

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
NEXTEL COMMUNICATIONS, INC.)
) **GN Docket No. 93-252**
Request for Pioneer's) **PR Docket No. 93-144**
Preference For A Wide-Area)
800 MHz Specialized Mobile)
Radio License in the New York)
Metropolitan Trading Area)

To: The Commission

AMENDMENT TO PIONEER'S PREFERENCE REQUEST

I. INTRODUCTION

Pursuant to the Federal Communications Commission's ("Commission") Third Report and Order in ET Docket No. 93-266 ("Third R&O"),^{1/} Nextel Communications, Inc. ("Nextel") hereby files this amendment to its October 6, 1994 Pioneer's Preference Request ("Request").^{2/} In the Request, Nextel seeks a pioneer's preference for an 800 MHz wide-area Specialized Mobile Radio ("SMR") license in the New York City Metropolitan Trading Area ("MTA").^{3/}

^{1/} Third Report and Order, FCC 95-218, released June 8, 1995.

^{2/} Request for Pioneer's Preference, filed by Nextel Communications, Inc. on October 6, 1995 in the above referenced dockets. The Request is attached hereto as Attachment A for the Commission's convenience.

^{3/} Nextel requested an MTA license in the New York City area based on the Commission's conclusion in the Third Report and Order in GN Docket No. 93-252 that wide-area SMRs should be licensed on an MTA basis. See Third Report and Order, 9 FCC Rcd 7988 (1994) ("Third CMRS Order") at para. 100. In the event the Commission concludes that wide-area SMRs should be licensed on a geographic basis other than an MTA, Nextel intends that its Request
(continued...)

II. BACKGROUND

In 1994, the United States Congress adopted the General Agreement on Tariffs and Trade ("GATT") which, among other things, amended the Commission's pioneer's preference rules to prevent the unjust enrichment of pioneer's preference licensees in the award of a license that would otherwise be subjected to competitive bidding. The GATT legislation provided that the pioneer's preference rules must be amended to include "procedures as may be necessary to prevent unjust enrichment by ensuring that the value of a pioneering contribution justifies any reduction in the amounts paid for comparable licenses.^{4/}

The Commission's Third R&O is the implementation of this Congressional mandate. The Commission concluded, among other things, that all applicants would be required to meet not only the Commission's general pioneer's preference requirements, but also would be required to show (a) that the Commission's rule making process would deprive the applicant of "capturing the economic rewards of its innovation,"^{5/} and (b) that the pioneer may lose certain intellectual property protection.^{6/} These new rules, the

^{3/}(...continued)
herein encompass the ultimate geographic-based license adopted by the Commission.

^{4/} Third R&O at para. 3 (citations omitted).

^{5/} Third R&O at para. 19.

^{6/} *Id.*

Commission concluded, would be applicable to future and pending pioneer's preference applications.^{7/}

III. DISCUSSION

A. Despite An Influx Of Imitators, Nextel Is THE Pioneer Of Wide-Area SMR Services And Is Entitled To Recognition Of Its Pioneering Innovation Through The Award Of A Pioneer's Preference

Because Nextel's October 6, 1994 Request, which is incorporated herein by reference, was pending on the effective date of the Commission's new pioneer's preference rules, Nextel hereby files this amendment as provided for in the Third R&O.^{8/} Nextel seeks a pioneer's preference for its work as *the pioneer* of wide-area 800 MHz SMR services -- the first to conceptualize the service and its transition from limited capacity, high-power, high-tower analog systems,^{9/} the first to present the concept to the Commission and obtain authorization,^{10/} the first to construct an advanced digital wide-area SMR system,^{11/} the first to

^{7/} *Id.* at para. 22.

^{8/} The Commission stated in the Third R&O that parties with pending applications could file amendments within 30 days after the effective date of the Third R&O. See Third R&O at para. 22. The Third R&O became effective on August 19, 1995 -- 60 days after publication in the Federal Register, which occurred on June 20, 1995. See 60 FR 32116 (June 20, 1995).

^{9/} See Request of Fleet Call, Inc., filed April 5, 1990, For Authority to Assign SMR Licenses and Waiver of Certain Private Radio Service Rules.

