

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

In the Matter of	)	
	)	
Biennial Regulatory Review – Amendment of	)	WT Docket No. 03-264
Parts 1, 22, 24, 27, and 90 to Streamline and	)	
Harmonize Various Rules Affecting Wireless	)	
Radio Services	)	

**NOTICE OF PROPOSED RULEMAKING**

**Adopted:** December 29, 2003

**Released:** January 7, 2004

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

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

By the Commission: Commissioner Martin concurring and issuing a statement.

**TABLE OF CONTENTS**

Heading	Paragraph #
I. INTRODUCTION.....	1
II. BACKGROUND.....	2
III. DISCUSSION .....	4
A. Classification of Part 90 Frequency and/or Transmitter Site Deletions as Minor Modifications under Part 1.....	5
B. Effective Radiated Power / Equivalent Isotropically Radiated Power.....	10
C. Part 22 Transmitter Identification .....	12
D. Part 24 Power and Antenna Height Limits .....	13
E. Proposed Modifications to Part 90.....	19
1. Frequency Coordination.....	19
2. Emission Masks.....	21
3. 800 MHz and 900 MHz Supplemental Information.....	24
4. 800 MHz and 900 MHz Trunked Systems Loading, Construction and Authorization Requirements.....	26
5. 800 MHz and 900 MHz Power and Antenna Height .....	28
6. System Authorization Limit in Geographic Areas .....	31
7. Reporting Requirement for Trunked SMR Loading Data.....	32
8. 220 MHz Phase I Supplemental Progress Reports .....	33
F. Corrections and Updates to WRS Rules .....	34
IV. PROCEDURAL MATTERS.....	56
A. Comment Filing Procedures .....	56
B. <i>Ex Parte</i> Presentations .....	64
C. Regulatory Flexibility Act .....	65
D. Initial Paperwork Reduction Act Analysis.....	66
E. Contact Information .....	67
V. ORDERING CLAUSES.....	68

## Appendix, Initial Regulatory Flexibility Analysis

**I. INTRODUCTION**

1. In this Notice of Proposed Rulemaking (Notice), we commence a proceeding to streamline and harmonize licensing provisions in the wireless radio services (WRS)<sup>1</sup> that were identified in part during the Commission's 2000 and 2002 biennial regulatory reviews pursuant to Section 11 of the Communications Act of 1934, as amended ("Communications Act" or "Act").<sup>2</sup> We propose various amendments to Parts 1, 22, 24, 27, and 90 of the rules to modify or eliminate provisions that treat licensees differently and/or have become outdated as a result of technological change, supervening changes to related Commission rules, and/or increased competition within WRS. Streamlining and harmonizing these rules would clarify spectrum rights and obligations for these licensees, fulfill the Commission's mandate under Section 11 of the Communications Act, and support recent efforts to maximize the public benefits derived from the use of the radio spectrum.<sup>3</sup>

**II. BACKGROUND**

2. In the *2000 Biennial Review Report*<sup>4</sup> and *2002 Biennial Review Report*,<sup>5</sup> the Commission supported proposals to streamline, harmonize, and update a number of regulations after reviewing various WRS rule parts pursuant to Section 11 of the Act.<sup>6</sup> Section 11 of the Act requires the Commission to review biennially its regulations that are applicable to providers of telecommunications service in order to determine whether any rule is "no longer necessary in the public interest as the result of meaningful economic competition."<sup>7</sup> Following such reviews, the Commission is required to modify or repeal any such regulations that are no longer in the public interest.<sup>8</sup> Since the release of the biennial review reports, the Commission has considered modifying or repealing certain regulations by issuing notices of proposed rulemakings as appropriate. This Notice addresses additional proposals, identified in the 2000 and/or 2002 biennial review reports, to streamline and harmonize WRS rules that may no longer be necessary in the public interest pursuant to Section 11 of the Act.

3. To a great extent, technological changes and/or successive changes to various Commission licensing rules have made it appropriate to review whether many of these rules are obsolete

---

<sup>1</sup> 47 C.F.R. § 1.907. WRS is defined in the Commission's rules as "[a]ll radio services authorized in parts 13, 20, 22, 24, 26, 27, 74, 80, 87, 90, 95, 97 and 101 . . . whether commercial or private in nature." *Id.*

<sup>2</sup> 47 U.S.C. § 161.

<sup>3</sup> In 2002, for example, the Commission's Spectrum Policy Task Force conducted a comprehensive and systematic review of spectrum policy. *See generally* Spectrum Policy Task Force, *Report*, ET Docket No. 02-135 (rel. Nov. 2002) (*Spectrum Policy Task Force Report*). This report is available at <http://www.fcc.gov/sptf>.

<sup>4</sup> *See* The 2000 Biennial Regulatory Review, CC Docket No. 00-175, *Report*, 16 FCC Rcd. 1207 (2001) (*2000 Biennial Review Report*); *see also* Biennial Regulatory Review 2000, *Updated Staff Report* (rel. concurrently with *2000 Biennial Review Report*) (*2000 BR Staff Report*); *id.* at Appendix IV: Rule Part Analysis (*2000 BR Staff Report Appendix*).

<sup>5</sup> *See* The 2002 Biennial Regulatory Review, GC Docket No. 02-390, *Report*, FCC 02-342 (rel. Mar. 14, 2003) (*2002 Biennial Review Report*); *see also* 2002 Biennial Regulatory Review, WT Docket No. 02-310, *Staff Report of the Wireless Telecommunications Bureau* (rel. concurrently with *2002 Biennial Review Report*) (*2002 BR Staff Report*); *id.* at Appendix IV: Rule Part Analysis (*2002 BR Staff Report Appendix*).

<sup>6</sup> 47 U.S.C. § 161.

<sup>7</sup> *See 2002 BR Staff Report* at 1, *citing* 47 U.S.C. § 161.

<sup>8</sup> *Id.* at 2.

and no longer in the public interest.<sup>9</sup> Accordingly, the Notice seeks comment on streamlining and harmonizing these rules if they no longer serve the public interest in their current form notwithstanding any findings regarding the level of competition among existing services. In its *2002 Biennial Review Report*, the Commission clarified the scope and standard of review for future proceedings conducted pursuant to Section 11.<sup>10</sup> In so doing, the Commission acknowledged that it has broad discretion to review the continued need for any rule even in the absence of a congressional mandate such as Section 11.<sup>11</sup> Accordingly, this Notice seeks comment pursuant to the Commission's broad authority to consider any proposed modifications to or eliminations of these existing rules under the Commission's general public interest standard. Under this broader standard for review, this Notice generally seeks comment on *inter alia* the appropriateness of certain rules in light of key principles underlying the Commission's approach to spectrum management.<sup>12</sup>

### III. DISCUSSION

4. In the sections below, we solicit comment on various amendments to provisions in Parts 1, 22, 24, 27, and 90 of the rules. We seek comment generally whether these provisions should be (1) streamlined as a result of competitive, technological, or subsequent administrative rule changes and/or (2) harmonized because they treat similarly situated services differently. Although many of these proposals are technical in nature and/or limited in application to particular WRS, they nonetheless are consistent with our goal to harmonize rules and streamline the licensing obligations for all WRS licensees by eliminating unnecessary rules, as appropriate. In addition, the proposals are consistent with continued Commission efforts to move toward innovative approaches to spectrum policy that are designed to maximize the public interest benefits derived from the use of radio spectrum.<sup>13</sup> We also provide notice of and invite the public to review various administrative corrections that we intend to make at the conclusion of this proceeding to update and/or clarify certain WRS rules. While it is not necessary pursuant to the Administrative Procedure Act to seek comment on all of the proposed rule changes in this item,<sup>14</sup> we do so to facilitate administrative efficiency.

#### A. Classification of Part 90 Frequency and/or Transmitter Site Deletions as Minor Modifications under Part 1

5. Section 1.929(c)(4) of the Commission's rules requires that certain requests for modification to a site-specific Part 90 authorization, including changes to the frequencies or locations of

---

<sup>9</sup> For example, staff acknowledges that many of these rules could be obsolete independent of any development of meaningful competition. *See, e.g., 2002 BR Staff Report Appendix* at 4 ("While staff generally determines that [the rules] remain necessary in the public interest, it also concludes that certain modifications of [these rules] may be in the public interest for reasons other than those related to competitive developments that fall within the scope of Section 11 review.")

<sup>10</sup> *See 2002 Biennial Review Report* at ¶ 27.

<sup>11</sup> *Id.*

<sup>12</sup> For example, the Commission seeks to incorporate certain common elements of regulation into the Commission's general approach to spectrum policy. *See Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium, Policy Statement*, 14 FCC Rcd 19868 (1999); *see also Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets, Policy Statement*, 15 FCC Rcd 24178 (2000).

<sup>13</sup> *See, e.g., supra* note 3.

<sup>14</sup> *See* 5 U.S.C. § 553(b).

base stations, are considered major modifications to the license which require prior Commission approval.<sup>15</sup> Pursuant to Section 90.135(b) of the rules, a site-specific Part 90 licensee that makes a modification request listed in Section 1.929(c)(4) must submit its request to the applicable frequency coordinator, unless the request falls within one of the specific exemptions listed in Section 90.175 of the rules.<sup>16</sup>

6. In the 2002 biennial review proceeding, the Cellular Telecommunications & Internet Association (CTIA) asks the Commission to clarify that applications requesting only that a frequency be deleted from an authorization fall under the exemptions of Section 90.175(i) and thus are exempt from the coordination process.<sup>17</sup> As support, CTIA argues that the deletion of *some* frequencies from an authorization is no different than the cancellation of an entire authorization, which currently does not require any frequency coordination before being submitted to the Commission.<sup>18</sup>

7. The American Petroleum Institute (API) makes a similar request that the Commission modify Section 1.929(c)(4)(v) and/or Section 1.929(k) of the rules to categorize the deletion of a site from a multi-site Part 90 authorization as a minor modification which would require neither frequency coordination nor prior Commission approval.<sup>19</sup> In lieu of coordination and prior approval, API advocates that such a change could be achieved by filing a notification through the Universal Licensing System (ULS).<sup>20</sup> API contends that ULS eliminated the traditional reason to inform frequency coordinators when a licensee proposes to delete a site (*i.e.*, so they know when spectrum is available) because they can now access the information immediately in ULS.<sup>21</sup> As a result, API concludes that the requirement is now “an unnecessary administrative burden upon the licensee, with no corresponding public or private benefit.”<sup>22</sup>

8. In the *2002 BR Staff Report*, Commission staff recommends that the Commission consider both CTIA’s and API’s proposals to determine whether rule changes are warranted.<sup>23</sup> Staff found that requiring frequency coordination and prior Commission approval for deletions of a frequency or a transmitter site may no longer be in the public interest. For example, staff states that not applying the frequency coordination requirement to frequency deletion could “reduce the processing burden on both

---

<sup>15</sup> 47 C.F.R. § 1.929(c)(4). Moreover, any change not specifically listed as a major in our rules is considered minor. *See id.* § 1.929(k) (also provides specific examples of changes considered minor amendments); *see also id.* § 1.947(b) (licensees may make minor modifications to station authorizations as a matter of right without prior Commission approval).

<sup>16</sup> *Id.* §§ 1.929(c)(4), 90.135(b), 90.175.

<sup>17</sup> Petition for Rulemaking Concerning the Biennial Review of Regulations Affecting CMRS Carriers of Cellular Telecommunications & Internet Association filed on July 25, 2002 (CTIA Petition) at 27.

<sup>18</sup> *Id.*

<sup>19</sup> 47 C.F.R. §§ 1.929(c)(4)(v), 1.929(k). Comments of the Association of Petroleum Industry, Inc. filed in WT Docket No. 02-310 on October 18, 2002 (API Comments) at 13-14.

<sup>20</sup> API Comments at 14.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* In reply comments in the 2002 biennial review proceeding, the American Mobile Telephone Association (AMTA) supports API’s recommendation and also asks the Commission to also eliminate the coordination requirement when a frequency is deleted from an authorization. Reply Comments of the American Mobile Telephone Association filed in WT Docket No. 02-310 on November 4, 2002 at 7-8. AMTA adds that, unlike adding a channel or site, the deletion of a frequency or location does not require coordination, but, as API indicated, the rule stems from pre-ULS when coordinators would not have had access to such information so readily. *Id.*

<sup>23</sup> *See 2002 BR Staff Report Appendix* at 6, 86.

applicants and frequency coordinators in cases in which the frequency coordination function is unnecessary.”<sup>24</sup>

9. We tentatively conclude that a request to delete a frequency or a site from a multi-site authorization under Part 90 should be considered a minor modification that requires neither frequency coordination nor the Commission’s prior approval. We agree that frequency coordination in these cases is unnecessary given that ULS now provides frequency coordinators with immediate access to frequency and site information. It would be inconsistent to require coordination for a deletion of a site or a frequency when it is not required for a request to cancel an entire authorization. We therefore propose to amend our rules such that these actions will be treated as minor modifications under Part 1 of the Commission’s rules.<sup>25</sup> We invite comment on this tentative conclusion. We also seek comment on whether there remains any need for licensees to notify the applicable frequency coordinator of any given deletion, if the rules are modified as proposed.

