

Before the  
Federal Communications Commission  
Washington, D.C. 20554

FCC MAIL ROOM

2000 NOV 21 P 4: 11

In the Matter of	)	
	)	
Implementation of Sections 309(j) and	)	WT Docket No. 99-87 ✓
337 of the Communications Act of 1934	)	
as Amended	)	
	)	
Promotion of Spectrum Efficient	)	RM-9332
Technologies on Certain Part 90	)	
Frequencies	)	
	)	
Establishment of Public Service Radio	)	RM-9405
Pool in the Private Mobile	)	
Frequencies Below 800 MHz	)	
	)	
Petition for Rule Making of The American	)	RM-9705
Mobile Telecommunications Association	)	
	)	

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**REPORT AND ORDER  
AND FURTHER NOTICE OF PROPOSED RULE MAKING**

**Adopted:** November 9, 2000

**Released:** November 20, 2000

**Comment Date:** 60 days after publication in the Federal Register

**Reply Comment Date:** 90 days after publication in the Federal Register

By the Commission:

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## I. INTRODUCTION AND EXECUTIVE SUMMARY

1. In this Report and Order and Further Notice of Proposed Rule Making, we adopt rules and policies to implement Sections 309(j) and 337 of the Communications Act of 1934 ("Communications Act"), as amended by the Balanced Budget Act of 1997 ("Balanced Budget Act"),<sup>1</sup> which was signed into law on August 5, 1997. The Balanced Budget Act significantly revised Section 309(j) of the Communications Act, which is the principal statutory provision that governs the Commission's auction authority for the licensing of radio services. With the *Notice of Proposed Rule Making* in WT Docket No. 99-87, we initiated this proceeding and requested comment on changes to the Commission's rules and policies to implement our revised auction authority.<sup>2</sup>

<sup>1</sup> Pub. L. No. 105-33, Title III, 111 Stat. 251 (1997).

<sup>2</sup> See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz, WT Docket No. 99-87, RM-9332, RM-9405, (continued....)

2. Specifically, this Report and Order sets out the general framework for exercise of the Commission's auction authority in light of the Balanced Budget Act's revisions to Section 309(j) of the Communications Act.<sup>3</sup> First, we examine how the Balanced Budget Act revised the statutory language of Section 309(j). In particular, we consider amended Section 309(j)(1)'s directive to use competitive bidding to resolve mutually exclusive license applications for those radio services that do not fall within one of Section 309(j)(2)'s auction exemptions. These statutory changes are considered in light of our continuing obligation under Section 309(j)(6)(E) to avoid mutual exclusivity and to fulfill the public interest objectives enumerated in Section 309(j)(3).

3. In this Report and Order, we conclude that in non-exempt services, the Commission's authority under the Balanced Budget Act continues to permit it to adopt licensing processes that result in the filing of mutually exclusive applications where the Commission determines that such an approach would serve the public interest. We do not, however, make any changes to license assignment procedures in existing services that preclude or limit the likelihood of mutually exclusive applications, nor do we make any specific determination about what licensing procedures to adopt for future services. Rather, we will reserve for future service-specific rulemaking proceedings the question of what type of licensing mechanism to use in each case, e.g., geographic area licensing, site-by-site licensing, or any other licensing process. Moreover, any consideration of whether we should use licensing procedures in a particular service that increase the likelihood of mutually exclusive applications will be based on careful analysis of the public interest considerations of Section 309(j)(3) as they apply to the specific characteristics, uses, and demands of the service.

4. We also conclude that in addition to other licensing mechanisms we have used previously, we should consider the use of band manager licensing as a future option for private as well as commercial services. We used the band manager concept for the first time in the 700 MHz guard bands,<sup>4</sup> and believe that it has the potential in other new spectrum allocations to provide private users with greater flexibility to access spectrum in amounts of bandwidth, periods of time, and geographic areas that best suit their needs. For example, we have recently initiated a proceeding to reallocate 27 MHz of spectrum in bands below 3 GHz from Federal Government to non-government use, and have sought comment on whether this spectrum could address demand in the congested private radio bands.<sup>5</sup> In that proceeding, we seek comment on the possibility of using band managers for some of those bands, as well as other licensing options.

5. We also define the scope of the Balanced Budget Act's exemption from auctions for licenses and permits issued for "public safety radio services." We conclude that this "public safety" exemption

(Continued from previous page)

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*Notice of Proposed Rule Making*, 14 FCC Rcd 5206 (1999) ("Notice"). For the reasons discussed in the *Notice*, this proceeding does not address satellite services. See *Notice* at ¶ 65.

<sup>3</sup> See 47 U.S.C. § 309(j) (1999).

<sup>4</sup> See *Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, WT Docket No. 99-168, *Second Report and Order*, 15 FCC Rcd 5299, 5311-12 at ¶ 26 (2000) ("*700 MHz Second Report and Order*") (establishing specific requirements for Guard Band Manager licenses for the 700 MHz guard bands).

<sup>5</sup> See *Reallocation of 27 Megahertz of Spectrum Transferred from Government Use*, ET Docket No. 00-221, RM-9267, RM-9692, RM-9797, RM-9854, *Notice of Proposed Rule Making*, FCC 00-395, at ¶ 1 (rel. Nov. 20, 2000) ("*27 MHz Reallocation Order*").

from auctions was intended to apply not only to traditional public safety services such as police, fire, and emergency medical services, but also to spectrum usage by entities such as utilities, railroads, transit systems, and others that provide essential services to the public at large and that need reliable communications in order to prevent or respond to disasters or crises affecting their service to the public. We also conclude, however, that the public safety exemption applies only to services in which these public safety uses, *i.e.*, protection of safety of life, health, and property within the meaning of Section 309(j)(2)(A), comprise the dominant use of the spectrum. Thus, services in which such uses are not dominant (and in which mutual exclusivity occurs) will not be exempt from auctions, even if some individual licensees in the service use the spectrum for public safety purposes as defined by the statute.

6. The Report and Order also addresses a number of proposals to amend our licensing and eligibility rules for existing private services.<sup>6</sup> In general, we conclude that the existing rules should be retained. Specifically, we decline a request by the American Mobile Telecommunications Association (“AMTA”) to establish geographic area licensing and competitive bidding rules in the 450-470 MHz band. We also decline the Utilities Telecommunications Council’s (“UTC’s”)<sup>7</sup> request to create a separate radio pool of private land mobile frequencies for entities that do not qualify for the existing Public Safety Radio Pool spectrum, but that fall within the broader “public safety” exemption established by Section 309(j)(2)(A).

7. We do make a limited change, however, to our use restrictions affecting 800 MHz Business and Industrial/Land Transportation (“BI/LT”) channels, which currently prohibit commercial use by licensees. We conclude that subject to certain safeguards, BI/LT licensees should be allowed to modify their licenses to permit commercial use, or to assign or transfer their licenses to CMRS operators for commercial use. To prevent trafficking, we will not allow such modifications, assignments, or transfers until five years after the initial grant date of the license, and we will prohibit a licensee who modifies or transfers a license under this provision from obtaining new BI/LT spectrum in the same location for one year.

8. In addition, we address issues relating to the awarding of licenses under Section 337 of the Communications Act, which allows public safety entities (defined more narrowly than in Section 309(j)(2)(A)) to apply for “unassigned” spectrum not otherwise allocated for public safety use. We conclude that where the Commission has proposed rules for the licensing of particular spectrum by auction, requests for licensing under Section 337 should not be deemed in the public interest once the competitive bidding process has begun except under extraordinary circumstances. Moreover, we conclude that Section 337 relief should only be available if the applicant demonstrates that there is no available public safety spectrum in any band in the geographic area where the public safety use is proposed.

9. Finally, in the *Further Notice of Proposed Rule Making*, we seek comment on a petition for rulemaking filed by AMTA proposing that certain Part 90 licensees be required to employ new spectrum-efficient technologies.<sup>8</sup> In particular, we seek further comment on the effectiveness of the Part 90 rules that have been adopted in the course of the Commission’s *Refarming* proceeding, PR Docket No. 92-

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<sup>6</sup> A list of the parties that filed pleadings and *ex parte* notices in the captioned proceedings, and the abbreviations used to refer to such parties, is attached at Appendix A.

<sup>7</sup> UTC is now known as the United Telecom Council.

<sup>8</sup> AMTA Petition for Rulemaking (RM-9332) at 3 (filed June 19, 1998) (“AMTA Petition I”).

235,<sup>9</sup> the current pace of migration to narrowband technology, and on whether enough time has elapsed to allow us to evaluate the effectiveness of our current rules. We also seek comment on whether to permit 900 MHz BI/LT licensees to modify their licenses to permit CMRS use.

## II. BACKGROUND

### A. Commission Implementation of the 1993 Auction Standard

10. The Omnibus Budget Reconciliation Act of 1993 ("1993 Budget Act")<sup>10</sup> added Section 309(j) to the Communications Act, authorizing the Commission to award licenses for use of the electromagnetic spectrum through competitive bidding where mutually exclusive applications are filed. The 1993 Budget Act expressly authorized, but did not require, the Commission to use competitive bidding to choose among mutually exclusive applications for initial licenses or construction permits.<sup>11</sup> As we described in detail in the *Notice*, the Commission in a series of rulemaking proceedings adopted rules and policies to implement Section 309(j).<sup>12</sup>

11. Pursuant to the 1993 Budget Act, Section 309(j)(1), "General Authority," only permitted the Commission to use competitive bidding for subscriber-based services if mutual exclusivity existed among initial license applications. Section 309(j)(6)(E) also made clear that the Commission was not relieved of its obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations and other means to avoid mutual exclusivity.<sup>13</sup> The Commission has determined that applications are "mutually exclusive" if the grant of one application

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<sup>9</sup> See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Report and Order and Further Notice of Proposed Rule Making*, 10 FCC Rcd 10,076 (1995) ("*Refarming Report and Order and Further Notice*"); *Memorandum Opinion and Order*, 11 FCC Rcd 17,676 (1996); *Second Report and Order*, 12 FCC Rcd 14,307 (1997); *Second Memorandum Opinion and Order*, 14 FCC Rcd 8642 (1999); *Third Memorandum Opinion and Order*, 14 FCC Rcd 10,922 (1999); *Report and Order and Further Notice of Proposed Rule Making*, 15 FCC Rcd 16,673 (2000) (collectively, the "*Refarming Proceeding*").

<sup>10</sup> Pub. L. No. 103-66, Title VI, § 6002(a), 107 Stat. 312, 387 (1993).

<sup>11</sup> 47 U.S.C. § 309(j)(1) (1996). As added by the 1993 Budget Act, Section 309(j)(1) stated:

(1) General Authority. -- If mutually exclusive applications are accepted for filing for any initial license or construction permit which will involve a use of the electromagnetic spectrum described in paragraph (2), then the Commission shall have the authority, subject to paragraph (10), to grant such license or permit to a qualified applicant through the use of a system of competitive bidding that meets the requirements of this subsection.

Paragraph (10) provided a number of conditions precedent and conditions subsequent to the Commission's use of competitive bidding, which are moot. See 47 U.S.C. § 309(j)(10).

<sup>12</sup> See *Notice* at 5208-21 ¶¶ 3-22. See also Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Second Report and Order*, 9 FCC Rcd 2348 (1994) ("*Competitive Bidding Second Report and Order*"); Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Second Memorandum Opinion and Order*, 9 FCC Rcd 7245 (1994) ("*Competitive Bidding Second M O & O*").

<sup>13</sup> 47 U.S.C. § 309(j)(6)(E).

would effectively preclude the grant of one or more of the other applications.<sup>14</sup> Where the Commission receives only one application that is acceptable for filing for a particular license that is otherwise auctionable, there is no mutual exclusivity, and thus no auction. Therefore, mutual exclusivity is established when competing applications for a license are filed.

12. Section 309(j)(1) also restricted the use of competitive bidding to applications for "initial" licenses or permits.<sup>15</sup> In addition, Section 309(j)(2) set forth conditions beyond mutual exclusivity that had to be satisfied in order for spectrum to be auctionable.<sup>16</sup> Generally speaking, these conditions subjected to auction those services in which the licensee was to receive compensation from subscribers for the use of the spectrum.<sup>17</sup> Former Section 309(j)(2) further directed the Commission, in evaluating the "uses to which bidding may apply," to determine whether "a system of competitive bidding will promote the [public interest] objectives described in [Section 309(j)(3)]."<sup>18</sup> Employing these criteria, the Commission identified a number of services and classes of services that were auctionable and not auctionable under the 1993 Budget Act, provided mutually exclusive applications were filed.<sup>19</sup> As we explained in the *Notice*, the services deemed nonauctionable under the 1993 Budget Act were non-

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<sup>14</sup> See *Notice* at 5210 ¶ 4 (citing *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2350 n.5).

<sup>15</sup> Renewal licenses were excluded from the auction process. See H.R. Rep. No. 103-111, at 253. See also *id.* at 2355.

<sup>16</sup> See 47 U.S.C. § 309(j)(2)(A) (1996).

<sup>17</sup> Among the services found to be auctionable under the 1993 Budget Act were narrowband and broadband Personal Communications Services, Public Mobile Services, 218-219 MHz Service, Specialized Mobile Radio Services (SMR), Private Carrier Paging (PCP) Services, Multipoint Distribution Service (MDS), Local Multipoint Distribution Service (LMDS), 2.3 GHz Wireless Communications Service (WCS), satellite Digital Audio Radio Service (DARS), Direct Broadcast Satellite (DBS) Service,<sup>17</sup> 220-222 MHz radio service, Location and Monitoring Service (LMS), and VHF Public Coast Stations, all of which involve commercial use of the spectrum. See *Notice* at 5212-13 ¶ 8; see also *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2359 ¶¶ 62-63. The plain language of the 1993 Budget Act also excluded traditional broadcast services from competitive bidding, because broadcast licensees do not receive compensation from subscribers. See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352 ¶ 22.

<sup>18</sup> 47 U.S.C. § 309(j)(2)(B) (1996). Section 309(j)(3), entitled "Design of Systems of Competitive Bidding," directs that these factors be addressed in both identifying classes of licenses to be issued by competitive bidding, and designing particular methodologies of competitive bidding. The objectives are listed as follows:

- (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 resource 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.

47 U.S.C. § 309(j)(3)(A)-(D).

<sup>19</sup> See *Notice* at 5212-14 ¶¶ 8-9.

subscriber based, private and noncommercial offerings operating on a variety of frequency bands.<sup>20</sup>

**B. The Balanced Budget Act of 1997**

13. In 1997, Congress revised the Commission's auction authority. Specifically, the Balanced Budget Act of 1997 amended Section 309(j)(1) to require the Commission to award mutually exclusive applications for initial licenses or permits using competitive bidding procedures, except as provided in Section 309(j)(2). Sections 309(j)(1) and 309(j)(2) now state:

(1) General Authority.--If, consistent with the obligations described in paragraph (6)(E), mutually exclusive applications are accepted for any initial license or construction permit, then, except as provided in paragraph (2), the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding that meets the requirements of this subsection.

(2) Exemptions.--The competitive bidding authority granted by this subsection shall not apply to licenses or construction permits issued by the Commission--

(A) for public safety radio services, including private internal radio services used by State and local governments and non-government entities and including emergency road services provided by not-for-profit organizations, that--

(i) are used to protect the safety of life, health, or property; and

(ii) are not made commercially available to the public;

(B) for initial licenses or construction permits for digital television service given to existing terrestrial broadcast licensees to replace their analog television service licenses; or

(C) for stations described in section 397(6)<sup>21</sup> of this title.<sup>22</sup>

As mentioned above, prior to the Balanced Budget Act of 1997, Sections 309(j)(1) and 309(j)(2) granted the Commission the authority to use competitive bidding to resolve mutually exclusive applications for initial licenses or permits if the principal use of the spectrum was for subscription-based services and competitive bidding would promote the objectives described in Section 309(j)(3).<sup>23</sup> As amended by the Balanced Budget Act of 1997, Section 309(j)(1) states that the Commission *shall* use competitive bidding to resolve mutually exclusive initial license or permit applications, unless one of the three exemptions provided in the statute applies.<sup>24</sup>

14. As noted above, the Balanced Budget Act of 1997 left unchanged the restriction that competitive bidding may only be used to resolve mutually exclusive applications. Moreover, the general auction authority provision of Section 309(j)(1) now references the obligation under Section 309(j)(6)(E) to use engineering solutions, negotiation, threshold qualifications, service regulations, or other means to

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<sup>20</sup> See Notice at 5214-19 ¶¶ 10-17.

<sup>21</sup> 47 U.S.C. § 397(6). Section 397(6) defines the terms "noncommercial educational broadcast station" and "public broadcast station."

<sup>22</sup> 47 U.S.C. § 309(j)(1), (2) (as amended by Balanced Budget Act, § 3002) (footnote added).

<sup>23</sup> See 47 U.S.C. § 309(j)(1) and (2) (1996).

<sup>24</sup> See 47 U.S.C. § 309(j)(2) (emphasis added).

avoid mutual exclusivity where it is in the public interest to do so. In addition, the portion of the Conference Report that accompanies this section of the legislation emphasizes that notwithstanding the Commission's expanded auction authority, its determinations regarding mutual exclusivity must still be consistent with and not minimize its obligations under Section 309(j)(6)(E).<sup>25</sup>

15. Section 309(j)(2), as amended by the Balanced Budget Act of 1997, exempts from auctions licenses and construction permits for public safety radio services, digital television service licenses and permits given to existing terrestrial broadcast licensees to replace their analog television service licenses, and licenses and construction permits for noncommercial educational broadcast stations and public broadcast stations. The Commission has found that the list of exemptions from our general auction authority set forth in Section 309(j)(2) is exhaustive, rather than merely illustrative, of the types of licenses or permits that may not be awarded through a system of competitive bidding.<sup>26</sup> Left unchanged by the Balanced Budget Act of 1997 is Section 309(j)(3)'s directive to consider the public interest objectives in identifying classes of licenses and permits to be issued by competitive bidding.

16. The Conference Report for Section 3002(a) of the Balanced Budget Act of 1997 states that the exemption for public safety radio services includes "private internal radio services" used by utilities, railroads, metropolitan transit systems, pipelines, private ambulances, volunteer fire departments, and not-for-profit organizations that offer emergency road services, such as the American Automobile Association ("AAA").<sup>27</sup> The Conference Report also notes that the exemption is "much broader than the explicit definition for 'public safety services'" included in Section 337(f)(1) of the Communications Act,<sup>28</sup> for the purpose of determining eligibility for licensing in the 24 MHz of spectrum reallocated for public safety services.<sup>29</sup>

<sup>25</sup> The conferees expressed concern that the Commission not interpret its expanded auction authority in a manner that overlooks engineering solutions or other tools that avoid mutual exclusivity. See H.R. Conf. Rep. No. 105-217, 105th Cong., 1st Sess., at 572 (1997) ("Conference Report").

<sup>26</sup> Implementation of Section 309(j) of the Communications Act -- Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, MM Docket No. 97-234, *First Report and Order*, 13 FCC Rcd 15920, 16000 ¶ 199 (1998) ("*Commercial Broadcast Competitive Bidding First Report & Order*").

<sup>27</sup> See Conference Report at 572. The 1997 amendments also eliminate the Commission's authority to issue licenses or permits by random selection after July 1, 1997, with the exception of licenses or permits for noncommercial educational radio and television stations. See Balanced Budget Act at § 3002(a)(2)(B)(5).

<sup>28</sup> 47 U.S.C. § 337(f)(1), *added by* Balanced Budget Act § 3004. See Conference Report at 572.

