

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

In the Matter of)	
)	
Year 2000 Biennial Regulatory Review –)	WT Docket No. 01-108
Amendment of Part 22 of the Commission’s Rules)	
to Modify or Eliminate Outdated Rules Affecting)	
the Cellular Radiotelephone Service and other)	
Commercial Mobile Radio Services)	

ORDER ON RECONSIDERATION

Adopted: February 4, 2004

Released: February 12, 2004

By the Commission: Commissioner Martin approving in part, concurring in part, and issuing a statement.

I. INTRODUCTION

1. In this Order on Reconsideration, we resolve petitions for reconsideration of the *Report and Order* in the Part 22 Biennial Regulatory Review proceeding.¹ In this order, we affirm the decision to establish a five-year sunset period for the removal of the Commission’s requirement that cellular carriers provide analog service. We also affirm the decision to remove the rule section governing electronic serial numbers (ESNs) in cellular telephones, but clarify that the fraudulent and unauthorized use of ESNs remains contrary to federal law and Commission policy. Further, we reconsider and adopt a proposal to permit, in certain circumstances, cellular carriers to extend into neighboring unserved areas without prior Commission approval. We also decline a request to further modify our rules regarding emissions limitations.

II. BACKGROUND

2. As part of its Year 2000 Biennial Review of regulations, the Commission issued a *Report and Order* in which it amended Part 22 of its rules by modifying or eliminating various regulations relating to the Cellular Radiotelephone Service that became outdated due to technological change, increased competition in the Commercial Mobile Radio Services (CMRS), or supervening rules. The Commission carried out this review pursuant to section 11 of the Communications Act of 1934, as amended (Act).²

¹ Year 2000 Biennial Regulatory Review - Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, WT Docket No. 01-108, *Report and Order*, 17 FCC Rcd 18401 (2002).

² See 47 U.S.C. § 161. Section 11 specifies that:

BIENNIAL REVIEW OF REGULATIONS. – In every even-numbered year (beginning with 1998), the Commission -- (1) shall review all regulations issued under this Act in effect at the time of the review that apply to the operations or activities of any provider of telecommunications service; and (2) shall determine whether any such regulation is no

Section 11 of the Act requires that we review all of our regulations relating to providers of telecommunications service and “determine whether any such regulation is no longer necessary in the public interest as the result of meaningful economic competition between providers of such service.”³ In the event that we determine that a rule is no longer necessary in the public interest, section 11 directs the Commission to remove or modify the rule in question.

3. Pursuant to this statutory mandate, the Commission re-examined its cellular rules in order to determine whether any of the rules are no longer necessary in the public interest as a result of the technological advances and growth in competition that have occurred in mobile telephony since the rules were first promulgated. As a result of this review, the Commission made several changes to its cellular rules, including: modifying its rules to eliminate, after a five-year transition period, the requirement that carriers provide analog service compatible with Advanced Mobile Phone Service (AMPS) specifications;⁴ removing the manufacturing requirements found in section 22.919 governing electronic serial numbers (ESNs) in cellular telephones, and; modifying language in section 22.917 regarding the out-of-band emission limit. The Commission also addressed a number of other Part 22 issues raised by commenters, such as various proposals seeking to overhaul our cellular unserved area licensing framework.

4. In response to the *Report and Order*, petitions for reconsideration were filed by AT&T Wireless Services (AWS), the Cellular Telephone and Internet Association (CTIA), and Dobson Communications Corporation (Dobson). In its petition for reconsideration, AWS requests that the Commission reduce the transition period for the cellular analog requirement from five years to no more than 30 months.⁵ AWS argues that, because the Commission found in the *Report and Order* that the analog requirement was no longer necessary to promote its original purposes of ensuring competition or nationwide compatibility, the Commission should have immediately removed the requirement rather than establish a transition period. AWS maintains that it was improper and unnecessary for the Commission to maintain the analog requirement as a means to ensure that persons with hearing disabilities and emergency-only consumers have access to wireless services. Further, AWS argues that, because the elimination of the ESN rule increases the risks of fraud and theft, the Commission should reinstate the rule governing ESN design specifications and extend the requirement to apply to all CMRS providers.

longer necessary in the public interest as the result of meaningful economic competition between providers of such service.

(b) EFFECT OF DETERMINATION. – The Commission shall repeal or modify any regulation it determines to be no longer necessary in the public interest.

³ *Id.*

⁴ The Commission set out a five-year transition period to ensure that wireless services are continuing to be made available to consumers who do not have ready access to digital phones, such as persons with hearing disabilities and 911-only consumers. In order to monitor the progress made by the wireless and hearing aid industries in developing hearing aid-compatibility solutions, and to ensure that wireless services are continuing to be made available to persons with hearing disabilities as well as 911-only consumers, the Commission required that nationwide licensees file reports with the Commission no later than the third anniversary of the release of the order (February 18, 2006) and again by the fourth anniversary of the order (February 18, 2007). The information contained in the reports will be used to determine whether or not the Commission will initiate a proceeding to extend the sunset date or take appropriate enforcement action against carriers who fail to provide access to telecommunications services. *See Report and Order*, 17 FCC Rcd at 18471-18419, paras. 28-32.

⁵ AT&T Wireless Services, Inc. Petition for Reconsideration, filed January 16, 2003.

5. CTIA also requests that the Commission re-evaluate the decision to remove the ESN requirement.⁶ Unlike AWS however, CTIA does not object to the removal of section 22.919, and does not seek reinstatement of the rule itself. Instead, it argues that certain language in the *Report and Order* appears to suggest that cellular telephone cloning is now permissible, and urges that the Commission revise the language.

6. Dobson seeks reconsideration of the Commission's decision not to adopt its proposal to modify certain aspects of the Commission's cellular unserved area rules.⁷ Specifically, Dobson argues that the Commission did not adequately examine whether cellular unserved area licensing rules continue to be necessary, and, erred in failing to adopt Dobson's proposal allowing licensees to extend into adjacent unserved areas of less than 50 square miles on a secondary basis.

7. Finally, in response to a Public Notice seeking comment regarding the *2002 Biennial Regulatory Review* proceeding,⁸ Lucent Technologies (Lucent) submitted comments arguing that further modifications to the Commission's rules regarding emissions limits are necessary.⁹ Lucent argues that the rule changes made in the *Report and Order* will require one spread spectrum system to comply with more stringent technical requirements than another system.

III. DISCUSSION

A. The Commission did not err in establishing a five-year sunset period for the analog requirement.

8. *Background.* Since the establishment of the Cellular Radiotelephone Service in the early 1980s, all cellular carriers have been required to provide service in accordance with the compatibility standard for analog systems, known as AMPS.¹⁰ The Commission mandated AMPS compatibility in order to accomplish two goals: (1) to enable subscribers of one cellular system to be able to use their existing terminal equipment (*i.e.* mobile handset) in a cellular market in a different part of the country (roaming); and (2) to facilitate competition by eliminating the need for cellular consumers to acquire different

⁶ Cellular Telephone and Internet Association Petition for Reconsideration, filed January 16, 2003.

⁷ Dobson Communications Corporation Petition for Limited Reconsideration, filed January 16, 2003.

⁸ See "The Commission Seeks Public Comment in the 2002 Biennial Review of Telecommunications Regulations within the Purview of the Wireless Telecommunications Bureau," WT Docket No. 02-310, *Public Notice*, 17 FCC Rcd 18933 (2002). In December 2002, Commission staff issued a report regarding the Commission rules that affect wireless telecommunications carriers, the status of ongoing and recent initiatives, and recommendations on whether specific rules should be retained, modified, or repealed. See Federal Communications Commission 2002 Biennial Regulatory Review, Staff Report of the Wireless Telecommunications Bureau, WT Docket No. 02-310 and GC Docket No. 02-390, 18 FCC Rcd 4243 (2002). In the Staff Report, the staff noted that the issues raised by Lucent are within the scope of review of Part 22 Cellular Biennial Review *Report and Order* and recommended that Lucent's comments regarding out-of-band emissions limits be treated as a petition for reconsideration in this proceeding.

⁹ See generally Lucent 2002 Biennial Review Comments.