^{10/} See In Re Request of Fleet Call, Inc. for Waiver and Other Relief to Permit the Creation of Enhanced Specialized Mobile Radio Systems in Six Markets, 6 FCC Rcd 1533 (1991) (the "Fleet Call Waiver Order"), recon. den. 6 FCC Rcd 6989 (1991).

^{11/} Nextel initiated commercial service on its first ESMR system in Los Angeles in the Spring of 1994.

present the Commission a geographic-based licensing proposal for wide-area SMR,^{12/} the first to propose an auction of the licenses,^{13/} and the first to commence operation -- both experimental and commercial -- of wide-area 800 MHz SMR services.^{14/}

Nextel is the leading provider of wide-area SMR services in the country, offering customers an integrated package of highly-efficient digital services including cellular telephone service, private network dispatch, paging, text messaging, mobile data applications (including portable computer and portable fax support), voice mail, and call forwarding -- all on a single handset with combined billing and customer support. Prior to Nextel and its wide-area, low-power, low-tower digital SMR concept, these innovative, state-of-the-art services were not available in an integrated services offering. Thus, Nextel is *the innovator* for which the Commission's pioneer's preference rules were intended.

^{12/} See *In re Policies and Rules for Licensing Fallow 800 MHz Specialized Mobile Radio Spectrum Through a Competitive Bidding Process*, Petition for Rule Making of Fleet Call, Inc., filed April 22, 1992.

^{13/} *Id.*

^{14/} Nextel is now providing commercial wide-area SMR services not only in Los Angeles and San Francisco, but also in the Northeastern United States from Alexandria, Virginia to Hartford, Connecticut, including the metropolitan areas of New York and Philadelphia. Nextel also operates digital mobile networks in Chicago, Denver, Kansas City, Las Vegas, Milwaukee, Oklahoma City, Portland, Seattle, St. Louis, Tulsa and Wichita.

B. The Commission's Delayed Rule Making Process Has Deprived Nextel Of the Economic Benefits That It Should Have Derived From A Wide-Area SMR License

As early as 1992, Nextel (previously "Fleet Call, Inc.") petitioned the Commission for a rule making to auction 800 MHz SMR spectrum and to create a wide-area 800 MHz SMR licensing procedure.^{15/} In that Petition, Nextel asked the Commission to "rethink its licensing procedures and grant exclusive use of a block of unassigned channels" to wide-area licensees in a defined geographic service area using auctions. However, the Commission never acted on Nextel's Petition. Despite this inaction, Nextel continued developing its digital systems within the framework of an antiquated SMR licensing process, which imposed unnecessary regulatory obstacles not applicable to other similar Commercial Mobile Radio Services ("CMRS") systems.

In 1993, Congress adopted the Omnibus Budget Reconciliation Act ("Budget Act"), which reclassified Nextel and other interconnected SMRS as CMRS, concluding that they should be regulated similarly to cellular. Congress, therefore, mandated that the Commission write new operational, technical and licensing rules for reclassified CMRS, i.e. Nextel and others, by August 10, 1994, that would provide reclassified CMRS providers a level regulatory playing field on which to compete with their competitors. As the Commission recognized in its Third CMRS Order,

^{15/} See Petition for Rule Making of Fleet Call, Inc., filed April 22, 1992, *supra*, fn 12.

the Congressional mandate included a requirement to license wide-area SMRs on a geographic-area basis.^{16/}

Pursuant to that mandate, the Commission proposed a wide-area 800 MHz SMR licensing scheme in its November 1994 Further Notice of Proposed Rule Making.^{17/} Similar to Nextel's proposal in 1992, the Commission proposed to license the top 200 SMR channels to wide-area SMRs. Moreover, the Commission tentatively concluded that these licenses should be assigned through competitive bidding.

