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Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

Re: GEN Docket Nos. ~~90-314~~ 93-252; ET Docket No. 92-9; CC Docket No. 94-18 and PP Docket No. 93-253

Dear Mr. Caton:

At a January 14, 1994 meeting between the Personal Communications Industry Association ("PCIA") and Chairman Reed Hundt, the Chairman requested suggestions for actions that could facilitate timely availability of PCS. The enclosed document, "PCIA Report To The Federal Communications Commission On Expediting The Availability Of PCS" is submitted in response to Chairman Hundt's kind invitation.

If any questions should arise concerning this notification, please contact the undersigned at (202) 828-4987.

Respectfully submitted,

Lauren A Carbaugh

LAC:blw
Enclosure
cc: Sheldon M. Guttmann

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PCIA Report To The Federal Communications Commission On Expediting The Availability Of PCS

February 28, 1994

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY ii

I. THE DEMAND FOR PCS AND ITS RESULTING BENEFITS FOR CONSUMERS AND THE COUNTRY 1

A. Primary Findings 1

B. Service Specific Findings 3

II. THE FCC'S ABILITY TO AFFECT THE PACE AND PROGRESS OF PERSONAL COMMUNICATIONS SERVICES 4

A. Regulation and Its Effects on Cellular Deployment 5

B. Regulation and Its Critical Role in the Success of PCS 7

III. PCIA'S PROPOSALS FOR REGULATORY POLICIES TO FOSTER THE SUCCESSFUL DEPLOYMENT OF PCS 8

A. Capital Formation 8

B. Speed of Deployment 9

C. Quality and Coverage of PCS 10

D. Avoiding Unnecessary Regulatory Costs and Burdens 12

E. Flexibility of PCS Licensees To Pursue Market Opportunities 15

IV. CONCLUSION 16

EXECUTIVE SUMMARY

The FCC has recognized the enormous potential of Personal Communications Services ("PCS") for the country and American consumers. New PCS will combine with existing personal communications services such as cellular and paging to revolutionize the way millions of Americans communicate by bringing wireless communications to a mass market using low priced equipment and service charges. The Personal Communications Industry Association ("PCIA")[1] recently completed a PCS Market Demand Forecast which estimates that within the next ten years there will be:

- Over 52 million subscriptions for cellular telephones.
- 65 million subscriptions for paging and messaging services.
- 31 million subscriptions for new PCS.

Additional tools such as mobile satellite terminals, special mobile data services, and advanced dispatch services will also help our diverse economy communicate without the constraints of wires. In sum, PCIA's study forecasts 167 million subscriptions to PCS services within the next decade.

Recognizing the critical role of regulation in the successful deployment of PCS, Chairman Hundt has requested suggestions for actions that could facilitate timely availability of PCS and avoid past mistakes that greatly delayed the advent of cellular service. In response to the Chairman's kind invitation, PCIA offers a number of concrete proposals,

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[1] The association was formerly named Telocator and, indeed, still operated under that name at the time of its initial meeting with Chairman Hundt and his staff.

detailed below, to ensure that high-quality, low-cost PCS infrastructure is deployed as rapidly as possible.

First, PCIA offers the following key recommendations to encourage capital formation in the competitive bidding process:

- ***While auctions must start as promptly as possible, the bidding process itself should be carefully structured to permit sufficient time for sound, informed decisions by bidders.*** Open bidding processes, such as oral or electronic bidding, should allow adequate bidding intervals to enable auction participants, armed with full information about competing bidders and the bids being offered, to accurately evaluate such bids and respond accordingly.

- ***The FCC's competitive bidding rules must be simple, workable, and permit informed decisionmaking by bidders to ensure access to capital markets.*** Overly burdensome and complex processes will create artificial barriers to entry and tax the resources of both the FCC and auction participants. Moreover, uneconomic results, such as service delays and unnecessary costs imposed upon subscribers, will likely occur if bidders are denied the information they need to make informed, rational decisions.

- ***Post-auction transferability of licenses among qualified entities will facilitate investment and the prompt and successful deployment of PCS.*** Flaws in the distribution of spectrum through the formal assignment process will certainly occur and the FCC must not create barriers to the timely shifting of spectrum to its most valuable use through after-market agreements. Similarly, licensees may require the ability to "swap" markets or bands in order to successfully implement their business plans.

- ***PCS build-out requirements must not be so onerous and rigidly applied as to discourage investment.*** While build-out obligations should transfer with licenses and remain binding on new licensees, there should be no "holding period" and no requirement to construct before transfer. Such restrictions create unproductive incentives instead of "trueing up" the market.

