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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

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In the Matter of	)	
	)	
Implementation of Section 309(j)	)	PP Docket No. 93-253
of the Communications Act -	)	
Competitive Bidding	)	

SECOND REPORT AND ORDER

Adopted: March 8, 1994 Released: April 20, 1994

By the Commission:

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I. INTRODUCTION

1. On August 10, 1993, the Omnibus Budget Reconciliation Act of 1993 (the "Budget Act") added Section 309(j) to the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-713 (the "Communications Act"). Section 309(j) gives the Commission express authority to employ competitive bidding procedures to choose among mutually exclusive applications for initial licenses. The Budget Act also requires the Commission to prescribe regulations to implement Section 309(j) within 210 days after enactment (March 8, 1994). The Commission adopted its Notice of Proposed Rule Making in this proceeding on September 23, 1993.[1] This Second Report and Order complies with the Budget Act's requirements.[2]

[1] Notice of Proposed Rule Making in PP Docket No. 93-253, 8 FCC Rcd 7635 (1993) (hereinafter "NPRM" or "Notice"). The Commission received 222 comments, 169 reply comments and numerous ex parte presentations relating to this proceeding. A list of commenters and reply commenters is attached as Appendix A to this Second Report and Order. Commenters may be referred to herein by the abbreviations noted in Appendix A.

[2] To comply with the requirements of new Section 309(i)(4)(C) of the Communications Act, the Commission prescribed transfer disclosure requirements with respect to licenses awarded by random selection. See First Report and Order in PP Docket No. 93-253, FCC 94-32, released February 4, 1994 ("First Report and Order"), petitions for reconsideration pending.

2. Under Section 309(j)(2)(B) of the Communications Act, the Commission must determine that use of a system of competitive bidding will promote the objectives described in Section 309(j)(3), which, in addition to those in Section 1 of the Communications Act,[3] are

> (A) the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas, without administrative or judicial delays;
>
> (B) promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women;
>
> (C) recovery for the public of a portion of the value of the public spectrum made available for commercial use and avoidance of unjust enrichment through the methods employed to award uses of that resource; and
>
> (D) efficient and intensive use of the electromagnetic spectrum.

A. Policy Objectives

3. Our purpose in this Second Report and Order is to promulgate competitive bidding rules that, in conjunction with our spectrum allocation rules, promote the public policy objectives set forth by Congress. We believe these objectives are embodied in two broad, basic Commission policy goals: promoting economic growth and enhancing access to telecommunications service offerings for consumers, producers, and new entrants. Structuring our rules to promote opportunity and competition should result in the rapid implementation of new and innovative services and encourage efficient spectrum use, thus fostering economic growth. We also can help to ensure access to new telecommunications offerings by ensuring that all customer segments are served, that there is not an excessive concentration of licenses, and that small businesses, rural telephone companies, and businesses owned by women and minorities will have genuine opportunities to participate in the provision of service. Providing new and innovative services on spectrum acquired via auction will offer licensees the opportunity to earn substantial revenues. We therefore anticipate that our auctions will recover a portion of the value of the public spectrum.

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[3] Section 1 of the Communications Act established the Commission, inter alia, "so as to make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide, and world-wide wire and radio communications service with adequate facilities at reasonable charges . . . ." 47 U.S.C. § 151.

4. Promoting Economic Growth. The new wireless services that will be licensed by competitive bidding, such as Personal Communications Services ("PCS"), have great potential to stimulate economic growth and create thousands of jobs for Americans. To advance our statutory goals and to realize this potential, we seek to design a competitive bidding system that will: 1) award licenses through a process that will promote competition among a diverse group of service providers; 2) award licenses to the parties who will provide service and use spectrum most efficiently; and 3) award licenses expeditiously. We seek to implement a licensing system that maximizes the competitiveness of service provision among new licensees and existing providers and avoids creating barriers to efficient license aggregations. Achieving procompetitive economies is particularly important where new entrants (such as broadband PCS providers) will have to compete with existing services (such as cellular telephone providers).

5. Awarding licenses to those who value them most highly, while maintaining safeguards against anticompetitive concentration, will likely encourage growth and competition for wireless services and result in the rapid deployment of new technologies and services. Because firms have different views of the value of the licenses to be awarded, a firm that expects to be able to offer new or much lower cost services might be willing to pay more for a license than another firm that does not believe it can offer services as competitively. Under other licensing mechanisms, licenses may be more likely to change hands in the post-licensing market (as was true in past cases of cellular licenses).[4] Such secondary market transactions, however, often involve substantial additional costs. In general, competitive bidding is a licensing scheme that should place licenses in the hands of the parties able to use them most efficiently.

6. Enhancing Access. The competitive bidding rules we adopt are designed to enhance access to telecommunications services by encouraging broad participation in the provision of spectrum-based services and ensuring that spectrum-based services are available to a wide range of consumers. In order to encourage participation in the competitive bidding process by all qualified bidders, we have adopted a set of open competitive bidding processes and a menu of preferences for certain groups who might otherwise face entry barriers. We will use these preferences to promote the participation of small businesses, rural telephone companies and women- and minority-owned firms (collectively referred to as "designated entities") when we adopt service-specific competitive bidding rules, thereby meeting Congress's mandate by ensuring diversity in the ownership and management of telecommunications facilities, which in turn will increase the diversity of service offerings and better meet the needs of more consumers.

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[4] With respect to licenses obtained through random selection (lottery) proceedings, the First Report and Order in this docket addressed this issue by relying on existing build-out requirements and by imposing new transfer disclosure requirements.

7. By establishing an efficient licensing mechanism that will promote the rapid deployment of a wide range of new products and services in all areas of the country, we seek to increase residential consumer and large user access to new technologies and services. Efficient provision of wireless service may also create alternatives for those not served by traditional wireline providers and should create competition for existing wireline and wireless services.

B. Summary

8. The following five sections of this Report and Order establish general rules and procedures to govern the competitive bidding process. In each of these sections we have selected the rules or procedures that should best serve our basic policy goals and therefore achieve Congress's objectives. Among other things, we are amending Part 1 of our Rules to add a new Subpart Q that would apply to competitive bidding generally. The new rules are set forth in Appendix B.

9. Section II of this Report and Order establishes rules governing the basic requirements for the types of services and licenses that may be subject to auctions. In Section III, we establish a range of competitive bidding methods and auction procedures from which we will choose for auctionable services. Because as yet the Commission has no actual experience with auctions, we will retain the ability to select among the procedures deemed appropriate for each service. This course also complies with the Congressional directive that we "design and test multiple alternative methodologies under appropriate circumstances." See Section 309(j)(3). In Section IV, we address procedural and payment issues regarding announcement of auctions and the filing of applications, bidder and licensee qualifications, pre-auction upfront payment and post-auction down payment, and penalties in the event of default or disqualification. These rules are intended to ensure that the competitive bidding process is limited to serious, qualified applicants. Section V establishes specific licensing safeguards, including anti-collusion and unjust enrichment provisions, that will deter possible abuses of the bidding and licensing processes. In Section VI, we identify preferences available for small businesses, rural telephone companies and businesses owned by members of minority groups and women to enhance their participation in the competitive bidding process and in the provision of spectrum-based services.