## **B. Effective Radiated Power / Equivalent Isotropically Radiated Power**

10. In its comments in the 2000 biennial review proceeding, the Wireless Communications Division of the Telecommunications Industry Association (TIA) states that designating FCC power limits<sup>26</sup> in terms of ERP in the Cellular Radiotelephone Service (cellular) rules and EIRP in the broadband Personal Communications Service (PCS) rules is “confusing to [its members’] customers since it appears that a dual mode phone [transmits] at different power levels at different frequencies.”<sup>27</sup> TIA argues that having two different types of power limits in the same device could be confusing to those who do not possess a scientific or engineering background.<sup>28</sup> Therefore, TIA requests that the Commission specify all power limits in Parts 22 and 24 of the rules in terms of EIRP.<sup>29</sup> TIA further recommends that EIRP be used universally in all parts of the Commission’s rules to end any confusion regarding ERP and EIRP.<sup>30</sup>

---

<sup>24</sup> *Id.* at 86.

<sup>25</sup> See 47 C.F.R. §§ 1.929(k), 1.947(b) (requiring licensees to notify the Commission within 30 days of implementing any such minor modifications).

<sup>26</sup> Power limits in both Part 22 and Part 24 of our rules are specified in terms of Effective Radiated Power (ERP) for stations transmitting radio waves having frequencies lower than 1000 MHz, and in terms of Equivalent Isotropically Radiated Power (EIRP) for stations transmitting radio waves having frequencies higher than 1000 MHz. Traditionally, radio engineers have used ERP for land mobile transmitting stations and EIRP for microwave fixed transmitting stations. This is because antenna manufacturers have historically measured the gain of antennas used in the mobile service on testing ranges, using a half-wave dipole antenna as a reference, while manufacturers of fixed microwave antennas have specified gain with reference to a theoretical isotropic radiator. Within the last ten years, however, the use of microwave frequency ranges for commercial mobile services has dramatically increased, particularly with broadband PCS. Because the broadband PCS frequency allocations are above 1000 MHz, the Commission expressed power limits in the PCS rules in terms of EIRP rather than ERP, despite the fact that many PCS licensees have chosen to provide mobile service more so than fixed service.

<sup>27</sup> Comments of the Wireless Communications Division of the Telecommunications Industry Association filed in CC Docket No. 00-175 on October 10, 2000 (TIA Comments) at 5. TIA states that it “is the principle industry association representing telecommunications equipment manufacturers and suppliers, including manufacturers of terrestrial mobile radio equipment.” *Id.* at 1.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

11. Although the Commission recommended in the *2000 Biennial Review Report* that a rulemaking proposal be initiated to consider using EIRP exclusively in Commission rules,<sup>31</sup> we tentatively conclude that the costs of implementation and potential for greater confusion that would likely be associated with making a wholesale conversion from ERP limits to EIRP limits outweigh the potential benefits to those licensees who do not possess the scientific or engineering expertise to distinguish between the two standards. As TIA notes in its comments, the conversion from ERP to EIRP is a simple calculation<sup>32</sup> and “manufacturers realize that radio waves propagate differently above and below 1 GHz.”<sup>33</sup> Such a change in the rules would require extensive modifications, not only for the Commission (e.g., reprogramming the Universal Licensing System (ULS), amending international agreements negotiated in terms of ERP, *etc.*), but also for licensees, frequency coordinators, manufacturers, and others in the wireless industry. Moreover, because an EIRP limit is always a larger number than the equivalent ERP limit, we believe that restating all ERP limits as EIRP limits could likely cause some entities (e.g., licensees, frequency coordinators, *etc.*) to mistakenly think that the Commission has increased the permitted power. We seek comment on this tentative conclusion. If parties disagree with this tentative conclusion, they should provide specific examples of how the benefits of such a harmonization outweigh the inevitable costs and potentially greater confusion among the public from such a conversion in the rules.

### C. Part 22 Transmitter Identification

12. Section 22.303 of the Commission’s rules provides, *inter alia*, that “[t]he station call sign must be clearly and legibly marked on or near every transmitting facility, other than mobile transmitters, of the station.”<sup>34</sup> In the 2002 biennial review proceeding, CTIA and the Rural Cellular Association (RCA) recommend that the Commission eliminate this requirement in the interest of commercial wireless regulatory parity, since wireless services regulated under other parts of the Commission’s rules are not subject to a comparable obligation to post call sign information on each transmitter.<sup>35</sup> We agree with CTIA and RCA that these rules should be harmonized and tentatively conclude to delete the last sentence of Section 22.303, thereby eliminating the transmitter-specific posting requirement for cellular and other Part 22 licensees. We request comment on this proposal, including whether the absence of call sign information on transmitting facilities associated with other WRS that are not subject to Part 22 has proved problematic to the public or other carriers in any way.<sup>36</sup>

---

<sup>31</sup> *2000 Biennial Review Report*, 16 FCC Rcd at 1231 ¶ 69. We note that the staff actually recommended the change without an explanation, but that the Commission merely recommended consideration of TIA’s proposal. *Compare id. with 2000 BR Staff Report Appendix at 69.*

<sup>32</sup> See TIA Comments at 5. When radio frequency electrical power is expressed as a scalar number (*i.e.*, in Watts, milliWatts, kiloWatts, *etc.*), to convert from ERP to EIRP it is necessary only to multiply by the simple constant factor, 1.64.

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

<sup>34</sup> 47 C.F.R. § 22.303.

<sup>35</sup> See CTIA Petition at 21; Further Comments of the Cellular Telecommunications & Internet Association filed in WT Docket No. 02-310 on October 18, 2002 at 6; Reply Comments of the Rural Cellular Association filed in WT Docket No. 02-310 on November 4, 2002 at 5.

<sup>36</sup> In addition, Section 22.303 references Section 22.163 of the rules. In our ULS proceeding, we consolidated this rule section into Section 1.929. See Amendment of Parts 0, 1, 13, 22, 24, 26, 27, 80, 90, 95, 97 and 101 of the Commission’s Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services, WT Docket No. 98-20, *Report and Order*, 13 FCC Rcd. 21027 (1998) (*ULS R&O*); *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd. 11145 (1998). In order to update Section (continued....)

## D. Part 24 Power and Antenna Height Limits

13. Section 24.232(a) of the Commission's rules contains, *inter alia*, power limitations for broadband PCS.<sup>37</sup> Specifically, base stations are limited to 1640 watts peak EIRP with an antenna height up to 300 meters height above average terrain (HAAT) and base station transmitters are limited to 100 watts peak output power.<sup>38</sup> When the Commission adopted the 100 watt transmitter power output limit in 1994, it did so to ensure that broadband PCS licensees utilizing the concurrent increase in EIRP limit for base stations from 100 to 1640 watts would use low power transmitters with high-gain, directional antennas, rather than high power transmitters with low-gain, non-directional antennas.<sup>39</sup> Such use of directional antennas, the Commission stated, would help reduce the likelihood that PCS licensees would deploy base stations that could transmit a strong signal over distances well beyond a mobile unit's capability to respond.<sup>40</sup> The Commission later clarified in 1994 that the power limits contained in Section 24.232 "apply to [] individual components and not to the sum of all components at the entire base station."<sup>41</sup>

14. In comments filed in the 2002 biennial review proceeding, Powerwave asserts that the power limitations contained in this rule section are overly restrictive.<sup>42</sup> According to Powerwave, as subscriber growth in PCS has increased dramatically since broadband PCS systems were first authorized, the number of carriers (*i.e.*, the individual electrical signals that carry information) required to provide the additional voice channels has also increased.<sup>43</sup> Powerwave contends that, in order to "provide the same level of service over more carriers at the same distance, it is necessary to increase power."<sup>44</sup> Moreover, Powerwave asserts that the need for higher power levels has also increased because, due to increased local resistance to base station construction, more PCS stations must be collocated with cellular stations and, therefore, are spaced on a cellular design.<sup>45</sup> As a result, PCS licensees, according to Powerwave, are increasingly using multi-carrier power amplifiers (MCPAs) to operate their systems.<sup>46</sup>

15. Powerwave contends that Section 24.232(a) generally has the unintended effect of thwarting PCS carriers' response to this increased demand by unfairly penalizing the use of MCPAs because the rule limits power per transmitter rather than per carrier.<sup>47</sup> Powerwave asserts that the

(Continued from previous page) \_\_\_\_\_  
22.303 to reflect the correct cross-reference, we propose to replace the reference to Section 22.163 in the first sentence of the section with a reference to Section 1.929.

<sup>37</sup> 47 C.F.R. § 24.232(a).

<sup>38</sup> *Id.*

<sup>39</sup> See Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, *Memorandum Opinion and Order*, 9 FCC Rcd. 4957, 5025, ¶¶ 172-73 (1994).

<sup>40</sup> *Id.* at 5025, ¶ 173.

<sup>41</sup> Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, *Third Memorandum Opinion and Order*, 9 FCC Rcd. 6908, 6918, ¶ 62 (1994).

<sup>42</sup> Comments of Powerwave, Inc. filed in WT Docket No. 02-310 on October 18, 2002 (Powerwave Comments).

<sup>43</sup> *Id.* at 1, 10.

<sup>44</sup> *Id.* at 1-2.

<sup>45</sup> *Id.* at 2.

<sup>46</sup> *Id.* Powerwave lists a number of commercial reasons why the base station industry is moving toward an MCPA design. *Id.* at 5 n.6.

<sup>47</sup> *Id.* at 2-3, 5-6. For example, five carriers going through one transmitter with an MCPA could have a limit of 100 watts per carrier, equaling a limit of 500 watts for the transmitter.

Commission's clarification in 1994 supports its position, but that the clarification was not incorporated into the Commission's rules.<sup>48</sup> Therefore, Powerwave requests that the Commission, at the very least, amend Section 24.232 to provide that the output power of each carrier must not exceed 100 watts, instead of each transmitter.<sup>49</sup> Powerwave, however, suggests that such a restriction is nevertheless insufficient in today's PCS environment, and instead, proposes that the Commission eliminate the output power restriction entirely and rely solely on the limit on radiated power.<sup>50</sup> Either change, Powerwave contends, would not affect the Commission's intent to prevent PCS licensees from operating a base station with a signal too powerful such that it would "outrun its mobile units," because it is by now recognized that it is in the carrier's self-interest to "optimally balance the link between its base stations and mobile units."<sup>51</sup>

16. In the *2002 BR Staff Report*, Commission staff agrees with Powerwave and concludes that Section 24.232(a) should be modified in order to regulate PCS base station transmissions in a technologically-neutral manner.<sup>52</sup> Staff believes that "the current rule may hinder the development and deployment of technologies (*e.g.*, the multi-carrier amplifiers described by Powerwave) that combine signals in innovative ways yet do not increase the potential for harmful interference to neighboring systems."<sup>53</sup>

17. Given the case presented by Powerwave and subsequent recommendations of staff, we seek comment on whether to relax the power limitations in Section 24.232(a) by either amending the rule to clarify that the output power limit of 100 watts applies on a per carrier basis in the case of MCPAs or eliminating the transmitter output power restriction in its entirety. In view of our goal to harmonize rules and promote the efficient use of spectrum across comparable WRS, we seek comment on whether there is any need for the transmitter power output restriction in Part 24, and if so, whether it can be modified to increase flexibility for PCS licensees to employ MCPAs. We seek comment on which approach is more desirable given the potential benefits to the public that would result from implementing either revision to the PCS power limits. We also request comment on the likelihood of interference or potential impact to the quality of PCS service associated with the two approaches.

18. Parties favoring retaining the output power limit on a "per carrier" basis instead of a "per transmitter" basis should provide definitions of the term "carrier" for a rule that would not be ambiguous for any of the various types of modulation technology that could be used and that can be complied with without difficulty. In this regard, we note that compliance with the output power rule occurs mainly through the equipment authorization process. This process places the burden of compliance through measurements on equipment manufacturers (such as Powerwave) as opposed to PCS licensees. While compliance with the current rule is easily determined (*i.e.*, measuring the power capability of a transmitter is a well-established laboratory procedure), we are concerned that if the rule were revised to state a limit on a per carrier basis, it may no longer be possible to determine compliance through the equipment authorization process, because neither the manufacturer, the measurement laboratory, nor the Commission can know in advance how many carriers the future owner of the MCPA (*i.e.*, the PCS licensee) would use.

