

OMNIPOINT COMMUNICATIONS, INC.
 Comments on 2 GHz Licensed PCS

Interest: New technology developer tentatively granted a pioneer's preference

Band plan:

- Initially, allocate 1850-1870/1930-1950 MHz and 1890-1900/1970-1980 MHz for licensee A, 1870-1890/1950-1970 MHz and 1900-1910/1980-1990 MHz for licensee B, and 1910-1930 MHz for unlicensed devices. (pp. 11-12)
- Licensees A & B would be able to utilize no more than 40 MHz in any given cell, and after a period of time (6 years from licensing or 3 years after the start date for involuntary relocation), each would be required to move all operations back into 1850-1870/1930-1950 MHz and 1870-1890/1950-1970 MHz. (pp. 11-12)
- Recommends setting aside 1910-1930 MHz for unlicensed devices, but does not endorse allocating these frequencies until a satisfactory means of ensuring all existing users will be cleared is determined. (p. 15)
- 30 MHz licensed allocations are bad because such allocations will necessitate 3-way negotiations between two PCS licensees and an OFS licensee. (p. 9-10)

Amount of spectrum per licensed system:

- Each licensee would have 60 MHz initially to "hunt in" to achieve 40 MHz per cell, but would be required eventually to use a specified 40 MHz. (pp. 11-12)
- Larger allocations are needed for adequate sharing of spectrum with existing users, since it dramatically increases the probability of co-existence. (pp. 10-11)
- Large allocations than cellular are needed because 2 GHz systems will require similar (or greater) bandwidths than cellular, even with digital, since the goal is achieving wireline voice quality (2 GHz should use 32 or 64 kbps vocoders vs. 8 or 4 kbps for cellular). (pp. 5-7)
- More than two competitors, or less spectrum, will result in 2 GHz services "cloning" cellular at higher frequencies and not achieving the potential of PCS. PCS, ideally, offers a fixed infrastructure, like the landline network, with very low marginal costs of adding subscribers. (pp. 7-9)

Service areas:

- While national consortiums show promise, national licenses do not. (p. 16)
- LATA-based licensing brings no benefits and has no correlation with the economics of portable communications. (p. 16)

Licensing policies:

- The FCC should first decide whether to empower PCS to reach its fullest potential and then decide whether any parties should be prohibited. (pp. 13-14)

Regulatory status:

- PCS should be given private carrier status to speed deployment. (p. 16)

Technical standards:

- There is a Gresham's law of RF -- allowing high power anywhere drives out the benefits of low power. Even 3 mile radius cells require extremely different handset features than microcells. (pp. 7, 14)

PACIFIC COMMUNICATION SCIENCES, INC.
Comments on 2 GHz Licensed PCS

Interest: Developer and producer of PCS-related technologies.

Technical standards:

- In adopting standards for PCS, FCC should take into account the technical standards that are evolving for Digital European Cordless Telephone (DECT) and Japan's Personal Handy Phone (PHP); adoption of these standards will benefit both the U.S. public and U.S. companies. (pp. 5-6).
- Time division duplex technology (TDD) is the best standard for certain PCS applications because, unlike TDMA and CDMA, TDD does not need separated frequency bands for the base-to-handset and handset-to-base paths, TDD combats multipath interference effectively, and TDD is the least expensive and most spectrally efficient technology. (pp. 6-9).
- Urges the FCC to adopt the same technology for both licensed and unlicensed PCN services. (pp. 10-11).
- Recommends that each PCS licensee be assigned contiguous bands rather than split bands so that the FCC's proposed plan is compatible with TDD technology. (pp. 11-13).

PACIFIC TELESIS GROUP
 Comments on 2 GHz Licensed PCS

Interest: Local exchange carrier group with subsidiaries that are potential 2 GHz PCS licensees

Band Plan:

- Advocates three licensed providers per area: one in the 1850-1862.5/1930-1952.5 range, one in the 1862.5-1875/1952.5-1965 range, and one in the 1875-1877.5/1965-1997.5 range. (p. 35).