10. The five sections of this Report and Order summarized above establish general rules and regulations for competitive bidding that will apply to a variety of spectrum-based services licensed by the Commission. In the future, specific rules within the scope of these general rules will be adopted in a Report and Order for each service subject to competitive bidding. These subsequent Reports and Orders will set forth specific competitive bidding rules for each service that meets the criteria in Section 309(j)(2).

II. PRINCIPLES FOR DETERMINING WHETHER LICENSES MAY BE AUCTIONED

11. We discuss below the general statutory criteria that must be met before we may use competitive bidding to award licenses in a particular service. In particular, we also establish the tests we will use to determine whether services or classes of services are excluded from competitive bidding and make determinations with respect to some of these services. Our determinations as to whether specific services are subject to competitive bidding may be found in new Section 1.2102 of the Commission's Rules (see Appendix B).

A. General Requirement for Mutual Exclusivity Among Applications for Initial Licenses or Construction Permits Accepted for Filing

12. In the Notice, we observed that Section 309(j)(1) only permits use of competitive bidding if mutual exclusivity exists among applications that have been accepted for filing.[5] Therefore, we concluded, if mutual exclusivity does not exist, a license or class of service would not be subject to competitive bidding. In addition, we noted that Section 309(j)(1) expressly limits our authority to use competitive bidding to the award of "initial" licenses or construction permits. See also H.R. Rep. No. 111, 103d Cong., 1st Sess. 253 (1993) ("H.R. Rep. No. 103-111"). Of those commenters that address these issues, none expresses significant disagreement with these conclusions. See, e.g., comments of the Utilities Telecommunications Council. Accordingly, we incorporate these requirements in our rules as follows.

1. Shared Spectrum

13. We will exclude from competitive bidding those classes of services where mutual exclusivity between applications cannot exist because channels must be shared by multiple licensees.[6] In ¶¶ 145-146 and n. 3 of the NPRM, we proposed to exclude these services from competitive bidding because there can be no mutual exclusivity. The comments generally agree that shared spectrum is inappropriate for competitive bidding for that reason. See, e.g., comments of ITA and AAR.

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[5] In general, the Commission considers two or more applications to be "mutually exclusive" if their conflicts are such that the grant of one application would effectively preclude, by reason of harmful electrical interference, the grant of one or more of the other applications.

[6] In this context, the term "shared" means a spectrum allocation scheme where each licensee has equal right to use the spectrum and no user has the right to exclusive use of an entire spectrum allocation for that service.

14. For this reason, the General Mobile Radio Service, any private land mobile radio service below 470 MHz (with the possible exception of the 220 MHz service (see ¶¶ 27-29)), the 800 MHz air-ground radiotelephone service, and the Amateur Radio services, for example, will not be subject to competitive bidding. For the same reason, we also exclude several other services from competitive bidding. The comments broadly support our determinations with respect to mutual exclusivity. See, e.g., comments of UTC.

2. Licenses Awarded on a "First-Come, First-Served" Basis

15. In some services currently regulated by the Common Carrier and Private Radio Bureaus, some licensing occurs on a "first-come, first-served" basis. At n. 132 of the NPRM, we noted that the use of "first-come, first-served" procedures and waiting lists in the 800 MHz Specialized Mobile Radio (SMR) service has generally enabled us to avoid mutual exclusivity among 800 MHz SMR applications.[7] In addition, we have recently adopted rules for 929-930 MHz paging that rely on first-come, first-served procedures for licensing of channels on an "earned exclusivity" basis. See Report and Order, PR Docket No. 93-35, 8 FCC Rcd 8318 (1993) (PCP Exclusivity Report and Order).

16. The Notice tentatively concluded that if mutually exclusive applications for SMR[8] or Private Carrier Paging (PCP) frequencies occurred, they should be resolved by competitive bidding. See NPRM at ¶ 138 and at n. 152. Several commenters favored the auctioning of some or all SMR frequencies. See, e.g., comments of Geotek, GTE, E. F. Johnson, McCaw and Southwestern Bell. Others cautioned the Commission to not create mutual exclusivity inadvertently. See, e.g., comments of NABER. Those commenters who argue that frequencies allocated to the SMR service should be exempted from competitive bidding generally base their arguments on the existing or future lack of mutual exclusivity. See, e.g., comments of AMTA and Cencall. The comments confirm that under some of our existing first-come, first-served procedures for these services, mutual exclusivity will generally not occur because applications are processed in sequence based on filing date and, in some cases, file number. Commenters argue that this process serves the public interest and should be

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[7] "First-come, first-served" and wait list procedures apply only to 800 MHz SMRs and have not applied when multiple mutually exclusive applications were received when the Commission opened a filing window inviting the submission of applications for licenses to operate on new SMR spectrum. Cf. ¶ 63, infra. We do not currently accept new 900 MHz SMR applications and we are currently considering proposals to restructure licensing of this service.

[8] As indicated in the NPRM at ¶ 138, we mean the 200 channel pairs at 900 MHz and the 280 channel pairs at 800 MHz available to SMRs under Section 90.617(d) of the Commission's Rules. We do not include those channels from other frequency pools which may be licensed to SMRs through our intercategory sharing rules or to General Category channels. See ¶ 47, infra.

retained. See, e.g., comments of NABER. We agree. Thus, we will not depart from existing first-come, first-served practices which work to avoid mutual exclusivity at this time. See Section 309(j)(6)(E) and comments of AMTA.

17. With respect to certain services regulated by the Common Carrier Bureau, however, "first-come, first-served" application procedures can, under the rules for those services, still result in mutual exclusivity. See, e.g., Section 22.31(b) (filing of application opens up 60-day filing window during which competing applications may be filed). Mutual exclusivity in common carrier services generally, and in the Public Mobile Services specifically, will be resolved through the use of competitive bidding. See ¶¶ 59-62, infra. We recognize that our existing first-come, first-served procedures for certain services currently regulated by the Private Radio Bureau are not necessarily consistent with the way similar services are regulated by the Common Carrier Bureau. As we make clear in our decision in GN Docket No. 93-252, see n. 15, infra, we intend in future proceeding to reconcile the regulatory treatment of these services. Such reconciliation may involve modification of existing SMR wait list procedures, as is currently proposed in PR Docket No. 93-144, 8 FCC Rcd 3950, 3958 (1993), and the use of auctions to resolve mutual exclusivity among initial applications for licenses in the Commercial Mobile Radio Services.

