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BEFORE THE
Federal Communications Commission
WASHINGTON, DC 20554

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Federal Communications Commission
Office of Secretary

In the Matter of	)	
	)	
Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS	)	GN Docket No. 90-314 ET Docket No. 92-100
	)	
Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Narrowband PCS	)	PP Docket No. 93-253

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COMMENTS OF ARCH COMMUNICATIONS GROUP, INC.

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COMMENTS OF ARCH COMMUNICATIONS GROUP, INC.

Arch Communications Group, Inc. ("Arch")[1], by its attorneys, hereby submits these comments in response to the Further Notice of Proposed Rulemaking issued in the above-captioned dockets.[2] In this proceeding, the Commission seeks comment on various proposals concerning licensing and auction issues relating to narrowband Personal Communications Services ("PCS").

I. INTRODUCTION AND SUMMARY

It has been almost three years since the Commission last addressed the service and auction rules for the narrowband PCS service. The Commission now proposes to

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1 Arch is a leading provider of paging services with over 3 million pagers currently in service. Arch operates in more than 40 states, and in 80 of the 100 largest markets in the United States.

2 *In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Narrowband PCS*, GEN Docket No. 90-314, ET Docket No. 92-100, PP Docket No. 93-253, Report and Order and Further Notice of Proposed Rulemaking, 62 Fed. Reg. 27507 (1997) ("*Further Notice*").

amend those rules, and it seeks comment in the *Further Notice* on how change should be effectuated. These proposals are not made in a vacuum -- recent developments in the industry provide a solid basis upon which the Commission can rely in making its determinations. Arch, therefore, agrees that this is an appropriate time to revisit these rules.

One notable change in the wireless services marketplace has been the trend toward larger service areas. Such a development was not necessarily apparent in 1993 when the narrowband PCS channelization and licensing scheme was first prescribed. For example, a decade before, the Commission had allocated three 931 MHz frequencies for use on a nationwide basis.[3] Demand for nationwide paging originally was so slight that one nationwide licensee let its construction permit expire and another requested permission to provide local service on its frequency.[4] The Commission later even proposed reallocating one of the nationwide 931 MHz frequencies on a local basis.[5] Thus, the Commission's decision to include small service areas, such as Basic Trading Areas

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[3] *See Amendment of Parts 2 and 22 of the Commission's Rules to Allocate Spectrum in the 928-941 MHz Band and to Establish Other Rules, Policies, and Procedures for One-Way Paging Stations in the Domestic Public Land Mobile Radio Service*, GEN Docket No. 80-183, First Report and Order, 89 FCC 2d. 1337 (1982).

[4] *See Flexible Allocation of Frequencies in the Domestic Public Land Mobile Service for Paging and Other Services*, CC Docket No. 87-120, 2 FCC Rcd 2795, 2796 at ¶ 14 (1987).

[5] *Id.*

("BTAs"),[6] in its original allocation plan for narrowband PCS made perfect sense at that time.[7]

Much has changed in the last three to four years, with the trend toward the establishment of nationwide systems at the forefront. A good illustration of this trend is found in the one-way paging industry. Following its initial narrowband PCS allocation plan, the Commission adopted rules allowing Private Carrier Paging ("PCP") systems to gain channel exclusivity in the 929-930 MHz band.[8] In response to that action, 70 percent of all 929 MHz authorizations are now licensed on a regional or nationwide basis, and of the 75 total channels available in the 931 MHz and 929 MHz exclusive bands, 26 are licensed on a nationwide basis.[9] This dramatic increase in the number of nationwide systems in the one-way paging industry occurred after the Commission's original allocation plan for narrowband PCS.

It is therefore appropriate for the Commission to take this trend into account as it re-evaluates its allocation plan for narrowband PCS. Indeed, Arch believes that the need for further examination of the issue of larger service areas is particularly relevant in the

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6 Rand McNally is the copyright owner of the MTA/BTA listings, which list the BTAs contained in each Major Trading Area ("MTA") and the counties within each BTA, as embodied in Rand McNally's Trading Areas System MTA/BTA Diskette, and geographically represented in the Rand McNally 1992 Commercial Atlas and Marketing Guide (the "MTA map"), 123rd Edition at pp. 38-39.

