grant, and to provide coverage to at least 1,500,000 square kilometers or at least 75 percent of the population within 10 years of grant. We will allow Phase II licensees implementing fixed operations as part of their nationwide system to meet a "substantial service" construction requirement as an alternative to meeting the five-year or 10-year construction requirements. We shall not adopt a particular measure of "substantial service" for such licensees, as Metricom suggests, but will consider such showings on a case-by-case basis. Licensees, in meeting either the standard construction requirement as described *supra*, or the substantial service requirement, will have to submit maps and other supporting documents to demonstrate compliance with their five-year and 10-year benchmarks. Failure on the part of a licensee to meet either its five-year or 10-year construction requirement will result in automatic cancellation of its nationwide authorization. Thus, a nationwide licensee failing to meet its construction requirement will not have its authorization converted to individual site-by-site authorizations for already constructed stations. In addition, we will not require nationwide licensees to construct and place in operation, or commence service on, all of their authorized channels at all of their base stations or fixed stations. This decision is consistent with our decision in paragraph 165, *infra*, to not require EA and Regional licensees to construct and place in operation, or commence service on, all of their authorized channels at all of their base stations or fixed stations.

159. As noted above, Phase I, nationwide licensees will be permitted to begin operating primary, fixed or paging operations *only* after meeting their two-year benchmark to construct the initial phase of their nationwide land mobile system, as prescribed in Section 90.725(a)(1) of the Commission's Rules.[284] In addition, licensees who wish to begin primary fixed or paging operations instead of or in addition to their land mobile operations after meeting their two-year benchmark will be required to meet the following requirements before beginning such primary fixed or paging operations:

- They must provide a schedule for the construction of the primary fixed or paging operations they intend to deploy instead of or in addition to their land mobile operations during the remainder of their initial 10-year licensing period.[285]

- They must certify that the financial showings and all other certifications they had provided in demonstrating their ability to construct and operate their nationwide land mobile system, as prescribed in the relevant provisions of Section 90.713 relating to entry criteria, remain applicable to any planned, primary fixed or paging operations they intend to deploy instead of or in addition to their land mobile operations.

- In lieu of such a certification, they must revise their financial showings and provide all other relevant certifications, as required under Section 90.713, to demonstrate their ability to construct and operate a nationwide system consisting of primary fixed or paging operations instead of or in addition to their land mobile operations.

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[284] 47 C.F.R. § 90.725(a)(1).

[285] *See* Section 90.713(a)(3) of the Commission's Rules, 47 C.F.R. § 90.713(a)(3).

All provisions of Section 90.725 relevant to nationwide, commercial licensees will apply to Phase I nationwide licensees operating primary paging systems instead of or in addition to their primary land mobile system. For example, licensees will be required to meet all subsequent construction benchmarks of Section 90.725(a) (*e.g.*, constructing base stations and placing them in operation in 70 geographic areas over a 10-year period in accordance with Section 90.725(a)(4)),[286] licensees will be required to provide system progress reports in accordance with Sections 90.725(d) and (e), and licensees will be subject to the conditions of Sections 90.725(b), (c), and (g). All provisions of Section 90.725 relevant to nationwide, commercial licensees will similarly apply to Phase I nationwide licensees operating primary fixed stations instead of or in addition to their primary land mobile or paging base stations, except that rather than being required to construct base stations (for base and mobile operation) and place them in operation to meet the four-, six- and 10-year construction benchmarks of Section 90.725(a), a licensee operating fixed stations instead of land mobile or paging base stations in any of the geographic areas identified in Section 90.725(a) will be allowed to demonstrate how it is providing substantial service to the public, as defined *supra* for Phase II licensees, in those geographic areas at the prescribed benchmarks.

b. *EA and Regional Licensees*

(1) Proposal

160. We proposed a similar construction requirement for EA and Regional licensees as we proposed for nationwide, Phase II licensees. We patterned this construction requirement after our construction requirement for 900 MHz SMR (MTA) licensees, and thus proposed that EA and Regional licensees be required to construct base stations to provide coverage to one-third of the population of their EA or Region within five years of initial authorization and two-thirds of the population of their EA or Region within 10 years. In the *Third Notice*, we proposed construction requirements for EA and Regional licensees in the 220 MHz service that paralleled the three- and five-year construction requirements for the 900 MHz SMR service, but proposed that Phase II 220 MHz licensees meet these requirements at five- and 10-year intervals. We also proposed to allow EA and Regional licensees, as an alternative to meeting this standard construction requirements, to submit showings demonstrating the provision of appropriate levels of substantial service to the public at their interim and final construction benchmarks.[287]

161. In proposing these coverage requirements, we acknowledged that Phase II licensees will have to provide co-channel protection to incumbent licensees and that this could inhibit their ability to meet the requirements. We tentatively concluded, however, that Phase II 220 MHz licensees should have to meet their construction requirements, even if some or all of their channels are authorized to co-channel Phase I licensees in their area. Finally, consistent with our proposals for the nationwide 220 MHz service, we proposed that EA and Regional licensees be required to submit maps and other supporting documents to demonstrate

[286] *See also* Section 90.713(a)(1) of the Commission's Rules, 47 C.F.R. § 90.713(a)(1).

[287] *Third Notice*, 11 FCC Rcd at 235 (para. 94).

compliance with their interim and final construction benchmarks, and that failure on the part of a licensee to meet either its interim or final construction requirement will result in forfeiture of its authorization.[288]

(2) Comments

162. AMTA supports our proposed construction requirements for EA and Regional licensees "given the geographic size of these authorizations in comparison with other wireless services, and the fact that these frequencies likely will be 'encumbered' by Phase I licensees in major markets."[289] Comtech notes that under our current rules, licensees must construct all of their channels at their authorized base station location to meet their construction requirement. Comtech is concerned that, because Phase II licenses must protect multiple Phase I licensees under our contiguous channel assignment configuration, "Phase II licensees will likely be unable to construct all of their channels at a single site."[290] It therefore suggests that Phase II licensees be permitted to "construct any subset of their authorized channels in their licensed service area, so as to provide substantial service [in accordance with Section 22.940] to the required population or coverage area."[291]

(3) Decision

163. We will require EA and Regional licensees implementing land mobile or paging systems to construct base stations to provide coverage to at least one-third of the population of their EA or Region within five years of initial authorization and at least two-thirds of the population of their EA or Region within 10 years of initial authorization. We will allow certain EA and Regional licensees to meet the "substantial service" construction requirement, as described *supra* for nationwide licensees, as an alternative to meeting the standard construction requirement. The option of providing a showing of substantial service will be available to those EA and Regional licensees that are offering fixed services as part of their EA or Regional system *and* to those licensees who, because of the existence of one or more incumbent co-channel licensees in their EA or Region, can only provide service to populations *outside* of the areas served by these incumbents. As we indicated in our *900 MHz SMR Third Order* with regard to our use of a coverage requirement for 900 MHz MTA licensees, our standard construction requirement for EA and Regional licensees is not intended to act as a deterrent to individuals seeking EA or Regional licenses. By providing the "substantial service" option, we afford sufficient flexibility to enable EA and Regional licensees who are providing new, *e.g.*, fixed services -- or are capable of only serving what are now unserved

[288] *Id.* at 236 (para. 96).

[289] AMTA Comments at 16.

[290] Comtech Comments at 6.

[291] *Id.* at 7.

populations -- to satisfy a construction requirement.[292] We also clarify that, as we indicated in the *900 MHz SMR Third Order on Reconsideration* with respect to 900 MHz MTA licensees, EA and Regional 220 MHz licensees will not be permitted to count the resale of the services of other providers in their EA or Region, *e.g.*, incumbent 220 MHz licensees, to meet the construction requirement.[293] Licensees will be required to demonstrate the provision of appropriate levels of substantial service to the public at their five- and 10-year construction benchmarks. We will not adopt a particular measure of "substantial service" for these licensees, but will consider their showings on a case-by-case basis.