18. Similarly, the comments make clear that under our rules, mutual exclusivity among Community Antenna Relay Service (CARS) applicants does not arise because of a de facto "first-come, first-served" policy and that therefore, the CARS should not be subject to competitive bidding. See comments of Cablevision, et al. We agree, and will not subject CARS spectrum to competitive bidding.

3. Mutual Exclusivity Unknown

19. There are a number of other pending proceedings to establish rules for new or recently authorized services in which the likelihood of mutually exclusive applications is unknown or is debated by the commenters. See, e.g., PR Docket No. 92-235, 7 FCC Rcd 8105 (1992) ("refarming" of private radio spectrum below 512 MHz); PR Docket No. 93-61, 8 FCC Rcd 2502 (1993) (Automated Vehicle Monitoring (AVM) in the 902-928 MHz band). Similarly, we do not currently know whether mutual exclusivity will exist in the Digital Audio Radio Service (DARS), or in the Low Earth Orbiting Satellite (LEOs) and the Mobile Satellite/ Radiodetermination Satellite Services (MSS/RDSS). At this time it is premature to determine whether mutual exclusivity will or will not occur in the DARS, the AVM service, or the LEO and MSS/RDSS offerings. With respect to pending or future services and any others that are either experimental or interim in nature, the Commission cannot at this time presume that the prerequisites for competitive bidding will exist when we award initial

licenses. We will, however, continue to monitor developments in these areas to determine, at a later date, whether competitive bidding for such spectrum might ultimately be appropriate.[9]

B. General Requirement of Subscribers

20. Section 309(j)(2)(A) requires that, to be subject to competitive bidding, the licensee must receive compensation in exchange for providing transmission or reception capabilities to subscribers. Thus, we will exclude from competitive bidding those services or classes of services in which licensees do not receive compensation from subscribers and, hence, are outside the scope of Section 309(j)(2)(A).

1. Broadcast Services Exclusion

21. Section 309's legislative history makes clear that applications for licenses to provide traditional over-the-air broadcast services should not be subject to competitive bidding. See H.R. Rep. No. 103-111 at 253. Consistent with the clear legislative intent, we proposed in the NPRM to exclude from the competitive bidding process broadcast television (VHF, UHF, LPTV) and broadcast radio (AM and FM).[10] Those commenters who address this issue generally agree with the Notice. See, e.g., comments of AMTA and MSTV/NAB. One commenter, however, argues that traditional broadcast spectrum should be auctioned. See comments of Brown and Schwaninger.

22. Under the plain language of the statute, traditional broadcast services are excluded from competitive bidding because licensees do not receive compensation from subscribers. Moreover, the legislative history confirms Congress's clear intent to exclude these licenses and construction permits. We therefore exclude from the competitive bidding process the broadcast television (VHF, UHF, LPTV) and broadcast radio (AM and FM) as well as the

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[9] We note that a number of commenters advance additional reasons why competitive bidding for these services at this time appears to be premature. See, e.g., comments of TRW. Furthermore, given the pendency of PR Docket Nos. 92-235 and 93-61, it would be speculative for us to decide on the auctionability of frequencies that may or may not become available as a result of those proceedings. Cf. comments of AAA.

[10] Although some television licensees may receive compensation from cable television operators under the "retransmission consent" provisions of the Cable Television Consumer Protection and Competition Act of 1992, these licensees will not be subject to competitive bidding. H.R. Rep. No 103-111 at 254. Similarly, Instructional Television Fixed Service (ITFS) will not be subject to competitive bidding even if ITFS licensees receive payments from Multichannel Multipoint Distribution Service licensees for use of ITFS spectrum because ITFS licensees do not receive compensation from "subscribers" as that term is used in Section 309(j)(2). See H.R. Rep. No. 213, 103d Cong., 1st Sess. (1993) (Conference Report) at 481-82.

ITFS services.[11] The for-profit subsidiary communications services transmitted by broadcast licensees on subcarrier frequencies that are indivisible from the main broadcast signal and similar services will also be excluded from the competitive bidding process given Congress's express intent to this effect. See H.R. Rep No. 103-111 at 253.

2. "Private Services" Exclusion

23. As we pointed out in the NPRM, the legislative history also refers to "private services" as those that do not involve the receipt of compensation from subscribers and thus are not to be subject to competitive bidding. In accordance with the plain language of the statute, we exclude from competitive bidding those services or classes of services in which licensees do not receive compensation from subscribers and, hence, are outside the scope of Section 309(j)(2)(A).

24. The House Report states that the enactment of competitive bidding authority should not affect the manner in which the Commission issues licenses for virtually all private services, including frequencies utilized by Public Safety Services, the Broadcast Auxiliary Service, and for subcarriers and other services where the signal is indivisible from the main channel signal. H.R. Rep. No. 103-111 at 253. In the context of determining eligibility for competitive bidding, however, the term "private services" was not intended to have the same meaning that the Commission has ascribed to private services in other contexts. See, e.g., comments of AT&T and of NYNEX.[12]

25. The comments strongly support our "private services" analysis, including our tentative conclusion that the term "private services" referred to services that did not involve the payment of compensation to the licensee by subscribers, i.e., that were for internal use. See, e.g., comments of the American Petroleum Institute. We affirm our tentative conclusion. Consistent with the express intent of Congress, we also affirm that frequencies allocated to the Public Safety Services, or the Broadcast Auxiliary Services under Subparts D, E, F and H of Part 74 and shared with the Cable Television Relay Service under Part 78 of our Rules, will

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[11] We defer consideration of whether licenses to provide Direct Broadcast Satellite (DBS) service should be subjected to competitive bidding until the nature of that service becomes clearer.

[12] We thus affirm the difference between the meaning of "private service" in the Section 309(j) auction context and "private mobile service" as that term has been defined in new Section 332(d)(3) as added by Section 6002 of the Budget Act. Private mobile radio services are distinguished from commercial mobile radio services in Section 332 on the basis of several criteria that are not relevant to Section 309(j), e.g., whether interconnected mobile service is provided for a profit to the public or a substantial portion of the public. See Section 332 Second Report and Order. Most commenters addressing this issue agree with this analysis. See, e.g., comments of AT&T, API and AAR.

be exempt from competitive bidding. We also hold that subcarrier-based and similar services, such as those provided via the Vertical Blanking Interval, and for-profit subsidiary communications services transmitted on subcarriers within the FM baseband signal (see Section 73.295), will be exempt from competitive bidding where the underlying service is exempt. See H.R. Rep. No. 103-111 at 253. Accord, comments of MSTV/NAB.[13]

26. As we proposed in the NPRM at ¶¶ 27 and 145-146, and at nn. 123, and 157, application of the private services test leads us to conclude that certain additional services and classes of services should be excluded from competitive bidding as well. These include the 220 MHz channels reserved for private service (including public safety), 800 MHz trunked systems operated on a not-for-profit, cooperative sharing basis, or 800 or 900 MHz systems for internal use in non-SMR frequency pools.[14] Most of the comments which address this issue support our proposal. See, e.g., comments of API.