Second, PCIA believes the following measures are necessary to facilitate the rapid roll-out of service:

- ***The Commission should consider a policy of routinely approving requests for pre-grant construction to allow permittees to begin building their systems during the time from the auction to the issuance of the license.*** By encouraging auction

winners to construct right away, the FCC will advance the public interest by accelerating the deployment of high quality services.

- ***PCIA believes that FCC oversight of LEC-PCS provider interconnection agreements would greatly assist in bringing timely and fair interconnection to fruition.*** By monitoring such agreements for compliance with the requirement of reasonable and fair interconnection for all PCS providers outlined in the Regulatory Parity Order,[2] the Commission will achieve its stated goal of regulatory symmetry and speed the introduction of "innovative and feature-rich services to the American public at affordable prices."

- ***The Commission should encourage the timely development of equipment standards through accredited industry standards bodies, but PCS deployment must not be dependent upon to the ability or inability of equipment manufacturers to reach consensus.*** PCIA has been working with accredited standards bodies to ensure that standardized equipment and network components are available when the next generation of PCS services are launched. Such standards will reduce the need for costly equipment and network modifications and promote competition. However, the initiation of PCS licensing should not be delayed if the consensus building standards process cannot be concluded promptly. Indeed, even after PCS standards have been established, they will likely need fine-tuning to allow the nascent PCS industry to evolve.

Third, PCIA focuses on several technical recommendations that will promote the economical extension of PCS to low population density areas.

- ***The industry supports raising the PCS base station power limit to 1,000 Watts ERP.***

- ***The rule on emissions limits should be expanded to cover both PCS to microwave and adjacent channel PCS interference.***

- ***Industry consensus revisions to the PCS to microwave interference calculations should be adopted.***

- ***The RF exposure regulations for PCS should be modified to be consistent with the text of the PCS Order.***

- ***Aspects of the application filing rules need clarification.***

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[2] *FCC News Release*, "FCC Clears the Way For Licensing of PCS; Provides Framework For Competitive Mobile Communications Market," GN Docket 93-252 (Feb. 3, 1994).

- ***The "listening period" in the Listen-Before-Talk protocol should be extended from 10 ms to 20 ms.***

Fourth, PCIA has identified a number of reforms that the FCC may wish to address in its upcoming proceedings to limit the cost and burden of unnecessary regulations and impediments to the realization of full competition in the wireless market.

- ***The FCC should maintain a strong preemption policy disfavoring state regulation of CMRS.***
- ***The FCC should evaluate forbearance from additional Title II regulation of CMRS.***
- ***Equal Access should not be extended to CMRS carriers.***

Finally, the Commission must take the following measures to increase the flexibility of mobile service providers to develop the broadest and most diverse range of new offerings.

- ***Proposals for private service set-asides in the spectrum allocated for PCS should not be seriously considered.***
- ***Efforts to create an FCC mandated standard for E-911 services are premature, unwarranted, and may be counterproductive.***

There are certainly additional operational and business issues that will impact the speed of deployment, coverage, and cost of new PCS. PCIA looks forward to a continuing dialogue with the Commission to identify these issues and craft regulatory responses that promote rapid and widespread availability of new services.

I. THE DEMAND FOR PCS AND ITS RESULTING BENEFITS FOR CONSUMERS AND THE COUNTRY

The introduction of cellular service in late 1983 was a cannon shot in the second revolution in communications -- mobility. By 1992, over 15 million Americans used pagers and over 11 million used cellular telephones. In the fall of 1993, another shot was heard as the FCC announced the structure of the new 2 GHz Personal Communications Services ("PCS") industry. In keeping with its role as an industry leader (See Exhibit A), the Personal Communications Industry Association ("PCIA") recently completed a market forecast to evaluate the growth, composition, and characteristics of the future PCS industry. The results of the survey indicate that these new 2 GHz PCS services will combine with existing services such as cellular and paging to fundamentally change the way millions of Americans communicate.

As discussed below, by 2003, PCIA predicts over 52 million subscriptions for cellular telephones, 65 million subscriptions for paging and messaging services, and 31 million subscriptions for New PCS. Additional tools such as mobile satellite will also help our diverse economy communicate without the constraints of wires. In sum, PCIA's 1994 PCS Market Demand Forecast predicts 167 million subscriptions to PCS services by 2003.

A. Primary Findings

As discussed in Exhibit B, for purposes of PCIA's survey, PCS demand was broken down into eight primary services: New PCS, paging, cellular, ESMR/SMR, dedicated data, satellite, wireless PBX and cordless phone. As wireless PBX and cordless phone are not

carrier services, the study generally focuses on the remaining six services. Briefly, the study found:

- ***All eight PCS services studied will continue to grow, despite increased competition.*** Available market research indicates that there is a very high amount of unmet demand for personal communications. Decreasing prices, advanced technologies, and creation of licenses will enable service providers to fill the demand gap.