164. We also require licensees, in meeting either the standard construction requirement or the substantial service requirement, to submit maps and other supporting documents to demonstrate compliance with the benchmarks. Failure on the part of a licensee to meet its construction requirement at either of its benchmarks will result in automatic cancellation of its authorization. Thus, an EA or Regional licensee failing to meet its construction requirement will lose its authorization; it will not be converted to individual, site-by-site authorizations for already constructed stations. As we have previously noted, Phase I, non-nationwide licensees will be permitted to begin operating primary, fixed or paging operations *only* after meeting the requirement that they construct their land mobile base station (for base and mobile operations) and place it in operation or commence service.

165. Finally, Comtech is concerned that Phase II licensees will have difficulty meeting our construction requirements due to the fact that under our proposed band plan, which was composed entirely of contiguous channel assignments, they would have been required to protect multiple Phase I licensees. While our adopted band plan, as we have discussed, reduces the number of Phase I licensees a Phase II licensee must protect, we agree with Comtech that Phase II licensees should not be required, in implementing their systems, to construct and place in operation all of their authorized channels at all base station locations. Such a requirement would not provide EA and Regional licensees with flexibility to construct their base stations in a manner that best serves their technical and operational requirements; the requirement thus could have an adverse effect on the ability of these licensees to meet the needs of their customers. We will therefore not require EA and Regional licensees to construct and place in operation, or commence service on, all of their authorized channels at all of their base stations or fixed stations.

c. *Licensees on Public Safety and EMRS Channels*

166. Because we tentatively concluded in the *Third Notice* that the Public Safety and EMRS channels should continue to be authorized on a single-station basis, we proposed to

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[292] *See* 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 the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, PR Docket No. 89-553, and Implementation of Sections 3(n) and 322 of the Communications Act, Third Order on Reconsideration, GN Docket No. 93-252, 11 FCC Rcd 1170 (para. 2) (1995) (*900 MHz SMR Third Order on Reconsideration*).

[293] *Id.* at paras. 3-4.

continue to require Phase II licensees operating on these channels to meet the existing 12-month construction requirement for non-nationwide 220 MHz licensees.[294] There are no comments on this issue, and we adopt our proposal to require Phase II licensees operating on the Public Safety and EMRS channels to construct their authorized base station and place it in operation within 12 months of initial authorization. Failure to meet this requirement will result in automatic cancellation of the licensee's authorization.

d. *General Construction Requirements Policy*

167. In the *Third Notice*, we sought comment on our specific construction requirement proposals for 220 MHz licensees. We did not, however, directly request comment on whether construction requirements of any type were in fact necessary and appropriate, and no party argues here that such requirements are unnecessary or counter-productive. Based on the record in this instant proceeding, and in light of the policy considerations we have expressed in our *Wireless Communications Service Report and Order*[295] we have concluded that it is appropriate at this time to establish construction requirements for the 220 MHz service.

168. We note, however, that in the *Wireless Communications Service Notice* we had asked for comment on whether any construction requirements are required or appropriate for that new wireless service.[296] We stated there that while Section 309(j) of the Communications Act requires "safeguards" and "performance requirements," with the aim of preventing uneconomic spectrum warehousing and promoting service to rural areas, we have never concluded that traditional construction requirements are the only way to satisfy the requirements of Section 309(j). We stated further that construction requirements in some cases may be unnecessary, ineffective, and potentially harmful, and that there may be better approaches to satisfying the objectives of Section 309(j). In the *Wireless Communications Service Report and Order*, we adopted a requirement that a licensee provide substantial service to its area within 10 years of initial authorization. In light of our decision in the *Wireless Communications Service Report and Order* to adopt liberal construction requirements,[297] we may choose to reassess the nature of construction requirements in the 220 MHz band at some time in the future.

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[294] *Third Notice*, 11 FCC Rcd at 236 (para. 97).

[295] *See* Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service, GN Docket No. 96-228, Report and Order, FCC 97-50, (released Feb. 19, 1997) (*Wireless Communications Service Report and Order*). *See also* Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service, GN Docket No. 96-228, Notice of Proposed Rule Making, FCC 96-441 (released Nov. 12, 1996) (*Wireless Communications Service Notice*).

[296] *See Wireless Communications Service Notice* at paras. 56-61.

[297] *See Wireless Communications Service Report and Order* at para. 112.

6. Protection of Phase I Licensees

a. *Proposal*

169. In the *Third Notice* we considered whether to establish a minimum co-channel separation between Phase I and Phase II stations to ensure that EA and Regional licensees, in constructing their facilities, do not cause interference to co-channel Phase I licensees. Specifically, we proposed that EA and Regional licensees ordinarily not be permitted to construct their stations less than 120 kilometers from constructed and operating Phase I, co-channel stations.[298] In order to accommodate EA and Regional licensees that may choose to employ low-power stations, we indicated that we would allow, as currently provided in the rules with regard to Phase I licensees, Phase II licensees to operate less than 120 kilometers from co-channel stations if they provide the Commission with a technical analysis demonstrating at least 10 dB protection to the 38 dBuV/m contour[299] of the existing licensee's station.[300] We also proposed that a Phase II licensee be allowed to construct and operate stations less than 120 kilometers from an existing co-channel station or with less than 10 dB protection to an existing co-channel station's 38 dBuV/m contour if the Phase II licensee obtains the consent of the affected co-channel licensee.[301]

b. *Comments*

170. Those commenters expressing views on this subject are opposed to our proposal. For example, E.F. Johnson contends that "it is apparent, without further study, that the Commission's presumptions concerning co-channel protection [are] inaccurate. 220-222 MHz systems propagate much further than the Commission anticipated. While the Commission plainly cannot change the 120 km separation requirement between Phase I licensees, it should

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[298] *See* Section 90.723(f) of the Commission's Rules, 47 C.F.R. § 90.723(f).

[299] *Id.* We proposed that this 10 dB of protection must be demonstrated by showing that the predicted signal from an EA or Regional licensee's station(s) does not exceed 28 dBuV/m at the predicted 38 dBuV/m contour of the Phase I licensee's station(s). The predicted signal from the EA or Regional licensee's station would be calculated using the F(50,10) field strength chart for Channels 7-13 in Section 73.699 of the Commission's Rules (Figure 10a), with a 9 dB correction factor for antenna height differential. The predicted signal(s) from the Phase I licensee's station would be calculated using the F(50,50) field strength chart for Channels 7-13 in Section 73.699 of the Commission's Rules (Figure 10), with a 9 dB correction factor for antenna height differential. We also proposed to modify Section 90.723(f) to identify use of these field strength charts as the appropriate method for calculating the prescribed 10 dB protection a Phase I licensee must provide to another co-channel Phase I licensee.

[300] *Third Notice*, 11 FCC Rcd at 237 (para. 99).

[301] *Id.*

modify the co-channel separation standard for Phase II licensees."[302] E.F. Johnson recommends that Phase II licensees be required to protect a Phase I licensee's 28 dBu contour. E.F. Johnson argues that "[t]his coverage area more accurately signifies where a reliable signal may be received by a mobile unit affiliated with a licensee."[303]

171. AMTA advocates that a Phase II licensee not "exceed 28 dBu at the Phase I licensee's 28 dBu contour."[304] Incom, in its comments, indicates that its customers "are routinely receiving reliable service at the 32 dBuV/m contour . . . ," and concludes that "the Commission must modify [its rules] to provide for 10 dB protection to the 32 dBuV/m contour, as opposed to the 38 dBuV/m contour."[305] Incom states that in the cellular radio service, we initially adopted rules limiting a cellular station's "protected service area" to a 39 dBu contour, but later "adopted a 32 dBu standard,"[306] and that we originally established a 15-mile protected service area in the MMDS and ITFS services, but then increased it to 35 miles.[307] Incom argues that we should similarly acknowledge that we were equally incorrect in originally establishing the 38 dBu service contour for the 220 MHz service -- and that we

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[302] E.F. Johnson Comments at 7.