---

<sup>48</sup> *Id.* at 4-5. Moreover, Powerwave asserts that the Commission's use of "channel" in the 1994 clarification statement "is anachronistic because PCS operators no longer equate channels with carriers [and] it is reasonable, therefore, to interpret the Commission's use of the word 'channel' in the 1994 clarification as 'carrier.'" *Id.* at 5.

<sup>49</sup> *Id.* at 7.

<sup>50</sup> *Id.* Powerwave contends that such a policy is followed in cellular and narrowband PCS. *Id.* at 8 n.10.

<sup>51</sup> *Id.* at 8. Powerwave argues that, otherwise, subscribers would switch to competing mobile systems. *Id.*

<sup>52</sup> *2002 BR Staff Report* at 9; *see also 2002 BR Staff Report Appendix* at 67.

<sup>53</sup> *2002 BR Staff Report Appendix* at 67.



We therefore ask parties to comment on how difficult and expensive it might be for a PCS licensee to monitor the power of each individual carrier to ensure compliance with the rule. In addition, commenters should address whether or not a “per carrier” rule would be technology-neutral if it permitted licensees utilizing relatively narrower bandwidth technologies (e.g., GSM) to operate with higher aggregate power across their authorized spectrum than licensees utilizing relative broader bandwidth technologies such as CDMA. In their comments, parties should consider other alternatives, including whether or not a power spectral density limit (*i.e.*, power per unit bandwidth) would be more equitable and thus preferable than a per-carrier wording.

## **E. Proposed Modifications to Part 90**

### **1. Frequency Coordination**

19. As stated above, Section 90.175(i) includes exemptions from the general coordination obligation of Part 90 license applications.<sup>54</sup> Among these exceptions, the Commission does not require evidence of frequency coordination to accompany applications for 800 MHz Upper 200 and Lower 80 SMR frequencies.<sup>55</sup> In the 2002 biennial review proceeding, CTIA asks the Commission to expand the exceptions to the coordination requirements to include the 800 MHz General Category frequencies.<sup>56</sup> CTIA argues that because the 800 MHz General Category channels are now subject to competitive bidding and are authorized by exclusive geographic areas, as the 800 MHz Upper 200 and Lower 80 SMR frequencies are, the need for frequency coordination is no longer necessary.<sup>57</sup>

20. In the *2002 BR Staff Report*, Commission staff finds that the frequency coordination requirements of Section 90.175 may no longer be in the public interest for certain 800 MHz General Category frequencies.<sup>58</sup> However, staff states that “the possible conversion of existing site-by-site licensed general category frequencies to a different mode of operation (e.g., from conventional to trunked use), and the potential shared use environment of the frequencies, makes [wholesale] elimination of the coordination requirement a concern.”<sup>59</sup> Staff also states that frequency coordination “remains beneficial in a shared use environment to ensure efficient use and prevent interference.”<sup>60</sup> Therefore, we seek comment on whether to eliminate the frequency coordination requirement for incumbent licensees operating on 800 MHz General Category frequencies on a non-shared basis, where such licensees propose

---

<sup>54</sup> 47 C.F.R. § 90.175(i); *see supra* paras. 5-6.

<sup>55</sup> *See* 47 C.F.R. § 90.175(i)(8) (exempts applications for frequencies listed in the SMR tables contained in Sections 90.617 and 90.619). 47 C.F.R. § 90.617 includes the “Upper 200” channels, which consist of 200 paired channels (Channel Nos. 401-600) at 816-821/861-866 MHz and the “Lower 80” channels, which consist of 80 paired channels at 811-815.700/856-860.700 MHz (Channel Nos. 201-208, 221-228, 241-248, 261-268, 281-288, 301-308, 321-328, 341-348, 361-368, and 381-388). 47 C.F.R. § 90.619 covers matters related to 800 MHz and 900 MHz frequency use at the Mexican and Canadian borders.

<sup>56</sup> CTIA Petition at 26-27. The General Category frequencies, which consist of 150 paired channels (Channel Nos. 1-150) at 806-809.750/851-854.750 MHz, are listed separately from the Upper 200 and Lower 80 channels. *See* 47 C.F.R. § 90.615. The General Category channels may be used by commercial entities, including SMR, and non-commercial entities (e.g., private, internal communications for a business).

<sup>57</sup> CTIA Petition at 26-27. CTIA asserts that it was an oversight to not include the 800 MHz General Category frequencies from the exemptions listed in 47 C.F.R. § 90.175(i)(8), even though “the rationale for coordination of the auctioned-over band has ended.” *Id.* at 27.

<sup>58</sup> *See, e.g., 2002 BR Staff Report Appendix* at 85-86.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at 86.

new and/or modified facilities that do not expand the applicable interference contour.<sup>61</sup> By limiting proposed elimination of the frequency coordination requirement to certain categories, we address the staff's concern that a number of shared use systems, including private, public safety and SMR incumbents, are protected. We ask that parties take this into consideration in their comments to the extent they support modification or elimination of the frequency coordination requirement for certain 800 MHz General Category frequencies.

## 2. Emission Masks

21. Section 90.210 of the Commission's rules describes several emission masks applicable to Part 90 transmitters.<sup>62</sup> In comments in the 2002 biennial review proceeding, Motorola notes that, while the standards imposed by this rule section generally serve the public interest by limiting unwanted emissions outside the authorized bandwidth and thus minimizing adjacent channel interference, Emission Mask G, set forth in Section 90.210(g), limits design flexibility without any corresponding value in improved interference control.<sup>63</sup> Motorola recommends that the Commission conform the Emission Mask G rule to the steps it has taken in recent years in adopting modulation-independent masks (emission masks D, E, and F) that place no limitation on the spectral power density profile within the maximum authorized bandwidth.<sup>64</sup> Commission staff agrees with Motorola in its *2002 BR Staff Report* and recommends that the Commission consider adopting Motorola's request in order to potentially enhance design flexibility without diminishing interference protection.<sup>65</sup>

22. We propose to revise Section 90.210(g) to eliminate paragraph (g)(1) and renumber the remaining subsections. Not only will this change afford greater flexibility to equipment manufacturers, but it will conform our approach for this emission mask with our rules governing a number of other emission masks applicable to Part 90 services. We request comment on the potential benefits to the public of making this change, and whether this proposed revision would, despite our intent, potentially increase interference.

23. In addition, Section 90.210(m) specifies a resolution bandwidth of at least 10 kHz when performing measurements under the condition of the unwanted emission being on a frequency below 1 GHz that is more than 50 kHz removed from the edge of the authorized bandwidth.<sup>66</sup> Both Motorola and TIA request that the Commission revise Section 90.210(m) to conform the emission mask measurement method to the standards set forth in Appendix S3, Article 10 of the International Telecommunications Union (ITU) Radio Regulations (ITU Regulation S3.10) which became effective on January 1, 2003.<sup>67</sup> According to Motorola, ITU Regulation S3.10 "serves to control unwanted out-of-band emissions more

---

<sup>61</sup> *See id.* at 85.

<sup>62</sup> 47 C.F.R. § 90.210.

<sup>63</sup> *Id.* § 90.210(g); *see* Comments of Motorola filed in WT Docket No. 02-310 on October 18, 2002 (Motorola Comments) at 1-2. Motorola notes that Emission Mask G was developed with specific applications in mind and is more restrictive than other masks contained in the Part 90 rules by requiring some attenuation of the emission within the authorized bandwidth. Motorola Comments at 1-2.

<sup>64</sup> *Id.*

<sup>65</sup> *2002 BR Staff Report* at 9; *see also 2002 BR Staff Report Appendix* at 88.

<sup>66</sup> 47 C.F.R. § 90.210(m).

<sup>67</sup> Motorola Comments at 3, *citing* ITU Radio Regulation, Article 10 in Appendix S3 of the Radio Regulations, RR S3.10 (ITU Regulation S3.10); TIA Comments at 6.

stringently by increasing the resolution bandwidth under that condition to be 100 kHz, not 10 kHz.”<sup>68</sup> We tentatively conclude that we should revise Section 90.210(m) of our rules to conform to ITU Regulation S3.10, because we believe this revision will provide greater protection against interference. We request comment on this tentative conclusion.

### 3. 800 MHz and 900 MHz Supplemental Information

24. Section 90.607 of the Commission’s rules describes the supplemental information that must be furnished by applicants for 800 MHz and 900 MHz SMR systems.<sup>69</sup> Under paragraph (a) of this rule, applicants proposing to provide service on a commercial basis in these bands must supply, among other things, a statement of their “planned mode of operation” and a statement certifying that only eligible persons would be provided service on the licensee’s base station facility.<sup>70</sup>

25. In comments filed in the 2002 biennial review proceeding, PCIA – the Wireless Infrastructure Association (PCIA)<sup>71</sup> advocates eliminating Section 90.607(a).<sup>72</sup> Specifically, PCIA states that the system diagrams that were used when the 800 MHz band was originally conceived have not been used by the Commission for years and are no longer necessary.<sup>73</sup> Moreover, PCIA asserts that the eligibility statement is no longer needed because the eligibility rules for SMR end-users have been eliminated.<sup>74</sup> In the *2000 BR Staff Report*, Commission staff recommends the removal of Section 90.607(a) because it appears to serve no regulatory purpose and is inconsistent with the Commission’s policies regarding the flexible use of spectrum.<sup>75</sup> We believe that meaningful competition among the various wireless services has rendered such requirements no longer necessary in the public interest because we believe market forces will encourage applicants to operate their facilities in the proper manner without Commission involvement. We, therefore, tentatively conclude that we should delete Section 90.607(a) to eliminate the above-mentioned reporting requirements.<sup>76</sup> We invite comment on this tentative conclusion.

---

<sup>68</sup> Motorola Comments at 3.

<sup>69</sup> 47 C.F.R. § 90.607

<sup>70</sup> *Id.* § 90.607(a)(1)-(2).

<sup>71</sup> PCIA, which is an abbreviation for Personal Communications Industry Association, states that it is “an international trade association representing the interests of both [CMRS] and private mobile radio service (‘PMRS’) users and businesses involved in all facets of the wireless communications industry,” and that it is a frequency coordinator appointed by the Commission for Industrial/Business Radio Service, 800 and 900 MHz Business and Special Industrial/Land Transportation Pools, 800 MHz General Category frequencies and for the 929 MHz frequencies. *See* Reply Comments of PCIA - the Wireless Infrastructure Association filed in WT Docket No. 02-310 on November 4, 2002 (PCIA Reply Comments) at 1.

<sup>72</sup> *Id.* at 4.

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> *2000 BR Staff Report Appendix* at 193. In the *2002 BR Staff Report*, Commission staff recommended that the Commission initiate a proceeding to consider whether to amend or eliminate 47 C.F.R. § 90.607(a), among other Part 90 rules. *See 2002 BR Staff Report Appendix* at 104.

<sup>76</sup> 47 C.F.R. § 90.607(a)(1)-(2).

#### 4. 800 MHz and 900 MHz Trunked Systems Loading, Construction and Authorization Requirements

26. Section 90.631 of the Commission's rules contains various requirements for the authorization, construction, and loading of 800 MHz and 900 MHz trunked systems.<sup>77</sup> PCIA and CTIA request that the Commission modify two of these requirements that they assert are no longer necessary. Section 90.631(d) of the Commission's rules allows a licensee of an 800 MHz and 900 MHz SMR trunked system to request an additional five channels than it has constructed without meeting the loading requirements if the licensee operates in a "rural area."<sup>78</sup> The rule defines a "rural area" as either (1) an area which is beyond the 100-mile radius of the designated center of urbanized areas listed in the rule, or (2) an area that has a "waiting list."<sup>79</sup> In comments in the 2002 biennial review proceeding, PCIA notes that waiting lists for 800 MHz and 900 MHz SMR frequencies<sup>80</sup> were eliminated by the Commission in 1995 when the Commission switched to competitive bidding and geographic area licensing.<sup>81</sup> As a result, PCIA requests that the Commission amend Section 90.631(d) to delete the "waiting list" exception to the definition of a rural area.<sup>82</sup> We agree with PCIA and seek comment on a tentative conclusion to delete this exception to the definition of a rural area. We also seek comment on eliminating other references to waiting lists contained in Section 90.631(d) of the rules.

27. Section 90.631(i) provides that an incumbent (*i.e.*, pre-auction) 900 MHz SMR licensee that has not met the loading requirements set forth in Section 90.631(b)<sup>83</sup> at the end of its initial five-year license term will only be granted a renewal period of two years, in which time the licensee must satisfy the loading requirements.<sup>84</sup> CTIA states that the requirement is obsolete because the "timeframe for site-specific SMR 900 MHz systems to meet the loading requirements has since expired."<sup>85</sup> We agree that the period of renewing incumbent 900 MHz SMR licenses subject to this requirement has ended. Therefore, we tentatively conclude to eliminate paragraph (i) of Section 90.631 from our rules, as well as references to paragraph (i) in Section 90.631(b) of the rules. We seek comment on this tentative conclusion.