¹⁰ The detailed technical standards for AMPS were set out in the Office of Engineering and Technology Bulletin No. 53 (OET 53) in April 1981. The OET 53 specifications established technical operational parameters and descriptions of call processing algorithms and protocols to be used by analog cellular systems. See An Inquiry into the Use of the Bands 825-845 MHz and 870 MHz and 870-890 MHz for Cellular Communications Systems; Amendment of Parts 2 and 22 of the Commission's Rules Relative to Cellular Communications Systems, CC Docket No. 79-318, *Report and Order*, 86 FCC 2d 469, 508 at paras. 92-93.

handset equipment in order to switch between the two competing carriers within the consumers' home market (thereby ensuring reasonable consumer costs). Pursuant to section 22.901, a carrier was required to provide service to any subscriber within the carrier's cellular geographic service area (CGSA),¹¹ including both the carrier's subscribers and roaming customers that are using technically compatible equipment.¹²

9. In the *Report and Order*, the Commission concluded that, in light of the present competitive state of mobile telephony, the nationwide coverage achieved by cellular carriers, and the market demand for nationwide, ubiquitous coverage by carriers, the analog requirement has substantially achieved its purpose of ensuring that the public has access to low-cost, compatible equipment and to nationwide roaming.¹³ The Commission found that the objectives of the analog requirement can now largely be accomplished by market forces without the need for regulation, and therefore determined that the analog requirement should be removed. Although the Commission concluded that as a general matter it is no longer necessary to impose the analog compatibility standard to achieve the original purposes of the rule, the Commission found that eliminating the analog requirement immediately without a reasonable transition period would be extremely disruptive to certain consumers, particularly those with hearing disabilities as well as emergency-only consumers, who currently continue to rely on the availability of analog service and lack digital alternatives.¹⁴

10. Although a wide variety of mobile technologies and services are available to most consumers, persons with hearing disabilities are limited to analog equipment or a small number of digital phones that are currently compatible with only certain types of hearing aids.¹⁵ Digital choices are limited because, at present, nearly all digital equipment can cause some interference to many types of hearing aids and cochlear implants.¹⁶ Further, the Commission found that immediate removal of the analog requirement

¹¹ A system's CGSA is defined as the geographic area served by the system, within which that system is entitled to protection and adverse effects are recognized for the purpose of determining whether a petitioner has standing.¹¹

¹² 47 C.F.R. § 22.901; *See* Interconnection and Resale Obligations Pertaining to Commercial Mobile Services, CC Docket No. 94-54, *Second Report and Order and Third Notice of Proposed Rulemaking*, 11 FCC Rcd 9462, 9469-9470, para. 11 (1996); Interconnection and Resale Obligations Pertaining to Commercial Mobile Services, CC Docket No. 94-54, *Third Report And Order and Memorandum Opinion and Order on Reconsideration*, 15 FCC Rcd 15975, para. 21 (2000). Section 22.901(d) specifically requires that carriers make mobile services available to subscribers whose mobile equipment conforms to the AMPS compatibility standard. 47 C.F.R. § 22.901(d).

¹³ *See Report and Order*, 17 FCC Rcd at 18406, para. 8; *id.* at 18407-18414, paras. 9-21.

¹⁴ *Id.*, 17 FCC Rcd at 18406-18407, para. 8; *id.* at 18414, para. 22.

¹⁵ Hearing aids operate in one of two modes – acoustic coupling or telecoil coupling. In acoustic coupling mode, the microphone picks up surrounding sounds and converts them into electrical signals. The electrical signals are amplified as needed and then converted back into sound by the hearing aid speaker. In telecoil mode, with the microphone turned off, the telecoil picks up the audio signal-based magnetic field generated by the voice coil of a dynamic speaker in hearing aid-compatible telephones, audio loop systems, or powered neck loops. The hearing aid converts the magnetic field into electrical signals, amplifies them as needed, and converts them back into sound via the speaker. Using a telecoil avoids the feedback that often results from putting a hearing aid up against a telephone earpiece, can help prevent exposure to over amplification, and eliminates background noise which provides improved access to the telephone. Some equipment manufacturers have developed neck loop devices that make it possible for some people who have a telecoil in their hearing aids to use digital mobile phones. Unlike digital handsets, some analog handsets have telecoils installed that are compatible with some telecoil equipped-hearing aids, obviating the need for the separate neck loop. However, people without telecoil-equipped hearing aids are unable to use neck loops with digital mobile phones or telecoil-equipped analog phones.

¹⁶ The pulsing nature of RF signals from digital telephones as well as electromagnetic energy emitted by a digital phone's antenna, backlight, or other components can cause interference to hearing aids and cochlear implants. A

would negatively impact those using emergency or 911-only phones which have been estimated by some to number between 20-30 million.¹⁷ Emergency or 911-only callers include “unsubscribed” consumers of recycled phones that have been reissued under some type of donor program (such as those donated to victims of domestic violence) as well as subscribers of 911-only phones that can only make 911 calls but cannot receive calls. The 911-only subscribers are often elderly persons who can not afford basic wireless service or do not want typical wireless service, but desire immediate access to emergency services.¹⁸ Recognizing that telecommunications technology has become an essential part of everyday life, and that those without ready access are at a disadvantage with respect to both daily routine or emergency services, the Commission determined that it is in the public interest to establish a transition period during which time the wireless industry could develop solutions for hearing aid-compatibility issues and phones used by emergency-only callers can cycle from analog to digital.¹⁹

11. In its petition for reconsideration, AWS asserts that the Commission has not adequately met its burden to demonstrate that the analog rule remains “necessary in the public interest” for five additional years, either for the original purposes of the rule or in order to ensure that certain consumers have access to wireless telephony. AWS argues that section 11 of the Act mandates that once the Commission has made the determination that a rule is no longer necessary as a result of meaningful economic competition, the Commission must repeal the rule.²⁰ Because the Commission determined that the analog requirement was no longer necessary to promote competition or roaming, AWS argues that the Commission should have immediately removed the rule rather than establish a transition period. AWS maintains that it was improper for the Commission to use concerns regarding access by persons with hearing disabilities and emergency-only consumers in deciding whether to retain the rule because the Commission may only consider the original purposes for which the rule was adopted.²¹ AWS argues that, because there are other measures in place to ensure that the needs of hearing impaired or emergency-only consumers will continued to be served, there is no justification for retaining the analog requirement beyond a brief transition period.²²

12. *Discussion.* We find that there is no basis to reconsider the Commission’s decision to establish the five-year transition period, and AWS offers little rationale supporting the immediate elimination or reduction of the transition period that was not previously considered and rejected in the *Report and Order*. We conclude that the Commission’s decision to defer the removal of the analog requirement in order to avoid causing significant hardship to certain consumers fully comports with our obligations

cochlear implant is a surgically implantable device that is designed to substitute for the function of the middle ear, cochlear mechanical motion, and sensory cells. A cochlear implant is comprised of external and internal components. The external components include a microphone that converts sound into an electrical signal, a speech processor that manipulates and converts the signal, and a transmitter that sends the electrical signal to the internal components. The surgically implanted components include a receiver that decodes the signal from the speech processor, and an electrode array that stimulates the cochlea with electrical current. The brain interprets this stimulation as sound. *See* Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones, *Report and Order*, 18 FCC Rcd 6753 (2003) (*HAC Report and Order*).

¹⁷ *See id.*, 18 FCC Rcd at 18414-18415, para. 23.

¹⁸ *See id.*, 18 FCC Rcd at 18414-18415, para. 23.

¹⁹ *See id.*, 17 FCC Rcd at 18414-18419, paras. 22-30.

²⁰ AWS Petition for Reconsideration at 2, 3.

²¹ *Id.* at 6.

²² In its comments, Western Wireless supports the immediate elimination of the analog requirement. Western Wireless Comments at 2.

under section 11 of the Act. We continue to conclude that the effects of an immediate elimination of the analog requirement would have an inordinate impact with respect to current analog consumers, particularly persons with hearing disabilities and emergency-only users. We affirm the conclusion that the five-year transition period is appropriate to ensure that persons with hearing disabilities and emergency-only consumers continue to have access to wireless devices, and we believe that the transition period is essential in ensuring a smooth migration from analog to digital technology.

1. The Commission's decision to implement a five-year sunset of the analog requirement is consistent with the original purposes of the rule.

13. In its petition for reconsideration, AWS argues that the analog requirement must be eliminated because it no longer serves its original purposes. AWS as well as Western Wireless maintain that under the Commission's own interpretation of section 11, the Commission may only consider the purposes for which the rule was adopted in deciding whether to retain a regulation.²³ They argue that, because the Commission found that the analog requirement has achieved its purpose of ensuring that the public has access to low cost, compatible equipment and to nationwide roaming, the rule is no longer necessary and must be removed.²⁴

14. AWS and Western Wireless are incorrect in their assertion that the Commission retained the analog requirement for a policy objective that is completely divorced from the original purposes of the rule.²⁵ As noted, the Commission found that the original goals of ensuring reasonable consumer costs and seamless, nationwide service (*i.e.* roaming) have been substantially achieved for most consumers.²⁶ The Commission emphasized, however, that despite the multiple wireless technologies and services that are currently available, there are certain individuals, specifically emergency-only users and persons with hearing disabilities, who may not have readily available and accessible economic or technological alternatives to analog service.²⁷ The Commission found that such consumers do not currently have adequate digital alternatives and would be unduly affected by the immediate elimination of the analog requirement.²⁸ In so doing, the Commission recognized the reality that there is currently little or no meaningful economic competition for such consumers. The analog requirement is still necessary, at least in the near term, to ensure that emergency-only consumers and persons with hearing disabilities continue to have access to wireless telephony, and, accordingly, the decision to implement a sunset period is consistent with the original purposes of the rule.

2. The Commission is not limited to the original purpose of a rule in determining whether it remains necessary.

15. Although the Commission's basis for establishing a five-year transition period is consistent with the original purposes of the analog requirement, we note that it would nonetheless be permissible to retain the analog requirement for other reasons if we conclude that it is in the public interest to do so. AWS is correct that the *Report and Order* stated that, in reviewing a regulation, the Commission must evaluate

²³ AWS Petition for Reconsideration at 6; Western Wireless Comments at 3-4.