[303] *Id.* E.F. Johnson, in its Comments, indicated that its recommendation is "tentative," pending the outcome of what it understood to be AMTA's subsequent evaluation of "the protection needed between co-channel 220 MHz licensees."

[304] AMTA Reply at 2-3. *See also* SMR Reply at 8; U.S. Mobilcomm Reply at 1; Securicor Reply at 5, all endorsing AMTA's position, and Comtech Comments at 14-15 (recommending that "the Commission insure that Phase II licensees do not exceed 28 dBuV/m at the Phase I licensee's 28 dBuV/m contour.").

[305] Incom Comments at 5. In its Reply Comments at 2, Incom supports AMTA's position.

[306] *Id.* at 4-5. We have always considered a cellular licensee's "protected service area" to be its Cellular Geographic Service Area (CGSA). Prior to 1992, the CGSA was an arbitrary line drawn by a cellular applicant on a map, and had no connection to any particular field strength. The 39 dBuV/m contour, prior to 1992, was used to determine if a licensee was providing "reliable service" over at least 75% of the area or population within its arbitrarily drawn CGSA and to evaluate *de minimis* extensions. Since the adoption of the Second Report and Order in CC Docket No. 90-6, a formula-based calculation of the "service area boundary" has been used to determine the licensee's CGSA. The service area boundary, as calculated using the formula, closely approximates the results one would obtain using the Carey propagation curves to predict the distance of the median 32 dBu contour. Thus, there is no direct connection between our use of the 39 dBuV/m contour prior to 1992, and the determination of cellular "protected service areas," as Incom appears to suggest. *See* Amendment of Part 22 of the Commission's Rules to Provide for Filing and Processing of Applications for Unserved Areas in the Cellular Service and to Modify Other Cellular Rules, CC Docket No. 90-6, Second Report and Order, 7 FCC Rcd 2449 (1992) (*Cellular Unserved Second Report and Order*).

[307] Incom Comments at 5.

should now recognize our error and change the 220 MHz service contour to 32 dBu.[308] Finally, Incom, in its reply comments, states that the 1993 Budget Act "obligates the Commission to make rules that eliminate inconsistencies between similar mobile services."[309] Incom argues that "[o]ne conceivable reason for this dissimilar treatment is that the cellular industry is a more powerful lobbying group than the 220-222 MHz industry. Another conceivable reason is that the Commission is attempting to create value for auction bidders by selling off areas already receiving reliable service from incumbents, which is an abdication of the Commission's spectrum management responsibility and a tremendous disservice to the public. Neither of these reasons would withstand judicial review."[310]

172. Roamer One asserts that the Commission should provide 10 dB protection to a Phase I licensee's 28 dBu contour, arguing that "[its] experience -- as is that of the entire 220-222 MHz industry -- is that the typical 220-222 MHz system provides reliable service for roughly 40 miles . . . ."[311] Finally, Kelley believes that by "under estimat[ing] [sic] the excellent propagation characteristics of narrowband single sideband signals at 220 MHz, [the Commission's proposal] will set the stage for a cacophony of interfering signals near the weak signal but still useable border area of every co-channel Phase I and Phase II station, seriously degrading overall service to the public."[312] Therefore, Kelley recommends that we adopt an easy to use distance-based protection criteria, and suggests that a 130 km standard be employed, with an additional correction factor of 5 or 10 km for mountaintop stations.[313]

c. ***Decision***

173. We continue to believe that EA and Regional licensees should be required to locate their base stations at least 120 km from the base stations of co-channel Phase I licensees,[314] except that such licensees should be permitted to locate their base stations less than 120 km from the base stations of co-channel Phase I licensees if they provide 10 dB protection to the predicted 38 dBuV/m service contour of the base stations of co-channel Phase I licensees. Phase II licensees may meet this requirement, as currently provided in our

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[308] *See id.* at 4-5, 7-8.

[309] Incom Reply Comments at 3.

[310] *Id.* at 3 n.3.

[311] Roamer Comments at 5, 6 (emphasis omitted).

[312] Kelley Comments at 5.

[313] *Id.*

[314] The term "base stations" in this Section and the following Section (addressing the issue of field strength limits at EA and Regional borders), refers to land mobile base stations, paging base stations, or fixed stations operating on the 220 MHz base station frequencies (*i.e.*, frequencies in the 220-221 MHz band).

rules,[315] by submitting a technical analysis demonstrating that the predicted 28 dBuV/m interfering contour of their base station does not overlap the predicted 38 dBuV/m service contour of the Phase I licensee's base station.[316] Such submissions shall be considered on a case-by-case basis. Also, as proposed, a Phase II licensee may construct and operate a base station less than 120 kilometers from an existing co-channel base station or with less than 10 dB protection to an existing co-channel station's predicted 38 dBuV/m contour if the Phase II licensee obtains the consent of the affected co-channel licensee.

174. The predicted 38 dBuV/m contour of the Phase I licensees will be calculated based on the licensee's authorized effective radiated power (ERP) and antenna height-above-average-terrain (HAAT) -- not on the maximum allowable ERP and HAAT provided in our rules for the 220-222 MHz band. Licensees shall be required to operate at their initially authorized ERP and HAAT, and will not be permitted to seek modification of their authorization to operate at a higher ERP or HAAT.[317] Licensees operating at power levels lower than their initially authorized ERP shall be required to seek modification of their authorization to reflect the lower ERP. By operating at such lower power levels, licensees shall receive less protection than they would have received by operating at their initially authorized ERP. We reach this decision because our ultimate goal is to provide 220 MHz service to the public. If we protect Phase I licensees beyond the predicted 38 dBu contour associated with their initially authorized height and power, then these licensees would be protected beyond the area that they had sought to serve. In addition, we do not think it would be appropriate to allow Phase I licensees to expand their service areas by increasing their power or antenna height without allowing the filing of mutually exclusive applications. Because Phase II licensees will have sought authorization for a large geographic area, we believe that it is appropriate to allow them to serve any portion of their licensed geographic area, except for portions of the area already being served by co-channel Phase I licensees. We also believe that it is likely that Phase II licensees will want to provide service to those areas that would have been protected if we had assumed herein that Phase I licensees are operating at maximum allowable height and power.

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[315] *See* Section 90.723(f) of the Commission's Rules, 47 C.F.R. § 90.723(f).

[316] The predicted signal from the Phase II licensee's station will be calculated using the F(50,10) field strength chart for Channels 7-13 in Section 73.699 of the Commission's Rules (Figure 10a), with a 9 dB correction factor for antenna height differential. The predicted signal from the Phase I licensee's station would be calculated using the F(50,50) field strength chart for Channels 7-13 in Section 73.699 of the Commission's Rules (Figure 10), with a 9 dB correction factor for antenna height differential. As proposed in the *Third Notice*, we will modify Section 90.723(f) of the Commission's Rules to identify use of these field strength charts as the appropriate method for calculating the prescribed 10 dB protection a Phase I licensee must provide to another co-channel Phase I licensee. *Third Notice,* 11 FCC Rcd at 237 n.151 (para. 99).