27. We will also defer a decision on whether to auction 220 MHz "local" licenses should the Commission need to conduct additional licensing in that class of service. As we pointed out in the NPRM, the 220 MHz service is a new service and, with the exception of those 220 MHz frequencies the Commission reserved for specific purposes (e.g., the 220 MHz nationwide "commercial" and "noncommercial" channels and the 220 MHz channels reserved for public safety purposes), the 220 MHz "local" channels may be used for private service or for the provision of service to subscribers. Because the service was new, we asked commenters to submit information on the likely use of these frequencies.

28. Almost every commenter who addressed this issue argued that it is still too early to classify the 220 MHz local channels as likely to be used for the provision of service to subscribers or for private use. See, e.g., comments of AMTA, Roamer One, UTC and E.F. Johnson, reply comments of TDS. Based on the record, we will temporarily defer any decision on whether to auction 220 MHz local channels, although our observations of the development of this service to this point lead us to tentatively conclude that it is likely to be a subscriber based service.[15] When the nature of this service becomes clearer, as we anticipate,

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[13] See also subsection B.1., supra (Broadcast Services Exclusion).

[14] The fact that SMRs might occasionally be able to access these frequencies through our intercategory sharing rules would not change this result inasmuch as the principal use of these frequencies is clearly for private services. See comments of API. It is also clear that the six frequency pairs in the 900 MHz band set aside for the Advanced Train Control Service meet the private service test and should be excluded from competitive bidding. See comments of AAR.

[15] This decision is not inconsistent with our decision in GN Docket No. 93-252, Implementation of Sections 3(n) and 332 of the Communications Act, FCC 94-31, released March 7, 1994, ("Section 332 Report and Order") that some 220 MHz local licensees will be Commercial Mobile Radio Service (CMRS) and some will not, depending on whether they

we will decide whether future applications for 220 MHz local service should be subject to competitive bidding.[16]

29. Future initial applications for 220 MHz Commercial Nationwide licenses will be auctioned if the Commission ever accepts mutually exclusive initial applications again for that service, as it is clear that they are within the ambit of Section 309(j). As we stated at ¶ 135 of the NPRM, these frequencies have been designated for use principally to provide for-profit service to subscribers. Accord, comments of NABER. Future initial applications for 220 MHz Noncommercial Nationwide licenses will not be auctioned; as licenses limited to the provision of private service, they are outside the ambit of Section 309(j). See comments of UTC.

C. Principal Use Requirement

30. Under Section 309(j)(2)(A), for spectrum to be subject to competitive bidding, the "principal use" of that spectrum must involve, or be reasonably likely to involve, the transmission or reception of communications signals to subscribers for compensation. The Commission has a number of service classifications where a licensee may provide service to itself only, offer communications service to subscribers for compensation, or provide service

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meet the statutory criteria for Commercial Mobile Radio Service. See Section 332 Report and Order at ¶ 95. Unlike the decision on whether 220 MHz local licensees are CMRS, which is made on a license by license basis, the decision on whether 220 MHz local channels will be subject to competitive bidding will depend on the principal use of that entire class of service. Additional observation of the manner in which the 220 MHz local service develops will provide us with a firmer basis on which to decide whether competitive bidding is appropriate for this class of service.

[16] The Commission has already conducted a lottery for 220 MHz local licenses for the entire United States and granted every license it could from among the applications it received. Licensees are currently in the process of constructing their systems. It is unclear which, if any, of these licensees will have their licenses cancelled for failure to construct or for other reasons. As such, unlike other services, e.g. the Interactive Video Data Service (IVDS), there is no immediate need to decide whether future mutually exclusive applications in this service should be subject to competitive bidding before service can be made available to the public.

both to itself and to subscribers.[17] By directing the Commission to identify the "principal use" of spectrum, Congress recognized the existence of such mixed use services.[18]

31. To address these situations and to comply with the statutory intent, we proposed that, in order to be subject to auctions, at least a majority of the use of a Commission regulated service or class of service must be for service to subscribers for compensation. NPRM at ¶ 31. We asked commenters to address the merits of measuring or estimating the extent of private or internal use by information throughput or by the amount of time or spectrum that is devoted to private use. Id. at ¶ 32, n. 14. We also sought comment on an alternative proposal, a so-called "contaminated band" proposal, under which a service or class of service could be subject to competitive bidding if there were any use, no matter how minimal, in which one or more licensees within a given service or classification of service used that spectrum for the provision of service to subscribers for compensation.[19] We received a range of suggestions from commenters on this issue. Compare comments of AT&T, ITA and Domestic Automation (favoring principal use determinations on a service or class of service basis) with comments of AAA (suggesting a license-by-license approach) and comments of PacBell (supporting the "contaminated band" proposal).

32. As explained below, we will look to classes of licenses and permits to determine their "principal use." In order to determine the principal use in a service, we will compare the amount of non-subscription use made by the licensees in a service as a class with the amount of use rendered to eligible subscribers for compensation on the basis of information throughput, time, or spectrum. We also adopt our proposal that at least a majority of the use of a Commission regulated service or class of service must be for service to subscribers for compensation. We believe that the so-called "contaminated band" proposal is at odds with the express statutory language requiring that the principal use, not any use, of the service or class of service in question be for subscription-based purposes before auctions are permitted.

33. We also reject the arguments by commenters such as AAA that the Commission must examine individual applications to determine each licensee's principal use of the spectrum. We do not agree that the Budget Act mandates that the "principal use" determination be made on a license-by-license basis. Although Section 309(j)(2)(A) of the Act does refer to licensees, it requires that the "principal use of the spectrum" be for compensation (emphasis added). Had Congress intended the principal use determination to be

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[17] An example of such a service is the Private Operational Fixed Service ("POFS") licensed under Part 94 of the Commission's Rules.

[18] See 47 U.S.C. § 309(j)(3) (Commission to identify "classes of licenses" to be issued by competitive bidding); H.R. Rep. No. 103-111 at 254 (Section 309(j)(2) determination to be made when a service or class of service is defined by Commission).