<sup>29</sup> Conference Report at 572. For purposes of comparison, the definition of "public safety services" included in Section 337(f)(1) provides:

The term "public safety services" means services--

- (A) the sole or principal purpose of which is to protect the safety of life, health, or property;
- (B) that are provided--
  - (i) by State or local government entities; or
  - (ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and
- (C) that are not made commercially available to the public by the provider.

47 U.S.C. § 337(f)(1).

17. As we discuss in greater detail below, the statutory changes to the Commission's auction authority brought about by Balanced Budget Act primarily affect those classes of radio service that are referred to generically as "private services." Our use of the term "private services" in the context of the 1993 Budget Act's auction exemption referred to those radio services "that did not involve the payment of compensation to the licensee by subscribers, *i.e.*, that were for internal use."<sup>30</sup> Generally, the private radio services are used by government or business entities to meet their own internal communications needs or by individuals for personal communications, rather than to provide communications services to others.<sup>31</sup> In this Report and Order, we use the term "private services" broadly to refer to the family of non-broadcast, non-subscriber based fixed or mobile radio services (*i.e.*, radio services that are for internal uses).<sup>32</sup> This Report and Order does not revisit any determinations made pursuant to the 1993 Budget Act of those radio services subject to competitive bidding. Rather, here we establish a framework for our future determinations of which radio services may be subject to competitive bidding. For example, we intend to use this framework to guide our decisions in regard to the spectrum bands that are the subject of a separate *Notice of Proposed Rule Making* in which we are proposing to reallocate 27 MHz of spectrum in bands below 3 GHz from Federal Government to non-government use.<sup>33</sup>

### III. REPORT AND ORDER

#### A. Framework for Determining Whether Licenses Are Subject to Auction

18. In this Report and Order, we evaluate the scope of our spectrum auction authority under Section 309(j) and establish a framework for determining whether licenses are subject to auction. First, we consider how the Balanced Budget Act's revision of our auction authority under Section 309(j) of the Communications Act affects future determinations of which services may be subject to auction. In particular, this analysis focuses on the application of the public interest factors enumerated in Section 309(j)(3) and the Commission's Section 309(j)(6)(E) obligation in the public interest to avoid mutual exclusivity in application and licensing proceedings for those radio services that are not specifically exempt from auction under Section 309(j)(2).<sup>34</sup> We also recognize the potential for band manager licensing of auctionable private radio services where that licensing mechanism is likely to serve the public interest and otherwise satisfy the Commission's overall spectrum management responsibilities and obligations under the Communications Act.

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<sup>30</sup> See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352 ¶¶ 23-25.

<sup>31</sup> Many different entities use private systems for a variety of purposes, and the systems themselves operate on a number of different spectrum bands. As was explained in detail in the *Notice*, to date, the Commission has employed a variety of alternative licensing approaches for these private radio services. See *Notice* at 5214-19 ¶¶ 11-17.

<sup>32</sup> Broadly speaking, the category of "private services" includes the Private Land Mobile Radio Services; parts of the Maritime and Aviation Services; the Private Operational Fixed Service; Amateur and Personal Radio Services. When used in this general sense, "private services" also includes the public safety radio services (which fall within the three aforementioned service classifications) as well as frequencies allocated to the Public Safety Radio Pool.

<sup>33</sup> Among other things, that *Notice of Proposed Rule Making* seeks comment on whether that spectrum could address demand in the congested private radio bands. See *27 MHz Reallocation Order*.

<sup>34</sup> See 47 U.S.C. §§ 309(j)(6)(E), 309(j)(2). See also *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352-53 ¶¶ 21-28.

## 1. Obligation to Avoid Mutual Exclusivity

19. Background. In the *Notice*, the Commission sought comment broadly on how the Balanced Budget Act's amendments to Section 309(j) affect its determinations of which services may be subject to auction.<sup>35</sup> In particular, we asked whether the express reference in Section 309(j)(1) to the Commission's obligation to avoid mutual exclusivity under Section 309(j)(6)(E) changes the scope or content of that obligation.<sup>36</sup> We also asked how we should apply the public interest factors in Section 309(j)(3) in establishing licensing schemes or methodologies under the Balanced Budget Act for both new and existing, commercial and private services.<sup>37</sup> We inquired whether the Commission's previous analysis of its obligation under Section 309(j)(6)(E) is still appropriate in view of the revisions to Section 309(j)(1) and 309(j)(2), *i.e.*, whether we should continue to evaluate our obligation to avoid mutual exclusivity by weighing the public interest objectives of Section 309(j)(3).<sup>38</sup> With respect to services currently using licensing schemes in which mutually exclusive applications are not filed, we asked whether Congress, in emphasizing our obligation to avoid mutual exclusivity, intended that we give greater weight to that obligation and less to other public interest objectives.<sup>39</sup>

20. Discussion. Private radio service interests generally argue that the Balanced Budget Act has not expanded the Commission's auction authority, particularly as it applies to private wireless services.<sup>40</sup> They argue that the added reference in Section 309(j)(1) to the Commission's obligation under Section 309(j)(6)(E) to consider alternatives to mutual exclusivity requires the Commission to give greater weight to the goal of avoiding mutual exclusivity and less to other public interest objectives in determining which wireless services are potentially auctionable.<sup>41</sup> Under these commenters' proposed

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<sup>35</sup> *Notice*, 14 FCC Rcd at 5222 ¶ 25.

<sup>36</sup> *Id.* at 5235 ¶ 60.

<sup>37</sup> *Id.*

<sup>38</sup> *Id.* at 5239 ¶ 64.

<sup>39</sup> *Id.* at 5235 ¶ 60.

<sup>40</sup> *See, e.g.*, AAR Comments at 8; API Comments at 14-16; API Reply Comments at 3-4; Blooston Comments at 5-10; Blooston Reply Comments at 2-3; Boeing at 2, 4 (“[a]ny implementation of the Balanced Budget Act amendments of 1997 must first acknowledge that Congress flatly restricted the Commission’s competitive bidding authority with Section 309(j)(6)(E)...”); Boeing Reply Comments at 1-2; CellNet Reply Comments at 2-4; Cinergy Comments at 4-5; Cinergy Reply Comments at 2-3; ComEd Comments at 4-6; ComEd Reply Comments at 2-3; CSAA Reply Comments at 4; Entergy Comments at 4-5; Entergy Reply Comments at 2-3; Ford Reply Comments at 2; FIT Comments at 1-4; Intek Comments at 4-6; ITA Comments at 4-7; ITA Reply Comments at 2-5; Kenwood Comments at 2-3; LMCC Comments at 5-6; Motorola Comments at 7-8; Motorola Reply Comments at 2; MRFAC Comments at 6-8; NTCC Comments at 4-5; PCIA Comments at 4-5; SCANA Comments at 5-6; SCANA Reply Comments at 2-3; Trimble Comments at 3-6; UEC Comments at 4-5; UTC Comments at 6.

<sup>41</sup> *See, e.g.*, AAR Comments at 8 (“the Commission’s first obligation under Section 309(j)(1) (referencing Section 309(j)(6)(E)) is to use all appropriate methods to avoid mutual exclusivity”); API Comments at 15 (“the Commission must give prior, independent consideration to its obligation to avoid mutual exclusivity, rather than continuing to weigh this obligation against the ‘public interest factors’ set forth in Section 309(j)(3)”); Boeing Comments at 4-5 (“Congress intended the obligations specified in the Commission’s general auction authority of Section 309(j)(1) to take priority over the public interest criteria found in Section 309(j)(3)”); Boeing Reply (continued....)

interpretation, the Commission's first objective in establishing a licensing mechanism for any non-auction exempt service must be to seek a method that avoids mutual exclusivity.<sup>42</sup> In the view of these commenters, only if the Commission determines that mutual exclusivity cannot be avoided, *i.e.*, that the service can *only* be licensed through processes that result in the filing of mutually exclusive applications, can it consider the public interest factors set forth in Section 309(j)(3) for purposes of determining the appropriate methodology to award licenses through competitive bidding.<sup>43</sup>

21. We disagree with the interpretation of amended Section 309(j)(1) advanced by these commenters. The obligation to consider alternatives to mutual exclusivity set forth in Section 309(j)(6)(E) has existed since the Commission was first authorized to conduct auctions of spectrum licenses by the 1993 Budget Act.<sup>44</sup> The Commission has consistently interpreted this provision to mean that it has an obligation to attempt to avoid mutual exclusivity by the methods prescribed therein only when doing so would further the public interest goals of Section 309(j)(3).<sup>45</sup> We conclude that the

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Comments at 2; CellNet Reply Comments at 2-4; Cinergy Comments at 5; Cinergy Reply Comments at 2-3; ComEd Comments at 6; ComEd Reply Comments at 2-3; Entergy Comments at 5; Entergy Reply Comments at 2-3; Intek Comments at 4-5; ITA Comments at 4; ITA Reply Comments at 3 ("before using competitive bidding as a licensing mechanism, the Commission *must* first consider ways to avoid mutual exclusivity"); Kenwood Comments at 2-3; LMCC Comments at 6 ("it is clear that the Commission must first seek to avoid mutual exclusivity"); Motorola at 4-8; MRFAC Comments at 6-8; NTCC Comments at 4-5; PCIA Comments at 4-5; PIRSC Comments at 3, 10; SBT Comments at 8; SCANA Comments at 6; SCANA Reply Comments at 2-3; UEC Comments at 5; UTC Comments at 6.

<sup>42</sup> See, e.g., API Comments at 15; Boeing Comments at 4-5; Boeing Reply Comments at 2 ("the Commission has a threshold responsibility to resolve mutual exclusivity before ever considering the use of competitive bidding"); CellNet Reply Comments at 2-4; Cinergy Comments at 5; ComEd Comments at 6; CSAA Comments at 5; Entergy Comments at 5; Ford Reply Comments at 2; Intek Comments at 4-5; ITA Comments at 4-7; ITA Reply Comments at 3; Kenwood Comments at 2-3; MRFAC Comments at 6-8; NTCC Comments at 4-5; PCIA Comments at 4-5; PIRSC Comments at 7; SBT Comments at 8; SBT Reply Comments at 32; SCANA Comments at 6; UTC Comments at 6.

<sup>43</sup> See, e.g., API Comments at 15; Boeing Comments at 4-5; Boeing Reply Comments at 2; CellNet Reply Comments at 2-4; Cinergy Comments at 5; ComEd Comments at 6; Entergy Comments at 5; Kenwood Comments at 2-3; LMCC Comments at 5-6; PCIA Comments at 4-5; SCANA Comments at 6; SBT Reply Comments at 32; UEC Comments at 4-5; UTC Comments at 7; UTC Reply Comments at 2.

<sup>44</sup> See 47 U.S.C. § 309(j)(6)(E) (1994).

<sup>45</sup> See, e.g., Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183, Implementation of Section 309(j) of the Communications Act – Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz Bands, PR Docket No. 93-253, *Memorandum Opinion and Order*, 14 FCC Rcd 12428, 12441-12445 ¶¶ 22-28 (1999); Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, WT Docket No. 96-18; Implementation of Section 309(j) of the Communications Act – Competitive Bidding, PR Docket No. 93-253, *Memorandum Opinion and Order on Reconsideration and Third Report and Order*, 14 FCC Rcd 10030 (1999); Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, *Second Report and Order*, 12 FCC Rcd 19079, 19104 ¶ 62, 19154 ¶ 230 (1997); Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *Memorandum Opinion and Order on Reconsideration*, 12 FCC Rcd 9972, 10009-10 ¶ 115 (1997).

amendment of Section 309(j)(1) by the Balanced Budget Act to add a cross-reference to Section 309(j)(6)(E) serves to underscore the Commission's pre-existing obligation, but did not change its fundamental scope or content.<sup>46</sup> More specifically, we conclude that the Balanced Budget Act amendments to Section 309(j) do not preclude the Commission from using licensing mechanisms for private services that permit the filing of mutually exclusive license applications if the Commission determines that it is in the public interest to do so.

22. We base our conclusion on several factors. First, nothing in the statutory language suggests that Congress intended to narrow the Commission's discretion to use licensing mechanisms based on mutual exclusivity. The addition of a cross-reference to Section 309(j)(6)(E) does not turn avoidance of mutual exclusivity into the paramount goal of the statute, but simply underscores that the Commission should continue to consider alternatives to mutual exclusivity as it did prior to the Balanced Budget Act, *i.e.*, based on whether such alternatives would promote the public interest objectives in Section 309(j)(3). Moreover, Congress did not change the language of Section 309(j)(6)(E) itself, indicating that it did not intend to change the scope of the Commission's obligation under that provision. Indeed, Section 309(j)(6)(E) itself continues to state – as it did prior to the Balanced Budget Act – that the Commission has the “obligation in the *public interest*... to avoid mutual exclusivity,”<sup>47</sup> which underscores that the Commission is required to avoid mutual exclusivity only if it is in the public interest to do so.

23. Finally, the plain language of Section 309(j)(3) negates the contention that Congress intended that section to be subordinate to Section 309(j)(6)(E). Specifically, Section 309(j)(3) directs the Commission to consider the public interest objectives specified therein in “identifying classes of licenses and permits to be issued by competitive bidding, in specifying the eligibility and other characteristics of such licenses and permits, and in designing methodologies for use under this subsection.”<sup>48</sup> This language makes clear that the public interest objectives of Section 309(j)(3) apply broadly to the threshold issue of which licenses should be subject to auction, which necessarily requires consideration in each case of whether to adopt a licensing mechanism based on mutual exclusivity.

24. Our interpretation of Section 309(j) is also supported by the legislative history of the Balanced Budget Act. In the Conference Report, Congress explicitly stated that the Balanced Budget Act *expanded* the scope of the auction authority previously conferred by the 1993 Budget Act.<sup>49</sup> However, Congress also expressed concern that the Commission not interpret its expanded auction authority in a way that would reduce its Section 309(j)(6)(E) obligations:

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<sup>46</sup> See, e.g., *DIRECTV, Inc. v. FCC*, 110 F.3d 816 (D.C. Cir. 1997)(affirming FCC decision establishing an auction procedure for assigning DBS spectrum, and noting that “[n]othing in 309(j)(6)(E) requires the FCC to adhere to a policy it deems outmoded ‘in order to avoid mutual exclusivity in ... licensing proceedings’”(decided prior to enactment of the Balanced Budget Act); *Benkelman Telephone Co. v. FCC*, 220 F.3d 601, *petition for rehearing on other grounds pending* (D.C. Cir. 2000) (denying petitions for review of FCC rulemaking orders establishing geographic area licensing system for certain paging licenses and adopting a competitive bidding procedure for mutually exclusive applications) (decided after enactment of the Balanced Budget Act).

<sup>47</sup> 47 USC § 309(j)(6)(E) (emphasis added).

<sup>48</sup> 47 U.S.C. § 309(j)(3) (emphasis added).

<sup>49</sup> The portion of the Conference Report that discusses the statute's amendments to the Commission's auction authority is entitled “Section 3002(a) -- *extension and expansion* of auction authority.” Conference Report, at 572 (emphasis added).

[T]he conferees emphasize that, notwithstanding its expanded auction authority, the Commission must still ensure that its determinations regarding mutual exclusivity are consistent with the Commission's obligations under section 309(j)(6)(E). The conferees are particularly concerned that the Commission might interpret its expanded competitive bidding authority in a manner that minimizes its obligations under section 309(j)(6)(E), thus overlooking engineering solutions, negotiations, or other tools that avoid mutual exclusivity.<sup>50</sup>

This language from the Conference Report makes clear that Congress sought continuity rather than change in the Commission's application of Section 309(j)(6)(E). Contrary to the assertions of some private services commenters,<sup>51</sup> Congress did not intend to create a new and greater obligation to avoid mutual exclusivity, but rather sought to ensure that in exercising its expanded auction authority, the Commission would continue to give Section 309(j)(6)(E) the same weight it had prior to the Balanced Budget Act.<sup>52</sup>

25. We also conclude that this interpretation of the Balanced Budget Act is consistent with the Commission's spectrum management responsibilities. Section 309(j)(3)(D) requires the Commission to promote efficient use of the spectrum, which is a valuable and finite public resource.<sup>53</sup> To accomplish these objectives, the Commission must have the freedom to consider all available spectrum management tools and the discretion to evaluate which licensing mechanism is most appropriate for the services being offered.<sup>54</sup> Thus, as the D.C. Circuit has recognized, the Commission is not required to adopt a licensing process that avoids mutual exclusivity but undermines the public interest goals embodied in the statute.<sup>55</sup> Subsequent to the adoption of the Balanced Budget Act, the D.C. Circuit concluded that the Section 309(j)(6)(E) obligation does not foreclose new licensing schemes that are likely to result in mutual exclusivity.<sup>56</sup> If the Commission finds such schemes to be in the public interest, the court states, it may implement them "without regard to [S]ection 309(j)(6)(E) which imposes an obligation only to minimize

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<sup>50</sup> *Id.*

<sup>51</sup> See, e.g., Cinergy Comments at 5; ComEd Comments at 6; Entergy Comments at 5; PIRSC Comments at 7; SCANA Comments at 6; UEC Comments at 4-5.

<sup>52</sup> H.R. Conf. Rep. No. 105-217, 105<sup>th</sup> Cong., 1<sup>st</sup> Sess., at 572 (1997) ("Conference Report") (emphasis added).

<sup>53</sup> 47 U.S.C. § 309(j)(3)(D).

<sup>54</sup> See Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, *Report and Order*, 15 FCC Rcd 11,956, 11,962-63 ¶¶ 12, 13-15 (2000) ("*MAS Report and Order*") ("[W]e believe that Section 309(j)(6)(E) allows us to determine the licensing approach that is most appropriate for the services being offered, taking into account the dominant use of the spectrum, administrative efficiency and other related licensing issues.").

<sup>55</sup> See *DIRECTV, Inc. v. FCC*, 110 F.3d 816, 828 (D.C. Cir. 1997) (Section 309(j)(6)(E) does not require Commission to adhere to policy it deems outmoded in order to avoid mutual exclusivity in licensing proceedings); *Benkelman Telephone Co., et al. v. FCC*, 220 F.3d 601, 606 *petition for rehearing on other grounds pending* (D.C. Cir. 2000).

<sup>56</sup> *Benkelman Telephone Co., et al. v. FCC*, 220 F.3d 601, 606, *petition for rehearing on other grounds pending* (D.C. Cir. 2000).

mutual exclusivity 'in the public interest' and 'within the framework of existing policies.'"<sup>57</sup> In the past, the Commission has found with respect to many services that the adoption of a licensing scheme that results in the filing of mutually exclusive applications encourages efficient use of the spectrum as mandated by Section 309(j)(3).<sup>58</sup> In other instances, the Commission has determined that a licensing approach that avoids mutual exclusivity, e.g., site-based, first-come, first-served licensing, best serves the public interest. For instance, we recently decided to license certain bands of spectrum designated for Multiple Address Systems ("MAS") on a first-come, first-served, site-by-site basis.<sup>59</sup> We conclude that the Balanced Budget Act did not change the nature of the public interest analysis required of the Commission when deciding the licensing process for a particular service. Therefore, in establishing processes for assigning initial licenses, the Commission will continue to fulfill its obligation under Section 309(j)(6)(E) and consider the public interest goals of Section 309(j)(3).