[317] In the *220 MHz Second Report and Order*, we did permit Phase I licensees to seek modification of their authorizations to *relocate* their base stations. *See 220 MHz Second Report and Order*, 11 FCC Rcd 3668.

175. We reject the arguments of commenters who believe that we should provide greater protection to Phase I licensees' base stations. Commenters suggest that we protect a Phase I licensee's 32 dBu contour or 28 dBu contour because, they claim, "reliable" 220 MHz signals are being received by mobiles and "reliable service" is being provided at distances from base stations farther than the 38 dBu contour. We decline to adopt the suggestions made by commenters because their arguments are not consistent with the methodology we have used to provide for co-channel protection for incumbent licensees in other auctionable land mobile services (*e.g.*, 800 MHz and 900 MHz SMR). Commenters have failed to explain why we should adopt a different methodology for determining co-channel protection (*e.g.*, affording protection to a contour at which commenters claim "reliable" signals are being received). Therefore, as we explain in the following paragraphs, we continue to believe that our methodology for determining Phase I co-channel protection was appropriate and should also be used to determine the protection that Phase II licensees must afford to Phase I licensees.

176. In the 800 MHz and 900 MHz services, as well as the 220 MHz service, our rules provide a certain degree of protection to a particular, "desired" signal contour of a base station, under the assumption that an "undesired" interfering signal from a co-channel base station will be present. For example, when we first determined the appropriate interference protection criteria for land mobile stations operating in the 800/900 MHz bands, we decided that our goal in establishing parameters for 900 MHz stations was to provide "a high quality signal to about 50 percent of the locations, 50 percent of the time, within the service area of the stations."[318] We concluded that to accomplish this objective, "the average desired signal should be 40 dBu at the edge of the service area."[319] This, we stated, would "give a high level of service in the area in which [the licensee] planned to operate."[320] We concluded that, to maintain this quality of service in the presence of an interfering signal, the interfering signal "should be 10 dB less than the desired signal at the boundary of the service area of the protected station."[321]

177. Similarly, in the 220 MHz service we proposed to adopt technical parameters to "enable private land mobile licensees to obtain quality service . . ."[322] and we determined that a 220 MHz station should be protected from interference by the provision of 10 dB

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[318] *See* An Inquiry Relative to the Future Use of the Frequency Band 806-960 MHz; and Amendment of Parts 2, 18, 21, 73, 74, 89, 91, and 93 of the Rules Relative to Operation in Land Mobile Services Between 806 and 960 MHz, Docket No. 18262, Second Report and Order, 46 FCC 2d 752, 774 n.26 (para. 76) (1974), *recon. granted in part,* 51 FCC 2d 945, *clarified,* 55 FCC 2d 771 (1975), *aff'd sub nom.* NARUC v. FCC, 525 F. 2d 630 (1976), *cert. denied,* 425 U.S. 992 (1976).

[319] *Id.*

[320] *Id.*

[321] *Id.*

[322] *220 MHz Notice*, 4 FCC Rcd at 8601 (para. 55).

protection to the station's 38 dBu contour.[323] E.F. Johnson states that "reliable" 220 MHz signals may be received at more distant contours than the 38 dBu contour.[324] Other commenters state that "reliable service" is being provided at such contours.[325] However, these commenters do not define what is meant by a reliable signal or reliable service in the context of the 220 MHz service -- nor do they draw a relationship between the use of these terms and our adoption of criteria to provide for the *protection* of 220 MHz signals in the presence of interfering signals. The signal contour at which they claim "reliable service" may be provided or where a "reliable signal" may be received by a mobile (*e.g.*, the location of the 32 dBu or 28 dBu contour) is therefore not determinative in deciding the appropriate 220 MHz signal contour to be protected.

178. Incom argues that we should modify the 38 dBu service contour for the 220 MHz service because we have changed the method by which protected service areas for cellular service are determined,[326] and have also changed the distance that defines protected service areas for MMDS stations.[327] However, as explained in footnote 306, our action in the *Cellular Unserved Second Report and Order* was not an adjustment from one field strength level to another; rather, it was a fundamental change in the methodology for determining a cellular licensee's CGSA, from an arbitrarily determined area to one that is based on the technical parameters of authorized existing and proposed facilities. Similarly, in the MMDS service, while we increased the "protected service area" for MMDS stations, we did not indicate that we did so in an effort to expand the area within which quality television service signals could be provided.[328] Thus, we find that one of the principal objectives of our signal protection rules for the 220 MHz service -- the design of technical parameters to enable licensees to obtain quality service -- does not have a parallel in the MMDS service, and, therefore, we reject Incom's unsupported suggestion that the MMDS decision is somehow relevant to the issues presented here. Further, no commenter has provided assurance that this principal objective would not be compromised by proposals to provide protection to other than the 38 dBu contour.

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[323] *220 MHz Report and Order*, 6 FCC Rcd at 2371 (para. 119).

[324] *See* E.F. Johnson Comments at 7.

[325] *See* Incom Comments at 5; Roamer One Comments at 5, 6.

[326] See para. 171, *supra.*

[327] Incom Comments at 5 (citing Amendment of Parts 21, 43, 74, 78 and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting Private Operational-fixed Microwave Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service, GN Docket Nos. 90-54 and 80-113, Second Order on Reconsideration, 10 FCC Rcd 7074 (1995) (*Second Order on Reconsideration*).

[328] *See Second Order on Reconsideration* at 7078 (para. 9).

179. We do not believe, therefore, that these actions should be applied to our use of the 38 dBu service contour as the protected contour for the 220 MHz land mobile radio service. Moreover, we conclude that our recent decisions in which we *have* examined the protected contour for other mobile services support our decision to not change the 38 dBu contour for the 220 MHz service. For example, in our proceedings addressing the licensing of the 800 MHz and 900 MHz SMR service, we proposed the continued use of the *40* dBu contour as the basis for protection for these services. In both instances, we concluded that we should continue to base interference protection in these services on the provision of protection to the 40 dBu contour.[329] In the *800 MHz SMR Report and Order*, for example, we decided to "require EA licensees to afford interference protection to incumbent SMR systems, as provided in Section 90.621 of the Commission's rules"[330] -- which provides for protection of a licensee's 40 dBu contour. In support of our decision, we stated that this will "ensure adequate protection of incumbent operations, without hampering the ability of EA licensees to construct stations throughout their authorized service areas."[331] For all of these reasons, we believe that it is appropriate to continue to employ the predicted 38 dBu contour as the contour that must be protected by co-channel 220 MHz licensees, and thus we will require Phase II licensees to provide 10 dB protection to the predicted 38 dBu service contour of the base stations of Phase I licensees.

7. Field Strength Limit at EA and Regional Border

a. *Proposal*

180. In the *Third Notice* we indicated that our existing rules for the 220 MHz service do not define a particular "service area" for non-nationwide stations, but indicated that, as discussed in the *220 MHz Report and Order*, stations operating at maximum authorized power and antenna height would "provide a service area with a 38 dBu contour at about 45

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[329] *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, Implementation of Sections 3(n) and 322 of the Communications Act, Regulatory Treatment of Mobile Services, GN Docket No. 93-252, Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rulemaking, 11 FCC Rcd 1463 (1995) (*800 MHz SMR Report and Order*); 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 the 935-940 MHz Bands to the Specialized Mobile Radio Pool, PR Docket No. 89-553, Second Report and Order and Second Further Notice of Proposed Rule Making, 10 FCC Rcd 6884 (1995) (*900 MHz SMR Second Report and Order*).

[330] *800 MHz SMR Report and Order*, 11 FCC Rcd at 1516 (para. 92).