Amount of spectrum per licensed system:

- 25 MHz per provider. (p. 35).

Service areas:

- Supports 487 Rand McNally Basic Trading Areas as best choice for geographic scope of PCS licenses. (p. 21).

Cellular carrier participation:

- States that cellular carriers should be allowed to provide PCS in areas outside their present cellular service areas to increase speed of deployment and competition. (p. 15).

Local exchange carrier participation:

- Supports LEC participation in PCS as furthering competition, speed of deployment, universality, and diversity of services. (pp. 9-14).
- Agrees that a LEC should be able to offer PCS or cellular service without use of a separate subsidiary (assuming appropriate non-structural safeguards); however, states that elimination of separate subsidiary requirements does not mean that existing cellular operations will be integrated into the BOCs. (pp. 15-17).
- States that BOCs should be eligible to offer PCS on an integrated basis, whether or not they have an affiliate that offers cellular service. (p. 17).

Licensing policies:

- Favors lotteries with application fees that cover costs of administration; applicants must supply sufficient information to allow verification of representations made. However, opposes submission of engineering documents and business plans. (pp. 32-33).
- Suggests that Commission use outside firm to handle processing of large numbers of applications. (p. 33).

- Supports free transferability in aftermarket and strict build-out requirements for all providers.

Regulatory status:

- Asserts that licensed PCS providers should be classified as common carriers. (p. 43).
- Proposes regulatory parity between PCS providers and cellular carriers. (p. 43).
- Calls for institution of rulemaking proceeding on whether all competitive services should be classified as common carriers or private carriers. (p. 43). In the interim, suggests that Commission consider Telocator petition to permit cellular carriers to provide private carrier services, as long as their common carrier obligations are met. (pp. 43-44).
- Does not favor preemption of state regulation, except as to entry; favors gradual deregulation, by both Commission and the states. (p. 44).
- States that all PCS providers should receive equal interconnection rights. Recommends safeguards to protect LEC ratepayers where LECs also provide retail PCS. (p. 45).

Technical standards:

- Supports proposal restricting PCS operation to antenna heights below 600 meters and ERP to below 1000w. (p. 41).
- Suggests that, at a minimum, out-of-band spurious emission limits should be specified by interested parties to prevent interference between co-located PCS systems. (p. 41).
- Supports Commission's 47 dBu signal strength figure to restrict radio emissions outside of the licensing area of a PCS operator (pp. 41-42).
- Believes Commission should require PCS industry to determine Common Air Interface standards before permitting PCS licensees to operate their systems. (p. 46).
- States that interoperability and roaming methodologies should be left to carriers to develop among themselves. (p. 47).

Other:

- States that public safety issues, such as possible lack of Automatic Location Identification in emergency PCS calls, warrant Commission consideration. Invites comment on role LECs might play in delivery of E911 to PCS users. (pp. 49-50).

PAGEMART, INC.
Comments on 2 GHz Licensed PCS

Interest: Paging company and unsuccessful applicant for 900 MHz pioneer's preference.

Cellular carrier participation:

- Since cellular companies are often owned by, affiliated with, or have strategic alliances with one or more LECs, they have incentives similar to those of the LECs to cross-subsidize PCS and to protect their investment by delaying implementation of PCS. (p. 11, fn. 20)

Local exchange carrier participation:

- Cross-ownership restrictions should preclude LEC participation in the broadband PCS market. (pp. 11-13)
- A set aside of 10 MHz for the LECs in the 2 GHz band would only guarantee that the PCS market will be uncompetitive. (p. 12)

PALMETTO RURAL TELEPHONE COOPERATIVE, INC.
Comments on 2 GHz Licensed PCS

Interest: Cooperative local exchange carrier serving areas of South Carolina

Service areas:

- Advocates using 734 MSA and RSA geographic delineations that Commission currently uses for cellular service and Interactive Video and Data Service licensing. (p. 2).