26. We emphasize that our conclusion applies to decisions regarding the licensing of existing services as well as future services. We recognize that many private wireless licensees contend that we should avoid auctioning private wireless spectrum that is currently licensed through processes that avoid mutual exclusivity.<sup>60</sup> These commenters assert that where the Commission has used licensing methods in the private services that avoid the filing of mutually exclusive applications (e.g., first-come, first-served licensing, shared use, frequency coordination), the Balanced Budget Act requires us to continue using these methods and prohibits us from converting to licensing methods that would result in mutual exclusivity.<sup>61</sup>

27. We reject this interpretation of the statute. Prohibiting the Commission from considering

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<sup>57</sup> *Id.* (citations omitted) (citing *DIRECTV, Inc. v. FCC*, 110 F.3d 816, 828 (D.C. Cir. 1997)).

<sup>58</sup> See, e.g., Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, *Memorandum Opinion and Order on Reconsideration*, 12 FCC Rcd 9972, 10009-10010 ¶ 115 (1997).

<sup>59</sup> *MAS Report and Order*, 15 FCC Rcd at 11,973-74 ¶ 45. See also *Commercial Broadcast Competitive Bidding First Report and Order*, 13 FCC Rcd at 15,920 ¶ 17 (allowing a limited period for engineering solutions or settlements by competing applicants).

<sup>60</sup> See, e.g., AAA Comments at 6 ("the existing system has worked well for private radio licensees, generally enabling widespread and efficient use of shared channels by many different users without interference."); API Comments at 16; API Reply Comments at 3-4; Blooston Comments at 7-10; ITA Comments at 24; ITA Reply Comments at 4; Blooston Comments at 10 ("[t]he current system of frequency coordination and first-come, first-served filing is fast, efficient and rarely results in mutual exclusivity"); Boeing Comments at 4-8; Boeing Reply Comments at 1-3; CellNet Comments at 6-9; CellNet Reply Comments at 2-4; Cinergy Reply Comments at 2-3; ComEd Reply Comments at 2-3; CSAA Reply Comments at 4; Entergy Reply Comments at 2-3; FIT Comments at 1-4; Intek Comments at 4-5; ITA Comments at 4-7; ITA Reply Comments at 2-5; Kenwood Comments at 3-5; LMCC Comments at 3-6; Mark IV Comments at 5, 10-11; Motorola Comments at 7-8; Motorola Reply Comments at 2; MRFAC Comments at 5; NTCC Comments at 2-5; PCIA Comments at 2-4; SCANA Reply Comments at 2-3; Trimble Comments at 3-6.

<sup>61</sup> See, e.g., API Comments at 16; Blooston Comments at 7 ("[t]he express language of Section 309(j), and its legislative history, unequivocally establish that the Commission is obligated to preserve the shared use licensing methodology in the private internal radio services"); Blooston Reply Comments at 3; Boeing Comments at 4-8; Boeing Reply Comments at 1-3; CellNet Comments at 6-9; CellNet Reply Comments at 2-4; ITA Comments at 4-6;

changes to licensing methodologies applicable to existing services would contravene the intent of the Balanced Budget Act and restrict the Commission's ability to act in the public interest.<sup>62</sup> Thus, we believe it remains fully within the Commission's authority to convert from a licensing method that avoids mutual exclusivity to one that is based on mutual exclusivity and auctions, as we have done in the case of certain services in the past.<sup>63</sup> At the same time, as discussed below, we believe that in order for this option to be considered in any service, the Commission, as part of its public interest analysis, should give significant consideration to the effectiveness of existing licensing mechanisms that avoid mutual exclusivity, and should weigh the potential costs of changing such mechanisms against the potential benefits.

## 2. License Scope

28. Background. In the *Notice*, the Commission sought comment on whether the use of geographic area licensing for non-exempt private radio services would further the public interest goals of Section 309(j)(3).<sup>64</sup> We solicited comment on the costs and benefits of implementing geographic area licensing in the private radio frequency bands and asked whether licensing schemes other than geographic area licensing would better serve the public interest.<sup>65</sup> In deciding if geographic area licensing would be appropriate for a given radio service or class of frequencies, we asked whether we should consider the actual purpose for which the spectrum is used or proposed to be used, as well as the purpose for which the spectrum is currently allocated.<sup>66</sup> We inquired whether the use of geographic area licensing would speed the assignment of new channels and facilitate further build-out of wide-area systems.<sup>67</sup> We also suggested that the shared private service bands may be so heavily used that adopting a geographic area licensing scheme may not serve any purpose because so little "white space" would be available to geographic area licensees that there would be no interest in applying for the geographic area licenses.<sup>68</sup> The Commission further sought comment on the likely effects of geographic area licensing on incumbent systems and potential new entrants for private radio services.<sup>69</sup>

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<sup>62</sup> See *Benkelman Telephone Co., et al. v. FCC*, 220 F.3d 601, 606, *petition for rehearing on other grounds pending* (D.C. Cir. 2000) (Section 309(j)(6)(E) imposes an obligation only to minimize mutual exclusivity in the public interest and within the framework of existing policies); *Orion Communications Ltd. v. FCC*, 213 F.3d 761, 763 (D.C. Cir. 2000) (notwithstanding other means of avoiding mutual exclusivity, "the statute cannot be read to direct the FCC to adopt *all* other means available").

<sup>63</sup> See, e.g., Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, *Second Report and Order*, 12 FCC Rcd 19079 (1997); Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183, *Report and Order and Second Notice of Further Rule Making*, 12 FCC Rcd 18600 (1997) ("39 GHz Report and Order").

<sup>64</sup> *Notice*, 14 FCC Rcd at 5241 ¶¶ 66-67.

<sup>65</sup> *Id.*

<sup>66</sup> *Id.* at 5241-5242 ¶ 69.

<sup>67</sup> *Id.* at 5241 ¶ 67.

<sup>68</sup> *Id.*

<sup>69</sup> *Id.*

29. Discussion. The Commission has previously concluded with respect to many commercial services that geographic area licensing is a highly efficient licensing scheme.<sup>70</sup> Among other benefits, it facilitates aggregation by licensees of smaller service areas into seamless regional and national service areas, allows development of strategic and regional business plans, provides licensees with greater build-out flexibility and is efficient for the Commission to administer. Our decisions to establish geographic area licensing in commercial services have been based on our commitment to serve the public interest as required by Section 309(j)(3).

30. Private wireless licensees generally urge the Commission to retain the current non-geographic licensing schemes employed in the private radio bands.<sup>71</sup> They assert that existing methodologies based on first come/first served, site-by-site licensing, and frequency coordination effectively serve the communications needs of private radio licensees.<sup>72</sup> They further argue that geographic area licensing would be inappropriate and counterproductive in the private radio bands.<sup>73</sup> Private wireless licensees state that unlike commercial service providers that seek to offer the widest possible coverage, the majority of private radio licensees are interested in tailoring their operations to

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<sup>70</sup> See, e.g., Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, WT Docket No. 96-18, *Second Report and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 2732, 2744 ¶ 15 (1997). In addition, in the rule making proceeding implementing competitive bidding to award licenses in the 39 GHz band, the Commission concluded that predetermined service areas provide a more orderly structure for the licensing process and foster efficient utilization of the spectrum in an expeditious manner. *39 GHz Report and Order*, 12 FCC Rcd at 18647 ¶ 101. See also *800 MHz Second Report and Order*, 12 FCC Rcd 19079, 19087 ¶ 10.

<sup>71</sup> See, e.g., Advocacy Comments at 2-3; API Comments at 12-14; API Reply Comments at 3-4; Blooston Comments at 7-10; Blooston Reply Comments at 3-4; Boeing Comments at 4-8; Boeing Reply Comments at 1-3; CellNet Comments at 7-9; CellNet Reply Comments at 2-4; Cinergy Comments at 8, 11; Cinergy Reply Comments at 2-3; ComEd Comments at 9, 13; ComEd Reply Comments at 2-3; CSAA Reply Comments at 4; Entergy Comments at 8, 11; Entergy Reply Comments at 2-3; FIT Comments at 1-4; ICA Comments at 2, 4; Intek Comments at 4-6; ITA Comments at 4-7; ITA Reply Comments at 2-5; Kenwood Comments at 3-5; LMCC Comments at 3-6; Mark IV Comments at 5, 10-11; Motorola Comments at 7-8; Motorola Reply Comments at 2; MRFAC Comments at 5; NTCC Comments at 2-5; PCIA Comments at 2-4; SBT Reply Comments at 2, 7-8, 26; SCANA Comments at 9, 12-13; SCANA Reply Comments at 2-3; Trimble Comments at 3-6; UEC Comments at 8, 11; UTC Comments at 20.

<sup>72</sup> See, e.g., AAA Comments at 6; Advocacy Comments at 3; API Comments at 12-14; Blooston Comments at 7-12; Blooston Reply Comments at 3-4; Boeing Comments at 4-8; Boeing Reply Comments at 1-3; CellNet Comments at 7-9; CellNet Reply Comments at 2-4; Cinergy Comments at 9, 11; Cinergy Reply Comments at 2-3; ComEd Comments at 11, 13; ComEd Reply Comments at 2-3; Entergy Comments at 9, 11; Entergy Reply Comments at 2-3; FIT Comments at 1-4, 7; Ford Reply Comments at 8; ICA Comments at 2, 4; Intek Comments at 4-6; ITA Comments at 24; ITA Reply Comments at 4; Kenwood at 3-5; LMCC Comments at 3-6; Motorola Comments at 7-8; Motorola Reply Comments at 2; NTCC Comments at 2-3; PCIA at 2-4; PIRSC Comments at 19; SCANA Comments at 10, 13; SCANA Reply Comments at 2-3; UEC Comments at 9, 11; UTC Comments at 20-21; UTC Reply Comments at 3.

<sup>73</sup> See, e.g., API Comments at 12-14; Blooston Comments at 7-12; Blooston Reply Comments at 3-12; CellNet Comments at 8-9; CellNet Reply Comments at 2-4; Cinergy Comments at 10-11; ComEd Comments at 12-13; Entergy Comments at 10, 11; FIT Comments at 4-7; ICA Comments at 3; Intek Comments at 5; ITA Comments at 16-17; LMCC Comments at 4-5; MRFAC Comments at 5; SBT Reply Comments at 3; SCANA Comments at 11-12; UEC Comments at 10-11; UTC Comments at 20-21; UTC Reply Comments at 4.

specific geographically confined needs.<sup>74</sup> These licensees point out that they serve themselves in the areas in which they conduct their core activities, not the public at large across broad market areas.<sup>75</sup> A number of commenters also argue that the use of geographic area licensing violates Section 309(j)(6)(E), claiming that it creates mutual exclusivity rather than avoids it.<sup>76</sup>

31. As discussed above, we have concluded that Section 309(j)(6)(E) does not prevent the Commission from adopting licensing processes, such as geographic area licensing, that serve the public interest but happen to result in the filing of mutually exclusive license applications.<sup>77</sup> We have also rejected commenters' arguments that the Commission is required by the Balanced Budget Act to retain current site-based licensing schemes in existing private services.<sup>78</sup> Nonetheless, we recognize, as many commenters have pointed out, that the decision to convert from current site-based licensing methods to geographic licensing should not be made unless it is clear that the benefits of making the change outweigh the costs.<sup>79</sup> Based on the record in this proceeding, we see no reason to make such an across-the-board change to existing licensing processes in private services. Therefore, we will not adopt geographic area licensing rules for existing private services in this rulemaking. Instead, with respect to private services, the Commission will continue to make determinations on a service-by-service basis of whether to adopt geographic area licensing, site-by-site licensing, or any other licensing scheme based on its obligation under Section 309(j)(6)(E) and the public interest considerations of Section 309(j)(3).

32. We recognize that some private licensees oppose geographic area licensing because they equate it with the use of competitive bidding, which they strongly oppose in the private services.<sup>80</sup> Blooston, for example, contends that the adoption of auctions in private services would make it difficult for many traditional private users to obtain licenses because they would be unable to outbid commercial service providers seeking to use the spectrum for subscriber-based services.<sup>81</sup> This view incorrectly

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<sup>74</sup> See, e.g., API Comments at 12-14; Blooston Comments at 7-12; Blooston Reply Comments at 3-4; CellNet Comments at 8-9; Cinergy Comments at 9; ComEd Comments at 11; Entergy Comments at 9; MRFAC Comments at 5; SCANA Comments at 10-11; UEC Comments at 9.

<sup>75</sup> See, e.g., API Comments at 12-14; Blooston Comments at 8, 10-12; Blooston Reply Comments at 3-4; CellNet Comments at 8-9; MRFAC Comments at 5;

<sup>76</sup> See, e.g., AAR Comments at 7-8; API Comments at 16; Blooston Comments at 7, 10-12; Blooston Reply Comments at 3; Boeing Comments at 4; Boeing Reply Comments at 3; CellNet Comments at 7; CellNet Reply Comments at 3; Intek Comments at 5; ITA Comments at 6.

<sup>77</sup> See Section III.B.2. *supra* (discussing obligation to avoid mutual exclusivity under Section 309(j)(6)(E)). Furthermore, even where we decide in a specific service that it is in the public interest to continue site-by-site licensing, such a decision does not necessarily preclude the use of auctions where competing applicants seek to operate at the same site on the same frequency. See *Commercial Broadcast Competitive Bidding First Report and Order*, 13 FCC Rcd 15920.

<sup>78</sup> See *supra* ¶¶ 25-27.

<sup>79</sup> See e.g., Blooston Comments at 10-17;

<sup>80</sup> See, e.g., Blooston Comments at 5-13; CellNet Comments at 7-9; Cinergy Comments at 11; ComEd Comments at 13; Entergy Comments at 11; ITA Comments at 10; SBT Reply Comments at 26; SCANA Comments at 12-13; UEC Comments at 11; UTC Reply Comments at 1.

<sup>81</sup> Blooston Comments at 13; see also Boeing Comments at 6-7; PIRSC Comments at 13.

assumes that if the Commission were to adopt geographic area licensing for private radio services, it would also eliminate eligibility restrictions for such services and permit commercial entities to bid for private spectrum for commercial use. In fact, with one limited exception in the 800 MHz band,<sup>82</sup> we have concluded that we should not change existing eligibility and use rules for services that are currently restricted to private radio eligibles.<sup>83</sup>

33. Moreover, even where we choose to retain eligibility restrictions on private spectrum, there may be ways in which geographic licensing could be employed to accommodate the needs of private radio users. For example, as noted above, we intend to use the framework adopted in this Report and Order to guide our decisions in regard to the separate *Notice of Proposed Rule Making* in which we are proposing to transfer 27 MHz of spectrum in bands below 3 GHz to non-government use.<sup>84</sup> In addition, as discussed below, the use of band managers could be an effective means of providing private radio users the flexibility to obtain access to the amount of spectrum, in terms of quantity, length of time, and geographic area, that best suits their needs.<sup>85</sup> In addition, we could tailor our auction designs and procedures in ways that serve the specialized needs of the private wireless industry.<sup>86</sup>

### 3. Band Manager Licenses

34. Background. In the *Notice*, we sought comment on whether to establish a new class of licensee called a “band manager” in the private radio services.<sup>87</sup> We described band managers in the *Notice* as a class of Commission licensee that engages in the business of making its spectrum available for use by others through private, written contracts.<sup>88</sup> We solicited comment on a broad range of issues relating to how band manager licenses should be defined, and whether the public interest would be served by using band manager licensing to address current and projected needs for private internal radio services.<sup>89</sup> We inquired whether the concept of a band manager fits within the Commission’s overall spectrum management responsibilities and obligations under the Communications Act.<sup>90</sup> We also asked a number of questions about whether and when a band manager licensing approach may be more effective relative to alternative methods of licensing private internal communications services.<sup>91</sup> Finally,

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<sup>82</sup> See Section III.C.4. *infra* (discussing limited availability of B/ILT channels in the 800 MHz band for use in CMRS systems).

<sup>83</sup> See Section III.B.2. *infra* (discussing eligibility requirements for auctionable services currently allocated for private radio use).

<sup>84</sup> See *27 MHz Reallocation Order*.

<sup>85</sup> See *infra* ¶¶ 35-50.

<sup>86</sup> See *infra* ¶¶ 51-61.

<sup>87</sup> See *Notice*, 14 FCC Rcd at 5247-49 ¶¶ 88-95.

<sup>88</sup> See *id.* at 5247 ¶ 89.

<sup>89</sup> See *id.* at 5247-48 ¶¶ 90-92.

<sup>90</sup> See *id.* at 5247-48 ¶ 90.

<sup>91</sup> See *id.* at 5248 ¶ 92.

we sought comment on a full range of license implementation issues, including whether it would be necessary to have more than one band manager in each geographic license area and what types of ownership and control requirements might be appropriate for band managers in the private services.<sup>92</sup>

35. Discussion. For the reasons discussed below, we believe that band manager licensing is a viable mechanism that should be considered for licensing in spectrum allocated for the private services.<sup>93</sup>

This Report and Order sets forth a framework to guide our determination in future proceedings concerning private services as to the circumstances under which we might use band manager licensing as an alternative or an addition to other licensing methods. We also review some of the considerations that we might take into account in defining a band manager's rights and responsibilities in the context of particular services. We emphasize that this Report and Order does not adopt band manager licensing in any existing private service, nor do we make any specific decision to do so in any future service. Rather, we reserve for future service-specific rulemaking proceedings the question of whether to use band manager licensing in each case. Such determinations will be based on careful analysis of the public interest considerations of Section 309(j) of the Communications Act as they apply to the specific characteristics, uses, and demands of the service.

36. Since the *Notice* was adopted, we have implemented a form of band manager licensing for the first time in the *700 MHz Second Report and Order*.<sup>94</sup> In that proceeding, we concluded that band manager licensing would be an effective and efficient way to manage the 700 MHz Guard Band spectrum while minimizing the potential for harmful interference to public safety operations in adjacent bands.<sup>95</sup> We also found that band manager licensing in the 700 MHz guard bands would enable parties to

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<sup>92</sup> See *id.* at 5248-49 ¶¶ 91-94.

<sup>93</sup> We also regard band manager licensing as an option to be considered in spectrum in which commercial services are authorized, as evidenced by our recent decision to license band managers in the 700 MHz guard bands. (The lessees of 700 MHz guard band spectrum may be either commercial service providers or private users.) In addition, we have sought comment on whether band managers licensing would be appropriate in the 3650-3700 MHz band (and in the 4.9 GHz band should we find that the public interest supports the pairing of these bands). See Amendment of the Commission's Rules With Regard to the 3650-3700 MHz Government Transfer Band, ET Docket No. 98-237; 4.9 GHz Band Transferred from Federal Government Use, WT Docket No. 00-32, *First Report and Order and Second Notice of Proposed Rule Making*, FCC 00-363 ¶ 81 (rel. Oct. 24, 2000). However, because licensees in commercial services typically operate with fewer restrictions and in a more market-driven environment than private licensees, there may be less need in some commercial services to designate band managers as a specific "class" of licensees. Instead, a potential issue is the degree to which all commercial licensees should have the option to use some or all of their spectrum in the same manner as a band manager, *i.e.*, to make spectrum available to third party users without the need for prior Commission approval, while retaining primary responsibility for compliance with the Commission's rules. We plan to address this issue more broadly in our upcoming secondary markets proceeding, which will address issues related to spectrum leasing in wireless services generally. See Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230, *Notice of Proposed Rule Making*, FCC 00-402 (adopted Nov. 9, 2000) ("*Secondary Markets Notice*") (Commission initiative to develop rules and policies to promote secondary markets in radio spectrum). Therefore, we defer further discussion of band managers in the commercial services context to that proceeding.

<sup>94</sup> See *700 MHz Second Report and Order*, 15 FCC Rcd at 5311-12 at ¶ 26.