[331] *Id. See also 900 MHz SMR Second Report and Order*, 10 FCC Rcd at 6899-6900 (para. 44), where we decided to continue to base interference protection on the provision of protection to the 40 dBu contour.

kilometers (28 miles)."[332] We further pointed out that for various wireless communications services that we license within Commission-defined geographic areas (*e.g.*, PCS, 900 MHz SMR) we prescribe limits on the strength of signals licensees may provide at the borders of their service areas.[333] We thus concluded that, for effective operation, a Phase II licensee should be permitted to transmit a signal of at least 38 dBuV/m throughout its area of service, and we therefore proposed a field strength limit of 38 dBuV/m at the border for EA and Regional 220 MHz licensees.[334] In order to allow licensees flexibility to exceed this limit if necessary, we also proposed that licensees be allowed to transmit signals greater than 38 dBuV/m at their border if all affected, co-channel EA and Regional licensees agree to the higher field strength. We also indicated that, when such agreements are in place among co-channel licensees, if interference were to occur to transmissions at or near the border between co-channel licensees, licensees would be expected to coordinate with one another and modify their facilities as necessary to minimize interference.

b. *Comments*

181. Commenters were opposed to our proposal to limit the base station transmissions of EA and Regional licensees to 38 dBu at their borders. Comtech, for example, contends that its systems can "provide reliable communications well beyond the predicted 38 dBu contour, in the absence of co-channel interference." Comtech believes that if we adopt the proposed 38 dBu limit at EA and Regional borders, "co-channel interference is likely to arise as a significant limitation to service along a system's border." Therefore, Comtech proposes a 28 dBu standard at the borders.[335] AMTA believes that in conjunction with its proposal that Phase II licensees not exceed 28 dBu at Phase I licensees 28 dBu contour, "allowing Phase II licensees to provide a signal strength of 28 dBu at borders will provide signal parity between existing and new licensees."[336]

c. *Decision*

182. We have concluded that the predicted 38 dBu service contour is the appropriate field strength contour that should be protected from co-channel interference for the 220 MHz service. Thus, to allow two Phase II licensees operating in adjacent EAs or Regions to each

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[332] *220 MHz Report and Order*, 6 FCC Rcd at 2371 (para. 115).

[333] *See, e.g.*, Sections 24.236 and 90.671 of the Commission's Rules, 47 C.F.R. §§ 24.236, 90.671.

[334] In calculating the predicted 38 dBuV/m contour resulting from the transmissions of their base stations, licensees will use the F(50,50) field strength chart for Channels 7-13 in Section 73.699 of our Rules (Figure 10), with a 9 dB correction factor for antenna height differential. *See* 47 C.F.R. § 73.699.

[335] Comtech Comments at 12.

[336] AMTA Reply Comments at 3.

employ a 38 dBu field strength at their border could conceivably result in interference at or near such borders. However, if we were to require that licensees provide a field strength lower than 38 dBu at their borders, we might unnecessarily restrict their ability to provide a quality service to mobiles operating in those areas. Thus, we conclude that to afford Phase II licensees the maximum degree of flexibility in designing their systems and provide a quality signal to all parts of their service area, we will permit licensees to transmit up to a predicted 38 dBu field strength at their border.[337] As proposed, we will also allow licensees to exceed this limit if all affected, co-channel EA and Regional licensees agree to a higher field strength. In instances where interference occurs between co-channel licensees at or near their borders -- *i.e.*, when licensees are operating at or below field strength levels of 38 dBu at the border, or when licensees are operating at greater field strength levels pursuant to agreements with co-channel Phase II licensees -- we will expect licensees to coordinate amongst themselves to minimize such interference and to cooperate to resolve any interference problems that may arise.[338]

D. APPLICATION PROCEDURES

1. Pending Applications for 220 MHz Channels

a. *Proposal*

183. The Commission indicated in the *Third Notice* that it had not yet requested the amending information necessary to process the 33 pending Phase I applications for the nationwide, non-commercial channels.[339] The Commission sought comment on three different means by which to address the pending applications:[340]

- Return the applications without prejudice, as well as the appropriate filing fees, to the 33 applicants, establish a date for the filing of "short-form" applications for nationwide licenses, and auction mutually exclusive applications.
- Act on the pending petitions for reconsideration of the Commission's June 21, 1993, Order, solicit the required amending information from the 33 applicants, and then conduct a lottery to award the four available nationwide licenses.
- Grant authorizations among the 33 applicants through comparative hearings.

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[337] As proposed in the *Third Notice*, in calculating the predicted 38 dBuV/m contour resulting from the transmissions of their base stations, licensees will use the F(50,50) field strength chart for Channels 7-13 in Section 73.699 of our Rules (Figure 10), with a 9 dB correction factor for antenna height differential. *Third Notice*, 11 FCC Rcd at 237 (para. 99) (citing 47 C.F.R. § 73.699 (Fig. 10)).

[338] *See, e.g.*, Section 90.173(b) of the Commission's Rules, 47 C.F.R. § 90.173(b).

[339] *Third Notice*, 11 FCC Rcd at 206 (para. 30).

[340] *Id.*

The Commission sought comment regarding the advantages and disadvantages of each of these proposals, and encouraged commenters to address factors that should be deemed relevant for purposes of ascertaining the most appropriate handling of the applications.

184. The Commission also observed that, although it has processed nearly all of the 60,000 applications filed for non-nationwide licenses, there are five groups of applications, totalling 34 applications, that were filed on the final day the Commission accepted 220 MHz applications and are mutually exclusive with one another.[341] The Commission sought comment on whether the Commission should resolve these mutually exclusive situations using competitive bidding, lotteries, or comparative hearings.[342]

b. ***Comments***

185. Commenters disagree regarding how the Commission should treat pending applications for 220 MHz licenses. Many commenters, particularly Phase I 220 MHz non-commercial, nationwide applicants, urge that we exercise our discretion to use lotteries.[343] Several of these commenters, however, believe that licenses should be awarded by lottery only if the licenses are designated strictly for non-commercial purposes and licensees are restricted from leasing excess capacity.[344]

186. Some commenters who support lotteries base their reasoning on equitable arguments, contending that it would be unfair to applicants who applied in good faith, in accordance with then existing rules, for the Commission to change the rules with respect to these applications.[345] A number of commenters argue that the applicants acted in reasonable

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[341] *Id.* at 206 (para. 31).

[342] *Id.*

[343] Airborne Comments at 2; AMTA Comments at 8-11; AMTA Reply at 6-7; Columbia Comments at 2-10; Comtech Comments at 2-4; Comtech Reply at 2-4; Fleet Comments at 2; Global Comments at 1-2; Mtel Comments at 1-10; Mtel Reply at 2-3; PCIA Comments at 5-6; PNC Comments at 4-14; Roamer Comments at 1-2 (supporting position taken by AMTA on this issue); Securicor Comments at 16; 360 Mobile Comments at 1-2; U.S. Central Comments at 1-2; UTC Comments at 3-8; WLF Comments at 2-5.

[344] AMTA Reply at 7 n.12; Comtech Reply at 3. These parties agree that if there is any possibility that these licenses may be used for commercial purposes then they should be awarded by competitive bidding.