---

<sup>77</sup> *Id.* § 90.631.

<sup>78</sup> *Id.* § 90.631(d).

<sup>79</sup> *Id.*

<sup>80</sup> Waiting lists were created when then the Commission could not process applications for 800 MHz and 900 MHz SMR category channels because of a lack of available frequencies in a particular geographic area.

<sup>81</sup> See 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, *First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making*, 11 FCC Rcd. 1463, 1501 at ¶ 59 ("all applications currently on waiting lists for frequencies that may become available in a geographic area are dismissed").

<sup>82</sup> PCIA Reply Comments at 4. We note that in its 2002 BR Staff Report, staff recommended that this requirement, among others, be reviewed to determine if it is still necessary in the public interest, and to the extent that it is not, to eliminate or modify the rule. *2002 BR Staff Report Appendix* at 104.

<sup>83</sup> 47 C.F.R. § 90.631(b) (requiring a minimum of 70 mobiles for each authorized channel to be placed into operation within 5 years of initial license grant).

<sup>84</sup> *Id.* § 90.631(i). The rule exempts incumbent licensees that obtained a Major Trading Area (MTA) license that includes the incumbent site location covering the same spectrum as the site-specific authorization. *Id.*

<sup>85</sup> CTIA Petition at 28. We note that in its 2002 BR Staff Report, staff recommended that this requirement, among others, be reviewed to determine if it is still necessary in the public interest, and to the extent that it is not, to eliminate or modify the rule. *2002 BR Staff Report Appendix* at 104.

---

## 5. 800 MHz and 900 MHz Power and Antenna Height

28. Section 90.635 of our rules sets forth the limitations on power and antenna height for 800 MHz and 900 MHz systems.<sup>86</sup> In its comments in the 2002 biennial review proceeding, PCIA asks the Commission to modify or eliminate the restrictions placed on two particular types of 800 MHz and 900 MHz systems – those located in “suburban” areas as defined in the rule and those whose service area requirements are less than 32 kilometers (*i.e.*, what PCIA refers to as “campus-type” radio systems).<sup>87</sup>

29. First, Section 90.635(a)-(c) differentiates between “urban” and “suburban” conventional (*i.e.*, non-trunked) systems, allowing a greater maximum power (1000 watts vs. 500 watts) and higher maximum antenna height (304 meters vs. 152 meters) for urban conventional systems than suburban conventional systems.<sup>88</sup> PCIA argues that such a distinction “no longer serves a useful purpose and should be eliminated.”<sup>89</sup> PCIA justifies this conclusion by asserting that suburban systems frequently must cover larger service areas than urban systems, and therefore, a smaller maximum power limit economically restricts the ability of these licensees to serve the suburban areas.<sup>90</sup> Moreover, PCIA asserts that the restrictions on suburban sites also prevent these licensees from counteracting interference from cellular systems to the same extent as urban sites.<sup>91</sup> We seek comment on PCIA’s proposal to modify Section 90.635 to remove the distinction between urban and suburban sites when setting the maximum power and antenna height limits for conventional 800 MHz and 900 MHz systems.<sup>92</sup> We believe there is

---

<sup>86</sup> 47 C.F.R. § 90.635.

<sup>87</sup> PCIA Reply Comments at 4-5.

<sup>88</sup> 47 C.F.R. § 90.635 (a)-(c). “Urban” conventional systems are defined as systems located within 24 km. of the geographic center of the 50 urbanized areas detailed in Table 1 to 47 C.F.R. § 90.635. *See id.* § 90.635(a). We note that trunked 800 MHz and 900 MHz systems have the same limits on power and antenna height as those for conventional systems in urban areas.

<sup>89</sup> PCIA Reply Comments at 5. In the open Commission proceeding dealing with, *inter alia*, abatement of interference being encountered by 800 MHz public safety systems, we are evaluating the role of more robust public safety signals in the calculus used to assess harmful interference originating from both spectrally adjoining and interleaved 800 MHz cellular-architecture systems. Thus, we can foresee that revising the ERP and height limits to eliminate the distinction between urban and suburban sites could contribute to our goal of ensuring more reliable 800 MHz public safety communications. *See Improving Public Safety Communications in the 800 MHz Band, Consolidating the 800 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, Notice of Proposed Rule Making, 17 FCC Rcd 4873, 4913 (2002).*

<sup>90</sup> PCIA Reply Comments at 5.

<sup>91</sup> *Id.* PCIA states that “800 MHz licensees have learned over the past several years that one of the primary means to limit interference from cellular systems is to increase the dispatch system’s ‘power to ground.’” *Id.* PCIA asserts that this could not be done by suburban sites with the same effectiveness as urban sites because of the power and antenna height restrictions. *Id.*

<sup>92</sup> We note that it is unclear whether PCIA is requesting that only paragraph (a) be eliminated (in which case paragraph (b) should also be eliminated and paragraph (c) should be revised to reflect the power and antenna height limits for all 800 MHz and 900 MHz systems) or to eliminate the rule altogether. *See id.* at 5 (“[t]he Rule no longer serves a useful purpose and should be eliminated.”). Because we strongly believe that power and antenna height restrictions must be maintained, we believe PCIA meant the former, however, we seek clarification from PCIA to the extent necessary.

a significant question as to whether the justification for such distinction remains relevant in today's marketplace.<sup>93</sup>

30. Second, PCIA asks the Commission to eliminate the power restrictions on 800 MHz and 900 MHz systems with an operational radius of less than 32 kilometers in radius, which PCIA refers to as "campus-type" radio systems.<sup>94</sup> PCIA states that although it "appreciates the Commission's original goal to maximize the number of radio systems that could be accommodated on a single frequency, by limiting the ERP of small footprint systems," the possibility of additional channel use is effectively prohibited by the requirement in Section 90.621(b)(4) that applicants protect all existing stations as if the incumbent system was operating at 1000 watts ERP.<sup>95</sup> PCIA also asserts that the power limitation prevents these smaller systems from limiting interference from cellular systems.<sup>96</sup> Therefore, PCIA requests that the power limitations on 800 MHz and 900 MHz systems with an operational radius below 32 kilometers be eliminated.<sup>97</sup> We seek comment on this proposal and ask that interested parties address the use of such systems in light of the Commission's original goal of increasing the use of single frequencies, and whether lifting of these restrictions will help eliminate interference from cellular systems.

## 6. System Authorization Limit in Geographic Areas

31. Section 90.653 of the rules states that "[t]here shall be no limit on the number of systems authorized to operate in any one given area except that imposed by allocation limitations."<sup>98</sup> The Commission adopted this rule in 1982 pursuant to its decision to not restrict equipment manufacturers from holding 800 MHz SMR licenses.<sup>99</sup> CTIA asserts that "[t]he rule is redundant and no longer serves any regulatory purpose."<sup>100</sup> Based on the fact that we have licensed and will continue to license 800 and 900 MHz SMR frequencies using competitive bidding for geographic-area authorizations, we agree with

---

<sup>93</sup> We note that, in 1993, the Commission sought comment whether there was a need to distinguish between stations in different settings and having different service area requirements, but decided that this issue, along with others, could be addressed if necessary in a separate future proceeding. See Co-Channel Protection Criteria for Subpart S Stations Operating Above 800 MHz, PR Docket 93-60, *Notice of Proposed Rule Making*, 8 FCC Rcd. 2454, 2456 ¶ 13 (1993); *Report and Order*, 8 FCC Rcd. 7293, 7297-98 ¶ 22 (1993). In addition, the Commission is considering proposals to allow providers in rural areas to operate at higher power levels so as to cover larger geographic areas with a given amount of equipment. See *Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services*, WT Docket No. 02-381, *Notice of Proposed Rule Making*, FCC 03-222 (Oct. 6, 2003). In that context, the Commission stated that increasing the range of radio systems makes the provision of spectrum-based radio services in rural areas less costly by potentially lowering infrastructure costs. *Id.* at ¶ 52.

<sup>94</sup> 47 C.F.R. § 90.635(b)-(c) (citing special power/antenna height tables for "service area requirements less than 32 km (20 mi.) in radius"); see PCIA Reply Comments at 5.

<sup>95</sup> 47 C.F.R. § 90.621(b)(4); see PCIA Reply Comments at 5.

<sup>96</sup> PCIA Reply Comments at 5.

<sup>97</sup> *Id.*

<sup>98</sup> 47 C.F.R. § 90.653. The rule further states that "no person shall have a right to protest any other proposal on grounds other than violation of any inconsistency with the provisions of this subpart." *Id.*

<sup>99</sup> Amendment of Part 90 of the Commission's Rules to Release Spectrum in the 806-821/851-866 MHz Bands and to Adopt Rules and Regulations Which Govern Their Use, PR Docket 79-191, *Second Report and Order*, 90 F.C.C.2d 1281 at ¶¶ 30-32, 223-226 (1982).

<sup>100</sup> CTIA Petition at 28.

---

CTIA that this rule is no longer in the public interest. Therefore, we tentatively conclude that Section 90.653 should be removed. We seek comment on this tentative conclusion.

## 7. Reporting Requirement for Trunked SMR Loading Data

32. Section 90.658 of the Commission's rules provides that site-based licensees of trunked SMR systems licensed before June 1, 1993 must provide loading data in order to either acquire additional channels or renew their authorizations.<sup>101</sup> Both PCIA and CTIA note that all SMR licenses issued prior to June 1, 1993 have now been through at least one renewal period, and therefore, advocate eliminating the rule.<sup>102</sup> In the *2002 BR Staff Report*, Commission staff finds this provision may be an outdated and burdensome requirement on SMR licensees,<sup>103</sup> especially in light of the competition among cellular, PCS, and 800/900 MHz SMR services. Accordingly, we tentatively conclude that we will eliminate Section 90.658 as no longer necessary in the public interest.<sup>104</sup> We seek comment on this proposal.

## 8. 220 MHz Phase I Supplemental Progress Reports

33. Section 90.737 of the Commission's rules sets forth the supplemental progress reports that 220 MHz Phase I licensees must file with the Commission.<sup>105</sup> In the *2002 BR Staff Report*, staff recommends that the Commission consider whether certain rules applicable to the 220 MHz Phase I licensees continue to be necessary in the public interest in light of increased competition among CMRS providers.<sup>106</sup> In particular, staff identifies Section 90.737 as imposing certain reporting requirements and restrictions on assignments of unconstructed, site-based, 220 MHz Phase I licenses that were intended to prevent speculation and trafficking in licenses awarded by lottery.<sup>107</sup> We tentatively conclude that Section 90.737 should be eliminated as no longer necessary in the public interest given recent competitive and other developments. Licensing by lottery has been eliminated in the 220 MHz Service and we believe that these reporting requirements may "impede the transferability of 220 MHz spectrum" in a competitive CMRS marketplace.<sup>108</sup> We seek comment on this tentative conclusion.

## F. Corrections and Updates to WRS Rules

34. In a Report and Order in this proceeding, we intend to correct, update, or eliminate various rules in Parts 1, 22, 24, 27, and 90. While we are not seeking specific comment on these

---

<sup>101</sup> 47 C.F.R. § 90.658.

<sup>102</sup> CTIA Petition at 27-28; PCIA Reply Comments at 6.

<sup>103</sup> Commission staff recommended that the Commission initiate a proceeding to consider whether to amend or eliminate 47 C.F.R. § 90.658, among other Part 90 rules. *2002 BR Staff Report Appendix* at 104; *see also 2000 BR Staff Report Appendix* at 193.

<sup>104</sup> 47 C.F.R. § 90.658.

<sup>105</sup> *Id.* § 90.737.

<sup>106</sup> *See 2002 BR Staff Report* at 10; *2002 BR Staff Report Appendix* at 108; *see also 2000 BR Staff Report Appendix* at 195.

<sup>107</sup> *2002 BR Staff Report Appendix* at 108.

<sup>108</sup> *Id.*

changes,<sup>109</sup> we include them to provide notice to the public. The following are the administrative changes we plan to make:

35. Part 1, subpart F – Title. Correct the term “Wireless Telecommunications Services” to read “Wireless Radio Services.”
36. Section 1.927(g). Replace the cross-reference to Section 1.948(h)(2) with Section 1.948(i)(2).<sup>110</sup>
37. Section 1.939(b). Eliminate the third sentence which states that manually filed petitions to deny can be filed at the Commission’s former office location.<sup>111</sup>
38. Section 1.955(a)(2). Replace the cross-reference to Section 1.948(c) with Section 1.946(c).
39. Section 22.946(b)(2). Replace the reference to Form 489 with Form 601.<sup>112</sup>
40. Section 22.946(c). Replace the cross-reference to Section 22.144(b) with Section 1.955.<sup>113</sup>
41. Section 22.947(c). Update the location for filing a cellular system information update (SIU) to “Federal Communications Commission, Wireless Telecommunications Bureau, Mobility Division, 445 12<sup>th</sup> Street, SW, Washington, DC 20554.”
42. Section 22.948(d). Delete the cross-reference to Section 22.144(a).<sup>114</sup>
43. Section 22.949(d). Replace the cross-reference to Section 22.122 with Section 1.927.<sup>115</sup>
44. Section 22.953(b). Replace the cross-reference to Section 1.929(h) with Section 1.929(a)-(b).<sup>116</sup>

---

<sup>109</sup> We do not seek detailed comment because the changes are mainly administrative in nature, and thus, exempt from the Administrative Procedure Act. *See* 5 U.S.C. § 553(b).