As the innovator and pioneer of wide-area SMR services, Nextel will participate in SMR spectrum auctions to continue the implementation of its nationwide, seamless digital mobile network. However, as a participant in those auctions, Nextel also stands to lose its opportunity to attain wide-area SMR licenses in certain areas, the New York City MTA for example. The failure to be licensed for the service which, without Nextel's innovation, would not even exist, would be a deprivation of the economic benefits and rewards to which Nextel is entitled as the creator of a spectrally-efficient integration of mobile communications capabilities. Therefore, the Commission should grant Nextel a pioneer's preference to ensure that Nextel captures the return on its pioneering works.

As discussed above, Nextel's innovation has created a dramatic enhancement of the SMR service, which has resulted in the

^{16/} See Third CMRS Order at para. 100, *supra*, fn. 3.

^{17/} Further Notice of Proposed Rule Making, PR Docket No. 93-144, 9 FCC Rcd 1647 (1994).

Commission's proposal to reallocate the top 200 SMR channels for wide-area SMR use. Thus, a preference should be granted to Nextel to allow it to reap the benefit of its innovation, which in and of itself, cannot be protected by intellectual property rights. No intellectual property rights exist to protect Nextel's creative concepts and associated technological improvements which have given rise to a vibrant new subset of CMRS of the future. Only the award of a pioneer's preference will protect the innovation and investment which Nextel has made in the SMR industry.

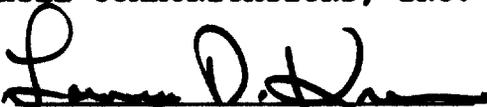
IV. CONCLUSION

Nextel is the innovator -- *the pioneer* -- of wide-area SMR services. Nextel conceptualized this spectrally efficient service, Nextel proposed it to the Commission, Nextel constructed and operated the first system, and Nextel is now providing these digital services to customers in numerous areas throughout the Nation. Without Nextel's innovation, there would be no wide-area

SMR services. Therefore, Nextel requests the award of a pioneer's preference for a wide-area SMR license in the New York City MTA.

Respectfully submitted,

NEXTEL COMMUNICATIONS, INC.

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Date: September 18, 1995

ATTACHMENT A

RECEIVED

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REQUEST FOR A PIONEER'S PREFERENCE

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Date: October 6, 1994

SUMMARY

Nextel Communications, Inc. ("Nextel") is entitled to a pioneer's preference in the Commission's new 800 MHz Specialized Mobile Radio ("SMR") licensing process because Nextel was the first to develop a wide-area SMR system, the first to present the wide-area SMR concept to the Federal Communications Commission ("Commission"), the first to present the Commission with a geographic-based SMR license proposal, the first to propose the auction of MTA-based SMR licenses, and the first to commence operations -- experimental and commercial -- of wide-area SMR systems.

The pioneer's preference rules were adopted by the Commission to ensure that innovative, risk-taking companies were given the opportunity to participate in the provision of the service which they took the lead in developing or the existing services to which they desire to apply a new and innovative technology. Nextel spent several years planning, developing, and implementing its Enhanced Specialized Mobile Radio Service ("ESMR"), and is now offering these services in California. ESMR services are provided by applying Nextel's Digital Mobile technology to reconfigured 800 MHz SMR systems using a multiple base station, low-power configuration employing significant channel reuse and call hand-off.

Nextel's Digital Mobile technology has resulted in a spectrally-efficient digital mobile communications system offering a unique combination of fully integrated services: cellular telephone service, private network dispatch, paging, text messaging, mobile data applications (including portable computer

and portable fax support), voice mail and call forwarding -- all on a single handset with combined billing and customer support. Nextel's introduction of this technology has revolutionized not only the SMR industry but also the entire wireless communications marketplace, injecting potential new competition into the existing cellular duopoly.

As a new technology that adds functionality to existing spectrum uses, provides a new and better use of the 800 MHz SMR spectrum, increases the capacity of 800 MHz SMR frequencies by 25 times, and offers higher quality information transfer, Nextel's Digital Mobile technology meets all of the requirements for a pioneer's preference. As the creator, developer, and operator -- the pioneer -- of wide-area SMR systems and technology, Nextel is entitled to a pioneer's licensing preference to ensure its participation in the continued provision of ESMR services to the public. Accordingly, the Commission should grant Nextel a pioneer's preference for a wide-area 800 MHz license for the New York MTA.

