channel utilizing today's broadcast television transmission standards[36] occupies 6 MHz of spectrum. This same amount of spectrum could provide 480 channels (12.5 kHz each) for voice or data communications. The location of the band within the radio spectrum is another important factor. Mobile operations generally are feasible only on spectrum below 2.5 GHz, whereas fixed microwave operations are feasible at much higher frequencies.

71. Our goal in this proceeding is that public safety agencies have adequate spectrum resources to ensure effective and reliable communications. As NTIA has previously noted, however, the demand for spectrum is usually not for spectrum *per se* but for increased capacity, which ultimately translates into more spectrum if the same technology is used.[37] We note, however, that this may not be the result if users employ different technologies. NTIA also has predicted that 50 MHz will be required for new advanced private land mobile services -- including public safety uses -- over the next ten years.[38] We are aware that public safety agencies have a wide range of existing and future needs. We seek comment on the amount and type (*e.g.*, VHF, UHF, or SHF bands) of spectrum necessary to satisfy public safety spectrum needs for the next fifteen years. Specifically, we ask commenters to identify the existing and future spectrum needs of public safety agencies, including bandwidth projections, spectrum placement recommendations, and any recommendations for spectrum allocation plans (which identify current spectrum assignments as well as recommendations for future allocations and a timetable for implementation of new allocations). Commenters also should specify amounts of spectrum necessary, the intended use of such spectrum, why existing allocations cannot accommodate the intended use, and any likely effects on other operations or entities of any particular allocations proposed.

2. Spectrum Allocation Options

72. We recognize that there are a variety of regulatory approaches we could use to address the problems of congested spectrum and fragmented bands facing public safety agencies. These approaches include, but are not limited to: (a) allocation of additional public safety spectrum; (b) reallocation of spectrum currently assigned to Federal Government; (c) requirement of system sharing; (d) use of spectrum-efficient systems; (e) use of commercial wireless services; and (f) promotion of more efficient use of the spectrum allocated for public safety use. We request comment on the advantages and disadvantages associated with these approaches, including the technical feasibility, economic considerations, and impact on existing services. In addition, we ask commenters to discuss any other means that could be used to increase the capacity and capability of public safety communication systems. While we recognize that the emergence of new technologies will create new applications that could require additional spectrum, we also believe that advanced technologies may help to alleviate

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[36] *See* 47 C.F.R. § 73.862.

[37] *NTIA October 1995 Report* at 3-2.

[38] *NTIA March 1995 Report* at 38.

some spectrum congestion problems as well as increase capacity. We request commenters to discuss the potential impact of new technologies on the spectrum congestion and capacity problems now present in public safety communications.

73. *Allocation of additional spectrum.* Traditionally, the Commission has addressed public safety agencies' need for additional capacity by allocating additional spectrum. One drawback of this approach is that public safety spectrum is in different bands and, as a result, interoperability can not be readily obtained. In addition, the increasingly congested nature of spectrum below 1 GHz makes immediate additional allocations very difficult.[39] Thus, we tentatively conclude that allocating additional public safety spectrum is not likely to satisfy the current and emerging needs of public safety communications systems. We seek comment on this tentative conclusion. We ask commenters to discuss both the technical and administrative advantages and disadvantages associated with adding to existing allocations, particularly if these newly allocated frequencies are not contiguous to existing public safety frequencies.

74. *Reallocation.* In the spectrum designated for transfer to the Commission,[40] NTIA has identified nine frequency bands below 3 GHz having the potential for new non-Federal mobile communications and technologies, as well as other uses. We believe that some of these bands may be suitable for public safety uses. The following chart describes the current and future uses and scheduled availability of these frequency bands.

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[39] Although spectrum below 1 GHz currently is very congested, additional spectrum may become available in the future. *See e.g. Fourth Further Notice of Proposed Rulemaking and Third Notice of Inquiry*, MM Docket No. 87-268, 10 FCC Rcd 10540 (1995) (digital television spectrum); *Report and Order and Further Notice of Proposed Rulemaking*, PR Docket No. 92-235, 10 FCC Rcd 10076 (1995) (increasing efficiency below 512 MHz).