<sup>95</sup> *Id.* at 5313 ¶ 30.

more readily acquire spectrum with a minimum of Commission involvement.<sup>96</sup> We adopted licensing rules for Guard Band Managers that were based on specific policy objectives that we considered relevant to those bands. To ensure that Guard Band Managers would make their spectrum available to third parties, we required that Guard Band Managers act solely as spectrum brokers, prohibited them from using spectrum for their own private internal communications or to provide telecommunications services, and limited the amount of spectrum that they may lease to affiliated entities.<sup>97</sup> To further our objective of making the 700 MHz guard band spectrum available to a wide range of users, we adopted certain requirements to ensure fair and nondiscriminatory access to the spectrum by potential users.<sup>98</sup>

37. Our recent adoption of Guard Band Manager licensing in the 700 MHz proceeding should help guide us in evaluating whether to adopt band manager licensing in future proceedings.<sup>99</sup> Nevertheless, a number of private radio commenters in the present proceeding argue that band manager licensing of private services is contrary to the public interest.<sup>100</sup> We agree that the use of band managers in spectrum restricted to private services may raise different issues from those that led to our decision for the 700 MHz guard band spectrum, which was open to all users, including commercial service providers and private radio eligibles.<sup>101</sup> There may be instances where we determine that band manager licensing is not appropriate, and where band manager licensing is adopted, we may adopt rules governing band manager activity that differ from those applicable to Guard Band Managers. As discussed below, however, we reject the view that band managers are inappropriate for private services generally.

38. A principal argument advanced by opponents of band manager licensing in private services is that in comparison to other licensing methods, band manager licensing will necessarily make it more difficult and costly for private spectrum users to obtain spectrum.<sup>102</sup> We do not agree. Band manager licensing is a potential response to the underlying scarcity of spectrum for private radio services. Repeatedly, we have recognized this problem and have attempted to address it through regulatory initiatives aimed at increasing spectral and economic efficiencies in the use of private radio spectrum.<sup>103</sup> In the absence of market-based mechanisms to promote efficient spectrum use, however, private radio spectrum has become congested and “users have little incentive to use that resource more efficiently because any privately initiated attempt to improve efficiency would confer benefits on all users of the

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<sup>96</sup> *See id.*

<sup>97</sup> *See id.* at 5324-26 ¶¶ 56-60.

<sup>98</sup> *See id.* at 5327-28 ¶¶ 63-67.

<sup>99</sup> *See id.* at 5311-23 ¶¶ 25-51.

<sup>100</sup> *See* Boeing Comments at 11; FIT Comments at 6; RRS Comments at 7; SBT Comments at 21; API Reply Comments at 7.

<sup>101</sup> We note that, even if we choose to restrict band managers in a particular service to lease only to private radio eligibles for permissible private uses, a band manager would still be considered to be engaged in a commercial activity.

<sup>102</sup> *See generally* Boeing Comments at 10-14; Western Resources 4-5; AWWA Comments at 9.

<sup>103</sup> *See, e.g., Refarming Proceeding.*

shared spectrum, with only a fraction of these benefits accruing to the party undertaking the effort."<sup>104</sup> By contrast, band manager licensing is a market-based mechanism that can create incentives for efficient spectrum use. Because band managers would be able to charge private users for spectrum use, users would likely be discouraged from engaging in spectrally inefficient and low value uses. In addition, band managers may realize greater economies of scale than existing private radio licensees. Finally, as in the case of the 700 MHz guard bands, we have the option of licensing more than one band manager in each license area, if we think it important to ensure that potential spectrum users have a choice of band managers. These factors will help ensure that efficiencies and cost savings associated with band manager licensing are passed on to private spectrum users.

39. We also disagree with the view that band manager licensing inevitably results in a concentration of private spectrum in the hands of a few licensees while depleting the spectrum available to others.<sup>105</sup> To the contrary, we believe that band manager licensing can increase the diversity of users of private spectrum. With a band manager, different types of spectrum users would have broad flexibility to satisfy their particular spectrum needs with fewer transactional costs and regulatory burdens than are associated with acquiring a full-term license under the Commission's existing license assignment and partial assignment procedures. Because band manager licensing may result in different types of users being able to access the same spectrum, we believe that this mechanism is consistent with the congressional intent underlying Section 309(j)'s directive to encourage diversity in licensing.<sup>106</sup>

40. In addition to allowing for wider variety of users, band manager licensing is intended to facilitate apportionment of spectrum in a more dynamic fashion than existing licensing procedures permit, thus making spectrum more responsive to market demands and technological changes.<sup>107</sup> We note that the marketplace is increasingly responding to such demands, with system operators increasingly offering services that have historically been provided only over private radio frequencies.<sup>108</sup> Band manager licensing is likely to accelerate this trend toward more efficient use of private radio spectrum. Rather than deplete spectrum, band manager licensing approaches will be developed with the objective of affording spectrum users additional options to access spectrum to meet their particularized needs.

41. In light of these considerations, we find no merit in SBT's assertion that band manager licensing would be "an economic disaster for local users" and small businesses.<sup>109</sup> We see no reason to

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<sup>104</sup> Gregory L. Rosston & Jeffrey S. Steinberg, *Using Market-Based Spectrum Policy to Promote the Public Interest*, 50 Fed. Comm. L.J. 87, 109 (1997) ("Market-Based Spectrum Policy").

<sup>105</sup> See, e.g., Blooston Reply Comments at 10-11; SBT Comments at 23; Boeing Comments at 11.

<sup>106</sup> See 47 U.S.C. §309(j)(3)(B).

<sup>107</sup> See Principles for Reallocation of Spectrum To Encourage the Development of Telecommunications Technologies For the New Millenium, *Policy Statement*, 14 FCC Rcd 19,868, 19,871-72 ¶ 12 (1999) ("Spectrum Policy Statement").

<sup>108</sup> Some commenters note that they are increasing relying on commercial service providers to supply some of their communications needs. See, e.g., AAR Reply Comments at 9. On a similar note, News Corp. has unveiled plans to develop set-top boxes capable of linking electric meters to networks, a telemetry function which has historically been handled wirelessly via private radio spectrum. See "Murdoch Sees Satellites as Way to Keep News Corp. Current," *New York Times* C1, C7 (June 16, 2000).

<sup>109</sup> See SBT Comments at 18.

believe that small businesses would not be awarded band manager licenses. Indeed, in our recently-concluded auction of 700 MHz Guard Band Manager licenses, five of the nine winning bidders claimed small business status.<sup>110</sup> When licenses are awarded through competitive bidding, the Commission may – and usually does – award bidding credits and other preferences to small businesses.<sup>111</sup> We also disagree with SBT's assertion that band managers would have no incentive to deal with small businesses. Band managers would be in the business of marketing and providing access to spectrum directly to eligible entities, which would give rise to economic incentives to intensively use the spectrum and permit access to as many users and types of users as possible.

42. Some commenters argue that band manager licensing is an improper delegation of the Commission's spectrum management and licensing authority under the Communications Act.<sup>112</sup> We previously concluded in the 700 MHz guard band proceeding that band manager licensing is fully consistent with our statutory spectrum management obligations.<sup>113</sup> For a number of reasons, we continue to believe that conclusion is correct, and we reiterate it today. First, because band managers are to be licensed and regulated by the Commission, the Commission fulfills its statutory obligation under Section 309(a) to determine whether licensing of spectrum will serve the public interest, convenience, and necessity.<sup>114</sup> Second, we do not regard the creation of band managers as an improper delegation of our regulatory authority over the use of spectrum. Band managers must operate and make spectrum available subject to the Commission's rules and oversight. Allowing band managers to make frequencies available to end users is analogous to the present frequency coordination process that requires applicants in some private services to use a frequency coordinator to select a frequency that will most effectively meet the applicant's needs while minimizing interference to licensees already using a given frequency band.<sup>115</sup> We view band managers as engaging in activities similar to those of a coordinator, though with greater rights and responsibilities to manage the spectrum covered by its license, consistent with technical limitations and other regulations for the licensed radio bands.

43. We also reject the view that band manager licensing is inherently inconsistent with the requirements of Section 310(d) of the Communications Act.<sup>116</sup> Section 310(d) prohibits the transfer of a radio license or any rights thereunder without Commission approval.<sup>117</sup> Generally speaking, one of the

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<sup>110</sup> See "700 MHz Guard Band Auction Raises \$519,892,575.00," *News Release* (Sept. 21, 2000). Additional information on the results of this auction may be found on the Commission's Auctions Web page: <<http://www.fcc.gov/wtb/auctions/>>.

<sup>111</sup> See 47 C.F.R. §1.2109(e).

<sup>112</sup> See Cinergy Comments at 25; ComEd Comments at 26; Entergy Comments at 24; SCANA Comments at 26-27; SBT Comments at 19; Ameren Comments at 25; Boeing Reply Comments at 3; Blooston II Reply Comments at 11. See generally AWWA Comments at 9; PIRSC Comments at 18.

<sup>113</sup> See *700 MHz: Second Report and Order*, 15 FCC Rcd at 5319-21 ¶¶ 42-47.

<sup>114</sup> See 47 U.S.C. § 309(a) (Commission authority to grant applications found to serve the public interest, convenience, and necessity).

<sup>115</sup> See *700 MHz: Second Report and Order*, 15 FCC Rcd at 5320-21 ¶ 45.

<sup>116</sup> See 47 U.S.C. §§ 310(d). See also *id.* at 5321 ¶ 46.

<sup>117</sup> 47 U.S.C. §§ 310(d). In any examination of control, the Commission considers both legal (*de jure*) and actual (*de facto*) control.

Commission's primary concerns in any analysis under Section 310(d) is to determine what party or parties may be held accountable for activities undertaken pursuant to a Commission license.<sup>118</sup> In the *700 MHz Second Report and Order*, we concluded that our Guard Band Manager rules allowing licensees to lease spectrum to third parties were consistent with the requirement that licensees retain ultimate control of their licenses.<sup>119</sup> For example, we provided Guard Band Managers with full authority and the duty to take whatever actions are necessary to ensure third-party compliance with the Act and our rules.<sup>120</sup> We also stated that a Guard Band Manager has the right to suspend or terminate its lessee's operations if the lessee's system is causing harmful interference or otherwise violating Commission rules.<sup>121</sup> We believe that the approach taken in the 700 MHz Guard Band proceeding demonstrates that band manager licensing can be implemented consistently with the requirements of Section 310(d). To the extent that we adopt alternative models for band manager licensing in future service-specific proceedings, we believe that issues relating to the statutory framework for such models can and should be addressed in those proceedings.<sup>122</sup>

44. While we conclude that band manager licensing should be considered as an option in the

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<sup>118</sup> *Id.* For example, in the case of broadcast auxiliary facilities, the Commission has emphasized that it would hold the broadcast licensee responsible for any interference or misuse of the facilities that occurs during operation by the non-licensed user. See Amendment of Part 74, Subpart F of the Commission's Rules to Permit Shared Use of Broadcast Auxiliary Facilities with Other Broadcast and Non-broadcast Entities and to Establish New Licensing Policies for Television Broadcast Auxiliary Stations, BC Docket No. 81-794, *Report and Order*, FCC 83-153, at 12, 53 Rad. Reg. 2d (P & F) 1101, 1983 WL 183062 (1983). The principle of licensee responsibility may be found throughout the Commission's rules. See, e.g., Implementation of Section 3(n) of the Communications Act – Regulatory Treatment of Mobile Services, GN Docket No. 93-252, *Second Report and Order*, 9 FCC Rcd 1411, 1430-31 (1994); 47 C.F.R. §§ 90.179(b)(licensee of shared radio station is responsible for assuring that facility is used in compliance with Commission rules); 21.13(f)(licensee must retain effective control where day-to-day management and operation of facilities are carried out by manager). We emphasize, however, that any analysis of *de facto* control over a band manager license must be considered in the context of this unique licensing scheme, and our express authorization of these activities pursuant to a band manager license application.

<sup>119</sup> See *700 MHz Second Report and Order*, 15 FCC Rcd at 5321 ¶ 46. We also required Guard Band spectrum use agreements to contain provisions under which the spectrum lessee agrees to comply with all applicable Commission rules, accept FCC oversight and enforcement consistent with the Guard Band Manager's license, and cooperate fully with any investigation or inquiry conducted by either the Commission or the Guard Band Manager. *Id.* These provisions ensure that the Commission has an additional means of enforcing its rules directly against the lessee. They do not, however, diminish the rights or obligations of the Guard Band Manager to exercise control as licensee.

<sup>120</sup> *Id.*, 15 FCC Rcd at 5322-23 ¶ 50.

<sup>121</sup> See *700 MHz Second Report and Order*, 15 FCC Rcd at 5322-23 ¶ 50. We also required Guard Band spectrum use agreements to contain provisions under which the spectrum lessee agrees to comply with all applicable Commission rules, accept FCC oversight and enforcement consistent with the Guard Band Manager's license, and cooperate fully with any investigation or inquiry conducted by either the Commission or the Guard Band Manager. *Id.* These provisions ensure that the Commission has an additional means of enforcing its rules directly against the lessee. They do not, however, diminish the rights or obligations of the Guard Band Manager to exercise control as licensee.

<sup>122</sup> We also address issues relating to Section 310(d) as it applies to spectrum leasing in our secondary markets proceeding. See *Secondary Markets Notice* at ¶¶ 70-82.

licensing of private services, we recognize that there are also arguments in favor of retaining the current site-by-site licensing approach in existing private radio services, as many commenters advocate.<sup>123</sup> Commenters raise legitimate concerns about the costs to spectrum users, both in terms of financial costs and delays in making spectrum accessible, that may be associated with changing a licensing scheme in an existing service. In light of these considerations, we have no plans at this time to implement band manager licensing in existing private radio bands that are licensed on a site-by-site basis.<sup>124</sup> We will continue to evaluate this issue on an ongoing basis, however. As many of the commenters who oppose band manager licensing acknowledge, demand for private radio spectrum is increasing and available spectrum is scarce.<sup>125</sup> Thus, while existing licensing schemes in the private radio services may tend to avoid mutually exclusive applications, such approaches may also raise barriers to new demands for access to private radio spectrum that may have significant public benefits. Compared with transactional costs and time periods associated with acquiring a full-term license under the Commission's existing licensing regimes, band manager licensing may have advantages because band managers may be able to complete frequency coordination and authorize wireless operations with significantly lower transactional costs and in less time. A number of commenters have observed that past Commission initiatives, such as refarming and authorization of infrastructure sharing, have increased spectral efficiency in the private radio services.<sup>126</sup> We believe that band manager licensing is another method that under some circumstances can help us progress towards greater efficiency in the use of private radio bands.<sup>127</sup>

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<sup>123</sup> See, e.g., PCIA Comments at 2-5; SBT Reply Comments at 17; API Reply Comments at 7.

<sup>124</sup> Our experience is that the use of geographic overlay licenses in private radio services may promote spectrum efficiency. See, e.g., *Refarming Report and Order*, 10 FCC Rcd at 10138-39 ¶¶ 141-143. Indeed, one may conceive of many scenarios under which this flexible licensing tool might be employed to alleviate congestion in encumbered frequency bands. By way of illustration, a band manager overlay licensee might aggregate unencumbered spectrum from one band with spectrum leased from an incumbent licensee in another frequency band within its geographic license service area. The band manager could then lease the aggregated spectrum to third parties. This is not to imply that the incumbent would suffer a degradation in service, as the band manager might provide the incumbent with equipment that is more spectrally efficient or might offer to operate the incumbent's system over other licensed frequencies as part of its bargain, provided such uses are otherwise consistent with the Commission's rules.

<sup>125</sup> See, e.g., Cinergy Comments at ii ("Private radio spectrum is already insufficient to meet the needs of eligibles..."); API Comments at 22; PCIA Comments at 21-22; Motorola Comments at 9.

<sup>126</sup> See Motorola Comments at 9; NTCC Comments at 7-8.

<sup>127</sup> Indeed, we are currently considering a proposal advanced by the Association of American Railroads under which a large number of incumbent private radio licenses would be aggregated into a single band manager-type license. See "Wireless Telecommunications Bureau Seeks Comment on Association of American Railroads Petition for Modification of Licenses for Use in Advanced Train Control Systems and Positive Train Control Systems," *Public Notice*, DC 00-1171 (rel. May 26, 2000) (seeking authority to modify 1069 land mobile base stations using six 900 MHz channel pairs into single geographic license whose total area would be defined as a 140-mile zone centered on the rights-of-way of all operating rail lines in the United States). We also note that some public safety and private radio users have been required to seek regulatory relief from certain regulatory requirements in order to have the flexibility to engage in some of the types of arrangements that might be accommodated under a band manager licensing. See, e.g., "Wireless Telecommunications Bureau Seeks Comment on Western Resources, Inc. Request for Waiver to Permit Sharing of Its 900 MHz Industrial and Land Transportation Trunked Radio System With Public Safety Users," *Public Notice*, DA 00-1405 (rel. June 23, 2000).

45. While we are hopeful that band manager licensing can yield efficiencies in existing spectrum use, we also agree with private radio users that this is a complement to rather than a substitute for pursuing new spectrum allocations.<sup>128</sup> We therefore intend to continue to explore the need for new spectrum allocations to address the needs of private and public safety users. We also believe that band manager licensing should be carefully considered as a licensing option for newly-allocated spectrum. For example, we have recently initiated a proceeding to reallocate 27 MHz of spectrum in bands below 3 GHz from Federal Government to non-government use, and have sought comment on proposals for band manager licensing in portions of that spectrum.<sup>129</sup>

46. We also believe that band manager licensing can be structured to prevent the types of problems that some commenters contend will occur, including problems of interference,<sup>130</sup> loss of spectrum efficiency,<sup>131</sup> and inadequacy of user access and service.<sup>132</sup> Although the rights and obligations of band managers may vary somewhat from service to service, we anticipate that band managers will generally have economic incentives to eliminate interference so as to ensure that end users receive quality service. Band managers will also be required to coordinate the use of frequencies among end user clients to minimize interference, and will be obligated to ensure that their lessees satisfy the interference protection requirements set forth in the Commission's rules both as to incumbent private radio licensees and licensees in adjacent frequency bands. Band managers will also be responsible for resolving interference conflicts among their customers and, in the first instance, among their customers and neighboring users of spectrum licensed to other band managers or other licensees. We have recognized that one way to allow greater flexibility in the use of spectrum is to permit licensees to negotiate arrangements among themselves to control interference rather than rely on mandatory technical rules.<sup>133</sup>

47. Band managers also have the potential to promote more efficient use of their licensed spectrum due to their financial incentive to maximize spectral efficiency and use. This incentive is likely to encourage band managers to reach private commercial agreements with incumbents, other band managers and adjacent licensees on effective spectrum management. The band manager will be responsible for managing a significant portion of spectrum and will attempt to maximize its use by finding additional third party users. In this way, band manager licensing may achieve greater efficiencies than existing licensing schemes in appropriate circumstances. Similarly, we find little merit in assertions that band managers will engage in unfair or discriminatory behavior<sup>134</sup> and warehouse spectrum.<sup>135</sup> We are confident that band managers will have incentives to open the use of the spectrum

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<sup>128</sup> Some commenters support the use of band manager licensing only for new spectrum allocations. *See, e.g.,* USMSS Comments at 14; Joint Filers Comments at 21-22.

<sup>129</sup> *See 27 MHz Reallocation Order* at ¶¶ 26, 31-32.

<sup>130</sup> *See, e.g.,* UTC Comments at 41.

<sup>131</sup> *See, e.g.,* AWWA Comments at 9.