7 *See Amendment of the Commission's Rules to Establish New Narrowband Personal Communications Services*, GEN Docket No. 90-314, ET Docket No. 92-100, First Report and Order, 8 FCC Rcd. 7162 (1993) ("*PCS First R&O*").

8 *See Amendment of the Commission's Rules to Provide Channel Exclusivity to Qualified Private Paging Systems at 929-930 MHz*, PR Docket No. 93-35, Report and Order, 8 FCC Rcd 8318 (1993).

9 *Further Notice* at ¶ 30, n. 94.

narrowband PCS context. Advanced messaging is primarily tied to those who travel, and thus, by its nature, requires large, often contiguous service areas. Moreover, Arch has concluded from its involvement in the narrowband PCS industry[10] that larger coverage areas are crucial in the creation of two-way voice and data applications.[11] The Commission appears to agree with this assessment: "our experience with similar services [to narrowband PCS] suggests that larger licensing areas may be more suitable to the actual configuration of narrowband systems ... regional and nationwide service areas in narrowband PCS would provide economies of scale and should alleviate some of the problems licensees have experienced when they have tried to aggregate smaller license areas."[12]

At the same time that this apparent shift toward larger service areas has occurred, only two narrowband PCS licensees currently have the necessary spectrum capacity (of up to 150 kHz in outbound channels) to provide voice services on a nationwide basis. These licensees will effectively be able to retain a stranglehold on the provision of this type of narrowband PCS service unless the Commission creates additional nationwide and regional licenses so that other carriers can amass the requisite spectrum capacity.

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10 Arch, through its wholly owned-subsidiary The Westlink Company, holds a non-controlling interest in Benbow PCS Ventures ("Benbow"). Benbow holds two regional narrowband PCS licenses for Regions R004-06 and R005-06. Benbow just recently announced its proposed acquisition of PageCall, Inc., which holds three regional narrowband PCS licenses for Regions R001-06, R002-06 and R003-06. Arch also has a minority interest in CONXUS (formerly PCS Development Corporation), a regional narrowband PCS licensee for licenses in Regions R001-02, R002-02, R003-02, R004-02 and R005-02.

11 It is also Arch's experience that the financial community views narrowband PCS as primarily a wide-area or nationwide service.

12 *Further Notice* at ¶ ¶ 29-30.

While some existing narrowband PCS licensees have argued against the creation of larger service areas for spectrum yet to be auctioned,[13] the Commission correctly points out that "the goal of our spectrum policy is not to preserve the value of the licenses that auction winners acquire, but to promote competition and service in the public interest."[14]

Insofar as the Commission may have been influenced by a belief that BTAs are necessary for small business participation when it originally allocated narrowband PCS spectrum, this concern proved unwarranted. Indeed, the Commission proposed to redesignate two BTA licenses as regional licenses following the nationwide narrowband PCS auction, because over half of the bidders in that auction would have qualified for an entrepreneurs' block license.[15] In the *Further Notice*, the Commission again recognized that licensing narrowband PCS using larger service areas would not preclude small business participation.[16] The Commission, therefore, is correct in readdressing its spectrum allocation at this time and devising a channelization scheme that takes into

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13 *Id.* at ¶ 28.

14 *Id.* at ¶ 32.

15 *See Implementation of Section 309(j) of the Communications Act - Competitive Bidding Narrowband PCS and Amendment of the Commission's Rules to Establish New Narrowband Personal Communications Services*, PP Docket No. 93-253, GEN Docket No. 90-314, ET Docket No. 92-100, Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd. 175, 228 at ¶ 122 (1994). The Commission also sought comment on "other means to achieve larger geographic license sizes such as designating these BTA licenses as nationwide licenses." *Id.*

16 The Commission explains that 75 percent of the winning bidders in the 900 MHz Specialized Mobile Radio ("SMR") auction, which awarded licenses on an MTA basis, qualified as small businesses.

account the developments of the past few years and more accurately reflects the state of today's wireless messaging industry.