[345] *See* AMTA Comments at 8-9; AMTA Reply at 6-7; Columbia Reply at 3; Ericsson Comments at 2-3; Mtel Comments at 10; Mtel Reply at 2-3; WLF Comments at 3-4; Securicor Comments at 16; U.S. Central Comments at 1-2; 360 Comments at 2-3.

reliance on these rules, spending valuable time and money on these applications,[346] and that their business plans did not take into account the possibility that these licenses subsequently might be awarded through competitive bidding.[347] Columbia, Mtel, and WLF contend that a refund of applicants' filing fees is not a sufficient step for the Commission to take, because applicants incurred other out of pocket expenses.[348] Some commenters point out that the delay in processing these applications was caused by the Commission and not by the applicants.[349]

187. Other commenters believe there are equally strong equitable arguments for returning the pending applications and awarding these nationwide licenses through auctions.[350] They point out that, with the dramatic change in circumstances due to the comprehensive restructuring of the rules governing 220 MHz service undertaken by the Commission in this proceeding, it would be unfair to move forward with the original applications.[351] If the licenses are redesignated for commercial use it is unfair to limit the pool of applicants to those who applied for non-commercial licenses and consequently to prevent other parties who desire commercial 220 MHz spectrum from obtaining it.[352] Pagenet contends that pending applicants would be unjustly enriched if permitted to obtain licenses through a lottery process.[353] SMR asserts that it may be true that these applicants applied in good faith, but it is also true that they have not yet incurred significant costs associated with their pending applications, and, in any event, their filing fees would be refunded under the competitive bidding option posed by the Commission in the *Third Notice*.[354]

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[346] Fleet Comments at 2; PNC Comments at 6-8; Columbia Comments at 10; Mtel Comments at 9-10; WLF Comments at 4.

[347] Global Comments at 3; PNC Comments at 9; WLF Comments at 4.

[348] Columbia Comments at 10; Columbia Reply at 6-7; Mtel Comments at 9-10; WLF Comments at 4.

[349] Airborne Comments at 2; AMTA Comments at 9; Columbia Comments at 5-6; Columbia Reply at 5-6; PCIA Comments at 5; Securicor Comments at 16; U.S. Central Comments at 1-2; UTC Comments at 5; WLF Comments at 3.

[350] *See* Metricom Comments at 7-8; U.S. Mobilcomm Comments at 4-5; Pagenet Comments at 15-17; Pagenet Reply at 7; SMR Reply at 6.

[351] Metricom Comments at 7-8; U.S. Mobilcomm Comments at 4-5; Pagenet Comments at 15, 17; Pagenet Reply at 7; SMR Reply at 6.

[352] Pagenet Comments at 17; Pagenet Reply at 7; U.S. Mobilcomm Comments at 4-5; Metricom Comments at 7-8.

[353] Pagenet Reply at 7.

[354] SMR Comments at 9.

188. Ericsson sets forth a compromise approach in its comments, suggesting that the most equitable solution would be to allocate, by competitive bidding, two nationwide 10 channel blocks for commercial use, and to allocate, by random selection, one nationwide 10 channel block for non-commercial use.[355] Ericsson believes this option accomplishes the Commission's purposes without disadvantaging those applicants who applied for non-commercial licenses.[356]

189. Commenters urge the Commission to avoid delay regarding the licensing of 220 MHz service. For example, Johnson states that it is largely indifferent as to whether the spectrum is allocated for commercial or non-commercial use, or how the licenses are awarded, but it urges the Commission to act expeditiously regardless of the path it takes.[357] PNC believes that choosing auctions over lotteries would lead to additional costs and delays because the Commission would have to dismiss pending applications, accept new applications, and then conduct an auction.[358] PNC also cites delays that have taken place in conducting previous auctions.[359] SMR contends, however, that there would be even greater delays if lotteries were used because the Commission would have to address several petitions for reconsideration, solicit additional information regarding the pending applications, and then review that information prior to conducting a lottery.[360]

190. Columbia, Mtel, and WLF argue that the pending applicants will be subjected to disparate treatment as compared to other 220 MHz Phase I licensees if the licenses for pending applicants are not awarded by lottery.[361] They point out that these applicants will be singled out unfairly for different treatment and will have to spend substantial sums for their licenses while other Phase I applicants have been permitted to receive their licenses at relatively low cost.[362] On the other hand, Pagenet contends that awarding the licenses by auction is the only way to prevent disparate treatment between winners of the lottery who

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[355] Ericsson Comments at 3.

[356] *Id.*

[357] Johnson Comments at 3-4.

[358] PNC Comments at 11-14.

[359] *Id.* at 13.

[360] SMR Comments at 8-9.

[361] Columbia Comments at 6-7; Columbia Reply at 3-4; Mtel Comments at 8-9; WLF Comments at 3.

[362] Columbia Comments at 7; WLF Comments at 3.

will, at a minimum, be able to lease excess capacity, and other commercial mobile radio service providers who have paid substantial sums for their spectrum licenses.[363]

191. Commenters generally acknowledge that the Budget Act granted the Commission the discretion to award these licenses by either lotteries or competitive bidding.[364] Several commenters cite two recent decisions, the *MMDS Report and Order* and *Unserved Cellular Lottery Order,* in which the Commission decided to award licenses to pending applicants by lottery rather than by competitive bidding.[365] Mtel, PNC, and Columbia believe that, if the Commission does not follow this precedent in this proceeding, then the Commission would be subjecting these applicants to disparate treatment.[366] Some commenters also argue that the same considerations that led the Commission to decide to award the licenses by lottery in these cases are present in this case.[367] Several commenters contend that since the Commission did not have auction authority until after these applications were filed, the Commission cannot now retroactively apply new rules to pending applications.[368] SMR and Pagenet argue, however, that the Commission's action would not result in the retroactive application of our rules.[369] Pagenet contends that there is ample precedent for dismissing pending applications,[370]

[363] Pagenet Comments at 6, 9; Pagenet Reply at 11-12.

[364] Columbia Comments at 2-3; Pagenet Reply at 4-5; PNC Comments at 4; SMR Comments at 6-7; SMR Reply at 6-7; U.S. Mobilcomm Comments at 6-7; WLF Comments at 3.

[365] Columbia Comments at 3; Columbia Reply at 4; PNC Comments at 9-10, 12-13; WLF Comments at 4; Mtel Comments at 8-9; UTC Comments at 7-8; U.S. Central Comments at 1-2.

[366] Mtel Comments at 8-9; PNC Comments at 9-10; Columbia Reply at 4.

[367] PNC Comments at 12-13 (delay and costs to the Commission and applicants); PNC Comments at 8-9 (stringent construction and operation requirements will prevent speculation, business plans did not take auctions into account); U.S. Central Comments at 1-2 (delay was not the fault of applicants who had assumed that the Commission would conduct lotteries); UTC Comments at 7-8 (few applications, pending a significant period of time).

[368] AMTA Comments at 8-9; AMTA Reply at 6-7; Global Comments at 2; 360 Mobile Comments at 2; Mtel Comments at 4-5.

[369] SMR Reply at 5; Pagenet Reply at 8-11.

[370] Pagenet Comments at 16; Pagenet Reply at 6.

and also argues that in the *Cellular Lottery Rulemaking*[371] the Commission decided to amend its rules and implemented the use of lotteries for cellular applications that were already on file.[372]

192. Several commenters are concerned that the Commission's willingness to adopt competitive bidding with respect to these licenses indicates that the Commission has decided to elevate revenue raising over the public interest and the needs of potential users.[373] Comtech contends that such a policy is proscribed by the Communications Act.[374] Pagenet, however, argues that auctions allow the Federal Government, on behalf of the American people, to collect some measure of value in return for the use of the public spectrum.[375] Pagenet also argues that under the Communications Act the Commission is charged with promoting the development and rapid deployment of services to the public and ensuring that the spectrum is used productively and efficiently.[376]

193. Pagenet and Metricom assert that using auctions will speed development and lead to the more efficient use of 220 MHz spectrum.[377] Pagenet argues that lotteries do not ensure that the winner will actually provide service, and asserts that many prior licenses granted by lottery were eventually forfeited for failure to construct or were sold prior to construction of any systems to serve the public.[378] Pagenet points out that lottery winners would be more likely to construct a system using relatively inexpensive, spectrum inefficient technology, with an eye toward selling their licenses as soon as the rules permit.[379] Pagenet asserts that the competitive bidding process discourages this type of speculation.[380] Columbia points out,

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[371] Amendment of the Commission's Rules to Allow the Selection from Among Mutually Exclusive Competing Cellular Applications Using Random Selection or Lotteries Instead of Comparative Hearings, CC Docket No. 83-1096, Report and Order, 98 FCC 2d 175 (1984) (*Cellular Lottery Rulemaking*). At the time the applications were filed licenses were awarded on the basis of comparative hearings.