[40] *NTIA October 1995 Report* at xi.

FREQUENCY BAND	SCHEDULED AVAILABILITY	CURRENT AND FUTURE USES
1390-1400 MHz	1999	Federal operation at 14 sites will continue for 9 years.
1427-1432 MHz	1999	Federal operation at 14 sites will continue for 9 years.
1670-1675 MHz	1999	Non-Federal use of a limited number of sites could receive consideration earlier.
1710-1755 MHz	2004	Under certain conditions, reallocation of the band in 1995 may be possible for the 25 largest U.S. cities.
2300-2310 MHz		Prior to the transfer, the amateur service held secondary status to government operations in this band. Although the Commission has not made a primary allocation in this band, the amateur service continues to hold secondary status.
2390-2400 MHz		Commission has allocated this band on a secondary basis for use by unlicensed synchronous Data Personal Communications Services devices.
2400-2402 MHz		Principal users are industrial, scientific, and medical devices, the amateur services, and unlicensed devices.
2402-2417 MHz		Commission has allocated this band on a primary basis to the amateur services and to unlicensed devices and services
2417-2450 MHz		Principal users of this band are industrial, scientific, and medical devices, the amateur services, and unlicensed devices.

75. We also note that there are other bands which may be suitable for public safety communications. For example, NTIA has proposed that public safety spectrum needs for full motion video be satisfied by using portions of the 4635-4685 MHz band. NTIA also has suggested that portions of the VHF television band (174-216 MHz) that will possibly be used for advanced television services be considered as potential spectrum for land mobile uses.[41] In addition, VHF channels presently allocated for the Public Mobile Service may be lightly used or even unused in some regions. We believe that this light use of frequencies may result from the discontinuation of service by commercial providers who are intended users of that spectrum.[42] Also, there are other VHF segments allocated for use by the Domestic Public Land Mobile Services, including the 152.000-152.255 MHz, 152.495-152.855 MHz, and 157.755-158.155 MHz bands.

76. Additionally, the 2110-2120 MHz band is presently allocated for fixed and mobile use. We note that there are few incumbent users on these frequencies. Thus, we believe that these incumbents could either share spectrum with public safety agencies or be cleared at a relatively low cost (*e.g.*, $25,000 per link or less). This band could support 800 simplex voice channels, or 400 repeater channels, or one television channel and 160 simplex voice channels, or other combinations.

77. Finally, in the International Telecommunication Union Region 2, the 335.4-399.9 MHz band is allocated for fixed and mobile stations. In the United States, this band is currently limited to the military services. It also is allocated on a primary basis to the mobile-satellite service, limited to military operations. We understand that the 380-399.9 MHz segment has been used by the North American Treaty Organization (NATO) and that agreement between NATO/ARFA and the European Conference of Postal and Telecommunications Administrations exists to allow certain European countries to have access to the band for public safety services. This low UHF segment, therefore, appears to be a good candidate for reallocation for public safety uses. Its proximity to the 74 channels in the 450-470 MHz band that are currently available for public safety communications may make this segment ideal for public safety voice, data, and facsimile channels. We note, however, that these frequencies are regulated by NTIA.

78. We seek comment on the feasibility of using the spectrum identified above either as additional spectrum or for reallocation of public safety spectrum. Specifically, commenters should discuss: (a) how much spectrum will be required for the various types of public safety agencies through the year 2005, 2010, and 2015; (b) what are the highest, lowest, and ideal frequency bands practicable for each type of public safety operation; and (c) which of the frequencies currently allocated for public safety communications are inappropriate for particular public safety uses and why. We also ask commenters to discuss whether there are

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[41] *NTIA October 1995 Report* at xi.