<sup>132</sup> *See, e.g., id.* at 8-9.

<sup>133</sup> *See Spectrum Policy Statement*, 14 FCC Rcd at 19,870-71 at ¶ 9.

<sup>134</sup> *See, e.g.,* API Comments at 17; SBT Comments at 18; Cinergy Comments at 25; Entergy Comments at 25; SCANA Comments at 27; Ameren Comments at 26; ComEd Comments at 28.

<sup>135</sup> *See* SBT Comments at 17; OSC Comments at 1. *See generally* API Reply Comments at 7.

for all eligible users. Nonetheless, we will consider whether it is appropriate for band managers in other bands to be subject to the same types of rules as 700 MHz Guard Band Managers regarding fair and nondiscriminatory access to the band manager's spectrum, and limits on the type of restrictions that band managers may impose on their customers' use of the spectrum.<sup>136</sup> If circumstances warrant, moreover, the Commission might consider imposing reasonable access standards or other requirements to forestall anticompetitive behavior.<sup>137</sup>

48. In assessing whether a band manager licensing mechanism may be appropriate for a specific private services band, we intend to look at a number of factors. For example, we might consider whether there are entities who can effectively perform the functions of a band manager, and whether other licensing options may be overly cumbersome or inefficient. Our decisions on whether and how to license band managers in other bands may also be guided by our experience with the 700 MHz Guard Bands. However, the band manager rules we adopt in other bands may differ in some or all respects from our Guard Band Manager rules. As an initial matter, if we decide to license band managers in other bands, we will determine whether the spectrum should be licensed exclusively to band managers or to band managers along with other types of licensees. In considering band manager licensing, we will decide whether the band manager may be solely a broker of spectrum or may also use its licensed spectrum for its own internal communications or to provide telecommunications services.

49. If we permit band managers to use their spectrum in addition to leasing it, we will also consider whether rules are needed to ensure that band managers continue to perform their core spectrum management functions. Thus, if we determine that a band manager will not be limited to acting as a spectrum broker, we will also consider whether it is appropriate to limit the amount of spectrum that a band manager may retain for its own use.<sup>138</sup> In addition, we will consider whether to adopt rules concerning the types of entities that may lease spectrum from a band manager. For example, if we decide to limit the amount of spectrum that a band manager may employ for its own communications needs or service offerings, we might advance that regulatory objective by limiting the amount of spectrum that a band manager leases to affiliated entities. We may provide the band manager in a given band flexibility to lease its spectrum for a wide range of uses, including fixed or mobile, private or commercial radio services. Alternatively, we could adopt eligibility restrictions for the band managers similar to those we have historically adopted for licensees in existing private radio services.<sup>139</sup>

50. We believe that the framework outlined above presents a workable set of guidelines in our future considerations of whether and how to license band managers in private radio services, and how to advance the policy objectives we establish for the bands under consideration. We emphasize that, where we find band manager licensing to be appropriate, we intend to seek input on how band manager licenses can be most appropriately defined for the service in a manner that affords users the broad flexibility to

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<sup>136</sup> See, e.g., *id.* at 5327-28 ¶¶ 63-67 (establishing standards of fair and nondiscriminatory access for Guard Band Manager leasing activities).

<sup>137</sup> In the 700 MHz proceeding, for example, we require Guard Band Managers to lease the predominant amount of their spectrum to non-affiliates. See *700 MHz: Second Report and Order*, 15 FCC Rcd at 5325 ¶ 59. We also remind licensees and spectrum users that state and federal antitrust and consumer protection laws may apply to their conduct.

<sup>138</sup> See, e.g., *id.* at 5326 ¶ 59 (limiting amount of spectrum Guard Band Managers may lease to affiliates).

<sup>139</sup> See, e.g., 47 C.F.R. §90.35(a) (eligibility for Part 90 licenses on Industrial/Business Pool frequencies).

access spectrum, maximizes efficient use of the spectrum, and yields greater benefits than site-by-site or other traditional licensing techniques.

## B. Auction Design for Private Radio Spectrum Deemed Subject to Auction

51. We next discuss issues of auction design and implementation for those services that were not subject to auction under the 1993 Budget Act but may be determined to be subject to auction under our revised auction authority. The services that may be determined to be subject to auction under our expanded auction authority are, by and large, private radio services which are presently licensed under procedures that generally do not result in the filing of mutually exclusive applications. Thus, we next consider issues of auction design and implementation for those services that may be subject to auction in the future.

### 1. Competitive Bidding Methodology and Design

52. Background. We have concluded above that Section 309(j), as amended by the Balanced Budget Act, gives the Commission authority to conduct auctions in the private services if, subject to its obligation to avoid mutual exclusivity, the Commission determines that the use of competitive bidding would serve the public interest.<sup>140</sup> In the event that the Commission adopts a licensing scheme that results in mutual exclusivity, the Commission seeks to develop a competitive bidding process that is tailored to the specific characteristics of the private radio services, the various purposes for which spectrum in those services is used, and the needs of the various types of entities holding licenses in those services.<sup>141</sup> In the *Notice*, we stated that Section 1.2103(a) of our rules sets forth the various types of auction designs from which we may choose to award licenses for services or classes of services subject to competitive bidding.<sup>142</sup> We also pointed out that under Section 309(j) the Commission has authority to design and test other auction methodologies.<sup>143</sup> In light of these options, we sought comment generally on the types of competitive bidding designs and methodologies to be considered for any private radio services that may be determined to be auctionable as a result of the Balanced Budget Act.<sup>144</sup> We also asked about the frequency with which we should conduct auctions of private radio services spectrum that we determine is auctionable, and whether we should conduct auctions at regularly scheduled intervals.<sup>145</sup> In addition, we asked whether certain procedures such as bidding credits and spectrum caps would be

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<sup>140</sup> See Section III.A.1. *supra*.

<sup>141</sup> See *Notice*, 14 FCC Rcd at 5244 ¶ 77.

<sup>142</sup> *Id.* at 5244-45 ¶ 78; 47 C.F.R. § 1.2103(a). Alternative designs include: (1) sequential multiple-round auctions, using either oral ascending, remote and/or on-site electronic bidding; and (2) sequential or simultaneous single round auctions, using either remote and/or on-site electronic bidding, or sealed bids. See generally 47 C.F.R. § 1.2103(a).

<sup>143</sup> *Id.* at 5244-45 ¶ 78 (citing Amendment of Part 1 of the Commission's Rules -- Competitive Bidding Procedures, WT Docket No. 97-82, *Order, Memorandum Opinion and Order and Notice of Proposed Rule Making*, 12 FCC Rcd 5686, 5691 ¶ 6 (1997)).

<sup>144</sup> *Id.* at 5245 ¶ 79.

<sup>145</sup> *Id.* at 5245 ¶ 80.

appropriate in the private radio services.<sup>146</sup>

53. Discussion. Although we received little public comment on these issues, we believe that the specialized nature of private radio services merits consideration of changes to our general auction design and procedures. We intend to consider proposals to amend our competitive bidding methodology for specific private radio services on a service-by-service basis. We may, for instance, decide to implement procedures such as bidding credits, spectrum caps, and auctions at regularly scheduled intervals. We have provided bidding credits to eligible applicants in many of our previous auctions<sup>147</sup> and believe that applicants for licenses in the auctionable private radio services should also be eligible to receive such financial benefits provided they meet the necessary criteria. We further believe that scheduling auctions for licenses in the private services at regular intervals would be particularly beneficial to the private wireless industry. We recognized in the *Notice* that private internal radio service licensees using spectrum to conduct their day-to-day business operations may not be able to wait a significant amount of time to obtain authorizations for the frequencies they need to conduct their businesses.<sup>148</sup> Conducting auctions at regularly scheduled intervals of whatever spectrum we determine to be available in our inventory would ensure that private users have the opportunity to acquire the spectrum they need to operate their businesses. Further, we confirm our determination made in the *Part 1 Third Report and Order* to continue to define small businesses for purpose of private wireless auction rules based on the characteristics and capital requirements of the specific service.<sup>149</sup>

## 2. Eligibility Requirements

54. Background. The *Notice* solicited comment on a broad range of questions relating to eligibility for participation in spectrum auctions for private radio services.<sup>150</sup> In particular, we sought comment on whether to restrict eligibility to participate in auctions for private wireless services so that we might be able to tailor a competitive bidding system to afford private wireless users reasonable opportunities to obtain sufficient spectrum to meet the needs of their day-to-day business operations. We requested comment on whether participation in private wireless spectrum auctions should be limited to certain types of entities, such as small businesses, non-commercial entities or public safety organizations, and whether to afford certain classes of applicants priority status in an auction.

55. Discussion. With respect to services that are currently restricted to private radio eligibles, we have no plans to change existing eligibility and use rules. Our decision of whether to use competitive bidding to assign licenses is independent of any determination relating to licensee eligibility.

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<sup>146</sup> *Id.* at 5247 ¶ 87.

<sup>147</sup> See, e.g., Amendment of Part 1 of the Commission's Rules -- Competitive Bidding Procedures, WT Docket No. 97-82, Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, ET Docket No. 94-32, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374 (1997) (modified by *Erratum*, DA 98-419 (rel. Mar. 2, 1998)) (adopting small business bidding credits). See also 47 C.F.R. § 1.2110 (definition of small business designated entities for purposes of FCC's competitive bidding processes).

<sup>148</sup> *Notice*, 14 FCC Rcd at 5245 ¶ 80.

<sup>149</sup> See *Part 1 Third Report and Order*, 13 FCC Rcd at 388 ¶ 18.

<sup>150</sup> See *Notice*, 14 FCC Rcd at 5245-47 ¶¶ 81-87.

56. As to newly allocated spectrum, we will make decisions on eligibility at the time we promulgate specific service rules for those bands. In recent years, the Commission has generally favored open eligibility rather than eligibility restricted to particular types of entities. We have taken this approach based on the finding that open eligibility generally promotes efficiency in spectrum markets and results in the award of licenses to those who value them most highly.<sup>151</sup> Nevertheless, we recognize that this general approach may not be appropriate in all cases and we may decide to restrict eligibility in particular cases if such restrictions are consistent with our spectrum management responsibilities under Section 309(j).

### 3. Processing of New Applications

57. Background. In the *Notice*, we posed a number of questions concerning the implementation of competitive bidding for services in which licenses will be assigned by auction for the first time.<sup>152</sup> In particular, we requested comment on measures that might be necessary to prevent applicants from using the current application and licensing processes to engage in speculative activity prior to our adoption of auction rules, such as temporary application freezes or interim rules imposing shorter time periods for construction or build-out.<sup>153</sup>

58. Discussion. In the event we decide to adopt competitive bidding for a private radio service, we will continue to make service-by-service determinations as to whether to temporarily suspend acceptance of applications for new licenses, amendments, or major modifications, or adopt interim rules imposing shorter time periods for construction or build-out. Commenters uniformly oppose the use of application freezes,<sup>154</sup> noting that they can be disruptive to existing operations and can often last longer than initially anticipated. We are mindful that even short-term freezes have the potential to harm incumbents as well as potential new entrants and, by extension, the public.<sup>155</sup>

59. We observe that the Commission has delegated authority to impose application filing freezes in the private wireless services to the Chief of the Wireless Telecommunications Bureau.<sup>156</sup> While we

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<sup>151</sup> See generally *Market-Based Spectrum Policy*, at 92-111.

<sup>152</sup> See *Notice*, 14 FCC Rcd at 5249 ¶¶ 96-97.

<sup>153</sup> See *id.*

<sup>154</sup> See, e.g., Cinergy Comments at 26-27; UTC Comments at 24-25; MRFAC Comments at 13; Ameren Comments at 26-28; CellNet Comments at 17-19; UTC Reply at 20-22.

<sup>155</sup> See, e.g., Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems; Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *First Report and Order*, 11 FCC Rcd 16,570, 16,581-82 (1996). Thus, in declining requests to impose a freeze on certain private wireless license applications, we noted that we are “reluctant to freeze the acceptance of applications without evidence that there is a serious problem that cannot be resolved under current rules and procedures.” Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Services, PR Docket No. 92-235, *Second Memorandum Opinion and Order*, 14 FCC Rcd 8642, 8649-50 ¶ 14 (1999)(denying requests by API and UTC for imposition of freeze on channels adjacent to those used by Power or Petroleum Radio Services).

<sup>156</sup> See 47 C.F.R. §§ 0.131; 0.331. Such decisions are procedural in nature and therefore not subject to the notice and comment requirements of the Administrative Procedure Act. See 5 U.S.C. §§ 553(b)(A); see also (continued....)

defer to the Bureau's expertise and experience in making such determinations, we believe that the Bureau should be guided by a principle of using the least restrictive means available to deter speculative applications. Generally, the Bureau has carefully balanced the benefits and costs to incumbent users, new entrants and the public of applying such measures.

60. In exercising its delegated authority, the Bureau has generally refrained from imposing licensing freezes upon applications for private, internal use facilities on the grounds that such applications are not subject to the same speculative pressures that may be present in commercial contexts.<sup>157</sup> In commercial contexts our practice has been to temporarily suspend the acceptance of applications upon the adoption of competitive bidding rules and new geographic licensing schemes;<sup>158</sup> however, in the private wireless services the Bureau has previously found that incentives for speculative abuse are limited.<sup>159</sup> Most commenters contend that the private radio services are not likely to be targeted by speculators and oppose the use of freezes in these services.<sup>160</sup> Nevertheless, we are concerned that for private services in which we decide licenses will be assigned by competitive bidding for the first time, it may be necessary to adopt temporary licensing freezes to prevent applicants from using the current application and licensing processes to engage in speculative activity prior to our adoption of auction rules, thus limiting the effectiveness of our decision.

61. Commenters are divided on the issue of whether short construction deadlines should be used to deter speculative licensing activity.<sup>161</sup> For example, Cinergy asserts that "[t]he current construction periods represent the perfect balance of being short enough to prevent speculation but long enough to allow all types of licensees to secure funding, order equipment and build new communications

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*NeighborhoodTV Co. v. FCC*, 742 F.2d 629, 637-38 (D.C. Cir. 1984) (holding Commission's filing freeze is a procedural rule not subject to the notice and comment requirements of the Administrative Procedures Act); *Buckeye Cablevision, Inc. v. United States*, 438 F.2d 948, 952-53 (6th Cir. 1971) (same); *Kessler v. FCC*, 326 F.2d 673, 680-82 (D.C. Cir. 1963) (same).

<sup>157</sup> See Notice, 14 FCC Rcd at 5249 n. 224.

<sup>158</sup> See, e.g., *MAS Report and Order*, 15 FCC Rcd at 12,005 ¶115 (2000).

<sup>159</sup> See, e.g., Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems; Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Second Report and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 2732, 2757-58 ¶ 43 (1997) (exempting private radio applications from paging licensing freeze and prohibiting conversion of private facilities to commercial use). Licensing freezes are not unheard of in the private services, however. For example, the Bureau imposed a temporary freeze on the acceptance of PLMR applications ancillary to its freeze on applications for public coast stations sharing the same spectrum. (Public coast licensees are CMRS providers that allow ships at sea to send and receive messages and interconnect with the public switched network.) See Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 12 FCC Rcd 16949, 17015 ¶ 32 (1997). See also Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, *Notice of Proposed Rule Making and Order*, 12 FCC Rcd 7973, 8003-8004 ¶¶ 68-71 (1997).

<sup>160</sup> See, e.g., CellNet Comments at 19; UTC Comments at 24-26.

<sup>161</sup> See *id.* at 25-26;

facilities.”<sup>162</sup> AWWA finds this proposal “problematic” for utilities and public agencies which, it asserts, would be unable to complete the bidding, contracting and construction processes within time frames any shorter provided for under existing rules.<sup>163</sup> Others favor shortened construction periods in the event of a transition to a new licensing scheme,<sup>164</sup> but differ on whether extension requests should be permitted.<sup>165</sup> We have previously recognized that shortened construction deadlines may serve as an effective deterrent to potential speculation by those with no sincere interest in constructing radio facilities.<sup>166</sup> With respect to private radio services, we remain convinced that reduced construction periods may be an appropriate spectrum management tool. However, given the broad range of private services involved in this rulemaking and those services’ differing objectives and needs, the Commission will not adopt a new framework here for making such determinations. Rather, we will retain the discretion to adopt temporary licensing freezes or shorter construction periods as a means of deterring speculative licensing activity on a service-by-service basis.

### C. Exemption from Competitive Bidding for Public Safety Radio Services

62. Since it initially became law, Section 309(j)(2) of the Communications Act has contained provisions qualifying the Commission’s auction authority.<sup>167</sup> As is discussed above, the Balanced Budget Act significantly revised Section 309(j)(2) to enumerate three types of spectrum licenses to which our competitive bidding authority does not apply.<sup>168</sup> Two of the three exemptions relate to categories of broadcast licenses.<sup>169</sup> The auction exemptions for those categories of broadcast licenses have been addressed in other Commission decisions and will not be discussed any further here.<sup>170</sup>

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<sup>162</sup> Cinergy Comments at 28. *See* Ameren Comments at 28 (same); SCANA Comments at 29 (same); Entergy Comments at 27 (same); ComEd Comments at 30 (same);

<sup>163</sup> *See* AWWA Comments at 10.

<sup>164</sup> *See, e.g.*, UTC Comments at 10.

<sup>165</sup> *Compare* NTCC Comments at 21 (“reducing the construction period is not as critical as ensuring that construction deadlines are not extended for just any reason.”) *with* CellNet Comments at 20 (urging waiver of deadlines where wide-area or complex networks are involved).

<sup>166</sup> *See, e.g.*, 220 MHz *Third Report and Order*, 12 FCC Rcd 10,943, 11,085 ¶ 336 (1997)(requiring full construction and operation of Phase I non-nationwide 220 MHz facilities prior to beginning primary fixed or paging operations); Amendment of Part 90 of the Commission’s Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, PR Docket No. 89-552, *Fifth Report and Order*, 13 FCC Rcd 24,615, 24,629 (1998)(requiring construction and operation of Phase I non-nationwide 220 MHz systems prior to disaggregation or partitioning).

<sup>167</sup> *See* discussion at Section II, *supra*. *See also* *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352-54.

<sup>168</sup> *See* discussion at Section II, *supra*.

<sup>169</sup> *See* 47 U.S.C. § 309(j)(2)(B) and (C) (as amended by Balanced Budget Act, § 3002) (exemptions for digital television services, noncommercial educational broadcast stations, and public broadcast stations).

<sup>170</sup> We addressed Section 309(j)(2)(C)’s statutory exemption for noncommercial and public broadcast stations in the First Report and Order in MM Docket 97-234. *See* In the Matter of Implementation of Section 309(j) of the Communications Act – Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses; Reexamination of the Policy Statement on Comparative Broadcast Hearings; Proposals to (continued....)

Rather, the following discussion focuses on the scope of Section 309(j)(2)(A)'s exemption for "public safety radio services,"<sup>171</sup> and mechanisms that may be used in the event we receive mutually exclusive applications for public safety radio services.

### 1. Scope of Public Safety Radio Services Exemption

63. Background. Section 309(j)(2)(A), as amended by the Balanced Budget Act, states that the Commission's auction authority does not extend to licenses and permits issued

(A) For public safety radio services, including private internal radio services used by State and local governments and non-government entities and including emergency road services provided by not-for-profit organizations, that –

- used to protect the safety of life, health, or property; and
- (ii) are not made commercially available to the public;

As we stated in the *Notice*, this exemption from the Commission's auction authority is of particular importance to determining the auctionability of wireless spectrum.<sup>172</sup> In the *Notice*, we sought comment on the various elements of the statutory exemption.