[19] We noted, however, that such an approach seemed inconsistent with the "principal use" standard. NPRM at ¶ 33.

made on a license by license basis, the Budget Act would have specifically stated this requirement. Also, Section 309(j)(3) refers to "each class of licenses or permits that the Commission grants through the use of a competitive bidding system . . ." (emphasis added). Moreover, the House Report states that the principal use determination should be made when a service or class of service is created by the Commission and that the Commission should review existing services, not licenses, to see if they meet the principal use test. H.R. Rep. No. 103-111 at 8.

34. We therefore believe that the best course is to evaluate classes of licenses and permits, rather than individual licenses, to determine the "principal use" of the spectrum, and further believe that approach is most consistent with Congressional intent.[20] In order to determine the principal use in a service, we proposed to compare the amount of non-subscription use made by the licensees in a service as a class with the amount of use rendered to eligible subscribers for compensation on the basis of information throughput, time, or spectrum. At least a majority of such use would have to be for service to subscribers for compensation in order for a service to be subject to competitive bidding. See NPRM at ¶ 32, n. 14. This approach found support in the comments (see, e.g., comments of AAR), and we adopt it.[21]

35. For existing services, our experience in regulating communications services will help us to accurately determine principal use. For example, in our experience and using any of the measurements that we proposed, the vast majority of use of the POFS as a class is for private or internal use by the licensee or its affiliates for which no compensation of any kind is paid. Our interpretation of the principal use test led us to propose that applications in the 470-512 MHz private land mobile services also should not be subject to competitive bidding.[22]

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[20] NYNEX's comments suggested three other tests: (1) a service would be presumed "private" based on majority use of the spectrum but parties would have an opportunity to rebut that presumption; (2) any license issued by the Commission in a service classified as "private" should be conditioned on the licensee's principal use of that spectrum for that purpose; violation of this condition would result in license forfeiture or a penalty; and (3) a service that might be considered private based upon majority use should nevertheless be subject to auction if more than $100,000 is received as compensation from subscribers. We reject NYNEX's last suggestion as essentially equivalent to the "contaminated band" proposal rejected above. NYNEX's first two suggestions appear to be variants of the classification by license scheme we have rejected for the reasons previously stated.

[21] As pointed out by AT&T in its comments, there is no way to anticipate today all of the possible uses of the electromagnetic spectrum. Thus, with respect to the measures to be used in making the principal use determination, we will, as AT&T suggests, retain the ability to use any of the measurement methods described above, as proposed at n. 14 of the NPRM.

[22] Most of these frequencies are shared, and therefore applications will not be mutually exclusive with one another. See comments of UTC.

NPRM at nn. 16 and 154. Most commenters agreed with our view of the principal use of these two classes of service. See, e.g., comments of APCO, AAR, UTC and API. We therefore adopt our proposal to exclude the 470-512 MHz private land mobile services and the POFS[23] from competitive bidding.[24] Finally, the few comments we received on the subject argue strongly that the MAS is principally used for private service and are unrebutted. See, e.g., comments of UTC, Fisher Wayland, and Domestic Automation. The comments comport with our own experience and the MAS will therefore be exempted from competitive bidding.[25] We will make other determinations on principal use with regard to other specific services in future Reports and Orders.

36. We also decline at this time to adopt APCO's proposal to exempt from competitive bidding any radio service that has or is likely to have significant use by state and local government licensees. We have already exempted from competitive bidding the public safety services over which APCO expressed the most concern (see ¶ 47, infra), and believe it would be premature and speculative to try to ascertain what other services are likely to be significantly used by state and local government licensees.

D. Initial and Modification Applications

37. As we pointed out in the NPRM, Congress apparently expected that applications to modify existing licenses would not be subject to competitive bidding.[26] While the commenters generally agree that modification applications should not be so subject, several commenters ask that the Commission clarify that certain types of mutually exclusive applications to modify existing licenses (e.g., to add radio channels to an existing system), may be so different in kind or so large in scope and scale as to warrant competitive bidding if

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[23] We do not adopt API's suggestion that the 18 GHz POFS Video Entertainment stations be treated separately from the rest of the POFS inasmuch as it is speculative whether these stations will function as private carriers as API asserts.

[24] Because the principal use of these classes of services is for private service, in the event that mutual exclusivity should occur among applicants for initial licenses, we are permitted to use lotteries to resolve that mutual exclusivity. See Section 309(i)(1).

[25] Since we have found the principal use of MAS to be for private service, Section 309(j) does not authorize us to use competitive bidding to award licenses for mutually exclusive pre-July 26, 1993 MAS applications pending before the Commission. We will therefore lottery these applications.

[26] See NPRM at ¶ 22; see also H. R. Rep. No. 103-111 at 253. Cf. Maxcell Telecom Plus, Inc. v. FCC, 815 F.2d 1551 (D.C. Cir. 1987).

mutual exclusivity exists. Cf. comments of RAM and NABER.[27] Where a modification would be so major as to dwarf the licensee's currently authorized facilities and the application is mutually exclusive with other major modification or initial applications, the Commission will consider whether these applications are in substance more akin to initial applications and treat them accordingly for purposes of competitive bidding.

38. We believe that there is merit in this course. It comports with our objectives of increasing competition and awarding spectrum to those who value it most highly. Accordingly, though as a general rule the Commission will regard mutually exclusive applications to modify existing licenses as not subject to competitive bidding, we may, on our own motion or in response to a petition from an interested party, determine that a major modification application in a particular service, if it is mutually exclusive with other applications, should be treated as an initial application and be subject to competitive bidding.

39. Similar questions of auctionability arise when applicant A files an application to modify its existing license, which in turn opens a window for another applicant, B, to file a competing initial application which is mutually exclusive with that of A. See, e.g., Maxcell Telecom Plus, Inc. v. FCC, 815 F.2d 1551 (D.C. Cir. 1987).[28] The statute requires the existence of "mutually exclusive applications [that are] accepted for filing for any initial license or construction permit," 47 C.F.R. § 309(j)(1) (emphasis supplied), but the legislative history makes clear that competitive bidding is not permitted "in the case of a renewal or modification of the license." H.R. Rep. No. 103-111 at 253 (emphasis supplied). Were we to read the statute literally, since one of the two applications in the example above is an initial applications, competitive bidding is arguably applicable. But such a result would also lead to competitive bidding by a modification applicant.

40. Given this apparent lack of clarity, we intend to deal with these situations on a case-by-case basis as it is impossible to know the factual context within which such mutual exclusivity might occur. We retain the authority to use comparative hearings to resolve

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[27] The May 14, 1992 Public Notice (Mimeo No. 23115) referenced by Alcatel in its reply comments was not issued for the purpose of determining what constitutes a "modification" of a microwave license. Therefore, its comment is inapposite. Cf. 47 C.F.R. Sec. 94.45.