[372] Pagenet Reply at 7.

[373] Comtech Comments at 3; Columbia Reply at 7; ITA Comments at 8-9.

[374] Comtech Comments at 3.

[375] Pagenet Comments at 4-5; Pagenet Reply at 11.

[376] Pagenet Comments at 7; Pagenet Reply at 5, 10-11.

[377] Pagenet Comments at 5, 7; Metricom Comments at 7.

[378] Pagenet Comments at 5.

[379] Pagenet Comments at 7-8.

[380] Pagenet Comments at 5.

however, that in the case of the 220 MHz spectrum there are stringent entry criteria, build out requirements, and rules to prevent unjust enrichment which will prevent trafficking and speculation in these licenses.[381]

194. SMR argues that awarding licenses through competitive bidding ensures that the spectrum will be held by the parties that value it the most, not by those who are the luckiest.[382] Columbia asserts, however, that a party's ability to pay does not equate with the party who values the spectrum the most, and that the Commission will never be able to meet its statutory obligation to provide spectrum for private, non-commercial requirements under this mistaken rationale.[383]

195. No commenters prefer using comparative hearings rather than lotteries to award these licenses. Airborne is the sole commenter supporting the use of comparative hearings if the Commission were choosing between comparative hearings and auctions.[384] Several commenters cite the delays and costs associated with comparative hearings.[385] PNC believes that comparative hearings do not necessarily result in the selection of more qualified licensees.[386] In addition, commenters assert that the Commission has previously rejected the option of using comparative hearings to award licenses in the *220 MHz Report and Order*, and that there is no need to revisit the issue at this time.[387]

196. Finally, Echo asks that, regardless of the option selected, the Commission allow the pending applicants to withdraw their applications and recoup their filing fees.[388] Echo argues that, because of the extended delay, business conditions have changed dramatically and the Commission should accommodate those applicants who have undergone unforeseen changed circumstances by allowing pending applicants this option.[389]

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[381] Columbia Comments at 9. *See also* PNC Comments at 9 (build-out requirements).

[382] SMR Comments at 9.

[383] Columbia Reply at 6.

[384] Airborne Comments at 3.

[385] AMTA Comments at 8 n.16; Columbia Comments at 11-12; Pagenet Comments at 5, 7; Pagenet Reply at 5-6; PNC Comments at 17-19; SMR Comments at 8.

[386] PNC Comments at 15-17.

[387] Columbia Comments at 10-11; Mtel Comments at 3; PNC Comments at 14-15; UTC Comments at 4-5.

[388] Echo Comments at 2-4.

[389] *Id.*

c. *Decision*

197. We find that it is in the public interest to return all pending applications and appropriate filing fees, both nationwide and local, for the 220 MHz service, without prejudice, and to accept new applications after the effective date of our Phase II rules. As we explain below, all mutually exclusive Phase II applications, except those applications for public safety and EMRS channels, will be subject to competitive bidding because they met the criteria for auctionable services.

198. We base our decision on several factors. First, the rules we adopt in this Report and Order will significantly alter the technical and operational rules for the 220 MHz service. Our new 220 MHz rules will afford licensees a great deal more flexibility than the rules in effect when the pending applications were filed. For example, the original rules permitted fixed and paging operations only on an ancillary basis to a licensee's primary land mobile operations. Our action today replaces those rules with a licensing framework that permits 220 MHz licensees to engage in fixed and paging operations on a primary basis. In addition, we have found that geographic, rather than individual site-specific, licensing is more appropriate for the 220 MHz service. We are therefore replacing the prior form of licensing with a framework that provides carriers with an increased degree of flexibility in providing service throughout a geographic license area.

199. The nature of the use for the nationwide channels has changed even more dramatically since the time we originally adopted rules for 220 MHz service. At the time the Commission accepted the pending nationwide applications, the rules specified that these channels could be used for non-commercial purposes and that a licensee could lease excess capacity only after meeting its five-year construction benchmarks.[390] As we have previously concluded, we no longer believe that it serves the public interest to designate these channels for non-commercial use. Instead, we find that the public will benefit by allowing a nationwide licensee the flexibility to use some or all of its licensed 220 MHz spectrum to offer service to the public. We note that two commenters advocating that we lottery pending applications have acknowledged that if the Commission allows these licensees to provide any commercial services, a lottery would not be an appropriate method to award the licenses because auctions provide incentives for more efficient use of the spectrum.[391]

200. We conclude that, because the nature of the 220 MHz service is undergoing such substantial change, it would be unfair to preclude new applicants from having the opportunity to apply for these 220 MHz licenses. In 1991, when the pending applications were filed, parties interested in using the 220 MHz spectrum may have decided not to apply for these licenses because the rules precluded a licensee from offering the type of service that these parties desired to offer, such as primary fixed service, paging, or nationwide commercial service. Although we will not preclude licensees from using their 220 MHz licenses for internal communications or for two-way land mobile communications, we do not believe that

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[390] Section 90.733(d) of the Commission's Rules, 47 C.F.R. § 90.733(d).

[391] AMTA Reply at 7; Comtech Reply at 3.

pending applicants should be afforded the exclusive benefit of receiving licenses that may be used for substantially different purposes than those for which the licenses originally could be used, and at the same time prevent new applicants who may desire to offer service to the public from having the opportunity to apply for such licenses. We have concluded that such a restriction on the pool of applicants is not equitable, nor is it sound public policy. Opening a filing window for all interested applicants, in our view, will increase the likelihood that competitive processes will trigger the delivery of a broad array of services to customers at reasonable prices.

201. Second, we agree with commenters that comparative hearings would lead to delay of service to the public and would increase administrative costs for applicants and the Commission. As commenters indicate, the Commission previously has considered and rejected the use of comparative hearings to assign 220 MHz licenses from among mutually exclusive applicants.[392]

202. Finally, we note that the Commission has found that auctioning spectrum will benefit the public by ensuring that licenses go to those who value them the most and to those who have an incentive to build their systems quickly, thereby speeding the provision of service to the public.[393]

203. We disagree with those commenters who argue that a decision to return these applications and conduct an auction will increase the likelihood of petitions for reconsideration and court challenges. Given the significant changes to the 220 MHz service rules that we adopt in this Report and Order, we think it is equally likely that a decision to lottery the pending applications would result in the same type of delay because the Commission would foreclose the opportunity for newly interested parties to obtain these licenses, thus exposing the Commission to court challenges from a different direction.

204. We also disagree with commenters arguing that Commission precedent requires that we lottery the pending applications. In the case of cellular unserved area applications, the Commission had not significantly altered the rules for the provision of cellular service, such that a Commission decision might stimulate substantially more interest by potential applicants. Indeed, the geographic area for which an applicant originally applied did not change, nor did the nature of the service. Similarly, in the *MMDS Report and Order*, we specifically stated that "while we are moving to larger geographic area authorizations and expanded service area protection, we are not fundamentally changing the nature of the service. Licensees still will be providing wireless cable service to subscribers, albeit under altered conditions designed to make the service more competitive with cable television."[394] Additionally, pending nationwide applications are distinguishable from the pending MMDS applications because unlike in the MMDS situation in which the Commission was able to proceed quickly to

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[392] *220 MHz Memorandum Opinion and Order*, 7 FCC Rcd at 4488-89 (paras. 17-22).