Arch also addresses the following arguments in response to the Commission's *Further Notice*:

- The Commission seeks comment on whether to channelize and license the remaining one MHz of narrowband PCS spectrum currently held in reserve. Arch believes that the Commission's reasoning in originally reserving this spectrum block remains valid today given that the narrowband PCS industry is still in its developmental stages.

- The Commission seeks comment, in light of its proposal to license the reserve block, on whether the narrowband PCS spectrum aggregation limit should be modified. Arch urges the Commission to retain the existing aggregation limit. The Commission should also take the opportunity in this proceeding to create regulatory parity among similarly situated licensees and adopt narrowband PCS attribution rules consistent with those for broadband Commercial Mobile Radio Service ("CMRS") providers.

- The Commission has sought comment on whether it should auction separately or at one time the remaining narrowband PCS spectrum that has been allocated and the paging response channels. Arch submits that factors of expediency and efficiency, as well as the potential drain on resources of both auction applicants and the Commission created by separate auctions, warrant a single auction for these channels.

- The Commission proposes to eliminate the restriction on paging response channels which limits their eligibility to incumbent paging licensees. Contrary to the Commission's assertions, Arch believes this action would deter competition by preventing one-way paging incumbents from upgrading their systems and providing two-way services in competition with narrowband PCS licensees. Arch also opposes the Commission's proposal to remove the mobile-to-base restriction on these response channels because of the potential for harmful interference.

- Finally, the Commission proposes to amend its existing construction and coverage requirements to allow narrowband PCS licensees to take advantage of a "substantial service" alternative to specific benchmarks. Arch submits that adoption of the vague substantial service alternative proposed by the Commission would thwart Congressional intent. Rather, Arch believes that defined construction thresholds should be required. The Commission should, however, modify the construction and coverage standards applicable to narrowband PCS to give licensees who pay for their spectrum sufficient flexibility to successfully implement their business

plans, especially given the delays caused by the lack of commercially available equipment.

II. NARROWBAND PCS SERVICE AREAS SHOULD BE MODIFIED

The remaining narrowband PCS spectrum that has been allocated is currently channelized as follows:[17]

	50/50 kHz (paired)	50/12.5 kHz (paired)	50 kHz (unpaired)	12.5 kHz (unpaired)
Nationwide				
Regional				
MTA	2	3	2	4
BTA		2		4

The Commission has proposed to reconfigure the service areas of the remaining spectrum by eliminating BTA licenses. Specifically, the Commission proposes that the band be channelized as follows:[18]

	50/50 kHz (paired)	50/12.5 kHz (paired)	50 kHz (unpaired)	12.5 kHz (unpaired)
Nationwide	2	1		
Regional		3		4
MTA		1	2	4

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17 *See PCS First R&O*, 8 FCC Rcd. at 7167, ¶ 28, as modified by *Amendment of the Commission's Rules to Establish New Narrowband Personal Communications Services*, GEN Docket No. 90-314, ET Docket No. 92-100, Memorandum Opinion and Order, 9 FCC Rcd 1309, 1311, ¶ 15 (1994) ("*Narrowband Reconsideration*").

18 *Further Notice* at ¶ 31.

Arch agrees that elimination of BTA-based licenses is justified because BTA service areas are too small to provide a viable narrowband service. The Commission correctly points out that larger service areas are more conducive to narrowband system configurations. The Commission notes in this regard its decision to establish MTA-based licensing for 929 MHz and 931 MHz paging channels, which "are likely to be directly competitive with narrowband PCS."[19] The Commission also makes the point that establishing MTAs as the smallest geographic area in a service does not preclude small business participation, noting that 60 of the 80 high bidders in the MTA-based 900 MHz SMR auction were small businesses.[20]

As noted, the Commission has recognized the trend toward demand for larger licensed service areas. The Commission correctly points out that regional and nation-wide service areas for narrowband PCS create economies of scale and solve many of the difficulties licensees have experienced in attempting to aggregate smaller license areas.[21] The demand for larger service areas is further illustrated by the fact that several of the winning bidders in the regional narrowband PCS auction aggregated their licenses into nationwide service and by the large number of 929 and 931 MHz paging licensees currently operating regional and nationwide systems.[22]

Arch therefore supports the Commission's proposed reconfiguration of channels with one exception. Specifically, while the Commission proposes to redesignate the two

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19 *Id.* at ¶ 29.