[42] The channels are at 152.03, 152.06, 152.09, 152.12, 152.15, 152.18, 152.21, 152.51, 152.54, 152.57, 152,60, 152.63, 152.66, 152.69, 152.72, 152.75, 152.78, and 152.81 MHz.

other Federal bands that could or should be reallocated for public safety communications.

79. *System sharing.* Beyond implementation of advanced technologies, there are sharing mechanisms whereby a particular frequency block can be used by entities providing compatible services. Sharing may be accomplished by geographic means, time of day, further band segmentation, or other technical means. We request comment on the issues involved in promoting greater sharing of public safety bands -- for both public safety agencies sharing with other public safety agencies and public safety agencies sharing with other users. The latter will be especially important if additional spectrum is eventually allocated to public safety uses because incumbents will either have to share or move to other frequency bands. We specifically request comment on technical advances that may enhance sharing prospects.

80. *Spectrum-efficient systems.* We also believe that spectrum-efficient technologies and system designs will provide more users with access to the public safety spectrum and encourage advanced applications to be developed using existing spectrum resources. Congress' embrace of this premise is reflected in Section 104(d)(3)-(4) of the Telecommunications Authorization Act of 1992, which requires the Secretary of Commerce, through NTIA, to establish and implement a plan whereby Federal Government mobile radio systems become more spectrum-efficient and cost-effective. NTIA's and the Commission's "refarming" proceedings promote more efficient use of existing private land mobile radio (PLMR) spectrum allocations below 800 MHz.[43] We request comment on additional methods and technologies that could increase spectrum efficiency in public safety communications. Specifically, what new technologies (*e.g.*, CDMA,TDMA, FDMA, and ACSSB) could enhance efficiency, when will they be available, and how significant would be the gains in efficiency?

81. *Options for efficient spectrum use.* Notwithstanding the various options described, *supra*, we believe that our promotion of more efficient spectrum relief will provide an expeditious, but perhaps limited, solution to the spectrum needs of public safety agencies. In this connection, we seek comment on whether exclusivity or leasing of excess public safety spectrum capacity would be a feasible means of increasing efficiency in spectrum use. We also ask commenters to discuss other ways in which the Commission can promote more efficient use of the spectrum currently allocated for public safety wireless communications.

82. Additionally, we direct specific comment to NTIA's proposal of a unique regulatory option of Federal/non-Federal sharing designed to enhance efficient spectrum use. NTIA relates that Federal, State, and local land mobile radio systems are generally single channel analog FM voice systems, owned and operated by single agencies to perform a single well-defined mission. NTIA states that technology and the agency have become entwined as part of a vertically-integrated radio communications organization with little incentive to move

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[43] *See* note 40.

to more efficient systems.[44] NTIA believes that this situation could be changed to provide public safety entities with a set of incentives more likely to ensure that public resources, both of public funds and spectrum itself, are directed in more optimal manners.

83. In this connection, NTIA previously has concluded that public safety users should consider implementing shared Federal/non-Federal multi-site trunked communications systems or wide-area systems using cellular or personal communications services (PCS) technology for future narrowband operations. [45] NTIA suggests that such systems be viewed as an alternative to allocating massive amounts of new spectrum. We note that the implementation of multi-site trunked communications capability would respond directly to the pressing demands for interoperability in public safety communications. In a broader context, pursuit of NTIA's suggestion, while potentially enhancing interoperability, would generate a far-reaching change for Federal, State, and local public safety agencies. In its March 1995 Report, NTIA notes the lack of an integrated program for future spectrum sharing and argues that significant barriers exist that impede frequency band sharing between Federal and non-Federal users.[46] In this connection, NTIA envisions that multi-site radio systems shared among many different agencies, would replace the large number of independent government radio systems that currently service Federal, state, and local agencies. This recommendation is consistent with a parallel proposal to modify the block allocation system to permit additional flexibility and harness unused spectrum. According to NTIA, the resulting greater technical flexibility would improve manufacturers' ability to develop the best standards for their products to meet users needs.[47]

84. We believe that NTIA's proposal seeks to maintain independent communications capability on the part of the user agencies, yet end the fragmentation that has contributed to virtual non-existent interoperability, stifled innovation, and confined competition. As a result, we believe that, in theory, it would provide higher levels of service and result in more efficient spectrum use. With the extreme difficulties of obtaining public revenues for infrastructure costs, it offers an opportunity for private participation in providing a wide breadth of services. Moreover, it seeks to accommodate those agencies with extensive requirements and expanding demands, as well as those not located in highly congested areas and who do not seek the wide range of services available.