[393] *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2349-50 (paras. 3-5).

[394] *MMDS Report and Order*, 10 FCC Rcd at 9633 (para. 92).

conduct a lottery, if we decide to award these licenses by lottery the Commission would first have to address petitions for reconsideration of our nationwide, non-commercial decisions, and consequently applicants may have to alter their original submissions.[395]

205. We also disagree with commenters claiming that the Commission does not have the authority to return these pending applications and conduct an auction from among new, mutually exclusive applications. As we explained in the *MMDS Report and Order,* Section 6002(e) of the Budget Act, entitled "Special Rule," made an exception to the general requirement that, if a service met the standards for auctionability under Section 309(j)(2) of the Communications Act, the Commission could not use a lottery to award licenses for such service. Section 6002(e) permits the Commission to use a lottery to award licenses even for an otherwise auctionable service for applications accepted for filing before July 26, 1993.[396] In adopting this provision, Congress indicated that the exception would "permit" but not require, the Commission to use lotteries for certain IVDS and "several other licenses."[397] Since, as we explain below, we find that the 220 MHz service meets the standards for auctionability, the Commission has the authority to award these licenses by competitive bidding.

206. We also agree with Pagenet that there is clear legal precedent for the Commission to dismiss pending applications.[398] Contrary to the views of some commenters, applying new rules to pending applications does not constitute retroactive rulemaking. It is well settled that the Commission may apply new rules to pending applications.[399] As we previously found in the *Part 22 Rewrite Order*, the fact that an application remained pending because of petitions for reconsideration does not affect the Commission's authority to apply new rules to the application.[400] Furthermore, "[u]ntil action on an application is final, processing has not been completed, and rule changes applied to that application are not

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[395] *See id.* at 9632 (para. 90).

[396] *Id.* at 9633 (para. 94).

[397] H. R. Conf. Rep. No. 103-213 at 498, 103rd Cong., 1st Sess., (1993), 1993 U.S.C.C.A.N. 1088 at 1113-14.

[398] Pagenet Comments at 15-16 (citing Private Operational-Fixed Microwave Service, 48 Fed. Reg. 32,578 (1983), *aff'd*, Affiliated Communications Corp. v. FCC, No. 83-1686 (D.C. Cir. May 9, 1985)).

[399] *See, e.g.,* United States v. Storer Broadcasting Co., 351 U.S. 192 (1956); Hispanic Information and Telecommunications Network v. FCC , 865 F.2d 1289 (D.C. Cir. 1989); Maxcell Telecom Plus, Inc. v. FCC, 815 F.2d 1551 (D.C. Cir. 1987).

[400] Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, CC Docket No. 92-115, Report and Order, 9 FCC Rcd 6513, 6534-35 (para. 100) (1994) (*Part 22 Rewrite Order*).

retroactive.''[401] Because we have decided to return pending applications and open a filing window for new applications before conducting an auction, we need not address contentions in the record that the Commission does not have the authority to conduct an auction that limits participation to parties with pending applications. Furthermore, since we will be returning the pending applications we find that the Petitions for Reconsideration filed in this matter by Columbia Cellular Corporation, PLMRS Narrowband Corp. and 360 Mobile Data Joint Venture on August 6, 1993 should be dismissed as moot. These petitions requested reconsideration of our 1993 decision in the *220 MHz Second Reconsideration Order*, which only addressed issues concerning non-commercial nationwide 220 MHz licenses.[402] The Petitions for Reconsideration will be moot because we will no longer have a non-commercial designation in the 220 MHz service.

2. Other Applications Issues

207. As we noted in the *Third Notice*, in the *CMRS Third Report and Order*, we adopted rules to govern the filing and processing of applications for Part 90 services reclassified as CMRS that were comparable to our rules for Part 22 services, but declined to consider definitions of initial applications and major or minor modifications and amendments for the 220 MHz service until we more fully examined the service in this rulemaking proceeding. We address these definitions and other application issues below.

a. *Initial Applications*

208. As we observed in the *Third Notice*, we proposed a definition of initial applications for the 220 MHz service that is similar to that adopted in the *CMRS Third Report and Order* for other mobile services that are licensed on a market or geographically-defined basis. Specifically, we propose to define an initial application for a 220 MHz license as an application for an EA, Regional, or nationwide license, regardless of whether the applicant is an incumbent 220 MHz licensee in the geographic area covered by the requested license. No comments were received regarding this issue. We will therefore define initial applications for the 220 MHz service as proposed.

b. *Amendment of Applications and Modification of Authorizations*

209. In the *Third Notice*, we proposed to adopt rules consistent with other reclassified Part 90 services to govern amendments to applications and modification of Phase II licenses. We thus proposed that applicants for the Phase II licenses have a limited opportunity to cure minor defects in their short-form applications and not be allowed major amendments after the expiration of the short-form filing window.[403] We also noted that a nationwide, EA, or Regional licensees generally would not seek major modification other than in the case of

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[401] *Id.* at 6535 (para. 100).

[402] *220 MHz Second Reconsideration Order*, 8 FCC Rcd 4161.

[403] Sections 24.422 and 24.822 of the Commission's Rules, 47 C.F.R. §§ 24.422, 24.822.

assignments or transfers of control.[404] We received no comments on this issue. We thus adopt our proposed limitations for filing amendments to applications, and will permit Phase II licensees to file modifications to their licenses only in cases of assignments or transfers of control.

c. *Special Temporary Authority*

(1) Proposal

210. In the *Third Notice*, we noted that under the *CMRS Second Report and Order*, all paging services and all private mobile licensees reclassified as CMRS and licensed to provide service as of August 10, 1993 were afforded a three-year grandfathering period under the Part 90 PMRS rules.[405] In the *CMRS Third Report and Order*, we had concluded that "licensee status before the August 10, 1993 deadline is the sole factor in determining whether the licensee will be treated as being in the PMRS until August 10, 1996."[406] Some reclassified PMRS providers have Part 90 STAs or conditional grants that were in effect at the time we adopted the *CMRS Third Report and Order*. However, we concluded that such STAs or conditional grants would be extended only until August 10, 1996, when their reclassification as CMRS becomes effective.[407] Additionally, we concluded that: (1) reclassified PMRS that were not grandfathered under the Part 90 rules and that had STAs or conditional grants only possessed such grants until the grants' scheduled expiration, or 60 days from the effective date of the *CMRS Third Report and Order*;[408] and (2) such STAs could not be extended, and the non-grandfathered reclassified licensees could only apply for STAs and conditional grants under Part 22 rules.

211. In the *Third Notice* we decided that such reasoning should also be applied to the 220 MHz service, and thus tentatively concluded that non-grandfathered 220 MHz CMRS licensees with STAs should only be allowed to apply for STAs or conditional grants, or extensions to existing STAs or conditional grants, under Part 22 rules. Additionally, we indicated that in granting STAs for 220 MHz licensees we must follow Section 309(f) of the Communications Act, which states that STAs should be granted to CMRS providers only in "extraordinary circumstances involving particular applications."

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[404] 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, RM-8117, RM-8030, RM-8029, and Implementation of Section 309(j) of the Communications Act - Competitive Bidding: 800 MHz SMR, PP Docket No. 93-253, Further Notice of Proposed Rule Making, 10 FCC Rcd 7970 (1994) (*800 MHz Further Notice*).

[405] *CMRS Second Report and Order*, 9 FCC Rcd at 1513-14 (paras. 280-284).

[406] *CMRS Third Report and Order*, 9 FCC Rcd at 8166 (para. 409).

[407] *Id.* at 8156 (para. 384).

[408] *Id.*