry is a mature industry, for the last several years it has been plagued with spectators who license paging facilities without the intention of ever serving the public. In some cases, these speculators were victims of application mills and were not fully informed of their obligations as licensees. In other cases, the speculators are entities that hope to profit from flipping their licenses. These speculators can be identified by their repeated re-licensing or "roll-over" of licenses. Because this second type of speculator files its second and then its third application prior to the expiration of the proceeding application without constructing the authorized facility, no *bona fide* applicant may file for the channel and the channel is not used to serve the public. The Commission has adopted measures to reduce

speculation and to reduce the roll-over of authorizations and these measures should be enforced.

In light of the strong history of speculation in paging channels and the already substantial build-out on many of the paging channels by *bona fide* carriers, an early construction benchmark should be imposed on geographic licensees in addition to the benchmarks proposed in the NPRM. An early benchmark will deter speculators while promoting prompt service to the public under the geographic license. The Commission must understand that speculators have had a field day with paging channels and the cottage industry of application mills will seize upon a paging auction to further inundate the paging licensing process with applicant's whose only goal is to acquire a license and then sell or flip the license prior to the currently proposed three-year construction period. This is particularly so if the speculator may elect to make a substantial service showing and wait five years to meet any construction requirement. Therefore, the Commission should impose the following three hard and fast construction requirements on paging geographic licensees:

(1) <u>One-year - 10% population coverage requirement</u>. Within one year of the grant of the license, the geographic licensee must have constructed facilities that cover 10% of the population of the market area.

(2) <u>Three-year - 33.3% population coverage requirement</u>. Within three years of the grant of the license, the geographic licensee must have constructed facilities that cover 33.3% of the population of the market area.

(3) <u>Five-year - 66.6% population coverage requirement</u>. Within five years of the grant of the license, the geographic licensee must have constructed facilities that cover 66.6% of the population of the market area.

In addition to the foregoing construction benchmarks, the Commission must not adopt its proposal to require a substantial service showing in lieu of meeting the construction benchmarks. The paging marketplace is mature with approximately 600 existing carriers, and over 34 million subscribers. If an auction participant seeks a geographic license, it is in the public interest that the Commission have some measure of confidence that the applicant intends to provide service to the public. Therefore, not only do the construction requirements and the inability to make a substantial service showing deter speculation, these measures will ensure that geographic licenses are used for service to the public rather than held for profiting and remaining unused for a lengthy period of time.

The penalty for failure to construct under the geographic license benchmarks should be the automatic termination of that license. If the geographic license had been acquired by an incumbent licensee, the original incumbent site specific licenses would be restored and treated as any other incumbent in the geographic license area. Any facility constructed under the geographic license could only be operated on a secondary basis. A returned geographic license should be made available immediately for new applications by a specific public notice. If mutually exclusive applications are filed, the license will again be subject to auction. The auction should be conducted as swiftly as possible.

VIII. The Power Limit For Non-Nationwide 929 MHz Paging Systems Should Be Raised To 3500 Watts

As proposed in the NPRM, PageNet supports the ability of non-nationwide 929 MHz carriers to operate their facilities at up to 3500 watts effective radiated power ("ERP").[42] In the 931 MHz band, the Commission recently eliminated the height-power limit because most systems in the 931 MHz band are multi-transmitter wide-area systems covering large areas.[43] The Commission concluded that it is more cost-effective for licensees to cover a large area with a high power facility than numerous smaller facilities.[44] For these reasons, the Commission should eliminate the height-power limitations for 929 MHz licensees because, like 931 MHz systems, paging systems in the 929 MHz band are multi-transmitter wide-area systems.[45]

IX. Interference Protection Among Adjacent Co-Channel Geographic Licensees

In the NPRM, the Commission sought comment on the interference protection obligations of geographic licensees with respect to neighboring co-channel licensees in the shared market

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[42] NPRM at ¶ 57.

[43] NPRM at ¶ 60.

[44] *See In the Matter of Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, Report And Order*, 9 FCC Rcd 6513, 6528 (¶ 74)(1994).

[45] Because high power stations could cause interference to co-channel facilities further away than 70 miles, the use of new high power stations for incumbents should be restricted to internal sites. The Commission should, however, allow incumbent and geographic licensees to reach their own agreements regarding co-channel spacing, including high power external sites, for incumbent systems.

area border.[46] The Commission tentatively concluded that geographic licensees should achieve interference protection either by: (1) negotiating a mutually acceptable agreement with the adjacent co-channel licensees; or (2) requiring the geographic licensees to reduce the signal level at their service area boundary (*e.g.*, by positioning directional antennas in such a way that the service contour does not encroach on a geographic licensee's adjacent territory).[47] PageNet believes that the Commission should adopt both of these proposals. By allowing geographic licensees to reach agreements among themselves as to how best to provide service in the market area border, the Commission will be allowing the licensees the flexibility of reaching the best solution for the carriers' business goals and for service to the public. As a general matter, the licensees should be given a wide latitude in permissible sharing and other arrangements geared toward eliminating harmful interference in the border areas.