- ***Multiservice use is expected.*** The complementary nature of PCS services will create a market in which users of one wireless service may adopt additional services to enhance overall functionality. For example, cellular users may adopt an alphanumeric pager for message screening and response queuing, or companies with many mobile workers already using PCS may install a wireless PBX. Since PCIA's results show that a person is likely to use multiple services, and the demand for more than one service per subscriber may be high, the forecasts refer to quantity of subscriptions, instead of subscribers.

- ***The respondents see New PCS as adding new value to the industry.*** New PCS is not expected to replace any existing wireless technology studied, although increased competition will certainly affect the growth rate of the other services. Rather, respondents see the new services as adding new value to the industry by complementing existing services, and increasing demand for all wireless services.

- ***A wide array of services is developing, each with its own specific functionalities, service mix and market advantages. These services each have varying price points and levels of technical complexity.***

- ***Residential service growth.*** New PCS will be heavily oriented to consumer service. Results show that business penetration for New PCS in Year 5 (1998) is a modest 30%, suggesting that New PCS will not necessarily follow the traditional pattern of business to consumer migration; rather, PCS may begin with the non-business or residential customer. PCIA's results also showed paging, and to a lesser extent cellular, further expanding into the residential marketplace.

- ***Data PCS.*** As with the landline communications, data will comprise an increasing share of total wireless communications in the future. This was reflected by data services growth in cellular data (anticipated 2.69% penetration in 2003). Voice-plus-incremental-data is a strong component of New PCS demand, and participants projected over 70% of New PCS usage will include some type of data service.

- ***Deployment.*** Demand is dependent upon the timing of service deployment. The data illustrates that ESMR will grow earliest followed by CDPD, and finally New PCS voice and data service.

B. Service Specific Findings

PCIA's Market Forecast breaks down projected demand for specific PCS service subscriptions for Year Five (1998) and Year Ten (2003). In formulating market estimates for the services detailed below, PCIA assumed the existence of a fully competitive environment where services coexist simultaneously and the demand for one service may influence the demand for others. Wherever possible, the 1993 reported penetration and subscription figures for a service were used as the baseline for calculating the five and ten year growth figures.

- ***New PCS.*** Although New PCS will clearly start service later than other existing wireless services, dynamic growth is expected to continue for the next decade. With service deployment anticipated for approximately 1995, total penetration is expected to grow to 3.1% by 1998 (8.5 million subscriptions) and reach 10.4% penetration in 2003 (31.1 million subscriptions.) The Year 5 to Year 10 growth rate is projected at 264%, the highest maintained growth rate of the services studied.

- ***Paging.*** With a lower price point, demand for paging and messaging services will remain strong. Today's over 19 million subscribers are predicted to grow to 36.8 million by 1998, with a predicted total penetration of about 13%. (This indicates a 1993-1998 increase of 93.7%). Results suggest Year Ten penetration will reach close to 22%, indicating that over 46 million new paging/messaging subscriptions will be registered by 2003, many of which will be consumer or non-business. Paging maintains the largest market share, anticipating 65 million subscriptions in 2003.

- ***Cellular.*** Demand for cellular services will increase dramatically from 13 million subscriptions in 1993 to 33 million 1998, a 154% increase. Cellular penetration is expected to grow from a reported 5% penetration at year end 1993 to approximately 12% penetration in 1998 and 17.4% penetration in 2003. Cellular is predicted to have the second largest number of subscriptions in 2003: 52 million.

- ***ESMR/SMR.*** Survey respondents predict that ESMR/SMR use will be over 90% business based. Anticipated penetration in Year 5 is 1.9% (5.1 million subscriptions) representing a five year growth rate of about 246%. Year Ten results predict penetration of about 3% (8.9 million subscriptions). Customer premise equipment

(CPE) prices are expected to be relatively high ($467 average in 1998, dropping to $275 in 2003). This price level is second only to satellite CPE.

- ***Dedicated Data.*** Anticipated to be positioned primarily for business users, PCIA's results show growth from 50,000 subscriptions in 1993, to 3.36 million in 1998, representing an increase of over 6600%. The results forecast about 5.6 million subscriptions by 2003. The networks will provide added value through increased flexibility and mobility for those businesses that require such services.

- ***Satellite.*** The highest priced of the PCS services examined, CPE price will be $1200 in 1998. Satellite service will be over 98% business, and will serve about 1.3 million subscriptions by 1998, and over 4 million subscriptions by 2003. Although satellite networks may have the fewest subscriptions of those examined, the Year Ten growth registers at 211%.