²⁴ AWS Petition for Reconsideration at 6, citing *Report and Order*, 17 FCC Rcd at 18406, para. 8.; Western Wireless Comments at 4-5.

²⁵ AWS Petition at 5-6; Western Wireless Comments at 3.

²⁶ *Report and Order*, 17 FCC Rcd at 18406, para. 8.

²⁷ *Id.* at 18414, para. 22.

²⁸ *Id.*

whether the concerns that led to the rule or the rule's original purpose may be achieved without the rule or with a modified rule.²⁹ The Commission, however, did not conclude that it may only look to the original purposes of the rule to determine whether it remains necessary in the public interest. Instead, the *Report and Order* itself noted that the Commission is not limited to the original purposes of the analog requirement in determining whether the requirement remained necessary. As noted in the *Report and Order*, the U.S. District Court of Appeals for the D.C. Circuit has found that nothing in the language of section 202(h) of the Telecommunications Act of 1996³⁰ indicates that the Commission is limited to the purposes for which the rule was adopted when determining whether or not it remains necessary.³¹ Similarly, there is no language in section 11 which suggests that we are limited to the original purpose behind a rule in determining whether or not it should be retained.³² Indeed, it is unreasonable to interpret section 11 as requiring that a rule must be repealed if it has accomplished its original goals but yet remains necessary with respect to another purpose.³³ There is nothing in the text of section 11 or its legislative history that suggests that this is the appropriate standard for a biennial review.

3. Sections 255 and 332 of the Act do not preclude the Commission from finding that the analog requirement remains necessary.

16. Both AWS and Western Wireless argue that certain statutory provisions compel us to remove the analog requirement.³⁴ Section 255 of the Communications Act provides that manufacturers and telecommunications services providers must ensure that telecommunications equipment and telecommunications services are accessible to persons with disabilities. Specifically, section 255(c) of the Act requires that “[a] provider of telecommunications service shall ensure that the service is accessible to and usable by individuals with disabilities, if readily achievable.”³⁵ Further, section 332 requires that the Commission ensure that providers of CMRS services are subjected to technical and operational rules comparable to those that apply to providers of substantially similar common carrier services.³⁶ The

²⁹ *See id.*, 17 FCC Rcd at 18404, para. 4.

³⁰ *See* section 202(h) of the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56. Section 202(h) requires the Commission to review its ownership rules biennially as part of its regulatory reform review under section 11 to determine whether such rules are necessary in the public interest as the result of competition.

³¹ *See Report and Order*, 17 FCC Rcd at 18404, fn 16, citing *Fox Television Stations, Inc. v. FCC et al.*, 280 F.3d 1027 (D.C. Cir 2002) (“Nothing in § 202(h) suggests the grounds upon which the Commission may conclude that a rule is necessary in the public interest are limited to the grounds upon which it adopted the rule in the first place”).

³² Western Wireless argues that the courts have yet to pass on whether, similar to section 202(h), section 11 allows the Commission to base its decision to retain a rule for reasons other than the original basis of the rule. This fact however, does not preclude us from applying the same analysis given the similarity of the two rules: in looking to the plain meaning of the text of section 11 for guidance, nothing in the language states that we must consider only the original basis of the rule.

³³ We agree with comments that argue that it is unlikely that Congress intended to impose a standard that would require the Commission to needlessly initiate a completely new notice-and-comment rulemaking proceeding simply to reinstate the rule. *See* Joint Telematics Comments at 7.

³⁴ AWS Petition at 6; Western Wireless Comments at 7; AWS Reply Comments at 4.

³⁵ 47 U.S.C. § 255(c).

³⁶ 47 U.S.C. § 332.

general goal behind section 332 is to ensure that economic forces rather than disparate regulatory constraints shape the development of the CMRS marketplace.³⁷

17. The *Report and Order* specifically discussed whether section 255 or other regulatory provisions, such as the Hearing Aid Compatibility Act of 1988 (HAC Act), which requires the Commission to establish regulations that ensure hearing-aid compatibility,³⁸ are sufficient to ensure accessibility to persons with hearing disabilities.³⁹ The Commission found that, given the scarcity of digital devices that may be used with hearing aids, persons with hearing disabilities could be left without access to mobile telephony services in the event that the analog requirement is removed immediately, even with the existence of measures such as section 255 of the Act.⁴⁰ The Commission specifically noted that it was establishing a transition period even though, pursuant to section 255, carriers are otherwise obligated to ensure that telecommunications service is accessible to persons with disabilities.⁴¹ The Commission found that, the independent requirements of section 255 notwithstanding, it was appropriate to also establish a five-year transition period in order to address the particular current problem of hearing aid-compatibility with digital handsets, and ensure access to mobile telephony service for persons with hearing disabilities.⁴²

18. AWS and Western Wireless nevertheless maintain that the Commission failed to provide a rational reason as to why it was continuing to apply the analog requirement in light of its finding that carriers are obligated under section 255 to ensure that telecommunications service is accessible to persons with disabilities. They state that, despite comments to the contrary,⁴³ there is no basis to conclude that carriers will not comply with their obligations under section 255.⁴⁴ Both point out that carriers are now providing to persons with hearing disabilities a number of digital products,⁴⁵ and that, until the

³⁷ Implementation of Sections 3(N) and 332 of the Communications Act - Regulatory Treatment of Mobile Services, GN Docket No. 93-252, *Third Report and Order*, 9 FCC Rcd 7988, 7989, para. 4 (1994).

³⁸ The HAC Act requires almost all new telephones to “provide internal means for effective use with hearing aids that are designed to be compatible with telephones which meet established technical standards for hearing aid compatibility,” but provided an exemption for certain categories of phones including those used with CMRS and private mobile radio services (or PMRS). The Commission recently issued a *Report and Order* which modified the exemption to require that digital wireless phones be capable of being used effectively with hearing aids. *See generally HAC Report and Order*.

³⁹ *See Report and Order*, 17 FCC Rcd at 18417-18419, paras. 27-30.

⁴⁰ *Id.* at 18417-18418, para 28.

⁴¹ *Id.*, at 18418-18419, paras. 30.

⁴² *See id.* at 18418-18419, para. 30.

⁴³ *See* SHHH Comments at 3; TDI Comments at 6-8. These commenters argue that section 255 has not been fully effective in ensuring that equipment and services are accessible to people with disabilities, and that section 255 will not provide sufficient safeguards to ensure the continued availability of analog services to persons with speech or hearing disabilities.

⁴⁴ AWS Reply Comments at 4.

⁴⁵ For example, AWS notes that it makes available a peripheral device, called the Nokia Neckloop, that allows the digital phone to be distanced from the hearing aid and also provides telecoil connectivity. AWS Reply Comments at 4-5. Western Wireless points out that “CHAAMP” technology is available for use with Nokia handsets and is telecoil compatible, and also notes that wireless loop accessories have been developed that can be plugged into a number of mobile handset and which eliminates or substantially reduces interference for telecoil wearers. Western Wireless Comments at 6. Further, Western Wireless states that there are a number of readily-available alternative

compatibility issue is resolved, they will continue to make analog available to consumers in accordance to the requirements of section 255.⁴⁶ Given these considerations, AWS and Western Wireless argue that retention of the analog rule is not necessary to address concerns regarding accessibility for hearing-impaired consumers because section 255 expressly requires cellular carriers to ensure that their facilities and services are accessible to individuals with disabilities.⁴⁷

19. We disagree that the provisions of section 255 preclude us from taking action to ensure that mobile telephony services remain available and accessible to individuals with hearing disabilities. There is no language in section 255 that indicates that we are prohibited from taking action that we deem necessary to ensure that all consumers have ready access to wireless services. Indeed, the Commission has broad authority and discretion to implement, revise or retain policies if doing so advances the public interest. Given the possible consequences to persons with hearing disabilities and emergency-only callers of the immediate removal of the analog requirement, the Commission sought to ensure that wireless services remain accessible to such consumers regardless of the mandates of section 255, *i.e.*, the Commission's action to defer the sunset of the analog requirement was separate and distinct from the requirements of section 255. In the *Report and Order*, the Commission expressly stated that, notwithstanding a carrier's obligation under section 255, a transition period was being established to *safeguard* access to mobile telephony.⁴⁸ The purpose in implementing the transition was to ensure that persons with hearing disabilities have continuous access to wireless telecommunications services independent of actions taken by carriers to fulfill their statutory obligations. While we do not doubt that carriers take seriously their obligations to ensure that telecommunications services are accessible by persons with hearing disabilities, it is nonetheless possible for there to be disagreement as to what constitutes compliance under section 255. For instance, in its comments, Western Wireless identifies certain handsets or accessories that may be used with telecoil-equipped hearing aids as examples of digital technologies that are currently available to persons with hearing disabilities. A carrier might conclude that such devices satisfy section 255, and, in the absence of the analog requirement, determine that it can turn off its analog facilities. However, only 25-30 percent of hearing aids sold in the United States include telecoils; therefore, the majority of persons with hearing disabilities will not benefit from digital devices.⁴⁹ We concur with the reasoning of the Joint Telematics Commenters that resolving complaints or disputes over whether a carrier is in compliance with section 255 may require lengthy investigation, during which time persons with hearing disabilities could be without reasonable access to mobile services.⁵⁰ We conclude that the public interest is better served by ensuring that there is no period of time, while a section 255 complaint is pending, in which persons with hearing disabilities would be without analog service. Because it is feasible that a carrier will not be in compliance with section 255, we conclude that it was appropriate to establish a transition period to ensure uninterrupted access.