<sup>110</sup> When the Commission proposed 47 C.F.R. § 1.927(g), the rule cross-referenced proposed 47 C.F.R. § 1.948(g)(2), which has identical language to the current 47 C.F.R. § 1.948(i)(2). *See* Amendment of Parts 0, 1, 13, 22, 24 26, 27, 80, 87, 90, 95, 97, and 101 of the Commission’s Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Service, WT Docket No. 98-20, *Notice of Proposed Rulemaking*, 13 FCC Rcd. 9672, 9886 (1998).

<sup>111</sup> 47 C.F.R. § 1.939. The second sentence correctly states that manually filed petitions to deny should be submitted to the Office of the Secretary at the Commission’s current address. *Id.*

<sup>112</sup> Form 489 was discontinued and replaced with Form 601.

<sup>113</sup> Section 22.144(b) was consolidated with other similar rules into Section 1.955 in the *ULS R&O*.

<sup>114</sup> Section 22.144 was eliminated in the *ULS R&O*.

<sup>115</sup> Section 22.122 was removed and consolidated into Section 1.927 of our rules in the *ULS R&O*. *ULS R&O*, 13 FCC Rcd. app. E at 6, app. G at 78.

<sup>116</sup> Section 1.929(h) involves changes to ship station applications. 47 C.F.R. § 1.929(h). Section 1.929(a)-(b) lists changes applicable to all Wireless Radio Services authorizations and lists specific changes to cellular authorizations, respectively. *Id.* § 1.929(a)-(b).



45. Section 22.953(c). Replace the cross-reference to Section 1.929(h) with Section 1.929(k) of our rules.<sup>117</sup>
46. Section 24.12. Delete the cross-references to Sections 99.202(c) and 99.204.<sup>118</sup>
47. Section 24.843. Delete the entire section because similar “extension of time to construct” rules for other wireless services, including narrowband PCS,<sup>119</sup> were consolidated into Section 1.946,<sup>120</sup> which applies to all Wireless Radio Services.<sup>121</sup>
48. Section 27.3. Add “Part 74” to the list of other applicable rule parts and renumber.<sup>122</sup>
49. Section 90.20(c)(3). Replace limitation 77 with 78 for frequency 35.02; replace limitation 27 with 17 for frequency 42.40; replace limitation 19 with 29 for frequency 152.0075; replace frequency 158.4725 with 159.4725; remove limitation 43 for frequencies 156.165, 156.1725, 156.180, 156.1875, 156.195, 156.2025, 156.225, 156.2325, 156.240, 158.985, 158.9925, 159.000, 159.0075, 159.015, 159.0225, 159.045, 159.0525, 159.060, 159.0675, 159.075, 159.0825, 159.105, 159.1125, 159.120, 159.1275, 159.135, 159.1425, 159.165, 159.1725; and remove the frequency coordinator designation for frequencies 220.8025, 220.8075, 220.8125, 220.8175, 220.8225, 220.8275, 220.8325, 220.8375, 220.8425, 220.8475, 221.8025, 221.8075, 221.8125, 221.8175, 221.8225, 221.8275, 221.8325, 221.8375, 221.8425, 221.8475.
50. Section 90.20(d). Eliminate redundancy by consolidating limitations 10 and 38 and update frequency table(s) accordingly.
51. Section 90.35(b)(3). Eliminate redundancy by deleting one of the two entries for frequency 35.48.
52. Section 90.35(c). Remove limitation 45.
53. Section 90.149. Add “Except as provided in subpart R of this part,” to the beginning of Section 90.149(a) and eliminate 90.149(d).<sup>123</sup>

<sup>117</sup> Changes to cellular authorizations that are considered minor are any changes not specifically listed in Section 1.929(a)-(j). *Id.* § 1.929(a)-(j).

<sup>118</sup> Both rules were redesignated to Part 24, *i.e.*, 47 C.F.R. § 99.202(c) became 47 C.F.R. § 24.229, and 47 C.F.R. § 99.204 became 47 C.F.R. § 24.204. However, both rules have also since been eliminated or amended such that the cross-references in 47 C.F.R. § 24.12 are no longer appropriate. *See* Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, WT Docket No. 96-59, Amendment of the Commission's Cellular/PCS Cross-Ownership Rule, GN Docket No. 90-314, *Report and Order*, 11 FCC Rcd. 7824 (1996) (eliminating 47 C.F.R. § 24.204 and amending 47 C.F.R. § 24.229 to abolish cellular/PCS cross-ownership rule and PCS spectrum cap).

<sup>119</sup> *See* 47 C.F.R. §§ 24.409(c), 24.443 (1998) (setting forth procedures for a narrowband PCS licensee to request an extension of time to meet its construction requirements or a reinstatement of its license).

<sup>120</sup> 47 C.F.R. § 1.946; *see generally* *ULS R&O*, 13 FCC Rcd. at 21055-56 ¶¶ 56, 57; *id.* app. F at 3.

<sup>121</sup> We also note that Section 24.843 incorrectly referenced Form 489, instead of the current Form 601. 47 C.F.R. § 24.843.

<sup>122</sup> Section 27.3 references Part 73 but omits Part 74. *Id.* § 27.3.

<sup>123</sup> The license term for all nationwide 220 MHz licenses (*i.e.*, those granted under either Phase I or II of 220 MHz licensing) is set forth in Section 90.743(c). *Id.* § 90.743.

54. Section 90.743(a). Replace the cross-reference to Section 90.149 with Section 1.949.<sup>124</sup>
55. Section 90.743(c). Update the license term for Phase I non-nationwide licensees from five years to ten years.<sup>125</sup>

#### IV. PROCEDURAL MATTERS

##### A. Comment Filing Procedures

56. *Comments and reply comments.* Pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's rules,<sup>126</sup> interested parties may file comments in response to this Notice of Proposed Rulemaking in WT Docket No. 03-264 on or before 60 days after the date of publication of a summary of this Notice in the Federal Register, and reply comments on or before 90 days after the date of publication of a summary of this Notice in the Federal Register.

57. *Form of comments.* In order to facilitate staff review of the record in this proceeding, parties that submit comments or reply comments in this proceeding are requested to provide a table of contents with their comments. Such a table of contents should, where applicable, parallel the table of contents of the Notice.

58. *How to file comments.* Comments may be filed either by filing electronically, such as by using the Commission's Electronic Comment Filing System (ECFS), or by filing paper copies.<sup>127</sup>

59. Parties are strongly urged file their comments using ECFS (given recent changes in the Commission's mail delivery system). Comments filed through the ECFS can be sent as an electronic file via the Internet to <<http://www.fcc.gov/e-file/ecfs.html>>. Only one copy of an electronic submission must be filed. In completing the transmittal screen, the electronic filer should include its full name, Postal Service mailing address, and the applicable docket or rulemaking number, WT Docket No. 03-264. Parties also may submit comments electronically by Internet e-mail. To receive filing instructions for e-mail comments, commenters should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

60. Parties who choose to file by paper may submit such filings by hand or messenger delivery,

---

<sup>124</sup> *Id.* § 1.949.

<sup>125</sup> *Id.* § 90.743(c); see 2002 BR Staff Report at 10; 2002 BR Staff Report Appendix at 108. In 1994, the Commission established a uniform ten-year license term for all CMRS licenses, including those in Part 90, which were licensed for five years. See Implementation of Sections 3(n) and 332 of the Communications Act, GN Docket No. 93-252, Regulatory Treatment of Mobile Services, 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, Amendment of Parts 2 and 90 of the Commission's Rules To Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and 935-940 MHz Band Allotted to the Specialized Mobile Radio Pool, *Third Report and Order*, 9 FCC Rcd 7988, 8155-56, ¶¶ 383-384 (1994). In 2000, the Commission amended Section 90.149 of its rules to provide that licenses for stations authorized under Part 90 will be issued for a term not to exceed ten years from the date of initial issuance or renewal. See 1998 Biennial Regulatory Review – 47 C.F.R. Part 90 – Private Land Mobile Radio Services, WT Docket No. 98-182, *Report and Order and Further Notice of Proposed Rule Making*, 15 FCC Rcd. 16673, 16677-78 (2000)

<sup>126</sup> 47 C.F.R. §§ 1.415, 1.419.

<sup>127</sup> Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121(1998).

by U.S. Postal Service mail (First Class, Priority, or Express Mail), or by commercial overnight courier. Parties must file an original and four copies of each filing in WT Docket No. 03-264. Parties that want each Commissioner to receive a personal copy of their comments must file an original plus nine copies. If paper filings are hand-delivered or messenger-delivered for the Commission's Secretary, they must be delivered to the Commission's contractor, Natek, Inc., at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002-4913. To receive an official "Office of the Secretary" date stamp, documents must be addressed to Marlene H. Dortch, Secretary, Federal Communications Commission. (The filing hours at this facility are 8:00 a.m. to 7:00 p.m.) If paper filings are submitted by mail through the U.S. Postal Service (First Class mail, Priority Mail, and Express Mail), they must be sent to the Commission's Secretary, Marlene H. Dortch, Federal Communications Commission, Office of the Secretary, 445 12th Street, S.W., Washington D.C. 20554. If paper filings are submitted by commercial overnight courier (*i.e.*, by overnight delivery other than through the U.S. Postal Service), such as by Federal Express or United Parcel Service, they must be sent to the Commission's Secretary, Marlene H. Dortch, Federal Communications Commission, Office of the Secretary, 9300 East Hampton Drive, Capitol Heights, MD 20743. (The filing hours at this facility are 8:00 am to 5:30 pm.)<sup>128</sup>

61. Parties may also file with the Commission some form of electronic media submission (*e.g.*, diskettes, CDs, tapes, etc.) as part of their filings. In order to avoid possible adverse effects on such media submissions (potentially caused by irradiation techniques used to ensure that mail is not contaminated), the Commission advises that they should not be sent through the U.S. Postal Service. Hand-delivered or messenger-delivered electronic media submissions should be delivered to the Commission's contractor, Natek, Inc., at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002-4913. Electronic media sent by commercial overnight courier should be sent to the Commission's Secretary, Marlene H. Dortch, Federal Communications Commission, Office of the Secretary, 9300 East Hampton Drive, Capitol Heights, MD 20743.<sup>129</sup>

62. Regardless of whether parties choose to file electronically or by paper, they should also send one copy of any documents filed, either by paper or by e-mail, to each of the following: (1) Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C., 20554, facsimile (202) 863-2898, or e-mail at [qualexint@aol.com](mailto:qualexint@aol.com); and (2) Jay Jackson, Mobility Division, Wireless Telecommunications Bureau, 445 12th Street, S.W., Washington, D.C., 20554, or e-mail at [Jay.Jackson@fcc.gov](mailto:Jay.Jackson@fcc.gov).

63. *Availability of documents.* Comments, reply comments, and *ex parte* submissions will be available for public inspection during regular business hours in the FCC Reference Information Center, Federal Communications Commission, 445 12th Street, S.W., Room CY-A257, Washington, D.C. 20554. These documents also will be available electronically at the Commission's Disabilities Issues Task Force web site, [www.fcc.gov/df](http://www.fcc.gov/df), and from the Commission's Electronic Comment Filing System. Documents are available electronically in ASCII text, Word 97, and Adobe Acrobat. Copies of filings in this proceeding may be obtained from Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C., 20554, telephone (202) 863-2893, facsimile (202) 863-2898, or via e-mail at [qualexint@aol.com](mailto:qualexint@aol.com). This document is also available in alternative formats (computer diskette, large print, audio cassette, and Braille). Persons who need documents in such formats may contact Brian Millin at (202) 418-7426, TTY (202) 418-7365, [Brian.Millin@fcc.gov](mailto:Brian.Millin@fcc.gov), or send an e-mail to [access@fcc.gov](mailto:access@fcc.gov).

<sup>128</sup> See "FCC Announces a New Filing Location for Paper Documents and a New Fax Number for General Correspondence," *Public Notice*, DA 01-2919 (rel. Dec. 14, 2001); "Reminder[:] Filing Locations for Paper Documents and Instructions for Mailing Electronic Media," *Public Notice*, DA 03-2730 (rel. Aug. 22, 2003).