The first option for eliminating harmful interference in the shared border area is permissive and will allow the geographic licensees to work together to reach solutions that best fit the needs of the carriers and their subscribers. The second option is technical and should not require any input from the adjacent co-channel licensee. The technical option should require that,

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[46] NPRM at ¶ 62.

[47] *Id.*

in the absence of an agreement with the adjacent co-channel licensees, the geographic licensee employ technical solutions, such as directional antennas, to reduce the signal level at their service area boundary. This technical option will allow service to the border in situations where the adjacent co-channel licensees cannot reach a joint solution on the elimination of harmful interference. Finally, the Commission should only entertain complaints regarding border area transmitters placed by using the technical option if the complaining geographic licensee is able to demonstrate actual harmful interference to its operations rather than incidental signal bleed-over.

X. Eligibility For Geographic Paging Licenses

As proposed in the NPRM, PageNet supports no eligibility restrictions for the geographic paging licenses.[46] However, as discussed in Section XIII.A *infra*, PageNet believes, because of the existence of wide-area incumbent systems that meet the threshold construction requirements proposed for the geographic licenses, the Commission should not offer geographic licenses for auction for certain markets.

XI. Licensing Of Channels Allocated To Canada And Mexico In Border Areas Should Be Allowed If The Geographic Licensee Has An Agreement With The Foreign Licensee

In the NPRM, the Commission tentatively concluded that, if the paging services are converted to geographic licensing, all geographic areas should be licensed on a uniform basis without

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[46] NPRM at ¶ 65.

distinguishing border from non-border areas, even if some spectrum is unusable.[49] PageNet supports the Commission's tentative conclusion to include the entire geographic area in the license even if the specific channel is unavailable in the border region because it has been assigned to Canada or Mexico on a primary basis. With respect to the border areas and channels allocated on a primary basis to Canada and Mexico, the Commission should continue the practice of allowing the placement of transmitters by the U.S. licensee (the geographic licensee) on the U.S. side of the border area if the U.S. licensee has consent from the foreign licensee and the appropriate foreign regulatory authority. The geographic licensee and the foreign carrier will likely enter into an intercarrier arrangement that allows their subscribers to cross the border and receive service. This cooperation is vital to the development of international roaming service offerings and will serve the public interest because it will allow a subscriber to travel from Mexico, to the United States, and into Canada while receiving messages from a single paging unit.

XII. There Should Be No Channel Aggregation Limitation Or Spectrum Cap For Paging Channels

In the NPRM, the Commission sought comment as to whether a spectrum cap should be placed on the paging channels.[50] PageNet vigorously opposes a spectrum cap for paging carriers. A

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[49] NPRM at ¶ 64.

[50] NPRM at ¶¶ 68-70.

spectrum cap cannot be imposed on paging carriers because paging spectrum is already significantly licensed. Generally speaking, it is unlikely that licensees will acquire large amounts of additional virgin spectrum as a result of the auctions. There simply is not that much unassigned spectrum left. Rather, licensees will be attempting to acquire spectrum that will compliment their existing geographic licenses *e.g.*, the MTAs in which their existing facilities reside. This process of acquiring the market area license and thus assuming the expansion rights for existing systems, cannot be achieved within the confines of a spectrum cap.

Secondly, a spectrum cap is inappropriate because the Commission has already determined that the paging marketplace is highly competitive. PageNet respectfully submits that a cap should only be considered if the concentration of spectrum in the hands of a few licensees caused verifiable anti-competitive ramifications in the paging marketplace. This is not the case for paging and a spectrum cap is not warranted.

A third reason not to impose a cap on paging spectrum is that paging carriers have the smallest allocation of spectrum among the CMRS providers. When the Commission considers that broadband carriers have a spectrum cap of 45 MHz and a paging channel is 25 kHz in bandwidth (1/40 of 1 MHz), it does not seem conceivable that the Commission would even consider a cap on

paging spectrum.[51] The broadband carriers may and do provide paging service that is indistinguishable from traditional paging service. From a parity standpoint, no spectrum cap would be appropriate on traditional paging carriers in light of the fact that their competitors in the CMRS marketplace are able to license significantly more spectrum than all of the paging spectrum licensed to the 600 present paging carriers put together.