20. We also reject arguments that the Commission cannot require cellular carriers to bear the burden of maintaining a specific technology at its competitive disadvantage while similar CMRS providers are not subject to the same requirement.⁵¹ Both AWS and Western Wireless assert that continuing to apply

wireless mobile technologies. For example, T-Mobile's "Side-Kick" combines a cell phone/PDA with a keyboard for email, instant messaging and web browsing functions. Western Wireless Comments at 6.

⁴⁶ Western Wireless Comments at 7; AWS Reply Comments at 4.

⁴⁷ AWS Petition at 6; Western Wireless Comments at 7.

⁴⁸ *Report and Order*, 17 FCC Rcd at 18418, para. 30.

⁴⁹ *HAC Report and Order*, 18 FCC Rcd at 16763, para. 22.

⁵⁰ See Joint Telematics Commenters Comments at 10.

⁵¹ AWS Petition at 7; Western Wireless Comments at 4.

the analog requirement is violative of regulatory principles pursuant to section 332 because the analog rule requires cellular carriers to bear a regulatory burden that is not placed on service providers in similar services.⁵² AWS and Western Wireless argue that the Commission failed to offer any explanation that would justify treating cellular carriers differently from other wireless carriers.⁵³

21. The Commission has previously determined that while regulatory parity is a significant policy that can yield important pro-competitive and pro-consumer benefits, parity for its own sake is not required by any provision of the Communications Act.⁵⁴ Instead, section 332 empowers the Commission to make a distinction between different CMRS at any time if it becomes necessary to do so.⁵⁵ Because we have concluded that it is in the public interest to ensure that persons with hearing disabilities and emergency-only carriers have access to mobile telephony, cellular carriers, as a consequence, must continue to provide analog service as cellular is the only service in which every carrier has analog facilities.

4. The decision to establish a five-year transition period for the removal of the analog requirement was not an abuse of discretion.

22. AWS asserts that, while it does not dispute that the Commission has wide discretion to establish the effective dates for the elimination of its rules, the decision to set a five-year transition for removal of the analog requirement was an abuse of discretion.⁵⁶ AWS argues that the decision to select five years as the transition period was arbitrary given the Commission's own findings regarding the robust nature of the wireless industry and the significant competitive harms and costs associated with maintaining an analog network, as well as its failure to explain why the five-year transition is necessary in the public interest.⁵⁷ AWS argues that at the very least the Commission must reduce the transition period to no longer than 30 months.

23. We reject AWS's argument that the Commission did not adequately demonstrate that the five-year transition period is in the public interest, and we disagree with arguments that a five-year transition period is an inordinately long length of time. As AWS notes, the *Report and Order* stated that in light of the present state of competition in the wireless industry, the analog requirement has substantially achieved its purpose of facilitating competition and ensuring nationwide roaming.⁵⁸ Throughout the *Report and Order*, however, the Commission was very clear in stating that, although there is a variety of wireless

⁵² AWS Petition at 7-9; Western Wireless Comments at 4-5.

⁵³ Western Wireless at 4.

⁵⁴ See Petition of the People of the State of California and the Public Utilities Commission of the State of California to Retain Regulatory Authority Over Intrastate Cellular Service Rates, PR Docket No. 94-105, *Report and Order*, 10 FCC Rcd 7486, 7490, para. 9 (1995).

⁵⁵ 42 U.S.C. § 332(c)(1)(a). Implementation of Sections 3(N) and 332 of the Communications Act - Regulatory Treatment of Mobile Services, GN Docket No. 93-252, *Second Report and Order*, 9 FCC Rcd 1411, 1475, para. 162 (1994); see also Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54, *First Report and Order*, 11 FCC Rcd 18455, 18464, para. 15 (1996), citing H.R. Rep. No. 103-213, 103rd Cong., 1st Sess. 491 ("Although Section 332 of the Act was designed to eliminate unwarranted regulatory disparities among different classes of CMRS, Congress recognized 'that market conditions may justify differences in the regulatory treatment of some providers of commercial mobile services,' and it therefore permitted us 'some degree of flexibility to determine which specific regulations should be applied to each carrier'").

⁵⁶ AWS Reply Comments at 7.

⁵⁷ AWS Reply Comments at 7.

⁵⁸ *Report and Order*,

technologies and services available to most consumers, consumers such as persons with hearing disabilities or emergency-only users may not have readily available and accessible economic or technological alternatives to analog service.⁵⁹

24. The Commission found that, given the scarcity of digital devices that may be used with hearing aids as well as the fact that many emergency-only callers may not have affordable digital alternatives, such consumers could be left without access to mobile telephony services if the analog requirement was immediately removed and carriers are able to shut down their analog facilities.⁶⁰ While market mechanisms will, for the most part, ensure access to digital services for most consumers, the same economic incentives do not exist that would ensure that emergency-only consumers and persons with hearing disabilities have adequate access to digital wireless service because they account for only a small percentage of mobile telephony subscribers.⁶¹ Because emergency-only callers and persons with hearing disabilities must currently continue to rely on analog technology for access to wireless service, the Commission found that the record in the proceeding supported a transition away from, rather than immediate elimination of, the analog rule.⁶²

25. In setting out a transition period, it was necessary for the Commission to establish a time frame that reflected its policy goals with respect to the analog requirement; that is, the transition period should be long enough to ensure that certain categories of individuals continue to have access to wireless telecommunications until digital solutions are readily available and accessible to them, yet be limited in duration in recognition that the analog rule is no longer necessary to ensure competition and nationwide service for most consumers. Although a number of commenters argued that the analog requirement should be maintained indefinitely until emergency-only callers can be assured of service,⁶³ or until digital technologies are fully compatible with hearing aid devices,⁶⁴ the Commission concluded that a transition period is necessary to facilitate the orderly migration of consumers with analog handsets to digital multimode handsets.⁶⁵

26. To allay concerns by certain commenters who argued that the analog requirement should not be removed until access to digital devices is assured for emergency-only users, the Commission observed that, although there is a sizable number of emergency-only consumers using analog handsets, it could be assumed that the total number of such users will decline in the future, as digital networks expand and carriers migrate current analog customers to digital services.⁶⁶ The Commission stated that unsubscribed consumers will have access to digital equipment because digital handsets are being donated along with analog handsets.⁶⁷ The Commission found that it is reasonable to assume that the number of digital handsets will increase over time because the number of digital subscribers is approximately three times that of analog subscribers, and a consumer uses a handset on average for 1.5 to 2.5 years before acquiring

⁵⁹ See e.g. *Report and Order*, 17 FCC Rcd at 18414, para. 22.

⁶⁰ *Report and Order*, 17 FCC Rcd at 18417-18418, para. 28; *id.* at 18414, para. 22.

⁶¹ *Id.*

⁶² *Id.* at 18418, para. 28.

⁶³ See *id.* at 18415, para. 24.

⁶⁴ See *id.* at 18418, para. 29.

⁶⁵ *Id.* at 18415, para. 24.

⁶⁶ See *id.* at 18415, para. 25.

⁶⁷ *Id.*

a new one.⁶⁸ The Commission concluded that, because subscribers turn over handsets approximately every 18 to 30 months, the five-year transition period should be sufficient to ensure that recipients of donated mobile telephones have access to digital equipment.⁶⁹

27. Similarly, the Commission also found that a five-year period provides a reasonable time frame for the development of solutions to hearing aid-compatibility issues.⁷⁰ The progress made in developing digital solutions in other areas⁷¹ caused the Commission to determine that the industry will also likely be able to develop digital solutions for wireless telephones within a five-year period.⁷² In response to concerns that the five-year transition period would expire before solutions to hearing aid-compatibility problems are addressed, the Commission stated that because it is reserving the right to extend the transition period in the event that solutions to hearing aid-compatibility problems are unsatisfactory,⁷³ the industry has an incentive to develop digital solutions to the access problem.⁷⁴

28. Despite the rationales set out in the *Report and Order* supporting a five-year transition, AWS as well as Western Wireless nonetheless argue that there is simply no basis to extend the analog requirement for another five years.⁷⁵ Both AWS and Western Wireless claim that the Commission's statement indicating that, on average, a consumer owns a handset for 1.5 to 2.5 years before acquiring a new one, supports at most a transition period of 30 months.⁷⁶ AWS and Western Wireless both argue that, given the robust competition and the rapid rate of technological development that exists in mobile telephony, it is unsupportable to impose a transition period that is more than twice as long as the typical lifespan of a handset.⁷⁷

29. AWS and Western Wireless, however, place too much emphasis on the statement that the typical recycling period for a handset is 18 to 30 months. In the *Report and Order*, the Commission sought to explain that it was unnecessary to retain the analog requirement indefinitely despite the large numbers of emergency-only callers because it is likely that digital equipment will be made available over time. The Commission surmised that, given that both digital and analog phones are being donated, that digital

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *See id.* at 18418, para. 29.