85. We seek comment on NTIA's recommendation, including how NTIA and the Commission would administer this structure and what legislative action would be necessary to bring about the creation of such systems. Specifically, we seek comment on the range of

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[44] *NTIA October 1995 Report* at A-1.

[45] *NTIA March 1995 Report* at 181-182; *NTIA October 1995 Report* at A-1.

[46] *NTIA March 1995 Report* at 181-182.

[47] *NTIA March 1995 Report* at 177-178.

elements, such as equipment life cycles and financial incentives, that would create sufficiently strong incentives for public safety agencies to aggressively embrace such an initiative.

86. *Use of commercial wireless services.* We believe that use of commercial wireless services offers great promise in relief of spectrum congestion and emergence of advanced services for public safety agencies in a timely and cost-effective manner. We request comment on how the use of commercial providers might affect the demand for exclusive or shared public safety spectrum, including whether the effect will be uniform for all public safety agencies and the impact on the amount of spectrum necessary for specific public safety applications. In addition, we ask commenters to discuss whether there are other tools which will increase capacity while promoting interoperability.

E. Transition

87. We believe that in order to address the deficiencies of public safety communications, we must not only facilitate the development of feature-rich, spectrally efficient communications systems but also provide for a smooth transition from today's environment to public safety communications employing advanced technologies. We further believe that such a process will entail (1) greater use of commercial services by public safety entities; (2) more efficient use of existing spectrum; and (3) provision of additional spectrum for public safety uses. We are mindful, however, that the process must provide sufficient incentives and inducements for affected parties to be active participants while not being overly ambitious and unrealistic. In this connection, we believe that pursuit of any plan which focuses entirely on substantial, new spectrum allocations for public safety uses would be ill-advised given the current state of public safety communications. For example, even if unlimited, clear spectrum were available for such an allocation -- and it is not -- there is no evidence that the funding necessary to support a migration of all existing public safety entities to new frequencies is or will be readily available to public safety agencies. Moreover, the regulatory proceedings necessary to accomplish such spectrum allocations would take time, as well as the migration of public safety and other users to new spectrum. Given these factors, we tentatively conclude that a transition strategy that rests principally on obtaining additional spectrum for public safety is unacceptable because it effectively would ignore public safety agencies' more immediate spectrum needs. We seek comment on this tentative conclusion and ask commenters to discuss the most reasonable plan for transition to new technologies and services, including a transition timetable through the year 2010, whether the transition would be different in urban and rural areas, and whether there should be a date certain for the full transition in the top markets.

88. We believe that the underpinnings of an effective and reasonable transition plan must recognize and account for the traditional characteristics of the public safety community. First, public safety activities are geared either solely or principally towards the protection of life and property rather than commercial motives, such as maximization of profits. Second, communications associated with the performance of such activities often require service

capabilities that differ from those typically marketed to the general public (*e.g.*, priority access, coverage, security). In fact, until relatively recently, the number of commercial carriers capable of meeting public safety entities' specialized needs was arguably limited. Third, public safety entities typically are publicly-funded, and thus face longer planning and new system acquisition cycles than most large commercial users. Public safety entities also must compete for operating and capital funding with other entities responsible for other important state and local government functions. We seek comment on whether and to what extent these attributes continue to accurately characterize public safety agencies. We also seek comment on other characteristics that are relevant to our analysis, and how all such factors should affect our strategic planning.