[28] This scenario was raised by AllCity Paging in its comments. AllCity noted that under Section 22.33(c)(1) of our Rules, when a common carrier public mobile service applicant seeks to add one or more transmitters and which meets certain criteria is faced with a mutually exclusive initial applicant, the first applicant is entitled to request a comparative hearing to determine which application should be granted. AllCity requests the retention of this procedure notwithstanding that the Commission has proposed elimination of this rule in CC Docket No. 92-115, 7 FCC Rcd 3658 (1992). Telocator, however, suggested that such mutual exclusivity be resolved through competitive bidding.

mutual exclusivity between initial and modification applications, but also believe that competitive bidding may be appropriate in some of these cases as well.[29]

E. Intermediate Links

41. In the NPRM, we proposed that a license for frequencies used in a service as an "intermediate link" in the provision of a continuous, end-to-end service, i.e., one used by a licensee as part of a service offering to subscribers, but not one on which subscribers directly send or receive communications signals, would be subject to competitive bidding. NPRM at ¶ 29.[30] We believed that such a result would be administratively efficient because it would eliminate the necessity of determining the exact nature of the use to be made of a particular license by a particular applicant.

42. As noted, in order for a license to be subject to competitive bidding, Section 309(j)(2)(A) requires that the subject spectrum enable subscribers to "receive communications signals" or to "transmit directly communications signals." The comments strenuously and almost unanimously opposed the Commission's proposal, in part on the basis that by definition, an intermediate link cannot transmit communications signals directly. See, e.g., comments of AT&T. Other commenters believe that auctions would not promote the objectives of Section 309(j)(3).

43. We have decided not to adopt the NPRM's proposal. Before employing competitive bidding for intermediate links, we are still required to determine that mutual exclusivity exists and that such bidding would promote the objectives of Section 309(j)(3)(A) through (D). As to mutual exclusivity, we note that on those types of frequencies most often utilized as intermediate links, mutual exclusivity is very rare because of frequency coordination efforts made prior to the time an application is filed. See, e.g., reply comments of Alcatel. We are also concerned that auctioning intermediate links might lead to significant

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[29] In the specific hypothetical raised by AllCity Paging, for example, we are inclined to believe that if the modification application that is filed by the first applicant is substantial enough to require prior permission from the Commission, see, e.g., Section 22.9(d) of our Rules, it is the equivalent of a new or initial application and we are thus permitted to use auctions to resolve the mutual exclusivity.

[30] Examples of such intermediate links include cellular carriers transmitting subscriber traffic between cell sites and its Mobile Telephone Switching Office, or a local exchange telephone company using microwave links as one means of transmitting local exchange telephone service. Similarly, point-to-point microwave frequencies in the CARS are often used by cable television companies to transmit television programming to different points within or among systems although not directly to their subscribers. Another type of intermediate link is the so-called "MSS feederlink" discussed by several of the commenters. See reply comments of Loral Qualcomm.

delays in the provision of services thus hindering the development and rapid deployment of new technologies, products and services for the benefit of the public. See, e.g., comments of Southwestern Bell. Further, such auctions would impose significant administrative costs on licensees and on the Commission, particularly relative to the likely value of these licenses. It is thus unclear whether using auctions to award licenses for intermediate links would promote the objectives in Section 309(j)(3)(C). Therefore, intermediate links, including MSS feederlinks, CARS frequencies,[31] and point-to-point microwave frequencies regulated under Parts 21[32] and 94[33] of the Commission's rules will not be subject to competitive bidding.[34]

F. Services For Which Competitive Bidding Would Not Further Section 309(j)(3) Objectives

44. As exemplified above in our consideration of whether intermediate links should be auctioned, a system of competitive bidding may only be used if it would promote the objectives of Section 309(j)(3), even if the principal use of the spectrum otherwise satisfies the requirements for competitive bidding. Based on the comments, we have identified a number of circumstances where auctions do not appear to be consistent with these statutory objectives or are otherwise inconsistent with Congressional intent.

45. In response to n. 174 of the NPRM, a number of commenters noted that the Basic Exchange Telephone Radio Service (BETRS) and certain paging services use the same spectrum and that mutual exclusivity between them was possible. See, e.g., comments of Interdigital. The Rural Radio Service, including the BETRS, is a fixed service regulated under Subpart H of Part 22 of our Rules. The frequencies in these services are most commonly used in the provision of telephone service to remote locations where it is impractical or uneconomic to provide such service via landline. See comments of GTE. Because rural radio, including BETRS, frequencies are co-primary with certain common

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[31] As we pointed out earlier at ¶ 18, CARS applications are not subject to mutual exclusivity and are therefore exempt from competitive bidding for this reason as well.

[32] In the event that we receive mutually exclusive applications for common carrier point-to-point microwave facilities that would provide service to subscribers, we might conduct comparative hearings to resolve such mutual exclusivity. See Section 309(i)(1)(B). We expect such instances to be rare, however.

[33] As noted elsewhere, Part 94 point-to-point microwave users are exempt from competitive bidding because the principal use of these frequencies is for private service. See, e.g., comments of APCO.

[34] In view of our intent not to auction any point-to-point microwave licenses, whether private or common carrier, our proposal to exempt from competitive bidding those entities forcibly relocated by our orders in ET Docket No. 92-9 is moot. See NPRM at ¶ 128, n. 118.

carrier mobile services, it is possible that mutual exclusivity may occur between BETRS applications and other common carrier applications.[35]

46. The commenters argue that it would not serve the public interest to subject rural radio frequencies to competitive bidding because doing so would frustrate the important goals of universal service embodied in Section 1 of the Communications Act, which are incorporated by reference in Section 309(j)(3). See comments of NTCA. We agree. It would not serve the public interest for the Commission to establish services such as the BETRS as a potential less costly alternative to landline service[36] and then require a BETRS applicant to bid against a radio common carrier applicant for those frequencies. Accord, reply comments of Southwestern Bell. Therefore, we will not conduct auctions to resolve mutual exclusivity between initial BETRS or rural radio applications and common carrier mobile service applications.[37] We note that this is consistent with our decision on General Category frequencies discussed below.

47. In the NPRM, we proposed to exclude from competitive bidding procedures certain private radio channels known as the General Category[38] channels as well as other classes of frequencies subject to intercategory sharing. See NPRM at ¶¶ 139-141. These frequencies can be used by both SMRs, who are commercial mobile radio service providers, as well as for internal private service. Subjecting the General Category or non-SMR intercategory shared frequency pools to competitive bidding, however, might force police departments, for example, to bid against SMRs for spectrum. This would be contrary to Congressional intent and disserve the public interest. The comments strongly support this conclusion. See comments of APCO, AMTA, and AAA. Therefore, we will exclude from competitive bidding General Category channels and other intercategory classes of frequencies.[39]

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[35] Because local exchange carriers generally operate under exclusive franchises, we do not anticipate mutual exclusivity between BETRS applications.