64. Discussion. As discussed in greater detail below, we conclude that the statutory exemption for public safety services applies not only to traditional public safety services such as police, fire, and emergency medical services, but also to services designated for non-commercial use by entities such as utilities, railroads, transit systems, and others that provide essential services to the public at large and that need reliable internal communications in order to prevent or respond to disasters or crises affecting their service to the public. We also conclude that the public safety exemption applies only to services in which these public safety uses comprise the dominant use of the spectrum. Thus, services in which such

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Reform the Commission's Comparative Hearing Process to Expedite the Resolution of Cases, MM Docket No. 97-234, GC Docket No. 92-52, Gen Docket No. 90-264, *First Report and Order*, 13 FCC Rcd 15,920, 15,928-31 ¶¶ 20-25 (1998).

The statute also exempts initial licenses for digital television (DTV) services. The Commission issued initial DTV licenses simultaneously to all eligible full-power permittees and licensees in the Fifth Report and Order in the DTV proceeding (MM Docket 87-268). See *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, Fifth Report and Order*, 12 FCC Rcd 12809 (1997). The DTV license assignments were made pursuant to Section 336(a)(1) of the Communications Act, which was added by the Telecommunications Act of 1996; these assignments were made prior to the enactment of the Balanced Budget Act. As we observed in our *Notice of Proposed Rule Making* in MM Docket No. 97-234, competitive bidding procedures for future digital television services that do not fall within Section 309(j)(2)(B)'s exemption for DTV licenses will be the subject of a future rulemaking. See *In the Matter of Implementation of Section 309(j) of the Communications Act – Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses; Reexamination of the Policy Statement on Comparative Broadcast Hearings: Proposals to Reform the Commission's Comparative Hearing Process to Expedite the Resolution of Cases*, MM Docket No. 97-234, GC Docket No. 92-52, Gen Docket No. 90-264, *Notice of Proposed Rule Making*, 12 FCC Rcd 22,363, at 22,368-69 ¶ 10 (1997).

<sup>171</sup> See 47 U.S.C. § 309(j)(2)(A).

<sup>172</sup> *Notice*, 14 FCC Rcd at 5222 ¶ 26.

uses are not dominant (and in which mutual exclusivity occurs) are not statutorily exempt from auctions, even if some individual licensees in the service may choose to use the spectrum for public safety purposes as defined by the statute.

65. As set forth in greater detail below, in applying this analysis to existing private services, we conclude that spectrum currently allocated to the Public Safety Radio Pool, to the extent it is licensed on an exclusive basis, is within the scope of the statutory exemption. We also conclude that the exemption does not apply to exclusively licensed spectrum in the 220, 800, and 900 MHz bands allocated to Industrial/Land Transportation and Business Radio use, nor does it apply to exclusive private land mobile radio frequencies in the 470-512 MHz band,<sup>173</sup> because the dominant use of these bands is not “public safety” use as defined by Section 309(j)(2)(A). With respect to other private services that are not exclusively licensed, we do not need to determine the applicability of the public safety exemption at this time because mutual exclusivity does not occur in these services.

66. We do provide, however, the following guidance regarding our interpretation of the public safety exemption, and discuss the factors we will consider in assessing its applicability to future situations. As a threshold matter, we find that the exemption should be evaluated in terms of its application to particular services rather than to particular classes or groups of licensees within a service. The statutory language provides that the exemption applies to “public safety radio services.”<sup>174</sup> While the legislative history of the Balanced Budget Act refers to particular “users” as being exempt, we believe that this language is best interpreted as illustrating the types of services that fall within the new statutory term, *i.e.*, services like those used by the entities referenced in the legislative history. Because the applicability of the exemption to any service must be decided before the service is licensed, our analysis in each case must be based on the use and eligibility rules that we establish for the service. We therefore agree with the majority of commenters that delineating the scope of the exemption is a matter of determining whether the rules for a particular service cause it to fall within the definition of a “public safety radio service,” rather than attempting to predict the uses of spectrum that will develop after licensing occurs.<sup>175</sup> We therefore conclude that the exemption can apply only to spectrum that the Commission specifically allocates for the particular uses that Congress intended to benefit.<sup>176</sup> We note that the public safety radio services exemption does not preclude the Commission from allocating additional spectrum only for traditional public safety services as defined by Part 90 of the Commission’s Rules. We discuss each of the elements of the statutory exemption in turn.

67. *Private Internal Radio Services.* The statutory public safety exemption includes “private internal radio services” used for public safety purposes.<sup>177</sup> In the *Notice*, we proposed to define “private

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<sup>173</sup> See 47 C.F.R. § 90.311(a)(1) (permitting a wide variety of users in the 470-512 MHz band, including Business Radio Service eligibles).

<sup>174</sup> 47 U.S.C. § 309(j)(2)(A) (emphasis supplied).

<sup>175</sup> The majority of commenters agree that the exemption applies to “services.” See, e.g., Alliant Energy Comments at 2; AAA Comments at 10; API Comments at 4-8; CellNet Comments at 10; Georgia Comments at 3; DeKalb County, Georgia Water and Sewer and Division Comments at 2; EBMUD Comments at 3. *But see* Cinergy Comments at 13 (exemption applies to certain licensees); *accord* ComEd Comments at 19; Entergy Comments at 13.

<sup>176</sup> *Notice*, 14 FCC Rcd at 5224-25 ¶ 30.

<sup>177</sup> 47 U.S.C. § 309(j)(2)(A).

internal radio services” by adapting the Part 90 definition of “internal system” to also include fixed services (which are governed by Part 101).<sup>178</sup> The commenters broadly support adopting the Part 90 definition for purposes of determining this element of the statutory exemption. We therefore adopt this definition, *i.e.*, we define a “private internal radio service” as a service in which the licensee does not make a profit, and all messages are transmitted between fixed operating positions located on premises controlled by the licensee and the associated fixed or mobile stations or other transmitting or receiving devices of the licensee, or between mobile stations or other transmitting or receiving devices of the licensee.<sup>179</sup>

68. We also requested comment on whether the “private internal” use definition should include services in which licensees operate systems on a not-for-profit basis and under a cost-sharing agreement, on a cooperative basis, or as a multiple-licensed system for internal communications to support their own operations.<sup>180</sup> Consistent with most of the comments addressing this issue, we now decide that once we deem a particular service to be a public safety radio service, the spectrum will be auction-exempt even if some of the users operate their systems under some type of cost-sharing arrangement or through multiple licensing.<sup>181</sup> We note, however, that the services on which such use is permitted currently (*e.g.*, Private Land Mobile Radio Services) are licensed in a manner that does not give rise to mutual exclusivity, so that it is not necessary at this time to consider the applicability of the exemption to these services.<sup>182</sup>

69. *State and Local Governments.* The exemption includes “private internal radio services” used by both public and private entities, *i.e.*, “state and local governments and non-government entities.”<sup>183</sup> In the *Notice*, we requested comment on our tentative conclusion that we should presume that all state and local government entities are eligible for licensing in the public safety radio services without any further showing as to eligibility, rather than require all state and local government entities to demonstrate their eligibility for licensing in the public safety radio services.<sup>184</sup> In establishing eligibility for licensing in the public safety spectrum in the 700 MHz band, the Commission concluded that all state and local government entities would be presumed eligible without further showing as to eligibility.<sup>185</sup> The Conference Report accompanying the Balanced Budget Act makes clear that Congress intended the public safety radio services exemption to be broader than the definition of “public safety services”

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<sup>178</sup> *Notice*, 14 FCC Rcd at 5225-26 ¶ 32.

<sup>179</sup> *Id.*

<sup>180</sup> *Id.* at 5226 ¶ 33. See *infra* at Section III.D.5. regarding multiple licensing.

<sup>181</sup> See, *e.g.*, ARINC Comments at 3-4; Arizona Public Service Company Comments at 3; BGE Comments at 2; Georgia Comments at 2-3; DeKalb County, Georgia Water and Sewer Division Comments at 3; EBMUD Comments at 3; ITA Joint Commenters Comments at 10-11; SCANA Reply Comments at 5; Ameren comments at 22-24; UTC Comments at 14.

<sup>182</sup> See *infra* at Section III.D.5. for a discussion on multiple licensing.

<sup>183</sup> 47 U.S.C. § 309(j)(2)(A).

<sup>184</sup> See *Notice*, 14 FCC Rcd at 5227 ¶ 36.

<sup>185</sup> See The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements through the Year 2010, WT Docket No. 96-86, *First Report and Order and Third Notice of Proposed Rule Making*, 14 FCC Rcd 152, 180-81 ¶ 54 (1998).

eligible for licensing in the 700 MHz band, *i.e.*, to include a larger universe of services.<sup>186</sup> Commenters addressing this issue agree that the Commission should presume eligibility for state and local government entities.<sup>187</sup> Consequently, we conclude that all state and local government entities are eligible for licensing in the public safety radio services without any further showing as to eligibility, subject to the statutory requirements for spectrum to be deemed auction-exempt.

70. *Non-government Entities.* In the *Notice*, we requested comment on whether we should establish any eligibility criteria for non-government entities (NGOs) to ensure that public safety radio services spectrum licensed to these entities is used to protect the safety of life, health, or property and is not made commercially available to the public.<sup>188</sup> Most commenters addressing this issue oppose the imposition of eligibility restrictions, such as governmental approval requirements.<sup>189</sup> We agree. A statutory analysis supports this conclusion. The definition for “public safety services” in Section 337(f) of the Communications Act requires NGOs to be authorized by a governmental entity in order to be eligible for public safety spectrum in the 764-776/794-806 MHz (700 MHz) band, but the public safety radio services exemption in Section 309(j)(2) contains no such condition. This distinction indicates that Congress did not intend to subject NGOs to such requirements in order to be eligible for public safety radio service spectrum.<sup>190</sup> Accordingly, we conclude that we shall not establish any eligibility criteria for NGOs separate and apart from the eligibility requirements for each public safety radio service.<sup>191</sup>

71. Section 309(j)(2)(A) also provides that the exemption includes services used by not-for-profit organizations providing emergency road services. The legislative history to the Balanced Budget Act reflects that this service exemption includes “radio services used by not-for-profit organizations that offer emergency road services, such as the American Automobile Association,” and explains that the Senate “included this particular exemption in recognition of the valuable public safety service provided by emergency road services.”<sup>192</sup> The Conference Report specifies that this exemption was not meant to include “internal radio services used by automobile manufacturers and oil companies to support emergency road services provided by those parties as part of the competitive marketing of their products.”<sup>193</sup> Commenters were divided<sup>194</sup> in response to our question in the *Notice* regarding whether

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<sup>186</sup> Conference Report at 572.

<sup>187</sup> *See, e.g.*, APCO Comments at 2-6; MDTA Comments at 4; NJHA Comments at 3; NJTA Comments at 3-4; NYSTA Comments at 3-4; Nextel Reply Comments at 11; The Peace Bridge Authority Comments at 3; UTC Comments at 15.

<sup>188</sup> *Notice*, 14 FCC Rcd at 5228 ¶ 37.

<sup>189</sup> *See, e.g.*, CII Comments at 13-14; UTC Comments at 15.

<sup>190</sup> *See McGarry v. Secretary of the Treasury*, 853 F.2d 981, 986 (D.C. Cir. 1988) (statutory provisions should be construed as to be consistent with each other) (citing *Citizens to Save Spencer County v. United States Environmental Protection Agency*, 600 F.2d 844, 870 (D.C. Cir. 1979)).

<sup>191</sup> Commercial service providers are not NGOs in this context. Commercial service providers intending to provide telecommunications services to public safety entities will not be able to apply for auction-exempt spectrum. *See infra* ¶¶82-83.

<sup>192</sup> Conference Report at 572.

<sup>193</sup> *Id.*

we should exclude providers of emergency road services that are not organized as not-for-profit entities from using auction-exempt spectrum.<sup>195</sup> The statute makes a specific distinction between for-profit and not-for-profit entities in this context. The statute does not make this distinction in any other context with respect to the exemptions from competitive bidding. We conclude that a radio service used by for-profit entities providing emergency road services is not auction-exempt. The for-profit nature of such entities takes them outside the scope of the emergency road services exemption, even if they arguably otherwise meet the statutory criteria.<sup>196</sup>

72. *Protection of Life, Health, or Property.* Congress requires that the exemption apply to private internal services used by state and local governments and non-government entities to protect life, health, or property. Thus, the most prominent issue in delineating the scope of the exemption is to determine which services are “used to protect the safety of life, health, or property” within the meaning of the statute.<sup>197</sup>

73. As a threshold question, we must determine what proportion of users in a given service must be the type of user that Congress intended to be able to make use of exempt spectrum, in order for the service to be deemed a public safety radio service. For example, is a service auction-exempt so long as *any* of the users within that service are qualified to obtain such spectrum? Or must all, or the majority, of the entities within the service, be qualified to obtain such spectrum? In the Multiple Address System proceeding, we looked to the “dominant” or “primary” use of each band to determine whether to assign it by competitive bidding.<sup>198</sup> In other words, we examined whether the majority of users within a given band are qualified to obtain auction-exempt spectrum, in order to determine whether that band should be designated as auction-exempt. We will use the same approach here.

74. In order to determine whether a given service is primarily utilized by the type of user Congress intended to exempt from competitive bidding, we must determine what users Congress intended to include within the exemption. In the *Notice*, we tentatively concluded that Congress intended

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<sup>194</sup> See AAA Comments at 3 (Commission should only include not-for-profit entities under this exemption); *accord* Cal State Reply Comments at 5. *But see* Rocky Mountain Reply Comments at 4-5 (Commission should allow for-profit entities within this exemption).

<sup>195</sup> See *Notice*, 14 FCC Rcd at 5227 ¶ 35.

<sup>196</sup> AAA’s contentions that the Commission may not auction spectrum allocated to either the former Auto Emergency Radio Services (AERS), nor spectrum outside of the former AERS frequencies used by AAA and other non-profit auto emergency users, AAA Comments at 4, are related to this issue. AAA notes that in many locations, the AERS frequencies are so crowded that AAA clubs have been forced to obtain licenses in different private land mobile frequency bands, and contends that under the language of Balanced Budget Act, these frequencies also are included in the exemption when they are used by AAA or another not-for-profit emergency road service provider. *Id.* These comments relate to the larger issues of whether the exemption applies to blocks of spectrum or to classes of users. As explained above, we conclude that the exemption applies to blocks of spectrum, not classes of users. AAA’s concerns regarding frequencies used by non-profit auto emergency users will be addressed at a future date, when we make a service-by-service determination of which services fall within the exemption.

<sup>197</sup> 47 U.S.C. § 309(j)(2)(A)(i).

<sup>198</sup> *MAS Report and Order*, 15 FCC Rcd 11,965, 11,967 ¶¶ 20, 25.

to include those users of spectrum currently allocated for traditional public safety uses.<sup>199</sup> Specifically, we proposed to designate the following spectrum as exempt from assignment by competitive bidding procedures:

1. Private Land Mobile Radio Services currently assigned to the Public Safety Radio Pool. This pool is comprised of those services formerly<sup>200</sup> housed in the Public Safety Radio Services<sup>201</sup> and the Special Emergency Radio Services.<sup>202</sup>
2. Public safety spectrum in the 700 MHz band.<sup>203</sup>
3. The ten 220 MHz band non-nationwide channel pairs allocated for the exclusive use of Public Safety eligibles.<sup>204</sup>
4. The two contiguous channel pairs in each of the thirty-three inland VHF Public Coast areas set aside for public safety users.<sup>205</sup>

Commenters agree that Congress clearly intended to include this spectrum within the exemption.<sup>206</sup> We now conclude that the portions of spectrum listed above are public safety radio services for purposes of eligibility for the exemption. We also find that the five channel pairs in the 932/941 MHz Multiple Address Systems bands designated for Federal Government and/or public safety use as defined by Part 90 of the Commission's rules<sup>207</sup> fall within the exemption.

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<sup>199</sup> Notice, 14 FCC Rcd at 5223-24 ¶¶ 27-29.

<sup>200</sup> The former services were consolidated in the Public Safety Pool in 1997. In the Matter of Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, *Second Report and Order*, 12 FCC Rcd 14307, 14317-18 ¶ 20 (1997) ("*Refarming Second Report and Order*").

<sup>201</sup> See 47 C.F.R. § 90.16. The Public Safety Radio Services included the Local Government, Police, Fire, Highway Maintenance, Forestry-Conservation, and Emergency Medical Radio Services. See 47 C.F.R. Part 90, Subpart B, Note, former § 90.15 (1997).

<sup>202</sup> See 47 C.F.R. § 90.16. The Special Emergency Radio Service covered the licensing of radio communications of hospitals and clinics, ambulance and rescue services, veterinarians, persons with disabilities, disaster relief organizations, school buses, beach patrols, persons or organizations in isolated areas, and emergency standby and repair facilities for telephone and telegraph systems. See 47 C.F.R. Part 90, Subpart C, Note, former § 90.33 (1997).

<sup>203</sup> See Notice, 14 FCC Rcd at 5224 ¶ 28.

<sup>204</sup> Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service. PR Docket No. 89-552, *Third Report and Order; Fifth Notice of Proposed Rule Making*, 12 FCC Rcd 10943, 10973-74 ¶ 61 (1997). See Notice, 14 FCC Rcd at 5224 ¶ 29.

<sup>205</sup> Amendment of the Commission's Rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, PR Docket No. 92-257, 13 FCC Rcd 19853 (1988). See Notice, 14 FCC Rcd at 5224 ¶ 29.

<sup>206</sup> See, e.g., APCO Comments at 3-4; Motorola Comments at 5; Nextel Comments at 8-9.

<sup>207</sup> See *MAS Report and Order*, 15 FCC Rcd at 11,971 ¶ 37.

75. As stated earlier, we believe that Congress intended for the exemption to include a larger universe of uses than traditional public safety and the legislative history of the Balanced Budget Act provides guidance regarding the intended further scope of the exemption. Specifically, the Conference Report states that the exemption for public safety radio services includes the private internal radio services used by “utilities, railroads, metropolitan transit systems, pipelines, private ambulances, and volunteer fire departments.”<sup>208</sup> The inclusion of private ambulances and volunteer fire departments is due to the fact that the services they perform supplement or, in some areas, replace traditional public safety functions ordinarily provided by local governments. Accordingly, we conclude that spectrum bands, the dominant use<sup>209</sup> of which are by entities that use their communications systems to perform such public safety services, should be exempt from auction.

76. However, the other entities identified in the Conference Report -- utilities, pipelines, metropolitan transit systems and railroads -- do not have, as their primary missions, traditional public safety functions. Utilities and pipelines exist to bring, among other things, gas, water and electricity to consumers; transit systems and railroads exist to transport people and goods. In determining what common characteristics they do have, and thus what other entities Congress intended the exemption to encompass, we find helpful the Final Report of the Public Safety Wireless Advisory Committee (PSWAC), which the Commission, jointly with the National Telecommunications and Information Administration, chartered to provide advice and recommendations on the current and future requirements for public safety communications.<sup>210</sup> PSWAC recommended a definition of “Public Services” as services “that furnish, maintain, and protect the nation’s basic infrastructures which are required to promote the public’s safety and welfare.”<sup>211</sup> It stated, “Public service providers, such as transportation companies and utilities[,] rely extensively on radio communications in their day-to-day operations, which involve safeguarding safety and preventing accidents from occurring.”<sup>212</sup> The Commission relied on a similar concept when it established special frequency coordination requirements for spectrum formerly used exclusively by the power, petroleum, and railroad industries because, in these industries, radio is used as a critical tool for responding to emergencies that could impact hundreds or thousands of people. Although the primary functions of these organizations is not necessarily to provide safety services, the nature of their day-to-day operations provides little or no margin for error and in emergencies they can take on an almost quasi-public safety function. Any failure in their ability to communicate by radio could have severe consequences on the public welfare. For example, the failure or inability of trains to communicate with each other or a central dispatcher could result in unsafe conditions and an increased risk of derailment. Also, utility companies need to possess the ability to coordinate critical activities during or following storms or other natural disasters that disrupt the delivery of vital services to the public such as provision of electric, gas, and water supplies.<sup>213</sup>

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<sup>208</sup> Conference Report at 572.