Local exchange carrier participation:

- Urges Commission to allow local exchange carriers to provide PCS in their own exchange service areas, citing the universal service obligations of all local exchange carriers, facilitation of rapid delivery of PCS, increase in capability and efficiency of public switched network, benefits to local exchange customers, and competitive delivery as justification. (pp. 3-6).
- States that cellular holdings of local exchange carriers should not be a bar to the provision of PCS. (p. 7).
- Supports establishment of spectrum reserve for local exchange carriers serving RSAs to obtain a licensed block in order to provide PCS in their own exchange areas; one block in each RSA would be assigned to the exchange carriers serving that RSA, and those carriers would each use that block within their exchange areas. Commission could impose construction and service requirements and ban separate resale of this spectrum. (pp. 8-9).

PASS WORD, INC.
Comments on 2 GHz Licensed PCS

Interest: A radio common carrier and private carrier paging licensee that intends to seek PCS licenses.

Band plan:

- The 1850-1895 base/1930-1975 mobile allocations would support nine licensees; the 1895-1910 and 1975-1990 allocations would support three licensees; additional spectrum should be allocated from regions above 1990 MHz to permit eight additional licensees (for a total of 20 per area). (p. 3)

Amount of spectrum per licensed system:

- In light of technology and the policy goal of promoting a competitive market, 5 MHz per system is sufficient. It is better to have more competitors that larger allocations. (pp. 2-3)

Service areas:

- Licenses should be issued on an MSA by MSA basis; nationwide licenses are inappropriate. (p. 4)

Cellular carrier participation:

- Cellular carriers should be excluded from eligibility for PCS licensing in their licensed service areas, since they generally have adequate spectrum with CDMA technology to provide PCS and they have a strong incentive to absorb PCS allocations to inhibit competition. (p. 5)

Local exchange carrier participation:

- LECs could be excluded on basis of cellular interests. (p. 6)
- LECs should have no preference but may compete equally with other applicants for PCS licenses. (p. 6)
- Structural separation is necessary due to incentives for LEC PCS to discriminate against other PCS licensees. (p. 6)
- The unlicensed allocations seem to be the appropriate place for the LECs to augment their wireline networks. (p. 7)

Licensing policies:

- A limit should be set on the number of wireless licenses that may be held by affiliated interests, both intra-MSA and inter-MSA; the affiliation threshold should be set at a low level, such as 5 percent. (p. 4)
- An entity or affiliated entities should be able to hold a maximum of 5 PCS licenses. Cellular licenses should be counted against this maximum. This standard should be revisited in ten years. (p. 5)
- The separation between AT&T and the BOCs should be extended to interexchange carriers and "wireless local exchange carriers" (whether cellular or PCS). Once it becomes economically feasible, equal access should be required of wireless LECs. (p. 4)
- To limit number of applicants, only present wireline LEC, cellular, RCC, PCP, and cable industry licensees/participants should be eligible for PCS. (p. 7)
- Filing fees in the range of \$3,500 to \$7,000 would be appropriate and would help to discourage speculation. Calculates that 5 MHz at 25 kHz per analog channel times \$35.00/channel would yield a fee of \$7,000. (p. 8)

Regulatory status:

- Proposed revision to cellular service option should be approved. (p. 5)

PCN AMERICA, INC.
 Comments on 2 GHz Licensed PCS

Interest: New Entrant

Band plan:

- 2 paired allocations of 40 MHz (1850-1870/1930-1950 MHz & 1870-1890/1950-1970 MHz). (pp. 3-4)
 - Two licenses required for financial soundness. (p. 5)
 - There will be 9 companies in each market providing some kind of PCS (2 cellular, 3 dominant IXC's, wireless data, and multiple paging & SMR). (p. 5)
- 20 MHz for unlicensed systems (1910-1930 MHz). (p. 4)
- 40 MHz reserved for additional capacity or new technologies (1890-1910/1970-1990 MHz). (p. 4)
- 10 MHz for "wireless tails" is a good idea (open to all entrants), but not in the 1850-1990 MHz band. (pp. 6-7)

Amount of spectrum per licensed system: 40 MHz

Service areas:

- PCNA proposes 3 tier licensing scheme to promote rapid development of PCS and nationwide compatibility (Appendix II, proposal filed October 20, 1992):
 - License two "Tier 1" national network operators that would select PCS technology and provide for nationwide billing, interconnection, roaming, and database services.
 - For each frequency block, license 49 "Tier 2" regional licensees using the MTAs to construct PCS radio, switching, and network facilities.
 - License a minimum of 25 "Tier 3" local and rural licensees within each MTA, requiring Tier 2 licensees to relinquish at least 30 percent of the land area and 25 percent of the population within the MTA.