- ***Wireless PBX.*** Wireless PBX data in the survey had a relatively wide variance of response on CPE price, monthly service charge, and penetration. This may suggest some confusion within the industry about this products' relative positioning. Based on data received, the report does not make any conclusions about wireless PBX services.

- ***Cordless.*** Nominal growth in the cordless market is anticipated. The product will remain a primarily residential product.

PCIA's study is thus an important and informative tool evaluating the growth, composition, and characteristics of the future personal communications industry and represents the combined efforts of mobile communication's industry leaders.

II. THE FCC'S ABILITY TO AFFECT THE PACE AND PROGRESS OF PERSONAL COMMUNICATIONS SERVICES

The results of the aforementioned demand study indicate the pace and extent of the second communications revolution as America moves into the next century. According to the findings, new PCS will ignite the second wireless revolution, paging and messaging services will expand into new markets, cellular will maintain a strong subscriber base and diversify service offerings, and ESMRs will offer new wide area coverage services, if there is no

demand suppression due to regulatory delays or roadblocks. Thus, the Commission plays the pivotal role in the timing and success of this important new family of services.

A. Regulation and Its Effects on Cellular Deployment

The regulatory delays affecting cellular deployment are well known and documented. Although initial cellular applications were originally scheduled to be accepted beginning in late 1981,[3] the Commission delayed the filing deadline until 1982 in order to implement a plan limiting Cellular Geographic Service Areas ("CGSAs") to what are now referred to as Metropolitan Service Areas ("MSAs").[4] Applications were further delayed when the Commission reversed its plan to permit the filing of all applications at a fixed date and adopted staggered filing procedures for the MSAs in the top 90 markets.[5] Indeed, the Commission did not even adopt rules to process cellular applications for MSA markets below the top 30 by means of lotteries until May of 1984.[6] It was only in 1986 that the Commission turned to areas outside the MSAs and adopted rules for licensing cellular

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[3] *Cellular Communications Systems*, 86 F.C.C.2d 469, 499, 509, 510 (1981), *modified* 89 F.C.C.2d 58 (1982), *further modified* 90 F.C.C.2d 571 (1982) *appeal dismissed sub nom. United States v. FCC*, No. 82-1526 (D.C. Cir. 1983).

[4] *Cellular Communications Systems*, 89 F.C.C.2d 58, 86 (1982).

[5] *Cellular Communications Systems*, 90 F.C.C.2d 571, 574-75 (1982); *FCC Public Notice*, "Commission Announces Cellular Markets Beyond 90 Largest," Rpt. No. CL-69 (May 17, 1984).

[6] *Cellular Lottery Order*, 98 F.C.C.2d 175 (1984), *modified* 101 F.C.C.2d 577 (1985), *further modified*, 59 Rad. Reg. 2d (P & F) 407 (1985), *aff'd in part & rev'd in part Maxcell Telecom Plus v. FCC*, 815 F.2d 1551 (D.C. Cir. 1987).

providers in the Rural Service Areas ("RSAs"),[7] and only in 1991 did it release rules concerning the licensing of unserved areas within existing cellular markets.[8]

Cellular growth has been affected by these cumbersome and contentious licensing procedures. Despite the finalization of cellular service rules in 1982, it took five years for at least one license in all 306 MSAs to be issued. In part, this was due to the fact that in the initial MSAs where comparative hearings were utilized, applications often took several years until a grant was issued. The RSAs only began to be licensed in 1989, and it took until May of 1992 for at least one system to be turned on in all of the MSAs and RSAs in the country. Moreover, due to intense speculation in lotteried MSAs and in the RSAs, additional costs and delays were introduced in market consolidations and in the process of transferring authorizations to the licensees who would actually construct and operate the systems. The FCC has estimated that the "total transaction costs to consolidate [cellular] systems ultimately may be over one billion dollars"[9] and stated that consolidation in the cellular industry "has resulted in unproductive regulatory and transaction costs in the assignment process for cellular."[10]

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[7] *See Rural Cellular Service*, 60 Rad. Reg. 2d (P & F) 1029 (1986), *modified* 2 FCC Rcd 733 (1987), *further modified* 2 FCC Rcd 3366 (1987), 4 FCC Rcd 5272 (1988), 3 FCC Rcd 4050 (1988), and 4 FCC Rcd 4464 (1989).

[8] *Amendment of Part 22 of the Commission's Rules to Provide for Filing and Processing of Applications for Unserved Areas in the Cellular Service*, 6 FCC Rcd 6185 (1991); 7 FCC Rcd 2449 (1992) (Second Report and Order); 7 FCC Rcd 7183 (1992) (Third Report and Order and Memorandum Opinion and Order on Reconsideration); 8 FCC Rcd 1363 (1993) (Memorandum Opinion and Order on Reconsideration).