[36] See Basic Exchange Telecommunications Radio Service, 3 FCC Rcd 214 (1988).

[37] Because the principal use of both of these services is for the provision of service to subscribers for compensation, the Commission would have to resolve such mutual exclusivity through a comparative hearing. See Section 309(i)(1). We are confident, however, that applicants can negotiate to resolve such mutual exclusivity.

[38] General Category channels are frequencies at 800 MHz that have been allocated to eligibles for conventional operations. See 47 C.F.R. § 90.615. Some of the General Category channels may be licensed for commercial use by Specialized Mobile Radio licensees.

[39] In addition, it also appears that General Category channels are not subject to competitive bidding because they are not principally used for subscriber based services. See comments of UTC. Similarly, channels in non-SMR frequency pools may in some cases be

G. Specific Services Subject to Competitive Bidding

48. In ¶¶ 114-166 of the NPRM, we identified a number of services and classes of services that appeared to fall within the ambit of the competitive bidding provisions of the Budget Act if mutually exclusive initial applications were accepted for filing. Most spectrum-based common carrier services, some private mobile radio services,[40] some private fixed services,[41] and commercial mobile radio services will be subject to competitive bidding, assuming the other statutory criteria are met. We have determined that several of those services and classes of services should be auctioned, and discuss them further below.

1. Interactive Video Data Service

49. In ¶¶ 142-144 of the NPRM, we proposed to auction any future mutually exclusive applications for the Interactive Video Data Service (IVDS) for we believed that this new service fulfilled all of the statutory prerequisites for competitive bidding. A number of commenters speculate that IVDS will have no subscribers on the basis that the service will be provided free to consumers and supported by advertising revenues or revenues from transactions conducted using the interactive features of IVDS. They therefore urge that the Commission not utilize auctions to award IVDS licenses in the future. See, e.g., comments of Quentin L. Breen, Independent Cellular Consultants, Professor Andrea Johnson, and Richard L. Vega Group and reply comments of America 52 East, Kingswood Associates and Harry Stevens, Jr.[42]

50. We disagree. While it may be true that the business plans of some would-be IVDS applicants contemplate that the consumer of the IVDS service will pay nothing for the response transmitter units (RTUs), we remain convinced that IVDS will primarily "provide

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accessed by SMRs, but only if SMR frequencies are unavailable. See, e.g., Section 90.621(g) of our rules. The principal and primary use of these non-SMR frequencies is for the services to which they have been allocated. See, e.g., Section 90.617.

[40] A licensee could be classified as a provider of private mobile radio service for purposes of Section 332 and still be subject to competitive bidding under Section 309(j). An SMR that provides only dispatch service and is not interconnected with the public switched network, for example, would be regulated as a private mobile radio service under Section 332, yet still be subject to competitive bidding if mutual exclusivity existed inasmuch as we have generally classified all frequencies allocated to SMRs as subject to competitive bidding. Compare ¶ 63, infra, with Section 332 Report and Order at ¶ 90.

[41] See, e.g., the discussion concerning the Interactive Video Data Service, infra.

[42] Others, however, urge that future mutually exclusive IVDS applications be auctioned. See comments of the Chase McNulty Group, NYNEX, and Radio Telecom and Technology, Inc.

information, products, or services to individual subscribers."[43] We note, for example, that Radio Telecom and Technology, Inc. (RTT), a developer of IVDS equipment and a longtime participant in the Commission's proceedings which created IVDS, argues that IVDS licenses should be awarded pursuant to competitive bidding.[44] Moreover, the Commission recently received an ex parte presentation from Eon Corporation (formerly TV Answer, Inc.). Eon is a developer of IVDS equipment and a longtime participant in our proceedings creating IVDS, and has obtained FCC certification for its equipment. Eon indicates that IVDS will include a substantial number of services that are compensated by subscribers. Eon further believes that in order to be successful, IVDS cannot be supported on a non-subscription, free to the consumer basis.

51. Based on the record, we must try to predict whether the principal use of IVDS will be "reasonably likely to involve" the receipt of compensation from subscribers. The record indicates that it will. We accord great weight to the views of RTT and Eon because these parties have been associated with IVDS since its early days. They have invested substantial amounts of time and money in developing the service and are in a position to understand the likely use of IVDS.

52. We also believe that the use of competitive bidding will promote the objectives of Section 309(j)(2)(B) as follows. First, the use of auctions for IVDS is likely to contribute to the rapid deployment of this new technology and will promote the efficient and intensive use of the electromagnetic spectrum. When we established the IVDS, we prescribed an application fee of $1400 and still received hundreds of applications for the first nine IVDS markets. Since we have lowered the IVDS application fee from $1400 to $35,[45] we anticipate being inundated with thousands of applications. Given the length and expense of comparative hearings, we do not believe that such hearings are a realistic alternative means of resolving mutual exclusivity among IVDS applicants. Without auctions, we fear that licenses would not quickly be awarded to parties able to efficiently use them, which, combined with the administrative burdens of processing thousands of applications and the associated litigation that is likely to ensue, will unreasonably delay deployment of this new service. Second, under the rules we shall establish for designated entities, use of auctions to award IVDS licenses should also fulfill the Congressional objective of promoting economic opportunity and competition as well as dissemination of licenses among a wide variety of applicants, including

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[43] See Amendment of Parts 0, 1, 2, and 95 of the Commission's Rules to Provide Interactive Video Data Service, 7 FCC Rcd 1630, 1637 (1992).

[44] We discount America 52 East's speculation in its reply comments that RTT's comments are unworthy of consideration because they are based solely on the latter's pecuniary interest. America 52 East's assurances that to receive IVDS service a customer need only go to any electronics store and purchase the necessary equipment and that there will be no subscription fee are similarly unconvincing since IVDS is not yet available.

[45] See Second Reconsideration in PR Docket No. 91-2, 8 FCC Rcd 2787 (1993).

small businesses, rural telephone companies, and businesses owned by members of minority groups and women. Finally, auctions will also recover for the public a portion of the value of the public spectrum.