TABLE OF CONTENTS

SUMMARY. i

I. INTRODUCTION 1

II. BACKGROUND 3

III. DISCUSSION 6

 A. Nextel's Digital Mobile Technology Has All Of
 The Characteristics Of An Innovative Technology
 Warranting A Pioneer's Preference 8

 B. As The Creator Of A "Unique" and "Innovative"
 Technology, Nextel Is Entitled To A Pioneer's
 Preference 12

 C. Nextel Presented Its Innovative Digital Mobile
 Service To The Commission Long Before The
 Commission Ever Considered A Wide-Area 800 MHz
 SMR Licensing Scheme 15

IV. CONCLUSION. 16

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To: The Commission

REQUEST FOR A PIONEER'S PREFERENCE

I. INTRODUCTION

Pursuant to Section 1.402 of the Rules and Regulations of the Federal Communications Commission (the "Commission"), Nextel Communications, Inc. ("Nextel") respectfully files this application for a pioneer's preference in the licensing of wide-area 800 MHz Specialized Mobile Radio ("SMR") services in the New York Major Trading Area ("MTA").1/

In its Third Report and Order concerning the Regulatory Treatment of Mobile Services (the "Third Report"),2/ the

1/ In General Docket No. 90-217 (the "Pioneer's Preference Proceeding"), the Commission established procedures to accord preferential treatment for innovators who develop new communications services or new technologies for existing services. See In re Establishment of Procedures to Provide a Preference to Applicants Proposing Allocation For New Services, 6 FCC Rcd 3488 (1991) (the "Report and Order"), recon. 7 FCC Rcd 1808 (1992) (the "Reconsideration Order").

2/ Implementation of Section 3(n) and 332 of the Communications Act of 1934, as amended, Regulatory Treatment of Mobile Services, GN Docket No. 93-252, PR Docket No. 93-144 and PR

Commission stated that it would issue a further Notice of Proposed Rule Making in PR Docket No. 93-144 concerning the licensing of wide-area 800 MHz SMR systems on an MTA basis.^{3/} Based upon a recommendation from Nextel, the Commission stated that the forthcoming rule making will consider the licensing of contiguous 800 MHz SMR channels on an MTA basis, the treatment of incumbent non-MTA licensees, the specific technical and operating rules for MTA licensees and whether auctioning such licenses would be in the public interest.^{4/} Section 1.402(a) of the Commission's Rules authorizes an applicant to file a pioneer's preference request in an existing proceeding which addresses the new service or technology for which the applicant seeks preference and in which no Notice of Proposed Rule Making has been adopted. Accordingly, as the pioneer of wide-area 800 MHz SMR services, Nextel respectfully submits that it is entitled to a pioneer's preference for an 800 MHz MTA SMR license, as discussed below.^{5/}

Nextel is further entitled to a pioneer's preference in the Commission's new 800 MHz SMR licensing process because Nextel was

Docket No. 89-553, released September 23, 1994 ("Third Report").

^{3/} Third Report at para. 100.

^{4/} The Commission indicated that the upper 200 contiguous channels (Channels 401 to 600) in the SMR band could be licensed for exclusive use by a single wide-area SMR licensee in each MTA. Third Report at para. 90. Nextel proposed MTA-based wide-area SMR licensing in its Comments and Reply Comments in this proceeding.

^{5/} Consistent with the Commission's recent decision in ET Docket No. 93-266, if awarded a preference for the New York MTA license, Nextel would pay the required 90 percent of the auction value of a comparable 800 MHz wide-area SMR MTA license. See also the discussion at pp. 7-8, infra.

the *first* to develop a wide-area SMR system, the *first* to present the wide-area SMR concept to the Commission, the *first* to present the Commission with a geographic-based SMR license proposal, the *first* to propose the auction of MTA-based SMR licenses, and the *first* to commence operations -- experimental and commercial -- of wide-area SMR systems.