[9] *Amendment of the Commission's Rules to Establish New Personal Communications Services*, 7 FCC Rcd 5676, 5699 (1992) (*"PCS Notice"*).

[10] *Amendment of the Commission's Rules to Establish New Personal Communications Services*, 8 FCC Rcd 7700, 7732 (1993) (*"PCS Second Report and Order"*).

The net result has been slow initial penetration by cellular which accelerated rapidly after conclusion of the licensing process. As shown in the attached chart (Exhibit C), cellular demonstrated slow growth until 1990, when service became available throughout the country. The delays caused by this licensing process have been estimated to have cost the United States economy $86 billion.[11]

B. Regulation and Its Critical Role in the Success of PCS

PCS is particularly sensitive to the effects of regulation given the need to attract the significant investment required under competitive bidding. For 2 GHz licenses, PCS providers will be required to pay substantial up-front investments in order to obtain licenses. In addition, in order to compete on the basis of coverage with more mature cellular systems, significant infrastructure investments will be required before any subscriber revenues are realized. Under these circumstances, each month of regulatory delay will result in weighty penalties as companies strive to maintain debt burdens and subscriber revenue is postponed.

The challenge before the Commission is to ensure that PCS reaches consumers consistent with demand forecasts and free from any demand suppression due to regulatory externalities. As discussed in the following section, PCIA has a number of concrete proposals to ensure that high-quality, low-cost PCS infrastructure is deployed as rapidly as possible. PCIA's suggestions include means of encouraging capital formation in the competitive bidding process; proposals to facilitate rapid roll-out of service by streamlining service regulations; technical recommendations promoting economical extension of PCS

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[11] J.H. Rohlfs, C.L. Jackson & T.E. Kelly, *Estimate of the Loss to the United States Caused by the FCC's Delay in Licensing Cellular Telecommunications* (National Economic Research Associates, 1991).

service to low population density areas; reforms to limit the cost and burden of unnecessary regulations and impediments to the realization of full competition in the wireless market; and measures to increase the flexibility of mobile service providers to develop the broadest and most diverse range of new offerings.

III. PCIA'S PROPOSALS FOR REGULATORY POLICIES TO FOSTER THE SUCCESSFUL DEPLOYMENT OF PCS

A. Capital Formation

With the advent of competitive bidding, it is clear that many PCS applicants lacking the resources to successfully bid on a license, particularly small and medium-sized businesses, will necessarily rely on financing from private markets. In light of these circumstances, PCIA offers the following key recommendations designed to garner investment in the PCS marketplace.

- ***While auctions must start as promptly as possible, the bidding process itself should be carefully structured to permit sufficient time for sound, informed decisions by bidders.*** Open bidding processes, such as oral or electronic bidding, should allow adequate bidding intervals to enable auction participants, armed with full information about competing bidders and the bids being offered, to accurately evaluate such bids and respond accordingly.

- ***The FCC's competitive bidding rules must be simple, workable, and permit informed decisionmaking by bidders to ensure access to capital markets.*** Overly burdensome and complex processes will create artificial barriers to entry and tax the resources of both the FCC and auction participants. Moreover, uneconomic results, such as service delays and unnecessary costs imposed upon subscribers, will likely occur if bidders are denied the information they need to make informed, rational decisions.

- ***Post-auction transferability of licenses among qualified entities will facilitate investment and hence, the prompt and successful deployment of PCS.*** Flaws in the distribution of spectrum through the formal assignment process will certainly occur and the FCC must not create barriers to the timely shifting of spectrum to its most

valuable use through after-market agreements. Similarly, licensees may require the ability to "swap" markets or bands in order to successfully implement their business plans.

- ***PCS build-out requirements must not be so onerous and rigidly applied as to discourage investment.*** Thus, while build-out obligations should transfer with the license and remain binding on the new licensee, there should be no "holding period" and no requirement to construct before transfer. Such restrictions create unproductive incentives instead of "trueing up" the market.

With these few simple measures, PCIA believes the Commission will significantly ease the propects of obtaining the substantial financing necessary to realize new PCS systems.

B. Speed of Deployment

PCIA's recommendations, detailed below, reflect the collective efforts of the PCS industry to achieve a broad-based consensus on important regulatory issues and thereby hasten the arrival of a new era in mobile communications.

- ***The Commission should consider a policy of routinely approving requests for pre-grant construction to allow permittees to begin building their systems during the time from the auction to the issuance of the license.*** By encouraging auction winners to construct right away, the FCC will advance the public interest as such investment in time and energy is likely to accelerate the deployment of high quality services.