1. Increased Use Of Commercial Services

89. We believe that exploding public demand for spectrum for new commercial uses makes it increasingly difficult to address public safety communications needs as we have done in the past because the amount of available additional spectrum will be limited. As a result, we tentatively conclude that facilitating public safety agencies' use of commercial services, wherever feasible and possible, will necessarily be a key component of our efforts to ensure that public safety agencies' spectrum needs are met.

90. We also recognize, however, that public safety agencies have constructed and operated stand-alone private wireless systems in the past due, in part, to the lack of adequate commercial alternatives. As mentioned *supra*, the number of commercial alternatives are increasing rapidly. Moreover, the substantial spectrum allocations made by Congress and this Commission during the 1990s for a variety of commercial uses indicates the impending end of the era in which communications users, including public safety agencies, could turn to only a handful of service providers to meet their particular needs. Private companies are investing in wide-area, highly sophisticated wireless communications systems throughout the country, multiplying service options and lowering prices for these services. These companies have strong economic incentives to compete for new users, especially large users, and to tailor service offerings to local conditions and needs. We note that public safety entities often are among the largest telecommunications users in their local communities. We also believe that our rules and licensing procedures could be structured to provide public safety agencies with additional incentives to move to commercial offerings. For example, frequencies designated exclusively for public safety uses could be restricted in terms of the types of uses permitted on such frequencies. We seek comment on our tentative conclusion and observations. We ask commenters to discuss the types of public safety activities that could be performed using commercial systems with sufficient reliability that lives or property would not be threatened. We also solicit proposals for how to prioritize the communications associated with these existing and emerging activities.

2. Funding for Spectrum Migration

91. As we have discussed *supra*, we believe that additional spectrum allocations are

likely to be a critical step in our efforts to address the current deficiencies with public safety communications, but only one aspect of a more comprehensive approach encompassing increased use of sharing and spectrum-efficient technologies, wide use of commercial services and allocation of additional spectrum. Assuming that migration to newly allocated spectrum is based on the life cycle of present equipment, we believe that the substantial financial requirements inherent in such migration is a significant obstacle to its realization. We further believe that the availability of resources to finance the migration, including necessary new equipment, is tenuous at best because public safety agencies' ability to commit large initial sums of capital investment are likely to be strained significantly.

92. We seek comment on the degree to which the value of present public safety spectrum can be used to underwrite public safety spectrum consolidation. Under such an approach, as public safety users migrate from existing systems, the vacant spectrum could be auctioned. The auction proceeds then could be used to underwrite the migration of incumbent public safety entities to new frequencies. With the important caveat that statutory authority to use auction proceeds in this manner would be required, we believe the value of present public safety frequencies is a potentially important source of relocation funding. We seek comment on the statutory amendments and associated regulatory modifications that would be required to enable private sector demand for additional spectrum to be used for this purpose. We also seek comment on whether there are other methods of funding available for the transition. Alternatively, auction winners could be required to pay the cost of relocation of public safety incumbents, possibly with an auction price discounted by the cost of relocation. We seek comment on this proposal as well.

3. Improving Public Safety Spectrum Administration

93. We tentatively conclude that present spectrum allocation and administration processes for public safety services are inefficient and too lengthy. Currently, these processes require public safety entities to predict future spectrum requirements, initiate equipment procurement actions, obtain frequency coordination,[48] file license applications, and await processing of such applications. Public safety agencies often must seek modification of the license grants or request waivers of the Commission's rules in the wake of unforeseen emergencies. The Commission's present authorization process requires a determination that: (i) the applicant is eligible, (ii) the channels requested have been properly coordinated, and (iii) the proposed system is in conformance with applicable rules and regulations. Upon approval, the information is added to the licensee data base and a license is granted for a five-

[48] *See* Fact Sheet PR-5000 Number 301, Part 90 Frequency Coordinators dated August 1995. The certified coordinator for the Local Government, Police, and 800 MHz Public Safety Radio Services is the Association of Public Safety Communications Officers International, Inc. For the Fire Radio Service, it is International Municipal Signal Association. For the Special Emergency Radio Service, they are the Personal Communications Industry Association, International Municipal Signal Association, and International Association of Fire Chiefs. For the Highway Maintenance Radio Service, it is the American Association of State Highway and Transportation Officials. For the Forestry Conservation Radio Service, it is the Forestry Conservation Communications Association.

year term. We seek comment and suggestions on methods of streamlining and improving these processes.