⁷¹ Specifically, the Commission cited to progress made by the industry in developing digital solutions for text telephone, or TTY, devices. *See* Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Report and Order and Further Notice of Proposed Rulemaking*, 11 FCC Rcd 18676, 18701 (1996); *see* Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Fourth Report and Order*, 15 FCC Rcd 25216, 25217 at para. 3 (2000).

⁷² *Report and Order*, 17 FCC Rcd at 18418, para. 29.

⁷³ As noted, in order to monitor the adequacy of access to mobile telephony by persons with hearing disabilities and emergency-only consumers, the Commission required all cellular licensees providing nationwide coverage to file reports prior to the sunset date. If the reports show that progress in providing digital alternatives to such consumers is unsatisfactory, the Commission has the option to initiate a proceeding to reinstate the analog requirement. *See Report and Order*, 17 FCC Rcd at 18419, paras. 31-32.

⁷⁴ *Id.* at 18418, para. 29.

⁷⁵ AWS Petition at 4.

⁷⁶ AWS Petition at 4-5; Western Wireless Comments at 8-9; AWS Reply Comments at 3-4.

⁷⁷ *Id.*

subscribers outnumber analog phone subscribers, and that there is a rapid turnover rate of phones, *i.e.* a turnover frequency of every 18-30 months, it is likely that a sufficient number of digital phones will be made available to emergency-only consumers by the end of the five-year transition period. The 18-30 month period relates only to the turnover rate of a phone. It was not intended to reflect the time it will take for a donated digital phone to get into the hands of any given emergency-only consumer, much less the period of time necessary to migrate the large numbers of emergency-only callers from analog service. Moreover, although we agree that there is indeed robust competition in the wireless telephony marketplace, we reiterate that persons with hearing disabilities and emergency-only consumers do not benefit in large part from such competition.

30. We continue to conclude that five years is a reasonable length of time within which both emergency-only users and persons with hearing disabilities will likely achieve greater access to digital technologies. As noted in the *Report and Order*, in some geographic areas in which digital coverage is currently deficient, a five-year transition will provide carriers with a reasonable length of time to enhance coverage before removal of the analog requirement. It will allow for the continued expansion of digital networks and further conversion of analog networks to digital, thereby providing for a more extensive network of digital technologies before the analog requirement is removed.⁷⁸ Further, a five-year transition period will provide service providers an appropriate length of time to conduct customer outreach in order to educate consumers that analog services may be discontinued on a certain date, thereby providing consumers with time to migrate from analog to digital handsets.⁷⁹

31. Moreover, the Commission recently found that ensuring greater availability of hearing aid-compatible digital phones requires at least a five-year time frame. The Commission determined in the *HAC Report and Order* that it is feasible for certain digital wireless phones to be made hearing aid compatible, and set out certain performance standards as well as a schedule for implementation of those requirements.⁸⁰ Specifically, the Commission adopted certain performance levels set forth in ANSI C63.19 as a technical standard to govern digital wireless phone compatibility with hearing aids.⁸¹ In the *HAC Report and Order*, the Commission required that, within two years, each digital wireless handset manufacturer and each carrier providing digital wireless services must make commercially available at least two handsets for each interface (CDMA, TDMA, GSM, iDEN) in its product line which meet the ANSI C63.19 performance level (*i.e.* U3) for acoustic coupling.⁸² By the end of three years,

⁷⁸ See *Report and Order*, 17 FCC Rcd at 18411-18412, para 17; *id.* at 18413, para. 20; see also Sprint Opposition at 4.

⁷⁹ See *id.* at 18415, para. 24.

⁸⁰ See note 37 *supra*.

⁸¹ ANSI C63.19 is the technical standard developed by Task Group C63.19 of ANSI 63 (the Accredited Standards Committee on Electromagnetic Compatibility) that is predictive of the successful use of digital wireless phones with hearing aids. As noted, hearing aids operate in either acoustic or inductive (*i.e.* telecoil) coupling modes. See *supra* note 14. With respect to acoustic coupling mode, ANSI C63.19 specifies ratings for digital wireless phones, U1 through U4, based on their RF emissions levels, with U1 being the highest emissions and U4 being the lowest emissions. See *HAC Report and Order*, 18 FCC Rcd at 16770, para. 40. The standard also provides a methodology for rating hearing aids from U1 to U4 based on their immunity to interference, with U1 being the least immune. See *id.* As to telecoil coupling mode, the ANSI standard specifies the axial field and radial field intensity of the audio signal's magnetic field required for satisfactory operation of digital wireless phones with hearing aids. The standard also specifies ratings for the magnetic field quality of digital wireless phones as well as the immunity of hearing aids to undesired magnetic fields, U1T through U4T. See *id.* at 16770, paras. 41-42. The applicable ANSI C63.19 ratings identified for acoustic and telecoil coupling mode are U3 and U3T, respectively.

⁸² Digital wireless service providers are required to offer consumers at least two compliant phone models for each air interface they offer, but not necessarily two for every manufacturer they carry. However, the Commission

manufacturers and carriers must offer at least two digital wireless handsets meeting the U3T performance level of providing telecoil coupling capability for each air interface offered.⁸³ Further, in order to ensure consumers continued accessibility and a range of product options, the Commission determined that 50 percent of all digital wireless phone models offered by manufacturers and service providers must be compliant with requirements for acoustic coupling by February 18, 2008, the termination date of the five-year transition period.⁸⁴ The Commission determined that providing such compatibility in half of all phone models by the end of the five-year transition is a feasible interim goal, and that further progress would be made over time to make even more digital equipment hearing aid-compatible.⁸⁵ The Commission concluded, however, that requiring more (*i.e.* extend the requirements to all digital wireless phones in the near term) could not be done given technical and resource difficulties.⁸⁶ It is evident then, in light of the Commission's findings in the *HAC Report and Order*, that at least a five-year transition period is required to provide persons with hearing disabilities with adequate access to hearing aid-compatible digital devices.

32. Finally, although the Commission concluded that roaming and interoperability concerns advanced by small and regional carriers as well as telematics providers⁸⁷ were not sufficient in themselves to justify an indefinite retention of the analog requirement,⁸⁸ the Commission nonetheless determined that the five-

provided that, within two years, carriers with national footprints must make available to consumers at least two handset models for each air interface it offers to provide reduced RF emissions (U3) or 25 percent of the total number of phone models it offers, whichever is greater. *See HAC Report and Order*, 18 FCC Rcd at 16780, para. 65.

⁸³ *Id.* at 16781-16782, para. 71.

⁸⁴ *Id.* at 16782, para. 72.

⁸⁵ *Id.* at 16782, para. 73.

⁸⁶ *Id.* at 16783-16784, paras. 77-80.

⁸⁷ Telematics providers use location technology and wireless communications to enhance the functionality of motor vehicles, and to provide wireless data applications in vehicles. Telematics services provide a number of automotive and mobile applications, including safety and productivity services.

⁸⁸ *See Report and Order*, 17 FCC Rcd at 18410-18411, para. 15; *id.* at 18412-18413, paras. 18-19. Small and regional carriers argued that the elimination of the analog carriers would force them to convert to digital earlier than they would otherwise in order to ensure seamless service to their customers and other consumers, or that such a transition will be cost-prohibitive for such service providers or their customers. Telematics providers asserted that the elimination of the rule will significantly impair their ability to provide service because these systems require analog technology due to its ubiquitous coverage, and that there is currently no other widely-deployed technology available to adequately support telematics services. *See Report and Order*, 17 FCC Rcd at 18412, para. 18. For example, telematics providers argued that digital technologies are not yet interoperable, and can not yet transmit both voice and data --- an important telematics feature --- on the same call. *Id.* Moreover, telematics providers argued while they experience the same difficulties as other analog reliant provider, they encounter additional difficulties because the development cycle (*i.e.* the length of time necessary to design, test, and install equipment in vehicles) and hardware basis of telematics-equipped vehicles prevents telematics services from quickly and easily migrating to a new technology. *Id.* at 18412-18413, para. 18. The Commission found, however, that decisions made by these providers --- the choice to switch from analog to digital technology, rate at which the transition occurs, development cycles of vehicles, choice of hardware and technology platforms --- are business decisions that are in the control of the individual provider or, in the case of a telematics provider, by the original equipment manufacturer with whom it partners, and that the arguments advanced by these providers did not constitute sufficient basis to warrant the indefinite imposition of the analog standard. *Id.* at 18410-18411, para. 15; *id.* at 18413, para. 19. However, because paragraph 19 of the *Report and Order* may be unclear, we clarify that while the public interest did not necessarily require the Commission to take certain actions in the *Report and Order* regarding the provision of telematics services, the Commission did find it appropriate to adopt a five-year sunset period in order to

year transition period would be useful in mitigating any significant impacts that an immediate elimination of the analog requirement might cause.⁸⁹ Indeed, although the concerns expressed by regional carriers and telematics providers derive from business decisions that are generally within the control of the individual provider, we are not unmindful of the potential impacts of the elimination of the analog requirement on these service providers and their customers.