<sup>209</sup> *See supra* ¶ 74.

<sup>210</sup> Public Safety Wireless Advisory Committee, *Final Report* at 7 (1996).

<sup>211</sup> *Id.* at 45.

<sup>212</sup> *Id.* at 33.

<sup>213</sup> *Reforming Second R&O*, 12 FCC Rcd at 14329-30 ¶ 41. Subsequently in this proceeding, the Commission amended the rules to require that frequencies formerly allocated to the power, petroleum, and (continued....)

77. Against this background, we observe that the entities identified in the Conference Report which do not use their communications principally for the protection of life, health or property -- utilities, railroads, metropolitan transit systems and pipelines -- have two characteristics in common. First, these entities have an infrastructure that they use primarily for the purpose of providing essential public services to the population at large. In this context, an infrastructure can be described as fixed physical facilities that extend beyond the licensee's place of business to areas where the public at large live and work and are therefore exposed to adverse results stemming from a breakdown in the licensee's infrastructure. The second common characteristic is that the reliability and availability of the communications systems for these entities is necessary for them, as part of their regular mission, to prevent or respond to a disaster or crisis affecting the public at large.<sup>214</sup> Specifically, the public depends on these services, which affect the daily lives of members of the public and interruption in the service may have dangerous consequences. Accordingly, we conclude that a radio service not allocated for traditional public safety uses will be deemed to protect the safety of life, health or property within the meaning of Section 309(j)(2)(A)(i) if the dominant use of the service is by entities that (1) have an infrastructure that they use primarily for the purpose of providing essential public services to the public at large; and (2) need, as part of their regular mission, reliable and available communications in order to prevent or respond to a disaster or crisis affecting the public at large.

78. For instance, an electric utility meets both prongs of the two-part standard. Power lines extend far beyond the utility's power plant and into areas where members of the public live and work. A breakdown in the electric utility's infrastructure or fixed physical facilities (e.g., a live wire) creates a dangerous condition for members of the public. Additionally, a dependable communications system is necessary for an electric utility to respond to an interruption in service that may hinder the delivery of vital services (e.g., without power, a home may lack heat in the winter or air conditioning in the summer). Similarly, a metropolitan transit system meets both parts of the standard. A metropolitan transit system has an infrastructure or fixed physical facilities (e.g., railroad tracks) where a breakdown in the system (e.g., derailment) creates a dangerous condition that would adversely affect the public at large. Moreover, a reliable communications system is essential for a metropolitan transit system to enable quick response to any disruption in service as an interruption can create a dangerous condition and would impede the delivery of vital transportation services to the public.

79. Some commenters argue that all private wireless communications, in some respect, protect the safety of life, health, and property of the public, and therefore all private wireless services should be auction-exempt.<sup>215</sup> They note that individuals in virtually every industry rely upon their private wireless

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railroad industries on either an exclusive or shared basis be coordinated only by the frequency coordinator of the relevant service, or, at the relevant frequency coordinator's discretion, with its written concurrence. Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, *Second Memorandum Opinion and Order*, PR Docket No. 92-235, 14 FCC Rcd 8642, 8647-48 ¶ 9 (1999) ("*Refarming Second MO&O*"). The *Refarming Second MO&O* is currently on reconsideration, and has been stayed with respect to frequencies formerly allocated on a shared basis to these industries. Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, *Fourth Memorandum Opinion and Order*, 15 FCC Rcd 7051 (1999) ("*Refarming Fourth MO&O*").

<sup>214</sup> See, e.g., ComEd Comments at 16-19; Entergy Comments at 14-16; Joint Commenters Comments at 7; API Reply Comments at 7.

<sup>215</sup> See Cinergy Comments at 18, 21; Entergy Comments at 17, 20; Joint Commenters Comments at 8-9, 14; SBT Comments at 3-4; USMSS Comments at 5-6.

radio systems to ensure the safety of their employees and enhance their productivity and operations and contribute to the continued growth and vibrancy of the economy.<sup>216</sup> As a general matter, we agree with these characterizations. We conclude, however, that extending the exemption to all private wireless services would go beyond the legislative intent. As noted earlier, Section 309(j) formerly applied only to subscriber-based services, and thus exempted the private wireless services because these services were generally not subscriber-based. The Balanced Budget Act amended the statute to direct the Commission to use auctions to resolve mutually exclusive applications for all radio services, unless they fall within a specific exemption. To interpret the exemption for public safety radio services in Section 309(j)(2)(A) in a manner that effectively negates the changes to Section 309(j)(1) would not be reasonable.

80. It is apparent that Congress deemed utilities, railroads, metropolitan transit systems and pipelines to be entities that protect the safety of life, health, or property for purposes of public safety radio services. We agree with the commenters, however, that the list in the Conference Report was presented for illustrative purposes and not as an exhaustive listing.<sup>217</sup> Nonetheless, we believe that only spectrum used for the provision of services similar to those listed in the Conference Report should be included in the exemption, and that only similar entities can satisfy the aforementioned two-part standard.<sup>218</sup> For instance, telephone maintenance, although not specifically mentioned in the Conference Report, meets the two-part standard. In applying the standard, providers of such services have an infrastructure that serves the public where a breakdown in the system (e.g., cut wire) impedes the ability to communicate by telephone, which is a vital service in today's society. In addition, a reliable communications system is necessary for telephone maintenance to enable quick response to an interruption in the delivery of telephone service in an emergency situation. On the other hand, for example, taxi cabs do not meet both prongs of the two-part standard and are therefore unlike those entities listed in the Conference Report. Although taxi cabs arguably provide essential services to the public, the providers of this service do not have an infrastructure or fixed physical facility where a breakdown in its system (e.g., a disabled taxi cab) adversely affects the public at large.

81. While we will not at this time attempt to provide an extensive list of exempt public safety radio services, we do conclude that the Industrial/Land Transportation and Business Radio categories within the 800 MHz band<sup>219</sup> and 900 MHz band,<sup>220</sup> and the private land mobile radio frequencies in the

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<sup>216</sup> Indeed, virtually all of the commenters argue that the specific radio services they use, or that are used by the entities they represent, fall within the "public safety radio services" exemption because such radio uses in some way enhance the safety of their employees or the public safety. See, e.g., ARINC Comments at 9 (airlines and aviation support); AAR Reply Comments at 3 (railroads); CellNet Comments at 2-3 (gas, electric and water); ComEd Comments at 2-5 (electric utilities); Florida Fruit & Vegetable Association Reply Comments (RM-9405) at 2-3 (Florida agricultural producers); FIT Comments at 8 (forest products); Ford Reply Comments at 6-8 (automotive); HP Comments (RM-9405) at 1 (medical telemetry); LMCC Comments at 6-8 (land mobile); Motorola Comments at 3-10 (private land mobile); NRMCA Reply Comments (RM-9405) at 2 (concrete); NPGA Reply Comments (RM-9405) at 3 (propane); NUCA Reply Comments (RM-9405) at 2 (water and wastewater infrastructure).

<sup>217</sup> See, e.g., Joint Commenters Comments at 8. Indeed, the Conference Report states that the exemption "includes" the above listed-services, and does not state that the exemption is "limited to" those services. Conference Report at 572.

<sup>218</sup> See *supra* ¶ 77.

<sup>219</sup> The "800 MHz Band" is a reference to the frequencies in the 806-824 and 851-869 MHz bands. See 47 C.F.R. Part 90, Subpart S.

470-512 MHz band, shall not be exempt from auction under the public safety radio service exemption. The dominant use of these frequencies is by persons primarily engaged in the operation of a commercial activity, to support day-to-day business operations (such as dispatching and diverting personnel or work vehicles, coordinating the activities of workers and machines on location, or remotely monitoring and controlling equipment). The dominant use is not by entities with an infrastructure that they use primarily for the purpose of providing essential public services to the public at large, and that need, as part of their regular mission, such spectrum to prevent or respond to a disaster or crisis affecting the public at large. Accordingly, we conclude that the 470-512,<sup>221</sup> 800, 900 MHz bands shall be subject to auction to the extent that mutually exclusive applications are filed. However, we emphasize that we will continue to utilize existing licensing approaches for these bands, which tend to avoid mutual exclusivity, thereby minimizing the possibility of competitive bidding.

82. *Noncommercial Proviso.* The public safety radio services exemption requires that the radio services not be made commercially available to the public.<sup>222</sup> We sought comment on how the term “not made commercially available to the public” should be defined.<sup>223</sup> The Commission has interpreted similar language in implementing the congressional definition of “commercial mobile service.” In that context, the Commission interpreted the term “for profit,”<sup>224</sup> which we believe is inherent to “commercial” use, as including any service that is provided with the intent of receiving monetary gain.<sup>225</sup> The Commission also found that a service is available “to the public” if it is offered to the public without restriction as to who can receive it.<sup>226</sup> Because the purpose of that proceeding was to determine the meaning of commercial mobile service, as defined in Section 332(d) of the Communications Act, the Commission was required to include in its definition those services “effectively available to a substantial portion of the public.”<sup>227</sup> The Commission concluded that if service is provided exclusively for internal use or is offered only to a significantly restricted class of eligible users, it is made available only to insubstantial portions of the public, and cited as an example of this, the Public Safety Radio Services.<sup>228</sup>

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<sup>220</sup> The “900 MHz Band” is a reference to the frequencies in the 896-901 and 935-940 MHz bands. See *id.*

<sup>221</sup> We recognize that, unlike the 800 and 900 MHz Industrial/Land Transportation and Business Radio categories, the 470-512 MHz band is available to Public Safety users. See 47 C.F.R. § 90.311(a). We do not believe, however, that the level of use by such users is sufficient to require a different conclusion with respect to the applicability of the public safety radio service exemption to the 470-512 MHz band.

<sup>222</sup> 47 U.S.C. § 309(j)(2)(A)(ii).

<sup>223</sup> *Notice*, 14 FCC Rcd at 5230 ¶¶ 45-46, 5232-33 ¶ 51.

<sup>224</sup> See 47 U.S.C. § 332(d)(1).

<sup>225</sup> In the Matter of Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, *Second Report and Order*, GN Docket No. 93-252, 9 FCC Rcd 1411, 1427 ¶ 43 (1994) (*CMRS Second R & O*).

<sup>226</sup> *Id.* at 1439 ¶ 65.

<sup>227</sup> See 47 U.S.C. § 332(d)(1)(B).

<sup>228</sup> *CMRS Second R & O*, 9 FCC Rcd at 1440 ¶ 67. See also *id.* at 1509-10 ¶¶ 265-268. While we have held that provision of service to eligibles in the Business Radio Service category is essentially service to the (continued....)

We shall apply a definition of “commercially available to the public” that is consistent with these definitions. Accordingly, for the purposes of the auction exemption under Section 309(j) of the Communications Act, we find that “not made commercially available to the public” means that the service is not provided with the intent of receiving compensation, and is not available to a substantial portion of the public.<sup>229</sup>

83. In the *Notice*, we also asked whether commercial service providers intending to provide telecommunications services to public safety entities should be able to apply for auction-exempt spectrum.<sup>230</sup> We agree with the commenters who argue that commercial service providers and public safety agencies have very different goals and incentives regarding spectrum use, and caution that if licenses for scarce public safety radio spectrum are assigned to commercial providers, public safety entities may find it virtually impossible to secure sufficient spectrum for their own internal needs. Also, if we expand eligibility to commercial providers declaring an intent to serve public safety entities, it would be difficult to ensure that the dominant use of this spectrum would be by entities that protect the safety of life, health, or property.<sup>231</sup> In addition, we conclude that permitting such use of public safety radio service spectrum would be contrary to Congress’s intent. We believe that Congress created the exemption to give entities that protect the safety of life, health, or property, at a minimum, an opportunity to secure access to spectrum without having to pay for it. Assigning public safety radio service spectrum to commercial providers could conflict with this intention by compelling public safety radio service eligibles to pay for access to auction-exempt spectrum.<sup>232</sup> We agree with Nextel that including commercial third-party providers within the exemption would enlarge it beyond all limits of reasonableness.<sup>233</sup> Thus, we believe that creating an opportunity for commercial operators to obtain public safety radio service spectrum would contravene congressional intent.

84. *Restrictions on Use.* Another important issue is the scope of permissible uses for public safety radio services spectrum, and more specifically, whether such licensees are required to use their auction-exempt frequencies exclusively for safety-related purposes.<sup>234</sup> Section 337(f)(1) of the

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public, this is because the class of eligibles in this pool is extremely broad. Specifically, this pool encompasses users engaged in commercial activities and clergy activities, as well as, those that operate educational, philanthropic, or ecclesiastical institutions, hospitals, clinics and medical associations. 47 C.F.R. § 90.31.

<sup>229</sup> We also requested comment on whether services on which entities operate their systems under a nonprofit cost-sharing or cooperative agreement, or as a multiple licensed system, should be considered commercially available to the public. *Notice*, 14 FCC Rcd at 5230 ¶ 46. As we decided in the previous paragraph, once we have determined that a particular radio service is a public safety radio service, the spectrum will be auction-exempt even if some users operate their systems using such licensing arrangements.

<sup>230</sup> *Notice*, 14 FCC Rcd at 5228 ¶ 38.

<sup>231</sup> *See Notice*, 14 FCC Rcd at 5228 ¶ 38.

<sup>232</sup> We recognize that there may be situations where public safety radio service eligibles find it more cost effective to contract out their commercial needs to a commercial service provider, rather than construct their own systems. We believe that leaving this choice in the hands of the public safety radio service eligibles best comports with congressional intent.

<sup>233</sup> Nextel Reply Comments at 12-13.

<sup>234</sup> *See Notice*, 14 FCC Rcd at 5224-25 ¶ 30.

Communications Act defines a “public safety service” for determining eligibility for licensing in the 24 MHz of spectrum reallocated for public safety services, as a service the “sole or principal purpose” of which is to protect the safety of life, health or property.<sup>235</sup> By contrast, the auction exemption under Section 309(j)(2) contains no such restriction. The majority of commenters oppose the imposition of a requirement that spectrum be *solely* or *principally* used for public safety communications.<sup>236</sup> They argue that it is difficult to draw the line where public safety ends and routine business begins because day-to-day business communications often have a safety-related purpose.

85. We conclude that because utilities, pipelines and railroads do not use their frequencies exclusively for safety-related purposes, Congress could not have intended that entities using exempt spectrum use that spectrum exclusively for such purposes. Furthermore, it would be overly burdensome to require licensees to differentiate between, and use different frequencies for, pure public safety communications and business communications, which may also serve a safety-related purpose. Accordingly, we agree that we should not, at this time, impose an additional restriction upon licensees in auction-exempt services to limit their use of their assigned frequencies to be exclusively for safety-related purposes. We do, however, expect that licensees making use of auction-exempt spectrum will be using that spectrum primarily to protect the safety of life, health or property. This is so because, given our principles for determining what frequencies are in public safety radio services, we anticipate that the spectrum will be used by entities with reasonably predictable (in frequency and types of occurrences, if not in exact timing) public safety-related needs. When such needs arise, licensees should dedicate their public safety radio service spectrum to addressing the situation. We also expect users of auction-exempt spectrum to make efficient use of that spectrum for safety-related purposes, and to use other available spectrum, or commercial providers, for more general business-related purposes that are not primarily safety-related.

86. *Eligibility Requirements.* In the *Notice*, we noted that applicants seeking spectrum for public safety radio services without bidding competitively are able to apply for such designated spectrum or, if they meet the requirements of Section 337(f), file a waiver request for unassigned spectrum pursuant to Section 337(c).<sup>237</sup> In this connection, we sought comment on whether entities eligible for licenses in the public safety radio services should also be eligible to bid competitively for spectrum that has been designated for private or commercial radio use.<sup>238</sup>

87. We do not believe that it was Congress’s intent to forbid entities eligible to be licensed on public safety radio services from voluntarily participating in auctions for spectrum that is not exempted from our competitive bidding authority. Hence, we conclude that entities eligible for licenses in the public safety radio services are eligible to participate in auctions of other spectrum. We note that the licensing mechanisms adopted in this Report and Order would not enable entities eligible for public

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<sup>235</sup> 47 U.S.C. § 337(f)(1)(A).

<sup>236</sup> See, e.g., AAA Reply Comments at 4; AAR Comments at 5-7; CellNet Comments at 11; CII Comments at 11-13; ComEd Comments at 9-12; Ford Reply Comments at 6-7; Joint Commenters Comments at 8; LMCC Comments at 6-7; PCIA Comments at 5-6; UTC Comments at 16-18. *But see* Nextel Comments at 8-9 (arguing that only bands which are used exclusively or almost exclusively for public safety should be auction-exempt). See also ARINC Comments at 2 and 7 (supporting a principal use standard).

<sup>237</sup> *Notice*, 14 FCC Rcd at 5246 ¶ 85.

<sup>238</sup> *Id.*

safety radio services to select auctionable spectrum and exercise an exemption privilege. Therefore, those entities eligible for licenses in the public safety radio services that desire to participate in the auction of other spectrum will be required to comply with the same regulations, including filing and payment requirements, to which every other bidder is subject. Accordingly, the Commission will not make any special provisions for entities eligible for the public safety radio services that choose to competitively bid for auctionable spectrum. Further, if a public safety radio service eligible voluntarily chooses to seek licenses in auctionable spectrum, the spectrum will not thereby become auction-exempt.

## 2. Resolution of Mutually Exclusive Applications for Services Exempt from Competitive Bidding

88. Background. In the *Notice*, we requested comment on how to resolve mutual exclusivity between applications for spectrum exempt from competitive bidding.<sup>239</sup> We noted that the Balanced Budget Act terminated the Commission's authority to use lotteries to choose among mutually exclusive applications and concluded that we are precluded from using random selection procedures to resolve mutually exclusive applications for auction-exempt public safety radio services.<sup>240</sup> Thus, we specifically sought comment on whether engineering solutions, negotiation, threshold qualifications, service regulations, or other means, such as comparative hearings and first-come, first-served licensing, should be used to resolve mutual exclusivity in cases where frequency coordination is unsuccessful in avoiding mutual exclusivity.<sup>241</sup>

89. Discussion. Commenters overwhelmingly express support for the Commission's continued use of frequency coordination as a mechanism to limit instances of mutually exclusive applications.<sup>242</sup> Although frequency coordination greatly reduces instances of mutual exclusivity, we acknowledge the possibility that it may not resolve all conflicts. Commenters offered various proposals to address situations where frequency coordination is not adequate. For instance, several commenters suggest that mutually exclusive applications may be resolved through first-come, first-served procedures.<sup>243</sup> We agree with these commenters that first-come, first-served procedures may resolve some cases of mutually exclusive applications. However, such procedures may not be as useful if applications are received on the same day from different coordinators, or if the Commission opens a filing window. During a filing window, each application is given a filing status equal to any other application filed during the window. Hence, frequency coordination, coupled with first-come, first-served licensing procedures may not prevent every case of mutual exclusivity.