20 *Id.*

21 *Id.* at ¶ 30.

22 *Id.*

remaining 50 kHz paired channels as nationwide licenses, Arch believes the Commission should instead establish one of these channels as a nationwide license and one as a regional license.[23] Arch's proposal would afford more opportunities for potential industry participants, without foreclosing the opportunity for aggregation of regional licenses into larger systems.

III. THE RESERVED ONE MHz OF SPECTRUM SHOULD NOT BE LICENSED AT THIS TIME

The Commission allocated three MHz of spectrum -- in three separate one MHz blocks -- for narrowband PCS in 1993.[24] Two of these one MHz blocks were channelized and made available for immediate licensing; one block was held in reserve. The Commission specifically stated that it was holding the remaining one MHz block in reserve to "allow us flexibility in the future to channelize and license the remaining one megahertz of spectrum as this service develops."[25]

The Commission now tentatively proposes to channelize and license this reserve spectrum on the assumption that such action will facilitate competition and allow existing narrowband PCS licensees to expand their systems.[26] In Arch's view, plans to auction this reserve spectrum are imprudent at this time. The very factors that persuaded the

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23 Specifically, Arch believes Channel 18 should be designated as available for assignment on a regional basis, and Channel 19 should be designated as available for assignment on a nationwide basis. *See* 47 C.F.R. § 24.129(c)(1).

24 *PCS First R&O*, 8 FCC Rcd. at 7165 at ¶ 19.

25 *Id.*

26 *Further Notice* at ¶ 34.

Commission to reserve this one MHz of spectrum in 1993 still hold true today because the narrowband PCS industry is still in its developmental stages.

The well-documented delays in the introduction of commercially available equipment during the past several years have put the deployment of this service temporarily on hold. New equipment and software are largely still in the testing stages. Until these technological uncertainties can be resolved, the introduction of this one MHz of spectrum would be premature. The Commission, as well as the industry, will be better able to make prudent decisions regarding the use of this reserve spectrum once existing narrowband PCS licensees have put their systems into operation.

IV. REMAINING ALLOCATED NARROWBAND PCS SPECTRUM AND PAGING RESPONSE CHANNELS SHOULD BE AUCTIONED IN ONE AUCTION

The Commission tentatively concludes that it will conduct one auction for the remaining narrowband PCS spectrum that has been allocated[27] and one auction for the paging response channels, while reserving the option to auction these channels with the remaining narrowband PCS licenses.[28]

For those entities, like Arch, considering whether to participate in the auction of narrowband PCS licenses and paging response channels, separate auctions pose problems in terms of resources and financing. The drain on resources of both applicants and the Commission created by conducting two separate auctions is a particularly compelling reason for a single auction. Further, one auction would offer much needed expediency

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[27] *Further Notice* at ¶ 55.

[28] *Id.* at ¶ 57.

and convenience in licensing the remaining two MHz of allocated spectrum and the response channels.

As for financing, capital markets are very competitive, and companies will have better chances of success in raising necessary funding if they approach potential investors once with regard to a single auction, rather than on multiple occasions. The Commission's auction design should reflect this reality.

V. EXISTING PAGING RESPONSE CHANNEL USE AND ELIGIBILITY RESTRICTIONS SHOULD BE MAINTAINED

A. Response Channels Should Be Limited To Mobile-to-Base Transmissions

The Commission's rules currently permit paging response channels to be used only in paired communications with existing paging channels to provide mobile-to-base station communications.[29] The Commission proposes to remove this mobile-to-base restriction so long as licensees comply with relevant rules regarding maximum transmitter power and interference.[30] Arch opposes this proposal. The current use restrictions should be maintained because of the potential for the creation of harmful interference at receive sites if these response channels are allowed to be used for transmission purposes. This concern is particularly relevant given the high probability that receivers will be collocated with transmitters at base station facilities. The industry is in agreement that the current maximum power of 7 watts is too high, and if allowed to stand, could result in a raising of the noise floor, thus causing interference to receivers.