33. In this regard, we continue to believe that the five-year period is desirable to smooth the transition from analog to digital. A five-year time frame will enable regional carriers to evaluate their current and future technology choices as well as those of their current roaming partners, and will provide carriers with adequate time to negotiate new contracts where needed to ensure the availability of roaming services to their customers. As noted in the *Report and Order*, demand will likely increase for multimode/multiband handsets such that by the end of the five-year period, these handsets should be widely available and customers may choose to migrate to these new handsets depending on their roaming needs.⁹⁰ Similarly, a five-year period will give telematics providers time to partner with various carriers to secure service on the carriers' digital networks and develop multimode devices that will provide interoperability and facilitate roaming on digital networks. Further, given the public safety uses of many telematics devices,⁹¹ the five-year transition will allowed continued access to such applications for a reasonable period of time until telematics providers are able to switch their customers over to digital technology. Moreover, the transition period will provide additional time for other CMRS providers, particularly Personal Communications Service (PCS) carriers, to further build out their licensed service areas thereby enhancing roaming opportunities for all consumers.

B. It is appropriate to reconsider Dobson Communications' proposal to allow cellular licensees to extend, on a secondary basis, into adjacent unserved areas of less than 50 square miles without prior Commission approval.

34. *Background.* Our cellular unserved area rules provide that, once the initial licensee of a market completes a five-year build-out period, the portion of the market that is not being served becomes available for re-licensing.⁹² Under the unserved area rules, carriers are only licensed for areas that they intend to serve, and applications for new cellular systems must propose a contiguous cellular geographical

mitigate any specific impacts that might affect these service providers, a position that we believe is consistent with the public interest.

⁸⁹ See *Report and Order*, 17 FCC Rcd at 18411, para 17; *id.* at 18413, para. 20.

⁹⁰ *Id.*

⁹¹ For example, one application offered by certain telematics providers is automatic crash notification (ACN) which automatically call the appropriate emergency response personnel. Commenters state that, according to one study, the telematics service providers' call was the first notice received by public safety answering point (PSAPs) in approximately 60% of incidents and that telematics services are receiving and requesting emergency assistance for more than 900 airbag deployments per month and for more than 6,000 other emergency situations. See Joint Telematics Commenters Comments at 18.

⁹² 47 C.F.R. § 22.947. Initial licensees in a market are given five years in which to construct cell sites without the possibility of competing applications from other carriers. The unserved area process begins with Phase I, which is a one-time, one-day window for all interested parties to file for licenses in the unserved portions of the market. Unserved areas of the market not licensed pursuant to Phase I become available for licensing through Phase II procedures.⁹² 47 C.F.R. §§ 22.131(b)(3), 22.949(b). A Phase II application is granted if no other mutually exclusive application is filed within 30 days of the public notice of the initial filing. If mutually exclusive applications are filed, the matter is resolved via competitive bidding.

service area of at least 50 square miles.⁹³ Applications of an entity seeking to establish a new cellular system, or an existing licensee requesting an authorization that would expand its CGSA or that would produce a *de minimis* service area boundary extension into unserved area must be placed on public notice for thirty days.⁹⁴

35. In the *Report and Order*, the Commission addressed proposals by various commenters seeking significant revision of the Commission's unserved area rules.⁹⁵ Commenters proposing changes to the rules argued that the unserved area licensing scheme must be amended because the current approach is administratively inefficient, delays service to rural areas and is dissimilar to geographic area licensing.⁹⁶ A number of commenters recommended that the Commission abandon the per-application approach of the unserved areas rules in favor of significant changes to our cellular licensing scheme. Among the alternatives submitted included a proposal by Dobson which requested that the Commission permit existing licensees to cover adjacent unserved areas of less than 50 square miles on a secondary basis without approval from the Commission.⁹⁷ Dobson asserted that the rules regarding unserved areas between a cellular licensee's CGSA and the market boundaries or CGSAs of neighboring licensees impose filing obligations and delays in the introduction of new coverage. Dobson asserted that if it seeks to make engineering modifications to its CGSA-defining cell sites (*i.e.* sites along the periphery of its CGSA) in order to improve existing coverage inside the CGSA, it must file a major modification application if the modifications cause extensions into unserved area.⁹⁸ Dobson argued that because of this extension, a licensee must file a major modification application, wait approximately 60-90 days for the application to be accepted for filing, and wait another 30 days once the public notice is issued before grant can be made.⁹⁹ Such rules, argued Dobson are unnecessary and overly burdensome.

36. The Commission generally rejected the proposals submitted by Dobson and other commenters, stating that the proposed modifications constituted fundamental changes to the Commission's cellular unserved licensing framework, and as such were beyond the scope of the biennial review.¹⁰⁰ The Commission observed that the proposals failed to address key issues,¹⁰¹ or would increase administrative burdens. The Commission also noted that, under the current process, it receives approximately 40

⁹³ 47 C.F.R. § 22.951.

⁹⁴ 47 C.F.R. § 1.929(b).

⁹⁵ *Report and Order*, 17 FCC Rcd at 18438-18440.

⁹⁶ *Id.* at 18439, para. 77.

⁹⁷ *Id.*; Dobson *Report and Order* Comments at 4. Among the other proposals: automatic incorporation of areas of 50 square miles or less into the CGSAs of the first-authorized incumbent adjoining the unserved area, and, open a single filing window resulting in either the incorporation of the unserved area into an incumbent carrier's CGSA, or an overlay auction among mutually exclusive applicants for areas greater than 50 square miles, Western Wireless *Report and Order* Comments at 6-9; removal of the requirement to file applications in cases of unserved areas of less than 50 square miles that are completely surrounded by an incumbent's CGSA, AT&T *Report and Order* Comments at 5.

⁹⁸ Dobson Petition at 2; Dobson *Report and Order* Comments at 3.

⁹⁹ Dobson Petition at 2-3; Dobson *Report and Order* Comments at 3.

¹⁰⁰ *Report and Order*, 17 FCC Rcd at 18439, para. 78.

¹⁰¹ For example, one proposal advocated that the Commission adopt a regulatory approach for unserved areas that closely parallels the market-based licensing used for PCS. See Western Wireless *Report and Order* Comments at 5-6. However, the proposal did not address related issues such as coverage requirements, or operating parameters.

unserved area applications each month, and typically processes the applications within 45-60 days.¹⁰² Given the low number of unserved area applications that are filed as well as the speed with which such applications are processed, the Commission was not persuaded that the burdens imposed by a major overhaul of the rules would be offset by any corresponding benefits.¹⁰³

37. In response to the *Report and Order*, Dobson requests reconsideration of the Commission's decision to reject its proposal.¹⁰⁴ Dobson argues that the Commission did not correctly conduct a section 11 review of the cellular unserved area rules, and did not evaluate whether the unserved area licensing rules remain necessary.¹⁰⁵ Dobson argues that nothing in the *Report and Order* suggests that the Commission specifically examined Dobson's proposal and affirmatively concluded that the original purposes for the unserved area rules could not be achieved by permitting extensions into unserved area on a secondary basis.¹⁰⁶ Dobson asserts that the reasons advanced by the Commission in rejecting the unserved area proposals appear to have been directed at those advanced by other commenters rather than at Dobson's request.¹⁰⁷ Dobson asserts that the Commission's failure to adopt its specific proposal without advancing any reasons for doing so is contrary to section 11 as well as the fundamental requirements of reasoned decision making.¹⁰⁸ Further, Dobson argues that, consistent with the Commission's current new rural service-oriented initiatives,¹⁰⁹ Dobson's proposal advances and improves service to rural areas and should be adopted upon reconsideration.

38. *Discussion.* While we continue to believe that major changes to our cellular unserved area licensing framework are beyond the scope of a biennial review proceeding, we find that it is appropriate to reconsider certain aspects of Dobson's request. Unlike proposals advanced by other commenters which sought significant revision to existing rules (for example, the automatic incorporation of unserved areas as protected CGSA whether or not actual service is being provided), Dobson proposes only slight modification to our unserved area rules. We conclude that adopting Dobson's proposal that we allow licensees to extend into adjacent unserved areas of less than 50 square miles on a secondary basis without prior Commission approval will provide licensees with additional flexibility to respond to operational demands in a manner that remains consistent with our unserved area rules. Moreover, we believe that providing licensees with this added flexibility will help to encourage carriers to expand into rural areas.

39. With respect to Dobson's section 11 arguments, we do not agree with Dobson's assertion that the cellular unserved area rules are no longer necessary. As noted, the basic premise of cellular service licensing is that carriers are only licensed and provided protection from incursions from other licensees

¹⁰² *Report and Order*, 17 FCC Rcd at 18439, para. 78.

¹⁰³ *Id.*

¹⁰⁴ Dobson does not seek reconsideration of proposals raised by other commenters in the proceeding.

¹⁰⁵ Dobson Petition at 5.