- ***PCIA believes that FCC oversight of LEC-PCS provider interconnection agreements would greatly assist in bringing timely and fair interconnection to fruition.*** By monitoring such agreements for compliance with the requirement of reasonable and fair interconnection for all PCS providers outlined in the Regulatory Parity Order, the Commission will achieve its stated goal of regulatory symmetry and speed the introduction of "innovative and feature-rich services to the American public at affordable prices."

- ***The Commission should encourage the timely development of equipment standards through accredited industry standards bodies, but PCS deployment must not be dependent upon the ability or inability of equipment manufacturers to reach consensus.*** PCIA has been working with accredited standards bodies to ensure that standardized equipment and network components are available when the next

generation of PCS services are launched. Such standards will reduce the need for costly equipment and network modifications and promote competition. However, the initiation of PCS licensing should not be delayed if the consensus building standards process cannot be concluded promptly. Indeed, even after the PCS standards have been established, they will likely need fine-tuning to allow the nascent PCS industry to evolve.

C. Quality and Coverage of PCS

After release of the Commission's Second Report and Order on PCS, PCIA's members identified a number of areas where regulatory changes should be made to facilitate the availability of high-quality, ubiquitous, and low-cost PCS service. Working with the Commission, one of these issues, guaranteeing the government and industry's ability to utilize Rand McNally's proprietary Major and Basic Trading Area divisions without complex payment schemes, has already been satisfactorily resolved with the execution of a license agreement between PCIA and Rand McNally (see Exhibit 1, Attachment 3). The remaining issues raised by PCIA, however, are currently pending before the Commission in PCIA's Petition for Reconsideration. As discussed briefly below, each of these positions reflects industry consensus, is based on sound policy principles, and should be adopted on reconsideration:

- ***The industry supports raising the PCS base station power limit to 1,000 Watts ERP.*** To facilitate deployment of new "phased array" antenna technologies and to allow more economic provision of service to low population density rural areas, PCIA requested the Commission to raise the power limits for PCS base stations. This request received nearly universal support from both new PCS providers and the incumbent microwave licensees in the band.

- ***The rule on emissions limits should be expanded to cover both PCS to microwave and adjacent channel PCS interference.*** PCIA has also argued, unopposed, that the emissions limits that currently protect microwave users from adjacent channel PCS interference should be extended to govern interference between adjacent channel PCS

systems. In addition, clarifications to specify the measurement bandwidth for assessing these out-of-band emissions are needed.

- ***Industry consensus revisions to the PCS to microwave interference calculations should be adopted.*** PCIA agrees with the Commission that TSB10-E, and the industry efforts to develop TSB10-F, should form the basis for according protection to incumbent 2 GHz microwave users. PCIA and a broad range of both incumbent microwave users and those interested in deploying new PCS systems also noted, however, that it would be advisable to mandate the use of subsequent TSB10 standards and to require the use of a modified Appendix D methodology until TSB10-F was finalized.

- ***The RF exposure regulations for PCS should be modified to be consistent with the text of the* PCS Order.** Noting that the text of the Second Report and Order makes clear that only PCS handsets are deemed automatically to operate in an "uncontrolled" environment for purposes of evaluating RF exposure under the ANSI/IEEE criteria, PCIA requested revisions to the Part 99 rule that extends this determination to *all* PCS transmitters, including base stations and other types of mobiles. As PCIA discussed, the Commission's stated rationale for imposing an "automatic" environmental determination on handsets simply does not apply to other types of PCS transmitters.

- ***Aspects of the application filing rules need clarification.*** PCIA also suggested two limited changes to the application filing rules to ease paperwork burdens on the Commission and licensees. First, PCIA argued that the ± 5 meter accuracy required for PCS filings was technically difficult, expensive, and added little information of any use to the Commission, incumbent users, or other PCS providers. Accordingly, PCIA suggested that use of the existing ± 1" accuracy requirement be maintained. PCIA also argued that significant benefits and resource savings would accrue from the use of electronic filing procedures, and volunteered its efforts to establish an industry/FCC *ad hoc* task force to develop electronic filing guidelines.

- ***The "listening period" in the Listen-Before-Talk protocol should be extended from 10 ms to 20 ms.*** PCIA requested the FCC to extend the "listening period" and associated frame period for unlicensed devices to 20 ms in order to allow deployment of a greater range of technical solutions in the unlicensed bands, without perceivably affecting end-user response times.

PCIA believes that the Commission could substantially advance the utility and economic viability of PCS systems if these changes were made on reconsideration.