94. We propose to require frequency coordination post-license grant for public safety licensees rather than pre-license grant. Under this proposal, we would grant to each eligible entity a license that is subject to coordination. The frequency coordinator would be responsible for maintaining an accurate data base accessible by the public. We tentatively conclude that this would be an improvement upon our current procedures because the licensing process will be streamlined. Thus, public safety users will receive their authorizations more quickly. We seek comment on this proposal and tentative conclusion. We ask commenters to address what modifications to existing licensing processes and regulations, including those relating to public safety frequency coordination and the continuing need to coordinate border frequencies with neighboring countries, would be required to implement this proposal.

F. Competition in the Supply of Goods and Services

95. We believe that another contributing factor to the deficiencies in today's public safety communications is the lack of a vigorous competitive market for the purchase of communications equipment and services employed by public safety agencies. Subsequent to initial procurement, competition is virtually non-existent; therefore, maintenance, upgrades, and expansion are often limited to one provider. Consequently, not only must agencies pay higher prices, but also technological innovation and expanded product choice are inhibited.

96. It is our understanding that the market for public safety land mobile radio equipment is primarily confined to two suppliers, Motorola, Inc. and Ericsson, Inc.[49] Ericsson previously has noted that based on the market shares of these two companies, the Herfindah-Hirschman Index (HHI) for public safety land mobile radio equipment is estimated to be over 5,700. The Department of Justice and Federal Trade Commission Merger Guidelines promulgated in 1992, state that the degree of market concentration is broadly characterized as unconcentrated when the HHI is below 1,000, moderately concentrated when the HHI is between 1000 and 1800, and highly concentrated when the HHI is above 1800.

97. We reiterate that the Commission's goal in this proceeding, as in others, is to create a regulatory environment which fosters competition. In the public safety context, we believe that competition will result provided that we formulate policies which allow for a wide range of services to be provided by both simple and complex technologies. We also believe that competition will be present and thrive in those circumstances where initial equipment purchase does not limit choice in upgrade and expansion, innovation does not require an entirely new system, and most importantly, manufacturers and service providers

[49] Letter to Philip L. Verveer, Chair, PSWAC, from Dennis C. Connors, Vice President, Ericsson, Inc., and Member of the Steering Committee of the Advisory Committee, dated October 24, 1995 ("Ericsson letter").

accept the competitive environment. As a result, we tentatively conclude that any rules adopted in this proceeding should be technology-neutral. We seek comment on this tentative conclusion, and on whether adherence to such a position is mutually exclusive with consideration of the alternative of a single set of protocols or standards to foster, for instance, interoperability in public safety communications. We also ask commenters to address what measures, if any, must be taken in order to ensure that our rules do not favor use of a particular technology over another.

98. We recognize that similar goals have been established for the Association of Public Safety Communications Officers (APCO) Project 25. Commenced in 1989, Project 25 seeks to increase radio spectrum efficiency, enhance competition in the public safety equipment and services market, and provide interoperability capability. Project 25 evolved from the Commission's 1989 decision not to adopt protocol standards for communications equipment operating in the 800 MHz public safety bands that foster spectrum efficiencies and interoperability in GEN Docket. No. 88-441. APCO completed Project 25's first phase in August 1995, which set protocol standards.