Cellular carrier participation:

- Cellular carriers should be allowed to compete only in regions where they do not serve more than ten percent of the subscribers, because cellular will compete with PCS, the 10 percent benchmark is not excessively stringent, combined cellular/PCS services would give cellular carriers enormous advantages (existing infrastructure, dual mode phones, more

spectrum than any other cellular or PCS provider in the region). (pp. 7-8)

Local exchange carrier participation:

- LECs should only be allowed to participate in areas where they do not provide wireline service because they will provide competitive services, they may cross-subsidize, discriminate in interconnection, and the regulatory safeguards needed are complex. (p. 6)

Technical standards:

- PCS to microwave interference:
 - TSB10E is too conservative. (pp. 8-9)
 - Power aggregation from PCS sources should not be applied unless TSB10E is applied on a microwave base station-by-base station basis. (p. 9)
 - PCNA urges the FCC to specify coordination distances on a case-by-case basis, taking into account the proposed base station height and actual antenna height to determine coordination zones. (p. 10)
 - Free space propagation should not be used -- use either a modelling technique like TIREM or a statistical approach like Hata. (p. 10)
 - PCNA agrees with FCC that building loss should be factored in -- approximately 80 percent of users will be indoor and loss from each floor should be calculated based on the discrimination angle between the floor height and the microwave receiver antenna height. (p. 11)
 - Comprehensive PCS to microwave interference technical appendix attached to comments. (Appendix I)
- PCS to PCS interference: Adopt limits in NPRM -- 10 W EIRP for base transmit power, 300 feet antenna height.

PCN COMMUNICATIONS, INC.
Comments on 2 GHz Licensed PCS

Band Plan:

- 1850-1990 MHz range; 120 MHz to be allocated among 3 licensed providers. (p. 2)
For CDMA operation, blocks do not require "guard bands" and can even overlap. (p. 2)

Amount of spectrum per licensed system:

- 40 MHz (20 MHz receive and 20 MHz transmit) for each licensed provider. (p. 2)
Operator block allocations can be dynamic and do not have to be fixed over operator's entire assigned area. (p. 2)

Licensing Policies:

- Lottery of prequalified applicants, including those in Docket No. 90-314; no financial showings but applicant must have shown contribution to development of viable PCN business by field test results or by "technical showing." (p. 3)

PDM/PCS
Comments on 2 GHz Licensed PCS

Interest: Developer of telecommunications equipment and concepts

Amount of spectrum per licensed system:

- If each PCS licensee had the opportunity to integrate its system with the LEC's landline system, each system would require only 10 MHz of spectrum. Thus, the Commission should be able to license at least 5 entities (7).

Service areas:

- Supports the use of MSAs/RSAs as it will provide substantial service areas while still keeping the service local in nature (5).

Cellular carrier participation:

- Cellular carriers should not be permitted to obtain PCS licenses in the markets where they provide cellular service (4).
- The prohibition on common ownership should be the same one used by the Commission to prevent common ownership of wireline and nonwireline carriers in the same market (4).

Local exchange carrier participation:

- LECs should not be permitted to obtain PCS licenses in the markets where they provide telephone service (4).
- The prohibition on common ownership should be the same one used by the Commission to prevent common ownership of wireline and nonwireline carriers in the same market (4).
- To develop competition in the telecommunications marketplace, the Commission should require LECs to divest their interests in cellular companies within their local exchange service areas (4).

Regulatory status:

- Supports classification of PCS as a common carrier service as it meets the legal definition (2-4).
- The LEC's network backbone should be available to all PCS licensees (7).