XIII. Auction Considerations For Paging Channels

A. Geographic Licenses Should Be Automatically Awarded To Incumbent Licensees That Meet The Five-Year Construction Coverage Requirement

In the design of the paging auction, the Commission must take into account existing incumbent licensees. Paging is not like narrowband PCS (where the spectrum to be auctioned was clear) or broadband PCS or 800 MHz SMR (where mandatory relocation will be used to move incumbents from the spectrum) or even 900 MHz SMR where there are significant unserved areas and clear spectrum in many of the markets.[52] For the most part, paging channels are heavily licensed and heavily loaded with subscribers. As such, the Commission cannot proceed, as it has

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[51] One broadband carrier holding 45 MHz of spectrum is the equivalent to that carrier holding 1800 paging channels in one place.

[52] Even incumbent SMR licensees are facing major system and equipment modification to conform their systems in order to meet the competitive pressures of PCS and cellular.

in other services, as if vast numbers of paging carrier incumbents are not already licensed with sizable systems.

There is absolutely no question that, if an incumbent licensee's system covers at least 66.6% of the population of the market area, the market area license has no significant value to any other licensee as no one else will be able to offer service to the densely populated areas, and no one else will be able to offer the broad service subscribers demand. Furthermore, the fact that a wide-area system exists within the market area on a particular channel means that it is in the public interest that this system be expanded throughout the geographic license area. If the Commission should auction the geographic license for a channel for which an incumbent system already covers 66.6% of the population, unless the geographic licensee buys the incumbent, the market area licensee will ultimately fail for failure to meet subscribers' needs and for failure to meet the construction benchmarks. This will delay service to the public by the incumbent licensee and still not provide an avenue for the award of the geographic license to the incumbent carrier that, by its own substantial build-out, has truly earned the license.

In the context of 900 MHz paging, in order to serve the public interest, the Commission should not auction an unserved area within a geographic area if an existing licensee on the specific channel already covers by its 50-mile interference contours 66.6% of the population of the market area. If this is the case, the geographic license should be awarded to the incumbent licensee without having to participate in the auction.

The incumbent licensee has earned the market area license because it has already made the substantial investment to build a system in service to the public. In addition, the public interest is best served by allowing this existing incumbent system to complete its coverage of the MTA. Finally, from a policy standpoint, it better serves the Commission, subscribers and carriers to allow the incumbent, who has already earned the market area license, to hold the license, rather than to sell a license that, on its face, has no significant value.

B. Auction Design

1. License Groupings

The Commission should auction the 931 MHz and the 929 MHz channels in one auction and this auction should be conducted first because these are the channels that are in greatest demand by carriers building and maintaining wide-area high-capacity paging systems. The lower band channels should be auctioned in a second auction.

2. Simultaneous Auctions For 929 MHz and 931 MHz Licensees With Individual License Termination

With over 8000 licenses to potentially auction, the Commission must adopt an auction design that will accommodate large numbers of licenses. The following elements are essential to a meaningful auction design for the paging channels:

(1) Simultaneous Multiple Round. The auction design should be based upon a simultaneous multiple round model. Electronic bidding should be utilized.

(2) Bidders May Only Bid On Licenses That They Specifically Identified On Their Form 175 Applications And For Which They Have

Made A Specific Individual Up-front Payment. In previous auctions, the Commission has allowed applicants to specify "all licenses" on their Form 175 applications and submit an up-front payment that would not cover bidding on all of the licenses specified.[53] This meant the applicant could jump its bids around from license to license. Although this jumping ability may have had some utility in auctions where the spectrum was fungible or it is believed that incumbents are in transition, bid jumping will not be beneficial in the paging auction.

The fact that there are significant established incumbent systems on the paging channels indicates that the vast majority of legitimate bidders will focus on acquiring the geographic license needed to protect and/or expand existing systems. Furthermore, letting applicants check "all" will trigger the application of competitive bidding procedures, and the delays, etc., associated with the licensing process even in geographic areas which are desirable to only one applicant.

This does not mean that every applicant will not have the chance to bid on every license offered. What this means is that, prior to the auction, the applicant must evaluate the licenses and determine which specific licenses it will bid upon. Once that decision is made and the applicant has filed its Form 175

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[53] It may be appropriate for the Commission to design a specific and uniform worksheet to be filed with the Form 175 applications that identifies all of the licenses and allow the applicant to indicate which licenses will be bid upon in the auction.