99. We note that the record in Gen. Docket No. 88-441 concerning adopting protocols for the 800 MHz public safety bands reflects several positions. It was argued that any standard would be a product of compromise, not creativity. Additionally, it was asserted that the lead time to comply with the standards would divert effort away from innovation, and that the technical improvements that evolved could not be implemented without agreement to change the standard. It was asserted that protocol standards would stifle future advanced telecommunications systems in providing a higher form of interoperability, enhanced competition, and the spectrum efficiencies needed to handle future increased communications requirements.[50]

100. In addition, Ericsson raises competitive and other concerns regarding Project 25. It believes that Project 25 will further restrict competition in a market already concentrated, not contribute to spectrum efficiency, and not move public safety communications closer to interoperability. The Commission seeks comments on Project 25 that addresses its goals and objectives, the status of these efforts, and the issues raised by Ericsson.[51]

101. Beyond the efforts by APCO and others, we believe that it is our responsibility to examine how best to enhance competition in the public safety communications market, bring about interoperability, greater spectrum efficiency, and overall, more effective communications. In our 1989 decision, we noted the drawbacks to standard setting in face of projections of technical advances that would produce spectrum efficiency and interoperability

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[50] 4 FCC Rcd at 3879.

[51] *See* Charles L. Jackson, A Need to Be Heard: Will Project 25 Meet Public Safety Communications Needs in 1995 and Beyond (July 1995); Hatfield Associates, Inc., Competitive Considerations Associated with APCO Project 25 (Jan. 6, 1996) .

and our preference for allowing these forces to evolve. We ask commenters to discuss how we can foster a more competitive environment for the supply of goods and services related to public safety communications while encouraging greater efficiency and innovation.

V. CONCLUSION

102. Throughout this *Notice*, we have emphasized two primary issues. The first issue is the critical nature of public safety responsibilities to the Nation's well being and the role of modern wireless communications in ensuring that these duties are fulfilled effectively. The second issue is that the fragmented nature of present public safety wireless communications has a detrimental impact on present and future capabilities. We believe that bringing about improved quality and tangible access to expanded services is dependent largely on public safety operating in a wider and more consistent environment. This proceeding seeks to broaden the opportunity for public safety agencies to obtain access to the benefits that accrue from the increased competition and innovation that has emerged in telecommunications generally while maintaining the independence, reliability, universal service and security that are integral to public safety. We believe that a regulatory structure can emerge that is more efficient, commits more discretion to users, and facilitates access to a much broader range of services.

VI. PROCEDURAL MATTERS

A. Regulatory Flexibility Act

103. As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities of the proposals suggested in this document. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the *Notice of Proposed Rule Making*, but they must have a separate and distinct heading designating them as responses to the IRFA. The Secretary shall send a copy of this *Notice of Proposed Rule Making*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. § 601 *et seq.* (1981).

B. *Ex Parte* Rules -- Non-Restricted Proceeding

104. This is a non-restricted notice and comment rule making proceeding. *Ex parte* presentations are permitted except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission's rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206(a).

C. Comment Dates

105. Pursuant to the applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415 and 1.419, interested persons may file comments on or before **September 20, 1996**, and reply comments on or before **October 18, 1996**. To file formally in this proceeding, you must file an original and four copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you should file an original and nine copies. You should send your comments and reply comments to Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the Reference Center of the Federal Communications Commission, Room 239, 1919 M Street, N.W., Washington, D.C. 20554.

E. Ordering Clause

106. Authority for issuance of this *Notice of Proposed Rule Making* is contained in Sections 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) and 303(r).

F. Contact Person

107. For further information concerning this proceeding, contact Robert McNamara at (202) 418-0680 (Private Wireless Division, Wireless Telecommunications Bureau).

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

APPENDIX A

INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Act Analysis (IRFA) of the expected impact on small entities of the policies and rules proposed in this *Notice of Proposed Rule Making (Notice)*. Written public comments are requested on the IRFA.

1. Reason for Action: This rule making proceeding was initiated to establish the regulatory infrastructure necessary to accommodate the communications needs of public safety agencies through the year 2010.