90. Other commenters suggest alternative approaches, such as private negotiations, shared use

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<sup>239</sup> *Notice*, 14 FCC Rcd at 5233 ¶ 52.

<sup>240</sup> *Id.* at 5233 ¶ 53.

<sup>241</sup> *Id.*

<sup>242</sup> *See, e.g.*, AAR Comments at 8; Blooston Comments at 10; Boeing Comments at 5; NAM/ MRFAC, Inc. Reply Comments at 7; Motorola Comments at 3; Radscan Reply Comments at 6; RRS Comments at 4; Rocky Mountain Reply Comments at 6; SCANA Comments at 8.

<sup>243</sup> *See, e.g.*, Joint Commenters Comments at 7; Joint Commenters Reply Comments at 4; Intek Comments at 6; LMCC Comments at 3-4.

procedures and engineering solutions.<sup>244</sup> Specifically, CII Joint Commenters and United Telecom Council present a detailed procedure involving private negotiations to encourage the resolution of mutually exclusive applications without the Commission's involvement.<sup>245</sup> In this suggested procedure, applicants who file mutually exclusive applications must, within a specified time period, such as sixty to ninety days, resolve the conflict through private negotiation.<sup>246</sup> According to the commenters, the parties could devise engineering solutions and/or coordination procedures that would enable spectrum sharing.<sup>247</sup> Additionally, if the parties are unsuccessful at reaching an agreement by the end of the negotiation period, the applicants could be provided with the option of expedited alternative dispute resolution procedures, such as binding arbitration or mediation.<sup>248</sup> In the event that these procedures prove unsuccessful, the commenters indicate that the Commission should dismiss the applications and deem the requested frequencies unavailable for licensing by any party for a period of at least ninety days, as an incentive for the parties to reach an agreement.<sup>249</sup>

91. We are aware that there may be instances where frequency coordination and/or first-come, first-served licensing will be inadequate and the Commission will receive mutually exclusive applications for licenses in the public safety radio services. However, we believe that such instances will be rare and conclude that the Commission should continue to rely on the regulatory tools already available to it to resolve mutually exclusive applications that may not be resolved by competitive bidding. In addition to commenters' suggestion that we provide a time period during which mutually exclusive applicants may negotiate a mutually agreeable solution, the Commission can also work with the relevant frequency coordinators to find alternative spectrum, develop engineering solutions, dismiss the applications with or without prejudice, or refer the matter to a comparative hearing. These tools have been sufficient heretofore to resolve mutually exclusive applications for non-auctionable spectrum, and, particularly given the expectation that such situations will continue to be rare, there does not appear to be sufficient grounds to implement a new procedural framework.

#### **D. Proposals Regarding Private Land Mobile Radio Services**

92. A number of issues have been raised regarding our auction authority in the context of licensing in the private radio services. First, we consider whether geographic licensing and competitive bidding should be employed on the PLMR frequencies below 470 MHz that are currently licensed under a scheme developed in our "refarming" docket. Next, we consider a proposal advanced by a coalition of private radio users to create a third radio pool to accommodate the needs of "critical infrastructure industries." We also rule on a proposal advanced by the American Mobile Telecommunications Association, Inc. ("AMTA") to restructure the licensing framework for the 450-470 MHz band. This Report and Order also analyzes a proposal to permit the incorporation of PLMR spectrum in the 800 MHz band into commercial mobile radio services ("CMRS") systems. Finally, we address the issue of

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<sup>244</sup> See, e.g., Boeing Comments at 5; CII Comments at 23-24; UTC Comments at 19.

<sup>245</sup> CII Comments at 23-24; UTC Comments at 19.

<sup>246</sup> CII Comments at 23-24; UTC Comments at 19.

<sup>247</sup> CII Comments at 23-24; UTC Comments at 19.

<sup>248</sup> CII Comments at 23-24; UTC Comments at 19.

<sup>249</sup> CII Comments at 23-24; UTC Comments at 19.

whether the Part 90 multiple licensing rules should be changed in light of our revised auction authority.

### 1. Licensing of "Refarming" Bands

93. Background. In the *Notice*, we sought comment on whether the public interest would best be served by retaining our current licensing scheme, rather than adopting geographic licensing and competitive bidding, for the PLMR frequencies below 470 MHz.<sup>250</sup> We noted that the current licensing scheme for these frequencies came out of the lengthy "Refarming" proceeding,<sup>251</sup> in which the Commission, *inter alia*, consolidated the twenty PLMR services into two broad frequency pools,<sup>252</sup> and implemented procedures that will result in the transition to more spectrally efficient, narrowband technologies by requiring that future equipment meet increasingly efficient standards.<sup>253</sup>

94. Discussion. The commenters were nearly uniform in their opposition to the introduction of geographic area licensing in the Refarming bands.<sup>254</sup> The National Association of Manufacturers ("NAM") and MFRAC, Inc., for example, note that the Commission and the private radio community have spent the better part of the past eight years formulating and refining the policies for Refarming.<sup>255</sup> They caution that with the process nearly complete, users and equipment vendors would be subject to great uncertainty and displacement, should the current licensing scheme be changed, as the private land mobile community has relied on the Commission's Refarming decisions to date in forming investment plans.<sup>256</sup> We agree. Moreover, we believe that there simply has not been enough time since the adoption of the Refarming provisions to reap the full benefit of the revised procedures.

95. Moreover, we note that the refarmed bands below 470 MHz are currently licensed on a shared, rather than exclusive, basis.<sup>257</sup> Many licensees operate on the same channels in most geographic areas. These channels are heavily congested in most major urban areas, so the number of incumbents, particularly in the areas where geographic overlay licenses would be most desirable, would create nearly impossible due diligence requirements and would make the spectrum, at best, only marginally useful to a geographic area licensee. We believe that this militates against geographic overlay licensing of this

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<sup>250</sup> *Notice*, 14 FCC Rcd at 5241 ¶ 68.

<sup>251</sup> *See, e.g., Refarming Second R&O*, 12 FCC Rcd 14307; Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Memorandum Opinion and Order*, 11 FCC Rcd 17676 (1996); Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Report and Order and Further Notice of Proposed Rule Making*, 10 FCC Rcd 10076 (1995) ("*Refarming Report and Order and Further Notice*").

<sup>252</sup> *See Refarming Second R&O*, 12 FCC Rcd at 14315 ¶ 15.

<sup>253</sup> *Refarming Report and Order and Further Notice*, 10 FCC Rcd at 10098 ¶ 36.

<sup>254</sup> *See, e.g.,* AEP Comments at 4; API Comments at 12; AAR Comments at 7; Blooston Comments at 10; Cal State Reply Comments at 5; LMCC Comments at 4-6; Motorola Comments at 8. *But see* AMTA Comments at 2;

<sup>255</sup> NAM/MFRAC Reply Comments at 15.

<sup>256</sup> *Id.*; *accord. e.g.,* PCIA Comments at 4.

<sup>257</sup> *See* 47 C.F.R. § 90.173(a).

spectrum.

96. Thus, we conclude that the public interest would best be served by retaining our current licensing scheme. Accordingly, we shall not, at this time, reexamine the licensing scheme for the PLMR frequencies below 470 MHz. We emphasize, however, that this decision applies only to the existing allocation and not to any spectrum that might subsequently be allocated for PLMR services.<sup>258</sup> In addition, we would not be precluded from revisiting the licensing scheme for the Refarming bands at some later date and adopting a new approach, such as the use of band managers.<sup>259</sup>

## 2. UTC Proposal To Establish a New Public Safety Radio Pool in the Private Mobile Bands Below 470 MHz

97. Background. In the *Notice*, we requested comment<sup>260</sup> on a rulemaking petition submitted by UTC, The Telecommunications Association ("UTC"),<sup>261</sup> the American Petroleum Institute ("API"), and the Association of American Railroads ("AAR") (jointly referred to as the "Critical Infrastructure Industries" or "CII").<sup>262</sup> UTC represents electric, gas, water, and steam utilities, and natural gas pipelines.<sup>263</sup> API represents companies in all phases of the petroleum and natural gas industries.<sup>264</sup> AAR represents railroads operating in the United States, Canada, and Mexico.<sup>265</sup> The petition proposes to create a third radio pool, in addition to the Public Safety and Industrial/Business (I/B) Radio Pools already used for private radio frequencies below 470 MHz. We also sought comment on whether this approach would be feasible for other frequency bands.<sup>266</sup> For the reasons set forth below, we find that a third pool is not called for at this time, and we deny the petition for rule making.

98. Discussion. The petition urges the Commission to create a Public Service Radio Pool in the PLMR bands below 800 MHz open to entities that do not qualify for Public Safety Radio Pool spectrum, but are eligible to use the public safety radio service spectrum exempted from the Commission's auction authority under the Balanced Budget Act.<sup>267</sup> The CII propose to form the proposed Public Service Pool

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<sup>258</sup> See, e.g., Principals for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium, *Policy Statement*, 14 FCC Rcd 19868, 19878-79 ¶ 24 (1999).

<sup>259</sup> See, e.g., Service Rules for the 746-764 and 776-794 MHz Bands and Revisions to Part 27 of the Commission's Rules, *Second Report and Order*, 15 FCC Rcd 5299, 5311-14 ¶¶ 26-32 (2000).

<sup>260</sup> See *Notice*, 14 FCC Rcd at 5229 ¶ 41.

<sup>261</sup> UTC is now known as the United Telecom Council.

<sup>262</sup> UTC, The Telecommunications Association, American Petroleum Institute, and Association of American Railroads Petition for Rulemaking (RM-9405) (filed August 14, 1998) (UTC Petition).

<sup>263</sup> *Id.* at 2.

<sup>264</sup> *Id.*

<sup>265</sup> *Id.* at 3.

<sup>266</sup> See *Notice*, 14 FCC Rcd at 5229 ¶ 41.

<sup>267</sup> UTC Petition at 19.

from all of the channels formerly allocated exclusively to the Power, Petroleum and Railroad Radio Services before those services (and others) were consolidated into the I/B Pool in the *Refarming Second Report and Order*.<sup>268</sup> The CII also propose moving a portion of the channels formerly shared by these services with one or more of the other services now in the I/B Pool.<sup>269</sup> The CII further state that the Public Service Pool should also include frequencies formerly allocated to services used by any other industries that we conclude are eligible for auction-exempt public safety radio service spectrum. The CII recommend that the Commission should examine claims of eligibility for any new Public Service Pool closely.<sup>270</sup>

99. The CII argue that a pool to accommodate the needs of critical infrastructure industries is needed to protect the availability of spectrum for qualified entities, because of the public safety components of their requirements.<sup>271</sup> While critical infrastructure industries have legitimate spectrum needs, we do not believe these needs warrant removing frequencies from the I/B Pool. The I/B Pool was created to address the scarcity of PLMR spectrum, by consolidating spectrum to make fallow frequencies available to parties in need.<sup>272</sup> We are not persuaded that creating a third pool would not exacerbate the shortage of PLMR spectrum, overall, for the entire set of eligibles for the I/B Pool.

100. The CII also argue that a third pool is needed because the power, petroleum and railroad industries' radio operations need greater protection from interference caused by other users than the Commission has provided.<sup>273</sup> The CII note that the *Refarming Second Report and Order* requires entities that apply for frequencies formerly allocated solely to the Power, Petroleum, and Railroad Radio Services to obtain coordination from the frequency coordinator for the respective service.<sup>274</sup> They argue, however, that greater protection is needed in light of increasing instances of interference by new systems being licensed near utility and pipeline operations.<sup>275</sup> Critics of the petition argue that there is insufficient evidence of widespread interference problems to justify the creation of a third pool, and that

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<sup>268</sup> See *Refarming Second R&O*, 12 FCC Rcd at 14315-16 ¶ 15.

<sup>269</sup> UTC Petition at 21. The CII specifically propose that 61% of the shared low band frequencies, 8% of the shared frequencies in the 70 MHz band, 52% of the shared frequencies in the VHF high band, and 61% of the shared UHF frequencies should be allocated to the proposed new pool, in addition to all of the channels exclusively used by the CII.

<sup>270</sup> *Id.* at 19-20. A number of commenters urge that if we were to create a separate pool, they should also be included within that pool. See, e.g., ARINC Comments at 9 (airlines and aviation support); FFVA Reply Comments (RM-9405) at 2-3 (Florida agricultural producers); FIT Comments at 8 (forest products); HP Comments (RM-9405) at 1 (medical telemetry); NRMCA Reply Comments (RM-9405) at 2 (concrete); NPGA Reply Comments (RM-9405) at 3 (propane); NUCA Reply Comments (RM-9405) at 2 (water and wastewater infrastructure).

<sup>271</sup> UTC Petition at 7-8.

<sup>272</sup> See *Refarming Second R&O*, 12 FCC Rcd at 14315-16 ¶ 15.

<sup>273</sup> UTC Petition at 8.

<sup>274</sup> See *Refarming Second R&O*, 12 FCC Rcd at 14330 ¶ 42.

<sup>275</sup> UTC Petition at 9. See also API Reply Comments (RM-9405) at 3-5; AWWA Comments (RM-9405) at 1; AWWA Comments at 5-6; National Fuel Gas Company Comments (RM-9405) at 2; NRECA Comments (RM-9405) at 2-3; NU Comments (RM-9405) at 3; UTC Comments (RM-9405) at 7-9.

isolated incidences of interference do not create a justification.<sup>276</sup> We agree that the number of instances of actual electrical interference do not appear so large as to justify the inefficiencies that could arise from creating a third pool.

101. Furthermore, several commenters contend that the exclusive coordination prerogative granted to the CII creates a *de facto* separate pool for these entities, and that therefore a separate pool for the CII is not necessary.<sup>277</sup> We also note that the question of whether that exclusive coordination prerogative should be expanded to include frequencies formerly allocated to the Power, Petroleum, and Railroad Radio Services on a shared basis is pending in the *Refarming* proceeding.<sup>278</sup> We believe that the issue of how to protect these services from interference is more appropriately addressed there.

102. Finally, the CII contend that because Congress specifically intended to include within the exemption to competitive bidding the private internal radio services used by utilities, pipelines and railroads, the creation of a Public Service Radio Pool for the CII would effectuate Congressional intent by protecting those services from encroachment by non-essential services.<sup>279</sup> The purpose of the exemption from our competitive bidding authority for public safety radio services is to relieve entities that protect the safety of life, health, and property from having to purchase spectrum at auction.<sup>280</sup> There is no basis upon which to infer other or additional congressional intent with respect to this provision. Finally, the CII's argument that we should create a third pool in order to avoid complications due to the potential introduction of auctions in the I/B Pool is not persuasive.<sup>281</sup> Because PLMR frequencies below 470 MHz currently are licensed in a manner that tends to avoid mutually exclusive applications, such complications generally do not arise.<sup>282</sup>

103. Accordingly, for all the reasons stated above, we deny the petition. We note, however, that our decision not to create a third pool below 470 MHz does not preclude us from using other mechanisms (e.g., Bands Managers or a change of licensing schemes) in these or other bands, in order to appropriately respond to the concerns set forth by the CII.

### 3. AMTA Proposal To Restructure Licensing Framework for PLMR Services in the 450-470 MHz Band

104. *Background.* On July 30, 1999, after we released the *Notice*, AMTA, a trade association

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<sup>276</sup> See, e.g. PCIA Reply Comments (RM-9405) at 3; Petroleum Communications, Inc. Comments (RM-9405) at 2.

<sup>277</sup> *Refarming Fourth MO&O*, 15 FCC Rcd 7051. See, e.g., Joint Commenters Comments at 12; NAM /MRFAC Reply Comments at 3.

<sup>278</sup> See *Refarming Fourth MO&O*, 15 FCC Rcd at 7056 ¶ 14. (staying *Refarming Second MO&O*, 14 FCC Rcd at 8647-48 ¶ 9 (1999) (expanding the rule to formerly shared frequencies), pending resolution of petitions for reconsideration).

<sup>279</sup> UTC Petition at 7.

<sup>280</sup> See Conference Report at 572.

<sup>281</sup> UTC Petition at 17-18.

<sup>282</sup> *Notice*, 14 FCC Rcd at 5217 ¶ 14.

representing the specialized wireless communications industry, filed a petition for rule making proposing to fundamentally restructure the licensing framework for PLMR frequencies in the 450-470 MHz band.<sup>283</sup> Currently, this band is licensed by 6.25 kilohertz frequency pairs assigned on a site-by-site basis. The frequencies are licensed on a shared basis, and frequency coordination is required.<sup>284</sup> The frequencies are divided between the Public Safety Radio Pool (8 MHz) and the Industrial/Business (I/B) Radio Pool (12 MHz).<sup>285</sup>

105. AMTA proposes that we divide the 450-470 MHz band I/B Radio Pool so that 2 megahertz would be available for site-based licensing on a shared basis, and 10 megahertz would be licensed by geographic area in .5 megahertz paired blocks (creating twenty licenses per market).<sup>286</sup> Five of the twenty licenses would be set aside for private, internal systems, leaving the remaining fifteen available for either internal or commercial systems.<sup>287</sup> In addition, any incumbent that is not a winning bidder for its frequency and area would be required either to move to the shared channels or elect to receive service from a commercial geographic licensee.<sup>288</sup> The petition was placed on public notice on August 24, 1999.<sup>289</sup> We believe that it is appropriate to consider these proposals as part of the instant proceeding.

106. *Discussion.* Although we believe that geographic licensing is generally a highly efficient means of assigning spectrum, in this instance we agree with the commenters that do not believe such an approach is warranted in the 450-470 MHz band.<sup>290</sup> First, as we stated above in our discussion of the Refarming bands (which include the 450-470 MHz band), the benefits of geographic overlay licensing of this spectrum may be limited because these channels are heavily congested in most urban areas.<sup>291</sup> In addition, we note that many commenters were concerned by the AMTA proposal's effect on

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<sup>283</sup> AMTA Petition for Rulemaking (RM-9705) at 11 (filed July 30, 1999) (AMTA Petition II). AMTA filed a previous petition for rule making on June 19, 1998, proposing that certain Part 90 licensees be required to employ new spectrum-efficient technologies. AMTA Petition for Rulemaking (RM-9332) (filed June 19, 1999) (AMTA Petition I). Because the issues raised in that petition are relevant to the instant proceeding, we included it in the *Notice*. See *Notice*, 14 FCC Rcd at 5242 ¶ 71. We discuss AMTA Petition I *infra* in the *Further Notice of Proposed Rule Making*.

<sup>284</sup> See 47 C.F.R. §§ 90.173(a), 90.175.

<sup>285</sup> See 47 C.F.R. §§ 90.20(c)(3), 90.35(b)(3).

<sup>286</sup> AMTA Petition II at 13.

<sup>287</sup> *Id.*

<sup>288</sup> *Id.* at 16. An incumbent electing to obtain such service would receive replacement equipment paid for by the commercial geographic licensee. *Id.*

<sup>289</sup> Public Notice, Report No. 2356 (rel. Aug. 24, 1999).

<sup>290</sup> See, e.g., Blooston Comments (RM-9705) at 4; AAR Opposition (RM-9705) at 4 (implementation of the AMTA proposal will neglect railroad critical safety functions); APCO Comments (RM-9705) at 2; ARINC Comments (RM-9705) at 3; Mobex Opposition (RM-9705) at 4-5; Industry Coalition Joint Opposition (RM-9705) at 6 (the adoption of AMTA's proposals would merely suppress marketplace choice for no purpose other than to create new business opportunities for AMTA's members).

<sup>291</sup> See *supra* ¶ 95.