- If a cable television system utilizes its cable television facilities for PCS, it should be required to provide equivalent access to all other PCS carriers in the market on no less favorable terms. Also proposes separate subsidiary requirement for cable PCS companies (7-8).

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Comments on 2 GHz Licensed PCS

Interest: State regulatory agency.

Band plan:

- Five licensees per market should be authorized, with each licensee allocated a 20 MHz spectrum block. (p. 4).

Service areas:

- PCS service areas should mirror the cellular service areas. Alternatively, LATA boundaries would provide natural incentives for PCS providers to integrate their system with the wire network. (pp. 7-8).

Cellular carrier participation:

- Incumbent cellular carriers should be barred from providing PCS in their service areas because of their established market power and their imbedded plant. (pp. 4-5).

Local exchange carrier participation:

- LECs should be permitted to offer PCS in their local service areas, provided that the states can regulate intrastate PCS and the LECs are subject to non-structural safeguards and Open Network Architecture requirements. (pp. 5-6).

Licensing policies:

- Multiple and joint licenses, as well as license consolidations, should be prohibited in order to foster a competitive marketplace. (p. 6).
- Supports a competitive bidding process with restrictions on license resale to encourage bona fide licensees. (pp. 8-9).

Regulatory status:

- PCS should be classified as a common carrier service with safeguards to prevent discrimination and cross-subsidization. (pp. 10-11).

PERSONAL COMMUNICATIONS NETWORK SERVICES OF NEW YORK, INC.
Comments on 2 GHz Licensed PCS

Interest: Personal communications services provider;
subsidiary of Local Area Telecommunications
("LOCATE")

Band Plan:

- Recommends licensing three PCS providers in each market; asserts that one of these three licenses should be reserved for applicants that qualify as small companies. (p. 5, p. 24).

Amount of spectrum per licensed system:

- 30 MHz of spectrum per PCS licensee. (p. 24).

Service areas:

- Recommends adoption of 47 major trading areas to facilitate entry of many entrepreneurs into PCS market and to promote broad participation. (pp. 25-26).

Cellular carrier participation:

- Supports bar on cellular service providers providing PCS in their current service areas. (p. 20).

Local exchange carrier participation:

- Supports bar on LECs' provision of PCS in their current service areas. (pp. 21-23).

Licensing policies:

- Favors expedited, comparative hearing process that fully considers the merit of the applicant as a criterion for evaluation; opposes competitive bidding and lotteries. (pp. 9-16).
- In the event lotteries are used, proposes preliminary evaluation of applicants' qualifications and merit using objective criteria; states that high initial filing fee requirement is overbroad and would deter smaller qualified companies from applying for PCS licenses because they lack the immediate financial resources. (p. 16).

Regulatory status:

- Asserts that PCS should be regulated as non-dominant common carrier services. (p. 27).

- Concurs with Commission's decision to adopt minimalist approach to regulating PCS. (p. 27).
- States that ability to resell services of the public switched telephone network will be essential to success of PCS and will achieve economies of scope without adversely affecting competition. (pp. 26-28).

PERTEL, INC.
Comments on 2 GHz Licensed PCS

Interest: Joint venture between Westinghouse Communications, Harron Communications, and the principals of Douglas Cable Communications, Inc., formed to pursue PCS

Band plan:

- Allocate 1910-1930 MHz for unlicensed devices, and 1850-1910 and 1930-1990 MHz for licensed systems. (p. 2)

Amount of spectrum per licensed system:

- Each licensee should be licensed 40 MHz in any given area; it would have a range of 60 MHz to use to select its 40 MHz in each place. (pp. 2-3, 4-5)
- Two providers with 40 MHz are needed to: (1) conform more readily to the existing channelization plan; (2) provide economically viable PCS; and (3) accommodate the broadest range of transmission schemes. (pp. 3-4, 6)
- The ability to select a 40 MHz block from 60 MHz will facilitate negotiations, avoid dead spots due to lack of spectrum in a particular area, and avoid having PCS operators held captive to the extortion of a single operator. (pp. 4-5)
- At the end of 8 years, each licensee would lock in its 40 MHz block selection and the remaining 40 MHz could be allocated to another provider. (p. 5)