II. BACKGROUND

Nextel is the country's leading provider of traditional SMR services as well as wide-area SMR services. Its wide-area SMR services, also known as Enhanced Specialized Mobile Radio ("ESMR"), are highly-efficient digital mobile communications systems offering a unique combination of fully integrated services: cellular telephone service, private network dispatch, paging, text messaging, mobile data applications (including portable computer and portable fax support) voice mail and call forwarding -- all on a single handset with combined billing and customer support.

ESMR has been made possible by Nextel's conceptualization and implementation of innovative, state-of-the-art Digital Mobile technology which uses digital speech coding and Time Division Multiple Access ("TDMA") multiplexing to create six voice channels in place of one from a single 25 kHz frequency.^{6/} Moreover, Nextel's systems represent the first application in a communications system with dispatch capabilities of a multiple,

^{6/} Compared to the digital cellular IS-54 standard, which creates three voice channels on a 30 kHz frequency, and which has yet to be introduced on a wide-scale basis, Nextel's Digital Mobile technology is more than twice as efficient.

low-power base station configuration permitting geographic reuse of frequencies. Together, these innovations yield in excess of 25 times the customer capacity of existing SMR systems while providing improved transmission quality and enhanced services.^{7/}

Digital Mobile technology has enabled Nextel to reconfigure its traditional 800 MHz SMR systems to achieve unprecedented spectrum efficiency gains thereby making possible new services not currently provided by SMR systems as well as substantial enhancements of existing SMR services -- the sin qua non of a pioneer's preference.^{8/} Recognizing the need to alleviate frequency congestion in the major mobile communications markets in the country, Nextel envisioned a higher and better use for the 800 MHz SMR spectrum -- frequencies previously limited primarily to relatively inefficient high-power, high-tower analog services. Nextel conceptualized a more spectrally-efficient technology that, although operating on a narrower bandwidth than cellular, offers state-of-the-art wireless communications that will provide improved dispatch services and compete with the existing cellular duopoly. Nextel's innovations further the public interest by achieving greater efficiencies, alleviating mobile communications congestion in America's metropolitan areas, and enhancing overall competition in the telecommunications industry.

^{7/} In actual commercial operation -- not merely theoretical calculations -- Digital Mobile technology is providing up to 25 times the capacity of previous analog configurations.

^{8/} Report and Order at para. 47.

In 1991, the Commission authorized Nextel (known at the time as "Fleet Call, Inc.") to construct and operate its ESMR systems in Chicago, Dallas, Houston, Los Angeles, New York and San Francisco.^{9/} In granting Nextel the authority to move forward with its wide-area SMR systems, the Commission found that, although Nextel's Digital Mobile technology had not created a "de facto new service," Nextel's ESMR services were "innovative" and "unique."^{10/} In other words, these innovative and unique ESMR services would substantially improve existing SMR services and make new SMR services possible.

Since 1991, Nextel has brought its Digital Mobile technology from "drawing board" to commercial use. Nextel initiated commercial service on its first ESMR system in Los Angeles in the Spring of 1994 and recently initiated commercial service in the San Francisco metropolitan area.^{11/} Nextel will expand its ESMR service to California's Central Valley and San Diego later this year and to Chicago and New York thereafter. By the end of 1996, Nextel intends to provide ESMR services to customers in the 50 largest wireless communications markets in the United States.

^{9/} See In Re Request of Fleet Call, Inc. for Waiver and Other Relief to Permit the Creation of Enhanced Specialized Mobile Radio Systems in Six Markets, 6 FCC Rcd 1533 (1991) (the "Fleet Call Waiver Order"), recon. den. 6 FCC Rcd 6989 (1991).

^{10/} Id. at para. 26.

^{11/} On September 22, 1994, the mayors of Los Angeles, Sacramento and Oakland participated in wireless telephone calls marking the official initiation of Nextel's California ESMR service.

Nextel's pioneering vision, conceptualization, development and implementation of Digital Mobile technology has given birth to a new industry of wide-area SMR services offering the promise of improved competition among wireless communications services. The Commission's decision to consider establishing wide-area 800 MHz MTA licensing is a direct result of Nextel's pioneering efforts,^{12/} and is necessary to assure regulatory parity with cellular and PCS providers licensed on a wide-area basis. As the pioneering force behind ESMR and Digital Mobile technology, Nextel is entitled to an 800 MHz wide-area MTA licensing preference, and accordingly requests a preference for the wide-area 800 MHz MTA license in the New York MTA.