<sup>129</sup> See "Reminder[:] Filing Locations for Paper Documents and Instructions for Mailing Electronic Media," *Public Notice*, DA 03-2730 (rel. Aug. 22, 2003).

---

**B. Ex Parte Presentations**

64. This is a permit-but-disclose rulemaking proceeding, subject to the “permit-but-disclose” requirements under section 1.1206(b) of the Commission’s rules.<sup>130</sup> *Ex parte* presentations are permissible if disclosed in accordance with Commission rules, except during the Sunshine Agenda period when presentations, *ex parte* or otherwise, are generally prohibited. Persons making oral *ex parte* presentations are reminded that a memorandum summarizing a presentation must contain a summary of the substance and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.<sup>131</sup> Additional rules pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission’s rules. Parties submitting written *ex parte* presentations or summaries of oral *ex parte* presentations are urged to use the ECFS in accordance with the Commission rules discussed above. Parties filing paper *ex parte* submissions must file an original and one copy of each submission with the Commission’s Secretary, Marlene H. Dortch, at the appropriate address as shown above for filings sent by either U.S. mail, overnight delivery, or hand or messenger delivery. Parties must also serve the following with either one copy of each *ex parte* filing via e-mail or two paper copies: (1) Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C., 20554, telephone (202) 863-2893, facsimile (202) 863-2898, or e-mail at [qualexint@aol.com](mailto:qualexint@aol.com); and (2) Jay Jackson, Mobility Division, Wireless Telecommunications Bureau, 445 12th Street, S.W., Washington, D.C., 20554, or e-mail at [Jay.Jackson@fcc.gov](mailto:Jay.Jackson@fcc.gov).

**C. Regulatory Flexibility Act**

65. As required by the Regulatory Flexibility Act,<sup>132</sup> the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible impact on small entities of the proposals in this Notice of Proposed Rulemaking. The IRFA is set forth in the Appendix. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the Notice, and they must have a separate and distinct heading designating them as responses to the IRFA. The Commission’s Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act.<sup>133</sup>

**D. Initial Paperwork Reduction Act Analysis**

66. This Notice contains either a proposed or modified information collection. As part of the continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget (OMB) to comment on the information collections contained in this Notice, as required by the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public and agency comments are due at the same time as other comments on this Notice; OMB comments are due 60 days from the date of publication of this Notice in the Federal Register. Comments should address: 1) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; 2) the accuracy of the Commission's burden estimates; 3) ways to enhance the quality, utility, and clarity of the information collected; and 4) ways to minimize the burden of the collection of information on the respondents, including the use of automated

---

<sup>130</sup> 47 C.F.R. § 1.1206.

<sup>131</sup> *Id.* § 1.1206(b)(2).

<sup>132</sup> *Id.*

<sup>133</sup> *Id.* § 603(a).

---

collection techniques or other forms of information technology. A copy of any comments on the information collections contained herein should be submitted to Judith B. Herman, Federal Communications Commission, 445 12<sup>th</sup> St., S.W., Room 1-C804, Washington, D.C. 20554, or via the Internet to Judith-B.Herman@fcc.gov, and to Edward C. Springer, OMB Desk Officer, 10236 New Executive Office Building, 724 17<sup>th</sup> St., N.W., Washington, D.C. 20503, or via the Internet to Edward.Springer@omb.eop.gov.

### **E. Contact Information**

67. The Wireless Telecommunications Bureau contact for this proceeding is Jay Jackson at (202) 418-0620, e-mail at Jay.Jackson@fcc.gov. Press inquires should be directed to Lauren K. Patrich, Wireless Telecommunications Bureau, at (202) 418-7944, TTY at (202) 418-7233, or e-mail at Lauren.Patrich@fcc.gov.

### **V. ORDERING CLAUSES**

68. Accordingly, IT IS ORDERED that, pursuant to the authority contained in Sections 1, 4(i), 11, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 161, and 303(r), this NOTICE OF PROPOSED RULEMAKING is hereby ADOPTED.

69. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this NOTICE OF PROPOSED RULEMAKING, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

---

**APPENDIX****INITIAL REGULATORY FLEXIBILITY ANALYSIS**

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>1</sup> the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Notice of Proposed Rulemaking (Notice). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided in paragraph 56 of the item. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).<sup>2</sup> In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.<sup>3</sup>

**A. Need for, and Objectives of, the Proposed Rules**

2. We believe that streamlining and harmonizing certain licensing provisions in the wireless radio services (WRS) would further Commission efforts to maintain clear spectrum rights and obligations for these licensees, fulfill the Commission's mandate under Section 11 of the Communications Act to conduct biennial reviews, and support recent efforts to maximize the public benefits derived from the use of the radio spectrum. Thus, in the Notice, we seek comment on proposals – identified in the *2002 Biennial Review Report* and related *2002 BR Staff Report*, as well as the *2000 Biennial Review Report* and related *2000 BR Staff Report* – to streamline and harmonize WRS rules that are no longer in the public interest and/or may be obsolete as the result of increased competition within WRS pursuant to Section 11 of the Act. We discuss the potential impact of these on small entities in the paragraphs that follow.

**B. Legal Basis**

3. The potential actions on which comment is sought in this Notice would be authorized under Sections 1, 4(i), 11, and 303(r), of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 161, and 303(r).

**C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply**

4. The RFA requires that an initial regulatory flexibility analysis be prepared for notice-and-comment rulemaking proceedings, unless the Agency certifies that “the rule will not, if promulgated, have a significant impact on a substantial number of small entities.”<sup>4</sup> The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”<sup>5</sup> In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.<sup>6</sup> A small business concern is one which:

---

<sup>1</sup> See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>2</sup> See 5 U.S.C. § 603(a).

<sup>3</sup> See *id.*

<sup>4</sup> 5 U.S.C. § 603(b)(3).

<sup>5</sup> *Id.* at § 601(6).

<sup>6</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with (continued....)”

(1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).<sup>7</sup> A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”<sup>8</sup> This IRFA describes and estimates the number of small entity licensees that may be affected if the proposals in this Notice are adopted.

5. When identifying small entities that could be affected by our new rules, we provide information describing auctions results, including the number of small entities that are winning bidders. We note, however, that the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily reflect the total number of small entities currently in a particular service. The Commission does not generally require that applicants provide business size information, except in the context of an assignment or transfer of control application where unjust enrichment issues are implicated. Consequently, to assist the Commission in analyzing the total number of potentially affected small entities, we request commenters to estimate the number of small entities that may be affected by any rule changes resulting from this Notice.

6. The potential rules on which comment is sought in this Notice, if adopted, would affect small entity licensees of the services identified below.

#### ***Wireless Radio Services***

7. **Cellular Licensees.** The SBA has developed a small business size standard for small businesses in the category “Cellular and Other Wireless Telecommunications.”<sup>9</sup> Under that SBA category, a business is small if it has 1,500 or fewer employees.<sup>10</sup> According to the Bureau of the Census, only twelve firms out of a total of 977 cellular and other wireless telecommunications firms that operated for the entire year in 1997 had 1,000 or more employees.<sup>11</sup> Therefore, even if all twelve of these firms were cellular telephone companies, nearly all cellular carriers are small businesses under the SBA’s definition.

8. **220 MHz Radio Service – Phase I Licensees.** The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to “Cellular and Other Wireless Telecommunications” companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.<sup>12</sup> According to the

(Continued from previous page) \_\_\_\_\_

the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” 5 U.S.C. § 601(3).

<sup>7</sup> Small Business Act, 15 U.S.C. § 632 (1996).

<sup>8</sup> 5 U.S.C. § 601(4).

<sup>9</sup> 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517212.

<sup>10</sup> *Id.*

<sup>11</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 513322 (October 2000).

<sup>12</sup> 13 C.F.R. § 121.201, NAICS code 517212.

Census Bureau data for 1997, only twelve firms out of a total of 977 such firms that operated for the entire year in 1997, had 1,000 or more employees.<sup>13</sup> If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business standard.

9. **220 MHz Radio Service – Phase II Licensees.** The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for defining “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>14</sup> This small business standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>15</sup> A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.<sup>16</sup> The SBA has approved these small size standards.<sup>17</sup> Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.<sup>18</sup> In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.<sup>19</sup> Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.<sup>20</sup> A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.<sup>21</sup>

10. **Lower 700 MHz Band Licenses.** We adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.<sup>22</sup> We have defined a small business as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.<sup>23</sup> A very small business is defined as an entity that, together with its affiliates and controlling principals, has average

---

<sup>13</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 513322 (October 2000).

<sup>14</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, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶¶ 291-295 (1997).

<sup>15</sup> *Id.* at 11068 ¶ 291.

<sup>16</sup> *Id.*

<sup>17</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>18</sup> See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

<sup>19</sup> See “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” *Public Notice*, 14 FCC Rcd 1085 (WTB 1999).

<sup>20</sup> See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

<sup>21</sup> See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

<sup>22</sup> See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022 (2002).

<sup>23</sup> *Id.* at 1087-88 ¶ 172.



gross revenues that are not more than \$15 million for the preceding three years.<sup>24</sup> Additionally, the lower 700 MHz Service has a third category of small business status that may be claimed for Metropolitan/Rural Service Area (MSA/RSA) licenses. The third category is entrepreneur, which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.<sup>25</sup> The SBA has approved these small size standards.<sup>26</sup> An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.<sup>27</sup> A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 CMA licenses.<sup>28</sup> Seventeen winning bidders claimed small or very small business status and won sixty licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.<sup>29</sup>

11. **Upper 700 MHz Band Licenses.** The Commission released a *Report and Order*, authorizing service in the upper 700 MHz band.<sup>30</sup> This auction, previously scheduled for January 13, 2003, has been postponed.<sup>31</sup>

12. **Paging.** In the *Paging Second Report and Order*, we adopted a size standard for “small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>32</sup> A small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>33</sup> The SBA has approved this definition.<sup>34</sup> An auction of Metropolitan Economic Area (MEA) licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold.<sup>35</sup> Fifty-seven companies claiming small business status won 440 licenses.<sup>36</sup> An auction of

---

<sup>24</sup> *Id.*

<sup>25</sup> *Id.* at 1088 ¶ 173.

<sup>26</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

<sup>27</sup> See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

<sup>28</sup> See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

<sup>29</sup> *Id.*

<sup>30</sup> Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, *Second Memorandum Opinion and Order*, 16 FCC Rcd 1239 (2001).

<sup>31</sup> See “Auction of Licenses for 747-762 and 777-792 MHz Bands (Auction No. 31) Is Rescheduled,” *Public Notice*, 16 FCC Rcd 13079 (WTB 2003).

<sup>32</sup> Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Second Report and Order*, 12 FCC Rcd 2732, 2811-2812 ¶¶ 178-181 (*Paging Second Report and Order*); see also Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd 10030, 10085-10088 ¶¶ 98-107 (1999).

<sup>33</sup> *Paging Second Report and Order*, 12 FCC Rcd at 2811 ¶ 179.

<sup>34</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>35</sup> See “929 and 931 MHz Paging Auction Closes,” *Public Notice*, 15 FCC Rcd 4858 (WTB 2000).

Metropolitan Economic Area (MEA) and Economic Area (EA) licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.<sup>37</sup> 132 companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.<sup>38</sup> Currently, there are approximately 24,000 Private Paging site-specific licenses and 74,000 Common Carrier Paging licenses. According to the most recent *Trends in Telephone Service*, 608 private and common carriers reported that they were engaged in the provision of either paging or “other mobile” services.<sup>39</sup> Of these, we estimate that 589 are small, under the SBA-approved small business size standard.<sup>40</sup> We estimate that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

13. **Broadband Personal Communications Service (PCS).** The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>41</sup> For Block F, an additional small business size standard for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>42</sup> These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.<sup>43</sup> No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 “small” and “very small” business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.<sup>44</sup> On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.<sup>45</sup>

14. **Narrowband PCS.** The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, “small

(Continued from previous page) \_\_\_\_\_

<sup>36</sup> See *id.*

<sup>37</sup> See “Lower and Upper Paging Band Auction Closes,” *Public Notice*, 16 FCC Rcd 21821 (WTB 2002).

<sup>38</sup> See “Lower and Upper Paging Bands Auction Closes,” *Public Notice*, 18 FCC Rcd 11154 (WTB 2003).

<sup>39</sup> See *Trends in Telephone Service*, Industry Analysis Division, Wireline Competition Bureau, Table 5.3 (Number of Telecommunications Service Providers that are Small Businesses) (May 2002).

<sup>40</sup> 13 C.F.R. § 121.201, NAICS code 517211.

<sup>41</sup> See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

<sup>42</sup> See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶¶ 60.

<sup>43</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>44</sup> FCC News, “Broadband PCS, D, E and F Block Auction Closes,” No. 71744 (rel. January 14, 1997).

<sup>45</sup> See “C, D, E, and F Block Broadband PCS Auction Closes,” *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

businesses” were entities with average gross revenues for the prior three calendar years of \$40 million or less.<sup>46</sup> Through these auctions, the Commission awarded a total of forty-one licenses, 11 of which were obtained by four small businesses.<sup>47</sup> To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.<sup>48</sup> A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.<sup>49</sup> A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.<sup>50</sup> The SBA has approved these small business size standards.<sup>51</sup> A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (MTA and nationwide) licenses.<sup>52</sup> Three of these claimed status as a small or very small entity and won 311 licenses.

15. **Specialized Mobile Radio (SMR).** The Commission awards “small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.<sup>53</sup> The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.<sup>54</sup> The SBA has approved these small business size standards for the 900 MHz Service.<sup>55</sup> The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard

---

<sup>46</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, *Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 175, 196 ¶ 46 (1994).

<sup>47</sup> See “Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674,” *Public Notice*, PNWL 94-004 (rel. Aug. 2, 1994); “Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787,” *Public Notice*, PNWL 94-27 (rel. Nov. 9, 1994).

<sup>48</sup> Amendment of the Commission’s Rules to Establish New Personal Communications Services, Narrowband PCS, *Second Report and Order and Second Further Notice of Proposed Rule Making*, 15 FCC Rcd 10456, 10476 ¶ 40 (2000).

<sup>49</sup> *Id.*

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

<sup>51</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>52</sup> See “Narrowband PCS Auction Closes,” *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

<sup>53</sup> 47 C.F.R. § 90.814(b)(1).

<sup>54</sup> *Id.*

<sup>55</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999. We note that, although a request was also sent to the SBA requesting approval for the small business size standard for 800 MHz, approval is still pending.

won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.<sup>56</sup> A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.<sup>57</sup>

16. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed “small business” status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

17. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is established by the SBA.

18. **Private Land Mobile Radio (PLMR).** PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories, and are often used in support of the licensee’s primary (non-telecommunications) business operations. For the purpose of determining whether a licensee of a PLMR system is a small business as defined by the SBA, we could use the definition for “Cellular and Other Wireless Telecommunications.” This definition provides that a small entity is any such entity employing no more than 1,500 persons.<sup>58</sup> The Commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. Moreover, because PLMR licensees generally are not in the business of providing cellular or other wireless telecommunications services but instead use the licensed facilities in support of other business activities, we are not certain that the Cellular and Other Wireless Telecommunications category is appropriate for determining how many PLMR licensees are small entities for this analysis. Rather, it may be more appropriate to assess PLMR licensees under the standards applied to the particular industry subsector to which the licensee belongs.<sup>59</sup>

19. The Commission’s 1994 Annual Report on PLMRs<sup>60</sup> indicates that at the end of fiscal year 1994, there were 1,087,267 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz. Because any entity engaged in a commercial activity is eligible to hold a PLMR license, the revised rules in this context could potentially impact every small business in the United States.

---

<sup>56</sup> See “Correction to Public Notice DA 96-586 ‘FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,’” *Public Notice*, 18 FCC Rcd 18367 (WTB 1996).

<sup>57</sup> See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

<sup>58</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>59</sup> See generally 13 C.F.R. § 121.201.

<sup>60</sup> Federal Communications Commission, 60th Annual Report, Fiscal Year 1994, at ¶ 116.

20. **Fixed Microwave Services.** Fixed microwave services include common carrier,<sup>61</sup> private-operational fixed,<sup>62</sup> and broadcast auxiliary radio services.<sup>63</sup> Currently, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of this FRFA, we will use the SBA's definition applicable to "Cellular and Other Wireless Telecommunications" companies—that is, an entity with no more than 1,500 persons.<sup>64</sup> The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer small common carrier fixed licensees and 61,670 or fewer small private operational-fixed licensees and small broadcast auxiliary radio licensees in the microwave services that may be affected by the rules and policies adopted herein. The Commission notes, however, that the common carrier microwave fixed licensee category includes some large entities.

21. **Wireless Communications Services.** This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years.<sup>65</sup> The SBA has approved these definitions.<sup>66</sup> The FCC auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity. An auction for one license in the 1670-1674 MHz band commenced on April 30, 2003 and closed the same day. One license was awarded. The winning bidder was not a small entity.

22. **39 GHz Service.** The Commission defines "small entity" for 39 GHz licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>67</sup> "Very small business" is defined as an entity that, together with its affiliates, has average gross revenues of not

---

<sup>61</sup> 47 C.F.R. §§ 101 *et seq.* (formerly, part 21 of the Commission's Rules).

<sup>62</sup> Persons eligible under parts 80 and 90 of the Commission's rules can use Private Operational-Fixed Microwave services. *See generally* 47 C.F.R. parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

<sup>63</sup> Auxiliary Microwave Service is governed by part 74 of Title 47 of the Commission's Rules. *See* 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

<sup>64</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>65</sup> Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

<sup>66</sup> *See* Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>67</sup> *See* Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Band, *Report and Order*, 12 FCC Rcd 18600 (1997).

more than \$15 million for the preceding three calendar years.<sup>68</sup> The SBA has approved these definitions.<sup>69</sup> The auction of the 2,173 39 GHz licenses began on April 12, 2000, and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses.

23. **Local Multipoint Distribution Service.** An auction of the 986 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined “small entity” for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>70</sup> An additional classification for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>71</sup> These regulations defining “small entity” in the context of LMDS auctions have been approved by the SBA.<sup>72</sup> There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small business winning bidders that won 119 licenses.

24. **218-219 MHz Service.** The first auction of 218-219 MHz (previously referred to as the Interactive and Video Data Service or IVDS) spectrum resulted in 178 entities winning licenses for 594 Metropolitan Statistical Areas (MSAs).<sup>73</sup> Of the 594 licenses, 567 were won by 167 entities qualifying as a small business. For that auction, we defined a small business as an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.<sup>74</sup> In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not exceeding \$15 million for the preceding three years.<sup>75</sup> A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not exceeding \$3 million for the preceding three years.<sup>76</sup> The SBA has approved of these definitions.<sup>77</sup> At this time, we cannot

---

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

<sup>69</sup> See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Hector Barreto, Administrator, Small Business Administration, dated January 18, 2002.

<sup>70</sup> See Rulemaking to Amend Parts 1, 2, 21, 25, of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, Reallocate the 29.5-30.5 Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making*, 12 FCC Rcd 12545, 12689-90 ¶ 348 (1997).

<sup>71</sup> *Id.*

<sup>72</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>73</sup> See “Interactive Video and Data Service (IVDS) Applications Accepted for Filing,” *Public Notice*, 9 FCC Rcd 6227 (1994).

<sup>74</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Fourth Report and Order*, 9 FCC Rcd 2330 (1994).

<sup>75</sup> Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Report and Order and Memorandum Opinion and Order*, 15 FCC Rcd 1497 (1999).

<sup>76</sup> *Id.*

estimate the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this FRFA that in future auctions, many, and perhaps all, of the licenses may be awarded to small businesses.

25. **Location and Monitoring Service (LMS).** Multilateration LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning LMS licenses, the Commission has defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.<sup>78</sup> A “very small business” is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$3 million.<sup>79</sup> These definitions have been approved by the SBA.<sup>80</sup> An auction for LMS licenses commenced on February 23, 1999, and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses. We cannot accurately predict the number of remaining licenses that could be awarded to small entities in future LMS auctions.

26. **Rural Radiotelephone Service.** We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.<sup>81</sup> There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

27. **Air-Ground Radiotelephone Service.** We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.<sup>82</sup> There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and the Commission estimates that almost all of them qualify as small entities under the SBA definition.

28. **Offshore Radiotelephone Service.** This service operates on several ultra high frequency (UHF) TV broadcast channels that are not used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico. At present, there are approximately 55 licensees in this service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.<sup>83</sup> The Commission is unable at this time to estimate the number of licensees that would qualify as small entities under the SBA definition. The Commission assumes, for purposes of this FRFA, that all of the 55 licensees are small entities, as that term is defined by the SBA.

(Continued from previous page) \_\_\_\_\_

<sup>77</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>78</sup> Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Second Report and Order*, 13 FCC Rcd 15182, 15192 ¶ 20 (1998); *see also* 47 C.F.R. § 90.1103.

<sup>79</sup> Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Second Report and Order*, 13 FCC Rcd at 15192 ¶ 20; *see also* 47 C.F.R. § 90.1103.

<sup>80</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated February 22, 1999.

<sup>81</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>82</sup> *Id.*

<sup>83</sup> *Id.*

29. **Multiple Address Systems (MAS).** Entities using MAS spectrum, in general, fall into two categories: (1) those using the spectrum for profit-based uses, and (2) those using the spectrum for private internal uses. With respect to the first category, the Commission defines “small entity” for MAS licenses as an entity that has average gross revenues of less than \$15 million in the three previous calendar years.<sup>84</sup> “Very small business” is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$3 million for the preceding three calendar years.<sup>85</sup> The SBA has approved of these definitions.<sup>86</sup> The majority of these entities will most likely be licensed in bands where the Commission has implemented a geographic area licensing approach that would require the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission’s licensing database indicates that, as of January 20, 1999, there were a total of 8,670 MAS station authorizations. Of these, 260 authorizations were associated with common carrier service. In addition, an auction for 5,104 MAS licenses in 176 EAs began November 14, 2001, and closed on November 27, 2001.<sup>87</sup> Seven winning bidders claimed status as small or very small businesses and won 611 licenses.

30. With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, we note that MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definitions developed by the SBA would be more appropriate. The applicable definition of small entity in this instance appears to be the “Cellular and Other Wireless Telecommunications” definition under the SBA rules. This definition provides that a small entity is any entity employing no more than 1,500 persons.<sup>88</sup> The Commission’s licensing database indicates that, as of January 20, 1999, of the 8,670 total MAS station authorizations, 8,410 authorizations were for private radio service, and of these, 1,433 were for private land mobile radio service.

31. **Incumbent 24 GHz Licensees.** The rules that we adopt could affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The Commission did not develop a definition of small entities applicable to existing licensees in the 24 GHz band. Therefore, the applicable definition of small entity is the definition under the SBA rules for “Cellular and Other Wireless Telecommunications.” This definition provides that a small entity is any entity employing no more than 1,500 persons.<sup>89</sup> We believe that there

---

<sup>84</sup> See Amendment of the Commission’s Rules Regarding Multiple Address Systems, *Report and Order*, 15 FCC Rcd 11956, 12008 ¶ 123 (2000).

<sup>85</sup> *Id.*

<sup>86</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated June 4, 1999.

<sup>87</sup> See “Multiple Address Systems Spectrum Auction Closes,” *Public Notice*, 16 FCC Rcd 21011 (2001).

<sup>88</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>89</sup> See *id.* According to Census Bureau data for 1997, in this category, there were a total of 977 firms that operated for the entire year. U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 513322 (October 2000). Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more. *Id.* The census data do not provide a more precise estimate of the number of firms that have 1,500 or fewer employees; the largest category provided is “Firms with 1,000 employees or more.”



are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent<sup>90</sup> and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

32. **Future 24 GHz Licensees.** With respect to new applicants in the 24 GHz band, we have defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not exceeding \$15 million.<sup>91</sup> “Very small business” in the 24 GHz band is defined as an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.<sup>92</sup> The SBA has approved these definitions.<sup>93</sup> The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held.

33. **700 MHz Guard Band Licenses.** In the *700 MHz Guard Band Order*, we adopted size standards for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>94</sup> A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.<sup>95</sup> Additionally, a “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.<sup>96</sup> SBA approval of these definitions is not required.<sup>97</sup> An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.<sup>98</sup> Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.<sup>99</sup>

---

<sup>90</sup> Teligent acquired the Digital Electronic Message Service (DEMS) licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

<sup>91</sup> Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules To License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16967-77 (2000) (*24 GHz Report and Order*); see also 47 C.F.R. § 101.538(a)(2).

<sup>92</sup> *24 GHz Report and Order*, 15 FCC Rcd at 16967-77; see also 47 C.F.R. § 101.538(a)(1).

<sup>93</sup> See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Gary M. Jackson, Assistant Administrator, Small Business Administration, dated July 28, 2000.

<sup>94</sup> See Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, *Second Report and Order*, 15 FCC Rcd 5299 (2000).

<sup>95</sup> *Id.* at 5343 ¶ 108.

<sup>96</sup> *Id.*

<sup>97</sup> *Id.* at 5343 ¶ 108 n.246 (for the 746-764 MHz and 776-794 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain Small Business Administration approval before adopting small business size standards).

<sup>98</sup> See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 18026 (2000).

<sup>99</sup> See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 4590 (WTB 2001).