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[29] 47 C.F.R. § 24.130(a).

[30] *Further Notice* at ¶ 40.

B. Eligibility For Response Channels Should Be Limited To Incumbent Paging Licensees

Eligibility for response channels is currently limited to existing paging licensees of conventional one-way paging base stations licensed under Part 22 or Part 90 of the Commission's rules.[31] The Commission proposes to lift all eligibility restrictions for these response channels, claiming that doing so would increase competition.[32] Arch submits that adoption of this proposal would, in fact, deter competition.

These channels were originally set aside to allow incumbent paging licensees to upgrade their systems. This reasoning is still sound -- reserving these channels for incumbents will enable these entities to provide two-way services in competition with narrowband PCS licensees. Such competition would never eventuate under the Commission's proposal. Further, incumbent paging licensees will be able to make immediate use of these response channels in providing service to the public in connection with their existing, operational systems. Accordingly, Arch believes that eligibility for these response channels should continue to be restricted to existing Part 22 and Part 90 paging licensees.

VI. THE EXISTING AGGREGATION LIMIT SHOULD BE MAINTAINED BUT THE ATTRIBUTION RULES SHOULD BE RELAXED

A. There Is No Need To Modify The Spectrum Aggregation Limit At This Time

Pursuant to Section 24.101 of the Commission's rules, a single narrowband PCS licensee is limited to holding licenses for up to three 50 kHz channels, either paired or

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31 *Narrowband Reconsideration*, 9 FCC Rcd. at 1313, ¶ 26.

32 *Further Notice* at ¶ 40.

unpaired.[33] This limit is based on the total narrowband PCS spectrum held by a licensee through nationwide, regional and local licenses at any geographic point. Licenses for paging response channels are not counted toward this aggregation limit.[34] In addition, incumbent paging licensees are limited to obtaining a total of two response channels within the same geographic area for the first two years after initial license grant.[35]

The Commission requests comment on whether this aggregation limit should be modified or removed in light of its proposal to open and license the one megahertz of spectrum currently held in reserve.[36] Should the Commission continue to hold the one MHz of spectrum in reserve, as Arch recommends, then there would be no need or basis for revising the current aggregation limits.

Moreover, the Commission's decision in imposing this limit is still valid -- it allows "PCS providers considerable flexibility to combine channels to accommodate specific service needs while also ensuring competition in the provision of services."[37] As noted at the outset, only two existing narrowband PCS licensees possess enough spectrum capacity (*i.e.* up to 150 kHz in outbound channels) to currently be providing voice services on a nationwide basis. These carriers are precluded from obtaining additional spectrum by virtue of the existing narrowband PCS aggregation limit. The removal or

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33 *See* 47 C.F.R. § 24.101.

34 *See* 47 C.F.R. § 24.130(a) ("Licenses for paging response channels are not counted toward the multiple ownership restrictions of § 24.101.").

35 *Id.*

36 *Further Notice* at ¶ 35.

37 *PCS First R&O*, 8 FCC Rcd. at 7168, ¶ 34.

relaxation of this spectrum cap would allow these licensees to increase their spectrum holdings to the preclusion of others, thereby enabling the companies to maintain a stranglehold on the narrowband PCS two-way voice services market. The Commission's goal of promoting competition should not be overlooked in this context.

B. The Commission Should Make The Narrowband PCS Attribution Rules Consistent With Those For Broadband CMRS Licensees

Section 24.101(a)(2) defines a narrowband PCS licensee as any person or entity "with an ownership interest of five or more percent in a [narrowband PCS] license."[38] This attribution rule, which is unique to narrowband PCS, is more stringent than the attribution rules applicable to broadband CMRS providers. There is no apparent reason for this disparity with regard to narrowband PCS, particularly given the Commission's predisposition to establish regulatory parity among similarly situated licensees. Indeed, the initial attribution limit for the CMRS spectrum cap originally was set at the same level as that for narrowband PCS[39] -- *i.e.* five percent -- but was later modified to the current 20 percent attribution limit to make it consistent with the attribution rules applicable to the broadband PCS/cellular cross-ownership rules.[40]

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[38] 47 C.F.R. § 24.101(a)(2). Section 24.101(a)(1) also defines a narrowband PCS licensee as any institutional investor with an ownership interest of ten or more percent in a narrowband PCS license.