III. DISCUSSION

The Commission's goal in establishing its pioneer's preference program was to ensure that innovators have an opportunity to participate in the new services which they have taken the lead in developing or in the existing services to which they desire to apply new technologies.^{13/} These innovators, according to the Commission, are entities which have "developed an innovative proposal that leads to the establishment of a service not currently provided or a substantial enhancement of an existing service."^{14/} An "innovative proposal," moreover, is one which:

^{12/} Nextel has been a consistent proponent of wide-area SMR licensing, as discussed in Section III(C), infra.

^{13/} See Report and Order, supra. n. 1, at para. 1.

^{14/} Id. at para. 47.

". . . has brought out the capabilities or possibilities of the (new) technology or service or has brought them to a more advanced or effective state. Generally, we believe that an innovation could be an added functionality, a different use of the spectrum than previously available, or a change in the operating or technical characteristics of a service, any of which involve a substantial change from that which existed prior to the time the preference is requested. Further, technologies that yield efficiencies in spectrum use, speed or quality of information transfer, or spectrum sharing, or which significantly reduce costs to the public, will be given careful consideration."15/

The Commission decided that, as the entity assuming all the risks, investing the time and money, and developing a new or improved service, the innovator is entitled to an opportunity to offer its service in the marketplace. Granting a pioneer's preference is intended to assure the innovator of that opportunity by guaranteeing it a license to provide the new service.

On August 9, 1994, the Commission amended its pioneer's preference policy by requiring parties awarded a pioneer's preference for a license subject to competitive bidding to pay for their licenses.16/ The Commission observed that a pioneer's preference is intended to ensure the innovator's participation in the service resulting from its innovation, but not to create a competitive advantage for the innovator. Therefore, the Commission concluded that the public interest required a payment from these licensees for a discounted percentage of the value of the license.

15/ Id. at para. 48.

16/ See Review of the Pioneer's Preference Rules, Memorandum Opinion and Order, ET Docket No. 93-266, adopted August 9, 1994.

A pioneer's preference award, the Commission stated, is for "the expectation of a guaranteed license, not a guaranteed license without payment where other companies must pay for their licenses."^{17/} Therefore, if awarded a preference for an 800 MHz MTA license, Nextel would pay the required percentage of the auction value of such a license based upon an average of the appropriate number of similar markets.^{18/}

A. Nextel's Digital Mobile Technology Has All Of The Characteristics Of An Innovative Technology Warranting A Pioneer's Preference.

In considering whether to grant a pioneer's preference, the Commission determines whether the applicant is proposing a service "not currently provided or a substantial enhancement to an existing

^{17/} Id. See also The Application of Nationwide Wireless Network Corporation, File No. 22888-CD-P/L-94, released July 13, 1994 ("Mtel Order"). The Commission had tentatively awarded Mtel a pioneer's preference for a nationwide narrowband PCS license in July of 1992, prior to the Commission's authority to conduct spectrum auctions. Because all other nationwide narrowband licensees would be required to pay for their licenses, the Commission decided in this order to likewise charge Mtel for its license.

^{18/} See In re Review of the Pioneer's Preference Rules, ET Docket No. 93-266, 9 FCC Rcd 605 (1994). The Commission recently reviewed the continuing viability of its pioneer's preference program in light of Congress' recent authorization to use auctions to select licensees from among mutually exclusive applicants for a new service. It affirmed awarding pioneer's preferences to PCS narrowband and broadband services as well as the 28 GHz Local Multipoint Distribution Service, and declined to terminate the use of pioneer's preferences in the future. Nextel's Digital Mobile innovation is precisely the type of risk-taking resulting in innovative technological and service enhancements that the Commission intended to reward with a preference regardless of the licensing method used to award 800 MHz MTA licenses. As noted above, if competitive bidding is used, Nextel will pay the required amount for the license.

service."^{19/} An applicant can evidence its service or technology to be new or a "substantial enhancement" by showing (1) "added functionality," (2) "new use of the spectrum," (3) "changed operating or technical characteristics," (4) "increased spectrum efficiencies," (5) "increased speed or quality of information transfer," and (6) "reduced cost to the public."^{20/}

Applying these criteria to Nextel's Digital Mobile service confirms that Nextel has conceptualized, developed, and implemented an innovative, meritorious, and proven technology.^{21/} Nextel's pioneering work meets each and every one of the Commission's requirements for a pioneer's licensing preference for an 800 MHz wide-area SMR license, as discussed below.