D. Avoiding Unnecessary Regulatory Costs and Burdens

In order to fully exploit the potential benefits of competition for the American public, the FCC has recently adopted ground rules to ensure that functionally equivalent mobile services are regulated similarly by classifying certain systems as Commercial Mobile Radio Services ("CMRS") and reforming a host of its regulations. At the same time, the Commission has indicated plans for future proceedings, including further rulemakings on forbearance action with respect to certain classes of CMRS providers; establishment of monitoring provisions applicable to the cellular marketplace; and whether and to what extent interconnection among CMRS providers is mandated or warranted under the statute. In addition, the FCC will be evaluating state petitions to continue or initiate rate regulation of CMRS. In this context, PCIA believes that several overarching principles should apply.

The FCC Should Maintain a Strong Preemption Policy Disfavoring State Regulation of CMRS. The amendments to Section 332 properly preempt state entry regulation for mobile radio services and establish a presumption against state rate regulation where, as is currently the case, there are multiple providers serving mobile markets.[12] Indeed, PCIA has argued that, based on the record in the Section 332 implementation proceeding and in related proceedings, the FCC can and should now make a threshold finding that the presence of effective competition in the wireless market is currently protecting subscriber interests.[13] This would place states on notice that their burden of establishing otherwise will be a

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[12] 47 U.S.C. § 332(c)(3)(A). *See also* H.R. Rep. No. 213, 103d Cong., 1st Sess. 492-494, (1993), *reprinted in* 1993 U.S.C.C.A.N. 1088, 1181-1183.

[13] *See, e.g.*, Cellular Telecommunications Industry Association, Petition for Rulemaking, RM No. 8179 (filed January 29, 1993).

difficult one to carry. Moreover, the Commission should establish procedures that will ensure prompt resolution of state petitions to extend their regulatory authority where the pendency of the petition serves to perpetuate existing rate regulation. In acting upon state petitions pursuant to these standards, the Commission should ensure that the full range of competitive alternatives available to consumers in the petitioning state are taken into consideration.

The FCC Should Evaluate Forbearance From Additional Title II Regulation of CMRS. The records in the *Competitive Carrier*[14] and *Nondominant Carrier Tariffing* proceedings[15] demonstrate the public interest basis for forbearing from Title II regulation of CMRS, and the recent amendments to the Communications Act explicitly conferred the authority on the FCC to do so.[16] The Commission should not delay in exercising that authority to the fullest lawful extent.

As PCIA has noted, the mobile services market is highly competitive and consumers have significant choices both among carriers of one service and between services. This high level of competition demonstrates that traditional common carrier tariff regulation is, in particular, unnecessary for CMRS. In fact, the FCC has determined that tariff regulation of a competitive market will actually inhibit competition, innovation, market entry, and

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[14] *Competitive Common Carrier*, Fifth Report and Order, 98 F.C.C.2d 1191 (1984) (*"Competitive Carrier"*).

[15] *Tariff Filing Requirements for Nondominant Carriers*, CC Docket No. 93-36, FCC No. 93-401 (August 16, 1993) (Memorandum Opinion and Order).

[16] 47 U.S.C. § 332(c)(1)(A).

flexibility.[17] The absence of any countervailing public benefits establishes that tariff requirements and related provisions of Title II[18] should not be applied to CMRS. For the same reasons, application of other provisions of Title II, such as certain filing requirements and business organization and transactional limitations[19] would likewise be ill-advised. Under Sections 201, 202, and 208 of the Communications Act, the FCC retains the authority necessary to correct any unanticipated, future market failures if they should occur.

Equal Access Should Not Be Extended to CMRS Carriers. In a future proceeding, the FCC will seek comment on whether any or all classes of CMRS providers should be subject to equal access obligations like those imposed on some LECs and their affiliates. PCIA has and will continue to oppose extension of equal access requirements to CMRS providers because these obligations, which require commercial mobile service providers to allow mobile customers to presubscribe to interexchange providers of their choice, are unnecessary in the competitive wireless industry. Application of equal access requirements to CMRS would extend burdensome rules designed to limit monopoly power to a market with no monopoly players. With cellular, ESMRs, PCS, mobile satellite and unlicensed services all competing for a share of the rapidly expanding mobile services market, there is both the opportunity and incentive for interexchange carriers to compete vigorously for the long distance traffic from these providers.

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[17] *Tariff Filing Requirements for Nondominant Carriers*, ¶ 2, CC Docket No. 93-36, FCC No. 93-401 (August 16, 1993) (Memorandum Opinion and Order).

[18] *E.g.*, 47 U.S.C. §§ 210, 213, 215, 219 and 220.

[19] *E.g.*, 47 U.S.C. §§ 205, 211, 212, 214, 218 and 221.

Additionally, extension of equal access rules to all or some commercial mobile service providers creates significant burdens for the Commission in determining how to distinguish local from long distance mobile services. Equal access obligations create unjustified costs, consumer inconvenience, and inefficient networks. These rules impact the ability of wireless carriers to extend "local" calling to customers, develop integrated service areas, provide bundled services and negotiate bulk long distance rates. In sum, PCIA supports maximum flexibility for PCS providers to design their networks, package services, and provide cost effective services based upon market demand. Imposition of equal access requirements would be contrary to Commission goals in licensing these services.