2. Objectives: The Commission proposes providing a regulatory vehicle to accept the recommendations of the Public Safety Wireless Advisory Committee and seeks to address the present deficiencies in the public safety wireless communications as well as its expanding spectrum needs.

3. Legal Basis: The proposed action is authorized under Sections 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§154(i) and 303(r).

4. Reporting, Recordkeeping, and Other Compliance Requirements: The proposals under consideration in this *Notice* are wide ranging and encompass a number of options. It is unclear at the present time if there will be any additional reporting and recordkeeping requirements placed upon small entities as a result of proposals addressing transmitter and receiver standards, emission requirements, and type acceptance.

5. Federal Rules Which Overlap, Duplicate or Conflict With These Rules: None.

6. Description, Potential Impact, and Number of Small Entities Involved: The rule changes proposed in this proceeding could affect state and local government public safety agencies and private public safety providers, *e.g.*, ambulance services, volunteer fire departments, and other ancillary public safety services providers throughout the country. After evaluating the comments in this proceeding, the Commission will further examine the impact of any rule changes on public or private small entities and set forth our findings in the Final Regulatory Flexibility Analysis.

7. Significant Alternatives Minimizing the Impact on Small Entities Consistent With the Stated Objectives: This *Notice* solicits comment on a variety of alternatives. Any additional significant alternatives presented in the comments will also be considered.

8. IRFA Comments: We request written public comment on the foregoing Intial Regulatory Flexibility Analysis. Comments must have a separate and distinct heading designating them as responses to the IRFA and must be filed by the deadlines provided in paragraph 103 of the *Notice*.

SEPARATE STATEMENT OF

COMMISSIONER RACHELLE B. CHONG

Re: *The Development of Operational, Technical, and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010: WT Docket No. 96-86, Notice of Proposed Rule Making*

Public safety representatives have voiced concerns for years about the severe shortage of radio spectrum available for their critical operations. In addition, public safety agencies assert that they are beset by many other problems: (1) the fragmentation of existing spectrum; (2) a lack of interoperability between public safety systems; (3) budget and funding constraints; (4) inability to access new technologies due to funding constraints; and (5) a lack of competition among equipment and service providers. At our recent spectrum en banc hearing, I expressed concern about what the Commission can do to further help our nation's public safety users and to enhance the safety and security of our citizens. I hope that this Notice of Proposed Rule Making will help resolve some of these important issues.

One of my major concerns is how to promote interoperability among local, state and federal public safety systems for both day-to-day operations and large scale disaster scenarios where interagency cooperation is necessary. Our past "hodgepodge" approach of licensing individual public safety entities separately on various frequency bands using different and often incompatible technologies has created a situation where public safety agencies from neighboring areas, or sometimes even those within the same area, are unable to communicate with one another. It is my view that if we placed a higher priority on public safety interoperability, we could greatly enhance the effectiveness of our public safety personnel and literally save lives. I am particularly heartened by the proposals in this Notice to improve interoperability in the public safety spectrum, and urge detailed comments on how this could be made possible.

I am also pleased to see the Commission emphasizing in our Notice the use of spectrally efficient technologies. With the increased demand for spectrum from all types of users, we must ensure that our public safety users (as well as other users) be very efficient in their use of spectrum. Although I do not believe that the Commission should dictate the technologies to be used by public safety licensees, I believe that we should provide incentives for the use of the most spectrally efficient of the available technologies.

Finally, I am further encouraged by the proposals which address the need to encourage technological improvements in public safety radio services. Some of the problems identified by the public safety representatives may be alleviated through the use of new and advanced services.

I recognize that some of the solutions proposed by the Notice may be costly to implement by our public safety users and may cause other sticky transition issues. The Notice acknowledges these issues and discusses possible solutions to ensure that any transition plan is financially viable and does not cause any disruption in service. But as we consider the budgetary challenges of change, we must keep our long term goals of interoperability, state of the art technology, and spectrally efficient usage for our public safety users firmly in mind.