¹⁰⁶ Dobson Petition at 2.

¹⁰⁷ Dobson Petition at 5.

¹⁰⁸ Dobson Petition at 6.

¹⁰⁹ 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, 2000 Biennial Regulatory Review *Spectrum Aggregation Limits for Commercial Mobile Radio Services*, WT Docket No. 01-14, *Increasing Flexibility to Promote Access to and the Efficient and Intensive Use of Spectrum and the Widespread Deployment of Wireless Services*, and to *Facilitate Capital Formation*, WT Docket No. 03-202, *Notice of Proposed Rulemaking*, 18 FCC Rcd 20802 (2003).

for areas that they actually serve. The Commission put in place this licensing scheme to ensure that licensees could not claim as protected CGSA areas that they were not actually serving and prevent other entities from providing service instead.¹¹⁰ Because a licensee's protected CGSA is defined by actual coverage, it remains necessary for licensees to file for approval with the Commission if it seeks to add new areas to its protected service area.¹¹¹ Further, as noted in the *Report and Order*, proposals seeking to significantly overhaul, or remove as unnecessary, the unserved area rules are actually advocating a fundamental change to the Commission's cellular service licensing model, and, as such, are beyond the scope of a biennial review proceeding.¹¹²

40. While we find that major changes to our cellular licensing framework are not appropriate here, we nevertheless find that we should reconsider and adopt Dobson's proposal. We agree with Dobson's argument that our licensing rules may be burdensome in certain cases, such as where design changes or engineering modifications aimed only at improving coverage within a licensee's existing CGSA results in an extension into adjacent unserved area. Although we disagree with Dobson's assertion that there is an inordinate delay in processing applications,¹¹³ we find that the process is nevertheless burdensome if the licensee is not actually seeking to expand its service area.

41. We find that Dobson's proposal offers an appropriate solution. Pursuant to Dobson's proposal, a licensee may extend into adjacent unserved area of less than 50 square miles without prior approval by the Commission, and without first undergoing the major modification process. We conclude that this proposal provides licensees with greater flexibility to respond to operational demands yet remains within the framework of the Commission's existing cellular unserved rules. Any extension would be on a secondary basis only and will not become part of the licensee's CGSA unless the licensee files a major modification application.¹¹⁴ (Although we are permitting carriers to bypass the formal major modification filing process, we will require carriers to notify¹¹⁵ the Commission as to its actual service contours so that others are on notice of their presence.¹¹⁶) If another licensee is granted approval to incorporate the unserved area as part of its CGSA, the first licensee must pull back its coverage. Because any extension into unserved area will be on a secondary basis only, the proposal provides licensees with operational flexibility while also being consistent with existing unserved area rules because the licensee does not seek

¹¹⁰ 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).

¹¹¹ Although Dobson argues that the requirement to file applications for extensions into unserved area is a regulatory burden that is not experienced by other CMRS providers, we note that other CMRS providers are licensed under a geographic market licensing framework that does not base licensed service area on actual coverage.

¹¹² See *Report and Order*, 17 FCC Rcd at 18439-18440, paras. 77-82.

¹¹³ As noted in the *Report and Order*, unserved area applications are generally disposed of within 45-60 days. See *id.* at 18439, para. 78.

¹¹⁴ A cellular licensee is entitled to protection against harmful interference and subscriber capture only within its defined CGSA. See 47 C.F.R. § 22.911(d). A carrier operating on a secondary basis in unserved areas would not be entitled to such protection outside of its CGSA. Instead, in unserved areas in which it is operating on a secondary basis, a carrier must accept interference as well as avoid causing interference to others, and must avoid capturing customers of other systems.

¹¹⁵ Licensees may file such notifications as minor modifications through the Commission's Universal Licensing System (ULS).

¹¹⁶ This information will be useful to other licensees with respect to frequency coordination and may also be of use to the Commission in determining market conditions and service availability.

to claim the extension as protected CGSA.¹¹⁷ Moreover, we believe that adopting this proposal may expedite expansion of cellular coverage into rural areas. By providing licensees with the flexibility to extend into unserved areas without first having to go through the major modification filing process, we believe that licensees will be more likely to extend operations into rural areas. Accordingly, we reconsider the decision in the *Report and Order*.

C. The Commission appropriately removed section 22.919 which set out electronic serial number (ESN) hardware design requirements.

42. *Background.* In the *Report and Order*, the Commission removed section 22.919 of its rules, which established ESN design requirements for cellular telephone manufacturers.¹¹⁸ An ESN is a number that uniquely identifies a cellular mobile transmitter to a cellular system. Former section 22.919 required that each cellular mobile unit have an ESN that is not “alterable, transferable, removable or otherwise able to be manipulated.” The rule also required that equipment be designed in such a way that any attempt to remove, tamper with, or change the ESN chip or other related components would render the mobile transmitter inoperative.¹¹⁹ This rule section was originally promulgated to address the problem of cellular “cloning” fraud that was prevalent in the mid-1990s, and which resulted in millions of dollars in losses to the cellular industry.¹²⁰

43. Over the years, however, other measures were developed to combat cloning fraud. As noted in the *Report and Order*, among the anti-fraud measures developed by the industry include authentication,¹²¹ radio frequency fingerprinting,¹²² and call profiling.¹²³ Moreover, Congress enacted the Wireless Telephone Protection Act of 1998 (WTPA) to address fraudulent and unauthorized use of wireless telecommunications services.¹²⁴ Further, because the rule precluded the ESN host component from being

¹¹⁷ Western Wireless urges us to permit carriers to serve the same area on a primary basis subject only to the filing of a minor modification. As noted, however, we find that carriers must file for approval if they seek to claim additional area as CGSA.

¹¹⁸ See *Report and Order*, 17 FCC Rcd at 18420-18422, paras. 34-39. The former rule section also specified certain physical design and firmware programming requirements.

¹¹⁹ The design requirement that the ESN be made unalterable is referred to as “hardened ESN”.

¹²⁰ See 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 (1994); *Report and Order*, 17 FCC Rcd at 18420, para. 34. Cloning a cellular telephone involves intentionally altering the internally-stored telephone number (MIN), system identification number (SID) and unique factory-set ESN of a cellular telephone so as to duplicate the MIN, SID and ESN of another cellular telephone. Because the original cellular systems relied solely on these three numbers to identify a particular cellular telephone for access and billing purposes, cloning a cellular telephone created additional telephones that appeared to be the same telephone to these systems. By cloning the cellular telephone of a legitimate subscriber, third parties could use the cloned cellular telephone to make calls that would later be billed to the unsuspecting legitimate subscriber.

¹²¹ In authentication, a series of encoded passwords are sent over the airwaves between the cellular handset and the cellular network to validate a customer each time a call is placed or received. Because the authentication key is not transmitted, it can not be intercepted by third parties.

¹²² In radio frequency fingerprinting, a mobile handset is identified by its unique radio transmission characteristics in order to deter unauthorized use with other, unauthorized equipment.

¹²³ Call profiling enables carriers to monitor for unusual, sudden changes in calling patterns.

¹²⁴ 18 U.S.C.A. § 1029. The WTPA provides, *inter alia*, that an individual has committed fraud if he or she “knowingly and with intent to defraud uses, produces, traffics in, has control or custody of, or possesses a

transferred or removed, the ESN rule by definition prevented the use of “smart card” subscriber identity modules¹²⁵ in AMPS-compatible cellular telephones.¹²⁶ After reviewing the original purpose of the rule, the advanced fraud control technologies measures developed to combat fraud since the adoption of the rule, as well as comments submitted in the proceeding, the Commission concluded that the ESN requirements were no longer necessary as a preventative measure against cellular cloning fraud.¹²⁷ The Commission therefore removed section 22.919 of its rules.

44. In response, two entities seek reconsideration of the decision to remove the ESN rule. Although it did not initially submit comments on the matter, AWS now argues that the ESN rule remains essential to fulfill its original purpose of deterring cloning fraud and reducing incentives to steal handsets.¹²⁸ AWS asserts that not only does the Commission’s removal of the ESN requirements increase the carrier’s risk of fraud, it could also make wireless subscribers a target for thieves seeking expensive “next generation” handsets for resell. AWS also argues that the same issues are present in technologies other than analog. Accordingly, AWS not only requests that the Commission reinstate the ESN hardening rule, it also asks the Commission to extend the requirements to cover all CMRS devices regardless of technology or frequency band.¹²⁹

45. CTIA also asks the Commission to revisit the ESN issue. Unlike AWS, CTIA, who supported the removal of section 22.919, does not request that the Commission reverse its decision to remove the ESN requirement. Instead, CTIA requests that the Commission remove language in paragraph 39 of the *Report and Order* that stated that analog cellular cloning by legitimate subscribers would no longer be a violation of the Commission’s rules.¹³⁰ CTIA argues that the language is inconsistent with federal law and Commission policy and has serious consequences with respect to carrier operations.¹³¹

46. *Discussion.* We continue to conclude that the original basis for establishing the hardened ESN design requirements, *i.e.* to deter cloning and fraud, may be achieved without our intervention in light of developments in federal law and the deployment of advanced fraud control technologies. We continue to believe that it is unnecessary to mandate detailed hardware design requirements given the success the wireless industry has had in developing other more effective anti-fraud measures. We agree, however, that the language in paragraph 39 of the *Report and Order* regarding cloned phones may have had an

telecommunications instrument that has been modified or altered to obtain unauthorized use of telecommunications services,” or “knowingly uses, produces, traffics in, has control or custody of, or possesses hardware or software, knowing it has been configured to insert or modify telecommunication identifying information associated with or contained in a telecommunications instrument so that such instrument may be used to obtain telecommunications service without authorization.” 18 U.S.C.A. § 1029(a)(7), (a)(9).