[39] *Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services*, GN Docket No. 93-252, Further Notice of Proposed Rulemaking, 9 FCC Rcd. 2863, 2884, ¶ 101 (1994).

[40] *Implementation of Section 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, Amendment of Parts 2 and 90 of the Commission's Rules To Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901*

(continued...)

For purposes of consistency, Arch recommends that the Commission adopt for narrowband PCS licensees the standard applicable to broadband CMRS licensees as set forth in Section 20.6(d) of the rules.[41] Adoption of this proposal would mean that ownership interests in a narrowband PCS licensee of less than 20 percent would not be attributable, and ownership interests of less than 40 percent would not be attributable if they are held by small businesses in a narrowband PCS licensee or if they are non-controlling equity interests in a narrowband PCS licensee which qualifies as a small business.[42]

VII. THE COMMISSION SHOULD MODIFY THE CONSTRUCTION AND COVERAGE REQUIREMENTS APPLICABLE TO NARROWBAND PCS LICENSEES

A. Definitive Construction/Coverage Benchmarks Are Needed

Section 24.103 of the Commission's rules establishes the current minimum coverage (in terms of population or, alternatively, composite geographic area) require-

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40 (...continued)
MHz and 935-940 MHz Band Allotted to the Specialized Mobile Radio Pool, GN Docket No. 93-252, PR Docket No. 93-144, PR Docket No. 89-553, Third Report and Order, 9 FCC Rcd. 7988, 8114, ¶ 276 (1994).

41 *See* 47 C.F.R. § 20.6.

42 *See* 47 C.F.R. § 20.6(a)(2). That section provides that "[p]artnership and other ownership interests . . . amounting to 20 percent or more of the equity, or outstanding stock, or outstanding voting stock of a broadband . . . [licensee] shall be attributed [to the holder], except that ownership will not be attributed unless the partnership and other ownership interests and any stock interest amount to at least 40 percent of the equity, or outstanding stock, or outstanding voting stock of a broadband . . .[licensee] if the ownership interest is held by a small business . . . or if the ownership interest is held by an entity with a non-controlling equity interest in a broadband . . . [licensee] that is a small business."

ments for narrowband PCS licensees as follows:[43]

	population coverage requirement		geographic area coverage requirement	
	5 years	10 years	5 years	10 years
Nationwide[44]	37.5 percent of U.S. population	75 percent of U.S. population	750,000 square kilometers	1.5 million square kilometers
Regional [45]	37.5 percent of region population	75 percent of region population	150,000 square kilometers	300,000 square kilometers
MTA [46]	37.5 percent of MTA population	75 percent of MTA population	75,000 square kilometers or 25 percent of MTA geographic area	150,000 square kilometers or 50 percent of MTA geographic area

The Commission proposes to allow narrowband PCS licensees to meet their performance requirements through a demonstration of "substantial service" as an alternative to meeting the above-referenced coverage requirements.[47] The Commission also requests comment on whether it should modify these coverage requirements in light

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43 *See* 47 C.F.R. § 24.103.

44 *See* 47 C.F.R. § 24.103(a).

45 *See* 47 C.F.R. § 24.103(b).

46 *See* 47 C.F.R. § 24.103(c).

47 *Further Notice* at ¶ 44.

of its proposal to allow the substantial service alternative[48] or whether it should eliminate coverage requirements for narrowband PCS altogether.[49]

Congress mandated that construction and coverage requirements should be imposed on licenses obtained through the auction process. Specifically, Section 309(j)(4)(B) of the Communications Act requires the Commission to "include performance requirements, such as appropriate deadlines and penalties for performance failures, to ensure prompt delivery of service to rural areas, to prevent stockpiling or warehousing of spectrum by licensees or permittees, and to promote investment in and rapid deployment of new technologies and services."[50] It is clear that Congress expected auction winners to build out systems, and the Commission should -- indeed must -- demand no less. Adoption of the amorphous substantial service alternative would enable auction winners to avoid the construction objectives envisioned by Congress. Specific construction benchmarks are needed to remedy this problem.