First, Nextel's Digital Mobile service brings added functionality to mobile communications services in two ways: (1) it enables the creation of a new, highly efficient advanced land mobile communications system in a frequency band heretofore used primarily for traditional dispatch operations, and (2) it supports an integrated voice, data, paging, mobile telephone and dispatch service. Never before has such convenience and quality been

^{19/} In re Request for Pioneer's Preference in Proceeding to Allocate Spectrum for Fixed and Mobile Satellite Services for Low-Earth Orbit Satellites, ET Docket No. 91-280, 7 FCC Rcd 1625 at para. 13 ("the VITA Order"), citing Report and Order, supra., n. 1, at para. 49.

^{20/} Id.

^{21/} Id. at para. 46 ("A preference is intended to reward accomplishment, not proposals.").

available to wireless telecommunications customers. Nextel invites the Commission to examine the results of its pioneering work.

Second, Nextel's innovative technology ensures a more efficient use of 800 MHz SMR spectrum by vastly increasing the capacity of the frequencies, making them more productive and helping to curb frequency congestion in the nation's metropolitan areas. In other words, Nextel's innovations put the 800 MHz SMR spectrum to its highest and best use. It supports the deployment of improved operating and technical characteristics for wireless communications: digital technology, frequency reuse, improved coverage, as well as in-building penetration, enhanced privacy, and customized services. Nextel's Digital Mobile technology introduces not only enhanced uses of the 800 MHz spectrum but also a more efficient use of that spectrum.

Third, Nextel's Digital Mobile technology achieves 25 times the capacity of existing analog SMR systems. By overcoming the traditional capacity limitations of analog, single-site SMR operations, Nextel's innovative technology has revolutionized the SMR industry. This revolution has, in turn, transformed the entire mobile radio services industry into a potentially more competitive market with greater choices and more competitive prices for consumers. On spectrum efficiency grounds alone, Nextel is deserving of a pioneer's preference.

Fourth, the Digital Mobile technology provides increased radio communications quality, including error correction protocols for digital transmissions as well as increased data transfer speed.

Finally, the combination of mobile telephone, dispatch, paging and data communications all in a single handset will enable customers to achieve significant cost savings over obtaining these services individually from different providers using separate units for each one.

As for the feasibility of Nextel's Digital Mobile systems, an important element in a pioneer's preference award,^{22/} the Commission need look no further than Nextel's commercial operations in California. In the VITA Order, the Commission relied in part on the fact that VITA was the first to experiment with the operation of its innovation -- low-earth orbit (LEO) satellites.^{23/} Nextel has gone far beyond experiments. Nextel has not only shown that its new technology will lead to the establishment of enhanced 800 MHz SMR services, but has already proven their technical and operational feasibility in commercial operation.^{24/}

Nextel is currently providing Digital Mobile ESMR services in the greater Los Angeles and San Francisco areas. As a result of initiating operations in the most frequency-congested and geographically-challenging market in the nation -- Los Angeles -- Nextel has gained significant experience in meeting the "real world" difficulties of implementing and providing advanced mobile

^{22/} See Reconsideration Order, supra. n. 1 at para. 4.

^{23/} See VITA Decision at para. 15.

^{24/} See In re Amendment of the Commission's Rules to Establish New Personal Communications Services, GN Docket No. 90-314, 7 FCC Rcd 7794 at para. 47 (1992) ("PCS Pioneer's Preference Order") ("The Commission's rules clearly indicate that it requires claims to be based on work already accomplished.")