34. **Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and Instructional Television Fixed Service.** Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as “wireless cable,” transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).<sup>100</sup> In connection with the 1996 MDS auction, the Commission defined “small business” as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years.<sup>101</sup> The SBA has approved of this standard.<sup>102</sup> The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs).<sup>103</sup> Of the 67 auction winners, 61 claimed status as a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are not more than \$40 million and are thus considered small entities.<sup>104</sup>

35. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution,<sup>105</sup> which includes all such companies generating \$12.5 million or less in annual receipts.<sup>106</sup> According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.<sup>107</sup> Of this total, 1,180 firms had annual receipts of under \$10 million, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.<sup>108</sup> Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies proposed in the Notice.

36. Finally, while SBA approval for a Commission-defined small business size standard applicable to ITFS is pending, educational institutions are included in this analysis as small entities.<sup>109</sup>

---

<sup>100</sup> Amendment of Parts 21 and 74 of the Commission’s Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Report and Order*, 10 FCC Rcd 9589, 9593 ¶ 7 (1995) (*MDS Auction R&O*).

<sup>101</sup> 47 C.F.R. § 21.961(b)(1).

<sup>102</sup> See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Bureau, from Gary Jackson, Assistant Administrator for Size Standards, Small Business Administration, dated March 20, 2003 (noting approval of \$40 million size standard for MDS auction).

<sup>103</sup> Basic Trading Areas (BTAs) were designed by Rand McNally and are the geographic areas by which MDS was auctioned and authorized. See *MDS Auction R&O*, 10 FCC Rcd at 9608 ¶ 34.

<sup>104</sup> 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA’s small business size standard for “other telecommunications” (annual receipts of \$12.5 million or less). See 13 C.F.R. § 121.201, NAICS code 517910.

<sup>105</sup> 13 C.F.R. § 121.201, NAICS code 517510.

<sup>106</sup> *Id.*

<sup>107</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4 (issued October 2000).

<sup>108</sup> *Id.*

<sup>109</sup> In addition, the term “small entity” under SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

There are currently 2,032 ITFS licensees, and all but 100 of these licenses are held by educational institutions. Thus, we tentatively conclude that at least 1,932 ITFS licensees are small businesses.

37. **Cable Television Relay Service.** This service includes transmitters generally used to relay cable programming within cable television system distribution systems. The SBA has defined a small business size standard for Cable and other Program Distribution, consisting of all such companies having annual receipts of no more than \$12.5 million.<sup>110</sup> According to Census Bureau data for 1997, there were 1,311 firms in the industry category Cable and Other Program Distribution, total, that operated for the entire year.<sup>111</sup> Of this total, 1,180 firms had annual receipts of \$10 million or less, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.<sup>112</sup> Thus, under this standard, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies proposed in the Notice.

38. **Cable System Operators (Rate Regulation Standard).** The Commission has developed, with SBA approval, its own definition of a small cable system operator for purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.<sup>113</sup> Based on our most recent information, we estimate that there were 1,439 cable operators that qualified as small cable companies at the end of 1995.<sup>114</sup> Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. The Commission's rules define a "small system," for purposes of rate regulation, as a cable system with 15,000 or fewer subscribers.<sup>115</sup> The Commission does not request nor does the Commission collect information concerning cable systems serving 15,000 or fewer subscribers, and thus is unable to estimate, at this time, the number of small cable systems nationwide.

39. **Cable System Operators (Telecom Act Standard).** The Communications Act, as amended, also contains a size standard for a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."<sup>116</sup> The Commission has determined that there are 68,500,000 subscribers in the United States.<sup>117</sup> Therefore, an operator serving fewer than 685,000 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all of its affiliates, do

---

<sup>110</sup> 13 C.F.R. § 121.201, NAICS code 517510.

<sup>111</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4 (issued October 2000).

<sup>112</sup> *Id.*

<sup>113</sup> 47 C.F.R. § 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of \$100 million or less. See Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation, *Sixth Report and Order and Eleventh Order on Reconsideration*, 10 FCC Rcd 7393 (1995).

<sup>114</sup> Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

<sup>115</sup> 47 C.F.R. § 76.901(c).

<sup>116</sup> 47 U.S.C. § 623(m)(2).

<sup>117</sup> Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, 17 FCC Rcd 1255 (2001) (*Eighth Annual Report*).

not exceed \$250 million in the aggregate.<sup>118</sup> Based on available data, we find that the number of cable operators serving 685,000 subscribers or less totals approximately 1,450.<sup>119</sup> Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

40. **Multichannel Video Distribution and Data Service.** MVDDS is a terrestrial fixed microwave service operating in the 12.2-12.7 GHz band. No auction has yet been held in this service, although an action has been scheduled for January 14, 2004.<sup>120</sup> Accordingly, there are no licensees in this service.

### *Private Wireless Radio Services*

41. **Amateur Radio Service.** These licensees are believed to be individuals, and therefore are not small entities.

42. **Aviation and Marine Services.** Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category “Cellular and Other Telecommunications,” which is 1,500 or fewer employees.<sup>121</sup> Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.<sup>122</sup> There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as “small” businesses under the above special small business size standards.

43. **Personal Radio Services.** Personal radio services provide short-range, low power radio for personal communications, radio signaling, and business communications not provided for in other services. The Personal Radio Services include spectrum licensed under Part 95 of our rules.<sup>123</sup> These

---

<sup>118</sup> 47 C.F.R. § 76.1403(b).

<sup>119</sup> Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

<sup>120</sup> “Auctions of Licenses in the Multichannel Video Distribution and Data Service Rescheduled for January 14, 2004,” *Public Notice*, DA 03-2354 (August 28, 2003).

<sup>121</sup> 13 CFR § 121.201, NAICS code 517212 (2002).

<sup>122</sup> Amendment of the Commission’s Rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Red 19853 (1998).

<sup>123</sup> 47 C.F.R. Part 90.

services include Citizen Band Radio Service (CB), General Mobile Radio Service (GMRS), Radio Control Radio Service (R/C), Family Radio Service (FRS), Wireless Medical Telemetry Service (WMTS), Medical Implant Communications Service (MICS), Low Power Radio Service (LPRS), and Multi-Use Radio Service (MURS).<sup>124</sup> There are a variety of methods used to license the spectrum in these rule parts, from licensing by rule, to conditioning operation on successful completion of a required test, to site-based licensing, to geographic area licensing. Under the RFA, the Commission is required to make a determination of which small entities are directly affected by the rules being adopted. Since all such entities are wireless, we apply the definition of cellular and other wireless telecommunications, pursuant to which a small entity is defined as employing 1,500 or fewer persons.<sup>125</sup> Many of the licensees in these services are individuals, and thus are not small entities. In addition, due to the mostly unlicensed and shared nature of the spectrum utilized in many of these services, the Commission lacks direct information upon which to base an estimation of the number of small entities under an SBA definition that might be directly affected by the proposed rules.

44. Despite the paucity, or in some instances, total absence, of information about their status as licensees or regulatees or the number of operators in each such service, users of spectrum in these services are listed here as a matter of Commission discretion in order to fulfill the mandate imposed on the Commission by the Regulatory Flexibility Act to regulate small business entities with an understanding towards preventing the possible differential and adverse impact of the Commission's rules on smaller entities. Further, the listing of such entities, despite their indeterminate status, should provide them with fair and adequate notice of the possible impact of the proposals contained in the Notice.

45. **Public Safety Radio Services.** Public Safety radio services include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services.<sup>126</sup> There are a total of approximately 127,540 licensees in these services. Governmental entities<sup>127</sup> as well as private

---

<sup>124</sup> The Citizens Band Radio Service, General Mobile Radio Service, Radio Control Radio Service, Family Radio Service, Wireless Medical Telemetry Service, Medical Implant Communications Service, Low Power Radio Service, and Multi-Use Radio Service are governed by Subpart D, Subpart A, Subpart C, Subpart B, Subpart H, Subpart I, Subpart G, and Subpart J, respectively, of Part 95 of the Commission's rules. *See generally* 47 C.F.R. Part 95.

<sup>125</sup> 13 C.F.R. § 121.201, NAICS Code 517212.

<sup>126</sup> With the exception of the special emergency service, these services are governed by Subpart B of part 90 of the Commission's Rules, 47 C.F.R. §§ 90.15-90.27. The police service includes approximately 27,000 licensees that serve state, county, and municipal enforcement through telephony (voice), telegraphy (code) and teletype and facsimile (printed material). The fire radio service includes approximately 23,000 licensees comprised of private volunteer or professional fire companies as well as units under governmental control. The local government service that is presently comprised of approximately 41,000 licensees that are state, county, or municipal entities that use the radio for official purposes not covered by other public safety services. There are approximately 7,000 licensees within the forestry service which is comprised of licensees from state departments of conservation and private forest organizations who set up communications networks among fire lookout towers and ground crews. The approximately 9,000 state and local governments are licensed to highway maintenance service provide emergency and routine communications to aid other public safety services to keep main roads safe for vehicular traffic. The approximately 1,000 licensees in the Emergency Medical Radio Service (EMRS) use the 39 channels allocated to this service for emergency medical service communications related to the delivery of emergency medical treatment. 47 C.F.R. §§ 90.15-90.27. The approximately 20,000 licensees in the special emergency service include medical services, rescue organizations, veterinarians, handicapped persons, disaster relief organizations, school buses, beach patrols, establishments in isolated areas, communications standby facilities, and emergency repair of public communications facilities. 47 C.F.R. §§ 90.33-90.55.

<sup>127</sup> 47 C.F.R. § 1.1162.

businesses comprise the licensees for these services. All governmental entities with populations of less than 50,000 fall within the definition of a small entity.<sup>128</sup>

#### **D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements**

46. The policies proposals in this Notice could apply to a significant number of Commission licensees of wireless services. Specifically, the Notice proposes various amendments to Parts 1, 22, 24, 27, and 90 of the rules to modify or eliminate provisions that (1) have become outdated as a result of technological change, supervening changes to related Commission rules, or increased competition within WRS, and/or (2) should be harmonized because they treat similarly situated services differently. Although many of these proposals are technical in nature and/or limited in application to specific WRS, they nonetheless are consistent with the Commission's spectrum policy goals to harmonize rules and streamline the licensing obligations for all WRS licensees by eliminating unnecessary rules, as appropriate. The Notice also seeks comment on various administrative corrections to update and/or clarify certain rules affecting a broad range of WRS.

#### **E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered**

47. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities."<sup>129</sup>

48. A number of the Commission's technical, operational and service rules affecting various WRS may be determined to be inconsistent or outdated. Therefore, modifying or eliminating these rules should decrease the costs associated with regulatory compliance for service providers, provide additional flexibility in the provision of service and manufacturing of equipment, and enhance the market demand for some services. We therefore anticipate that, although it seems likely that there will be a significant economic impact on a substantial number of small entities, there will be no adverse economic impact on small entities. In fact, the proposed rule changes may particularly benefit small entities. For example, the Notice proposes to delete the last sentence of Section 22.303, thereby eliminating the transmitter-specific posting requirement for cellular and other Part 22 licensees.<sup>130</sup> Although adoption of such an amendment would benefit both small and large entities, many of the businesses in these radio services are small entities. The Notice also proposes *inter alia* that a request to delete a frequency or a site from a multi-site authorization under Part 90 should be considered a minor modification that requires neither frequency coordination nor the Commission's prior approval. Many Part 90 licensees are small entities that could benefit from this rule change.

49. In the Notice, then, the Commission has set forth various options it is considering for each rule, from modifying rules to eliminating them altogether. As discussed in the Notice, the effect of

---

<sup>128</sup> 5 U.S.C. § 601(5).

<sup>129</sup> 5 U.S.C. §§ 603(c)(1)-(c)(4).

<sup>130</sup> 47 C.F.R. § 22.303.

any rule change on the regulatory burden of licensees will be a significant criterion in determining appropriate Commission action. We note that the entire intent underlying our actions here is to lessen the levels of regulation, consistent with our mandate for undertaking biennial reviews. We seek comment on any additional appropriate alternatives and especially alternatives that may further reduce economic impacts on small entities.

**F. Federal Rules That May Duplicate, Overlap, or Conflict with the Proposed Rules**

50. None.

51. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rule Making, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

**CONCURRING STATEMENT OF  
COMMISSIONER KEVIN J. MARTIN**

*Re: Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 To Streamline and Harmonize Various Rules Affecting Wireless Radio Services, Notice of Proposed Rulemaking, WT Docket No. 03-264*

I concur in this Notice because I disagree with standard the Commission has adopted for biennial reviews pursuant to Section 11 of the Communications Act, 47 U.S.C. § 161(a). *See generally* Separate Statement of Commissioner Kevin J. Martin, *2002 Biennial Regulatory Review*, Report, 18 FCC Rcd 4726 (2003).