B. The Commission Should Modify Construction And Coverage Standards To Recognize The Experience Of Existing Narrowband PCS Licensees

Although the Commission should impose definitive coverage and construction benchmarks for the reasons noted above, Arch submits that modification of the current performance requirements applicable to narrowband PCS licensees is warranted. Specifically, the Commission should amend Section 24.103 of its rules to permit nationwide, regional and MTA narrowband PCS licensees to meet the 37.5 percent

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48 *Id.* at ¶ 45.

49 *Id.* at ¶ 46.

50 47 U.S.C. § 309(j)(4)(B).

population (and associated five-year geographic area) coverage requirements at 10 years from the initial license grant, rather than at the five-year mark currently required. This modified standard should be applied to both existing licenses and to licenses yet to be auctioned.

Arch believes that adoption of this recommendation is necessary to allow bona fide industry participants who have paid for their spectrum sufficient flexibility to successfully implement their business plans. Moreover, allotting additional time to construct is further warranted given the well-documented equipment and technological problems and delays that have been encountered by narrowband PCS licensees in their efforts to build systems and commence service. The Commission thus far has awarded 10 nationwide and 30 regional narrowband PCS licenses by auction. Only two licensees -- SkyTel, Corp.[51] ("SkyTel") and Paging Network, Inc. ("PageNet") -- have been able to institute commercial operation to date, however.

The delays, as noted, are attributable primarily to the unavailability of necessary equipment. For example, only three two-way paging and messaging protocol options are currently available for narrowband PCS licensees, depending upon whether a licensee chooses to provide voice or data service -- Motorola's InFLEXion, ReFLEX 50 and ReFLEX 25. Of these three, InFLEXion, primarily a voice application, is impractical for most licensees in that it requires installation of a new cellular system design infrastruc-

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[51] SkyTel is a wholly owned subsidiary of Mobile Telecommunication Technologies Corporation ("Mtel"). The Commission granted a final pioneer's preference (and awarded a nationwide narrowband PCS license for a 50 kHz unpaired block without auction) to an Mtel subsidiary in June 1993. *See PCS First R&O*, 8 FCC Rcd. at 7172-7175; *recon. granted in part, Narrowband Reconsideration*, 9 FCC Rcd. at 1315-1317 (1994).

ture as opposed to the traditional simulcast design used with the ReFLEX protocols.[52] Those licensees wanting to institute data services look to ReFLEX 50 and ReFLEX 25.[53] ReFLEX 50 is being used by SkyTel; however, because of software enhancements, SkyTel has a proprietary interest in this protocol. Thus, ReFLEX 50 is not an option for most licensees. ReFLEX 25, which is a data service protocol, still remains in the testing mode, and is not expected to be commercially available until early 1998.

These difficulties in obtaining the requisite equipment are beyond the licensees' control. The attendant delays will nonetheless make it extremely difficult for narrowband PCS licensees to meet the Commission's current construction and coverage requirements. Modification of these requirements is therefore warranted. Extending the construction benchmarks from 5 to 10 years would take proper account of the current state of the equipment market for narrowband PCS.

VIII. CONCLUSION

Important developments have occurred in the past three to four years since the Commission last addressed the narrowband PCS service. These changes reflect trends in the wireless messaging marketplace, as well as the realities faced by current narrowband PCS licensees. Accordingly, Arch respectfully requests, for the reasons stated herein,

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52 InFLEXion is being used by PageNet in providing its "VoiceNow" service.

53 A fourth two-way messaging protocol, personal Air Communications Technology ("pACT") was to have been commercially available later this year. AT&T Wireless Services, Inc. ("AT&T") was the only carrier that had publicly stated plans to use pACT. AT&T's decision not to deploy this protocol on its narrowband PCS system leaves the future of the pACT protocol in limbo. *See* Kelly Pate, *AT&T Plans to Pull the Plug on pACT*, Radio Communications Report, March 24, 1997, at 1.

that the Commission use this opportunity to re-evaluate its allocation plan and licensing rules for narrowband PCS.

Respectfully submitted,

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