E. Flexibility of PCS Licensees To Pursue Market Opportunities

Because of the diversity of communications services that will be available to the public, the Commission may need more than one classification for regulating mobile services. For example, paging and 900 MHz narrowband PCS have different characteristics from ESMRs, cellular and 2 GHz PCS. Nonetheless, PCIA urges that all services which consumers view as alternative market choices be put in the same category and be subject to the same regulations. If competing services are subject to different regulatory structures, those with the more stringent regulations will be less competitive, ultimately raising prices for consumers. PCIA's specific suggestions include:

- ***Proposals for private service set-asides in spectrum allocated for PCS should not be adopted.*** As a further extension of its flexibility policies, PCIA opposes creation of set-asides in the allotted 2 GHz PCS bands for any purpose, whether private or

not.[20] To the extent that particular spectrum uses are deemed warranted, spectrum can be obtained for such uses through competitive bidding or by negotiating with individual licensees. Accordingly, the Commission should not devote any 2 GHz PCS spectrum for solely "private" systems.

- ***Efforts to create an FCC mandated standard for E-911 services are premature, unwarranted, and may, in fact, be counterproductive.*** The PCS industry is working closely with public safety officials to ensure E-911 availability. PCIA believes that the Commission should not delay the advent of PCS by mandating E-911 standards, since, as previously noted, PCIA is currently engaged in discussions with both the Association of Public-Safety Communications Officers and the National Emergency Number Association on these precise issues. Based on the success of this inter-industry coordination, any attempts to set national E-911 standards prior to PCS deployment could only result in delay.

IV. CONCLUSION

It is no exaggeration to say that the wireless communications industry faces a critical turning point. As PCIA's attached PCS Market Demand Forecast indicates, America is poised on the brink of the second communications revolution, with the potential for 167 million subscriptions to PCS services within the next decade. However, the rules under which this entire new generation of services will be licensed and operate have not yet been determined. Thus, FCC actions will play a crucial role in the successful deployment of PCS.

With this in mind, PCIA offers the suggestions, detailed above, to ensure the timely availability of PCS and avoid past mistakes that greatly delayed the advent of cellular service. Specifically, PCIA's proposals include means of encouraging capital formation in the competitive bidding process; recommendations to facilitate rapid roll-out of service by streamlining service regulations; technical recommendations promoting economical extension

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[20] *See, e.g.*, APC at 19-20; Comments of Apple Computer, Inc. at 8-9, GEN Docket No. 90-314 (filed Jan. 3, 1993).

of PCS service to low population density areas; reforms to limit the cost and burden of unnecessary regulations and impediments to the realization of full competition in the wireless market; and measures to increase the flexibility of mobile service providers to develop the broadest and most diverse range of new offerings. It is PCIA's belief that Commission adoption of these proposals will expedite the introduction of high-quality, low-cost PCS services to the public.

There are certainly additional operational and business issues that will impact the speed of deployment, coverage, and cost of new PCS. PCIA looks forward to a continuing dialogue with the Commission to identify these issues and draft regulatory responses that promote rapid and widespread availability of new services.

EXHIBIT A

THE PERSONAL COMMUNICATIONS INDUSTRY ASSOCIATION'S MEMBERSHIP AND ITS COMMITMENT TO PCS

Founded as a trade association in 1949, the Personal Communications Industry Association (formerly Telocator) has provided legislative and regulatory representation for the mobile communications industry for over forty years. Not surprisingly, the association has evolved over the years consistent with the sweeping changes occurring in the industry. It began with representation of two-way mobile radio telephone service and paging, adding cellular carriers to its membership as that service came into being, and more recently, became the first national trade association to formally recognize the importance of the next generation of wireless services -- Personal Communications Services or PCS. Consistent with the fact that the association has taken the lead in advocating, formulating, and creating plans and policies to guide the development of PCS, it has recently undergone a name change from Telocator to the Personal Communications Industry Association ("PCIA"). The name change symbolizes the association's ongoing commitment to defining the direction of PCS.

A. PCIA and Its Membership Today

PCIA created a forum for companies seeking to provide PCS services by establishing a PCS Membership Section in May, 1991. One of PCIA's greatest strengths is its diverse membership, representing over 450 companies spanning the major sectors of the PCS industry, including PCS experimental licensees and entrepreneurs as well as the cellular, paging, cable, manufacturing, computer, mobile data, specialized mobile radio ("SMR"), local exchange and interexchange sectors of the industry. By representing the full range of