53. We note in addition that the use of auctions for IVDS is fully consistent with the intent of Congress. Congress clearly envisioned that the IVDS would be subject to competitive bidding, for the Budget Act's legislative history states that the exception permitting the Commission to conduct lotteries for pre-July 26, 1993 applications would "permit the Commission to conduct lotteries for the nine Interactive Video Data Service markets for which applications have already been accepted . . . ."[46] Had the Congress not expected that the Commission would auction IVDS applications generally, it seems that there would have been no need for this statement. We therefore hold that auctioning of mutually exclusive IVDS applications will further the objectives of Section 309(j)(3).[47]

2. Personal Communications Services

54. We proposed in ¶¶ 115-130 of the NPRM to award both narrowband and broadband PCS licenses by competitive bidding in case of mutual exclusivity and tentatively concluded that PCS would meet all of the prerequisites for such bidding, including the requirement of subscribers. We noted our expectation, judging from the nature of the comments and the myriad ex parte presentations that we have received in the various PCS proceedings, as well as the identity of the commenters, that many PCS licensees will operate in the manner contemplated by new Section 309(j)(2)(A). See NPRM at ¶¶ 115-119. The vast majority of the commenters who addressed this issue either agreed that mutually exclusive PCS applications should or must be subject to the competitive bidding process, or simply assumed that such applications will be auctioned. See, e.g., comments of Arch Communications, BellSouth, Bell Atlantic, TDS, Time Warner, and UTC, reply comments of Telocator.

55. Only one commenter seriously disputed the Commission's tentative conclusion that PCS licenses should be awarded by competitive bidding. Millin Publications, a publisher of specialized information services, intends to file PCS applications to provide service in a manner akin to the broadcast industry, i.e., without subscribers. Millin's PCS network would allow purchasers of goods to pay for their items electronically using hand-held personal digital assistants free of charge except for the cost of hardware. Compensation would be paid by the

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[46] See Conference Report at 498. The Commission held lotteries on September 15, 1993, for licenses in first nine IVDS markets, applications for which were filed prior to July 26, 1993.

[47] Because we classify IVDS as a whole as subject to competitive bidding, we disagree with the comment of Professor Andrea Johnson, who seems to argue for a license-by-license classification of IVDS, an approach we reject.

vendor. It argues that, given that PCS does not yet exist and the very flexible regulations proposed for the service, the Commission should not find that PCS is reasonably likely to be a primarily subscription service technology.

56. We disagree. An overwhelming number of the commenters either actively support or implicitly assume that the principal use of licensed PCS spectrum is likely to be for the provision of service to subscribers for compensation.[48] Our own experience confirms this: of the scores of experimental PCS applications that the Commission has granted, a clear majority have proposed some variation of a charge on subscribers, whether for airtime or for the lease of subscriber equipment or both. Many of these licensees have submitted market studies on the effect of various pricing schemes on consumer demand.[49] In view of this evidence, we believe that the principal use of narrowband and broadband PCS licenses is "reasonably likely to involve the licensee receiving compensation from subscribers."[50] And, even assuming that some PCS licensees may ultimately not provide a subscriber-based service to their customers, the Commission must look to the likely principal use of spectrum in narrowband and broadband PCS when determining whether competitive bidding is applicable.[51]

57. We also confirm that the use of competitive bidding will speed the development and rapid deployment of PCS service to the public, including those residing in rural areas, with minimal administrative or judicial delays, as required by Section 309(j)(3)(A). Because we have confirmed that PCS would operate in the manner contemplated by Section 309(j)(2)(A), new Section 309(i)(1)(B) does not permit the Commission to utilize lotteries to choose from among mutually exclusive PCS applicants, leaving comparative hearings as our sole alternative. As we stated in the NPRM, our experience with the comparative hearing process has been less than satisfactory in terms of both administrative and judicial delay: competitive bidding should avoid this time consuming litigation.[52] Likewise, in contrast with

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[48] See, e.g., comments of UTC.

[49] See, e.g., Amendment of the Commission's Rules to Establish New Personal Communications Services, Third Report and Order in GEN Docket No. 90-314, et al., FCC 93-550, released February 3, 1994.

[50] We anticipate that this would be the case with both "wideband" and "narrowband" PCS services. Our analysis, of course, does not apply to unlicensed PCS.

[51] For purposes of this discussion, we need not resolve whether the service described by Millin is, in fact, a non-subscription service within the meaning of Section 309(j)(2).

[52] See, e.g., Kwerel and Felker, "Using Auctions to Select FCC Licensees," OPP Working Paper Series No. 16, May 1985. In our experience, most comparative hearings for licenses in rural areas do not proceed appreciably faster than comparative hearings for licenses in most urban areas.

comparative hearings, auctions will promote the objectives of Section 309(j)(3)(C) by recovering for the public a portion of the value of the spectrum made available for commercial use. We have also promulgated general rules, applicable to PCS, which are designed to avoid unjust enrichment as well as rules to ensure the opportunity for participation in auctions by the entities designated by Congress.

58. Finally, in accordance with subsection (j)(3)(D), we believe competitive bidding will promote efficient and intensive use of the spectrum in the case of PCS. We have defined PCS broadly as composed of a "wide array of mobile, portable and ancillary communications services to individuals and businesses," Narrowband PCS Order, ET Docket No. 92-100 and GEN Docket No. 90-314, FCC 93-329 (released July 23, 1993) at ¶¶ 13-14. Auctions are therefore likely to reinforce the desire of licensees to make efficient and intensive use of PCS spectrum. Auctions make explicit what others are willing to pay to use the spectrum, and the licensees' need to recoup the out-of-pocket expenditure for a license should provide additional motivation to get the most value out of the spectrum.

3. Common Carrier and Commercial Mobile Radio Services

59. Common carriers have subscribers; by definition, their services are offered indifferently to the public for hire[53] and therefore satisfy the requirements of Section 309(j)(2)(A). The new CMRS providers, who are treated as common carriers under Section 332(c), also have subscribers and thus also satisfy Section 309(j)(2)(A).[54] We proposed that spectrum-based common carrier services and commercial mobile radio services should be subject to auction if they met the other criteria for competitive bidding. See NPRM at ¶ 26. We discuss below specific common carrier and commercial mobile radio services that will be subject to competitive bidding.

60. Public Mobile Services. The Public Mobile Services are regulated under Part 22 of the Commission's Rules and include the Public Land Mobile Service (Subpart G), the Rural Radio Service (Subpart H), the Domestic Public Cellular Radio Telecommunications Service (Subpart K), the Offshore Radio Telecommunications Service (Subpart L) and the 800 MHz Air-Ground Radiotelephone Service (Subpart M). In the NPRM, we asked whether each of these services should be subject to competitive bidding. The comments we received with respect to these services focussed almost exclusively on two issues: the applicability of competitive bidding to certain cellular radio applications pending with the Commission on

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[53] Section 3(h), Communications Act, 47 U.S.C. § 153(h).

[54] A commercial mobile radio service is a "for-profit" service and is treated as common carriage under Title II of the Act. 47 U.S.C. §§ 332(c)(1)(A) and (d)(1). The Commission has adopted rules governing the regulatory treatment of commercial mobile radio services. See Section 332 Second Report and Order, supra.