Service areas:

- Supports MTAs to minimize coordination problems, promote roaming, permit earliest build-out, achieve economies of scale, and permit (with reasonable eligibility restrictions) smaller cellular operators to compete with large cellular networks. (p. 7-8)
- Smaller areas will increase speculation and diminish the likelihood that licensees will have the financial and technical ability to speed commencement of PCS. (p. 8)

Cellular carrier participation:

- Supports APC's proposal for a 20 percent benchmark for assessing overlap, using proportionate POP evaluations, but without a multiplier for ownership -- any cognizable interest (1 percent) should trigger the POP overlap evaluation. (pp. 8-10)

Local exchange carrier participation:

- Not opposed to LEC entry, except where the LEC has a cellular affiliate, in which case the cellular rules would apply. (p. 10)

Licensing policies:

- Licenses for the 20 largest areas should be done by paper comparative hearings, with strict limits on page lengths, requirements for all relevant engineering, ownership, financial and other information. (p. 10-12)
- Settlements would be permitted in the expedited comparative hearings, but cash compensation for dismissing an application would be prohibited. (p. 12)
- Mergers of applicants would be permitted, but no upgrading or combining of applications for comparative purposes. (p. 12)
- Comparative criteria should be adopted that reward specificity of the proposal, technical merit, aggressive build-out schedules, viability of the proposal, knowledge of the market, experience with the technology, diversity in the market, and furtherance of the technology. (pp. 12-15)
- The remaining 29 markets would be lotteries with strict eligibility requirements. (pp. 15-16)
- Supports high filing fees. (p. 16)
- Suggests initial license term of 5 years, with subsequent 10 year terms. (pp. 16-17)

Regulatory status:

- PCS carriers should be able to elect common or private carrier status. (p. 17).

Technical standards:

- A federally protected right of interconnection should be established. (p. 17)

CITY OF PHOENIX FIRE DEPARTMENT
Comments on 2 GHz Licensed PCS

Interest: Public safety user

Other issues:

- The FCC should look at how mobile services interface with the 911 scheme. (p. 1)
- The FCC should require pioneer developers to consider public safety in the research and development of new products. (p. 1)

**PIEDMONT RURAL TELEPHONE COOPERATIVE, INC.
WEST CAROLINA RURAL TELEPHONE COOPERATIVE, INC. AND
FARMERS TELEPHONE COOPERATIVE, INC.**

Comments on 2 GHz Licensed PCS

Interest: Rural LEC cooperatives serving South Carolina markets

Band plan:

- 5 licensed providers with 20 MHz each, with 1 block reserved as a LEC wireline set-aside. (p. 2)

Amount of spectrum per licensed system: 20 MHz

Service areas:

- Use MSA/RSA licensing. (p. 2)

Local exchange carrier participation:

- LECs should be permitted to participate because LECs need advanced telecommunications technology for their core business, especially in rural areas. (p. 2)

Cellular carrier participation:

- Entities in limited partnerships or with minority interests in cellular licenses should not be excluded from full participation in PCS. (p. 2)

Licensing policies:

- Reformed lotteries, rather than spectrum auctions, should be used to license PCS. (p. 3)

PINON COMMUNICATIONS, INC.
Comments on 2 GHz Licensed PCS

Interest:

- Equipment manufacturer.

Band plan:

- Believes that more than three service providers should be accommodated. Sees a need for private PCS services. (p. 1)

Service areas:

- Supports the use of the 487 Basic Trading Areas. Alternatively, would support the use of the 487 Basic Trading Areas for private PCS services with larger service areas for the mass consumer PCS market. (p. 1)

Cellular carrier participation:

- Believes that cellular carriers would pose a threat to competitive markets. (p. 2)

Local exchange carrier participation:

- Believes that LECs should not be licensed in PCS markets if competition to the LEC is desired. Would not, however, preclude LECs from becoming suppliers of PCS through joint ventures. (p. 2)

Licensing policies:

- Supports a postcard lottery with a non-refundable \$10,000 fee payable 72 hours after notification of success in the lottery. Financial, technical and other eligibility showings should be required within 30 days of notification. (p. 2)
- Notes that competitive bidding would introduce delay due to the need for Congressional action. (p. 3)

Regulatory status:

- Believes that PCS should be regulated as a private carrier. (p. 3)
- Supports interconnection capabilities similar to that afforded interexchange carriers, and rates should be the same for either intrastate or interstate traffic. (p. 3)

POINT COMMUNICATIONS COMPANY
Comments on 2 GHz Licensed PCS

Interest: Cellular carrier serving a rural service area.

Service areas:

- PCS service areas should match the MSA and RSA boundaries employed for cellular so that rural and low density areas are not neglected. (p. 2).

Cellular carrier participation:

- Cellular carriers, particularly small companies serving RSAs, should not be excluded from participating in PCS; if the FCC excludes cellular companies from obtaining PCS licenses for their existing service areas, then there should be an exception for companies serving RSAs. (p. 3).
- Cellular companies that have a record of providing new services without selling out should be provided with a "job creators" preference in PCS licensing. (p. 3).

POWERSPECTRUM, INC.
Comments on 2 GHz Licensed PCS

Interest: Corporation that exploits development of frequency hopping multiple access (FHMA) technology

Amount of spectrum per licensed system:

- Recommends allocation of between 10 and 20 MHz for each service provider. (p. 4).

Service areas:

- States that the Commission should issue licenses to operators serving MSAs/RSAs, broader geographic regions, as well as the entire country. (pp. 5-6).

Licensing policies:

- Opposes competitive bidding, unless Commission awards a preference for entrepreneurs with less resources, but possessing relevant experience and technical expertise. (pp. 7-8).
- If lottery is chosen, recommends imposition of financial, technical and other eligibility requirements, and establishment of preference for entrepreneurial entities with relevant experience and technological capabilities. (p. 7).

Regulatory status:

- Asserts that PCS should be regulated as a private carrier. (pp. 7-8).
- Supports federally protected right to interconnect with public switched telephone network ("PSTN"). (p. 8).
- Agrees with Commission's conclusion that state and local regulation of the type of interconnection to which PCS providers are entitled should be preempted. (p. 8).

Technical standards:

- Opposes any Commission effort to establish technical standards for PCS, except for interference control standards. (p. 9).

PUBLIC SAFETY MICROWAVE COMMITTEE
Comments on 2 GHz Licensed PCS Devices

Interest: Representative of state and local government agencies that use fixed microwave facilities for public safety communications

Technical standards:

- Supports proposed use of TSB10-E standard for measuring potential interference from PCS to licensed fixed microwave facilities. Believes that a more "liberal" standard is unnecessary and could lead to disruption of vital public safety microwave facilities. (p. 3).
- States that TSB10-E standard must be adapted but not weakened to apply to a mobile/portable environment. (p. 4).
- Supports Commission proposal that total power level of PCS base stations and associated mobile and portable units within relevant area of coordination be less than the power levels specified in TSB10-E, provided that calculation includes all mobile and portable units. (p. 4).
- Power level calculation used for PCS must assume a worst-case scenario such as major emergencies and must take into account potential for PCS unit clustering. PCS systems using spectrum sharing technologies that automatically "assign" frequencies to PCS units to avoid interference must also be required to comply with proposed interference guidelines for each frequency used. (p. 4).
- Calculations should also have sufficient built-in tolerance to allow "minor" modifications in microwave licensees' systems, such as changes in antenna azimuth, beamwidth, antenna height and authorized power, without causing or inviting interference. (p. 5).
- Supports Commission's adoption of "conservative" rules, such as using straight power addition in measuring total power at microwave receiver. (p. 6).
- Proposed PCS-to-microwave coordination distances provide appropriate protection against interference and should not be reduced. (p. 6).
- States that additional measures are necessary to prevent interference to microwave facilities. Asserts that frequency coordination on a regional or local basis between PCS providers and all relevant microwave licensees is critical, and calls for establishment of