¹²⁵ Smart card subscriber identity modules are tiny cards containing an embedded electronic chip that is programmed with the subscriber’s identification, billing and other information. Generally tamper-proof, smart cards can be switched from one mobile telephone to another, making it easy to change from one system to another. Smart card technology protects a subscriber’s identity and preference from theft or disclosure, yet is easily transferable from one telephone to another.

¹²⁶ See *Report and Order*, 17 FCC Rcd at 18421, para. 36; see also *NPRM*, 16 FCC Rcd at para. 36.

¹²⁷ *Report and Order*, 17 FCC Rcd at 18421, paras. 36-37.

¹²⁸ AWS Petition at 9-10.

¹²⁹ AWS Petition at 10.

¹³⁰ CTIA Petition at 1.

¹³¹ CTIA Petition at 1-2.

unintended affect. Accordingly, we clarify that the fraudulent and unauthorized use of ESNs remains contrary to federal law and Commission policy.

47. In its Petition for Reconsideration, AWS argues that, unless each mobile has a unique, factory-set ESN that cannot be manipulated or transferred without rendering the handset inoperative, stolen handsets can be re-registered on a carrier's network under a new name without detection.¹³² AWS observes that, with hardened ESN, there is little utility in a stolen handset because a carrier will deactivate it once a customer reports it missing, or, if the ESN chip is tampered with or removed, the phone is rendered inoperative.¹³³ AWS argues that, without a hardened ESN host component, the value or utility of the handset increases and the incentive to steal handsets will grow,¹³⁴ particularly so as wireless devices incorporate more features and become more expensive.¹³⁵ AWS maintains that the measures cited in the *Report and Order* that have been established to combat cloning fraud, such as the Wireless Telephone Protection Act of 1998 and the development of authentication protocols, would do little to deter criminals from altering ESNs because the new ESNs could not be associated with the stolen phones.¹³⁶ Moreover, AWS argues that, because the same concerns exists for handsets using technologies other than analog, the Commission should require, for all CMRS handsets, a unique identifier that cannot be tampered with without disabling the phone.¹³⁷

48. We are not persuaded by arguments that we must continue to mandate ESN design requirements in order to prevent fraud.¹³⁸ We prefer, as a general policy, to allow market forces to determine technical standards wherever possible, and to avoid mandating detailed hardware design requirements for telecommunications equipment, except where doing so is necessary to achieve a specific public interest goal.¹³⁹ Although there may be instances in which we conclude that it is necessary to establish specific design requirements, we continue to find that mandating ESN design specifications is no longer necessary or warranted because of other measures that the wireless industry has developed to accomplish the same goal. Moreover, we note that in removing the ESN requirements from its rules, the Commission was not precluding equipment manufacturers from continuing to produce handsets using ESN hardening. Wireless equipment manufacturers and carriers may continue to utilize hardened ESN as a fraud deterrent if they wish to do so.¹⁴⁰

¹³² AWS Petition at 2.

¹³³ AWS Petition at 10.

¹³⁴ AWS Petition at 10-11.

¹³⁵ AWS asserts that the enhanced utility of stolen handsets would result in an increase in the illicit secondary market for handsets as well as make wireless customers a much more attractive target for street criminals. AWS Petition at 11.

¹³⁶ AWS Petition at 11.

¹³⁷ See AWS Petition at 10-12. As an example, AWS notes that in accordance with GSM industry standards, manufacturers embed a unique serial number in all 1900 MHz GSM handsets known as the International Mobile Equipment Identity (IMEI). AWS states that, although the GSM industry standards provide that the IMEI may not be changed after the mobile's final production and that IMEI must be resistant to tampering by any means (physical, electrical, or by software), thieves may find ways to change handset identifications.

¹³⁸ See generally AWS Petition at 9-15; Western Wireless Comments at 11-13; RCA Comments at 6 (arguing that small carriers do not have the resources to utilize other methods of fraud prevention).

¹³⁹ See *Report and Order*, 17 FCC Rcd at 18421, para. 35; *NPRM*, 16 FCC Rcd 11185, para.35.

¹⁴⁰ We are not persuaded by the assertion that equipment manufacturers will have no incentive to produce handsets with ESN hardening in the absence of section 22.919. We find it unlikely, given the tremendous resources that are

49. We also decline to mandate specific design requirements for non-cellular CMRS for the same reasons. We do not currently impose such anti-fraud measures in our rules affecting other CMRS services, and, we are not aware that the industry has had problems with its fraud prevention efforts in the absence of Commission rules requiring that equipment manufacturers design handsets to become inoperable if tampered with. It appears that the wireless industry has been successful thus far in developing and implementing fraud control measures without our involvement. There is nothing in the record that leads us to conclude that it is necessary to begin imposing specific design standards at this juncture.¹⁴¹

50. While we find that the decision to eliminate the ESN design requirements was appropriate, we agree with CTIA that it is necessary to clarify language in paragraph 39 of the *Report and Order* regarding the use of cellular cloning by legitimate subscribers. The *Report and Order* provided that in the absence of section 22.919, the cloning of phones by legitimate subscribers is not a violation of the Commission's rules but is instead a contractual matter to be judged according to the terms of the applicable contract.¹⁴² CTIA argues that paragraph 39 should be reconsidered for a variety of reasons. For example, CTIA argues that this language conflicts with the WTPA by allowing those engaging in cloning to claim that they are acting consistent with Commission policy.¹⁴³ Further, CTIA asserts that, with respect to cloned mobile stations, cellular carriers will not be able to exercise the "effective operational control" required by section 22.927 of the Commission's rules because carriers will not be able to distinguish one mobile station from the other. This inability to distinguish between the phones creates serious operational difficulties in the set up and delivery of calls simultaneously initiated by cloned phones.¹⁴⁴ CTIA states that the *Report and Order* language may encourage entities not affiliated with carriers to offer "cloning service" to the carriers' subscribers, thereby leading to a panoply of operational problems: misdirected incoming calls, the inability to make simultaneous calls on handsets with the same MIN/ESN, fraud losses from cloned devices not under the control of the subscriber as well as denial of service by the subscriber's own carrier when the carrier's anti-fraud software is triggered by the cloned handsets.¹⁴⁵ Moreover, CTIA argues that the use of cloned handsets will thwart PSAP call-

expended by the wireless industry to develop and implement anti-fraud measures, that equipment manufacturers will seek to design and configure their products in such a way that will, if AWS is correct, allow criminals to easily defeat all other anti-fraud safeguards, and we find it unlikely that a manufacturer would be successful in marketing such devices. See *Western Wireless Comments* at 12, n. 46.

¹⁴¹ AWS Petition at 14. AWS also notes that imposing such design requirements with respect to non-cellular CMRS would further the regulatory goal of encouraging growth and innovation in wireless services. AWS Petition at 14. AWS states that the ability to use the IMEI as an identifier for wireless devices would alleviate problems encountered in attempting to develop third generation applications using transitory device identifiers such as dynamic IP addresses or subscriber telephone numbers. AWS states that if the identifier is subject to change when the device registers on the mobile network, then the application generally will not function properly. AWS argues that unless and until the IMEI can be trusted as a unique, tamper-proof identity element, the wireless industry will avoid developing new wireless applications around it. We decline to impose hardware design standards for this reason. Again, our policy is to allow market forces to determine technical standards wherever possible, absent a public interest reason to the contrary. We do not find it necessary or desirable to impose a technical standard simply to encourage the wireless industry to develop new applications.

¹⁴² See *Report and Order*, 18 FCC Rcd. at 18422, para. 39.

¹⁴³ For example, the WTPA requires a showing of intent with respect to certain prohibited acts. CTIA argues that a person possessing or using a cloned phone or equipment used to clone phones could cite to the *Report and Order* as permitting cloning.

¹⁴⁴ CTIA Petition at 5.

¹⁴⁵ CTIA Petition at 6.

back attempts because cellular networks are not designed to complete calls to multiple devices with identical MIN/ESN combinations.¹⁴⁶

51. We note that the language in paragraph 39 was directed toward legitimate cell phone uses as agreed to by carriers and their subscribers. The intent of the paragraph was to allow carriers, in the absence of section 22.919, to examine whether there are permissible, legitimate uses of a cloned phone by its own subscribers, and, if so, to control such use contractually. In reviewing this matter, however, we agree that the language in paragraph 39 was imprecise and may be misconstrued. We are certainly cognizant of the operational problems that could occur with phones having the same ESN, and we continue to believe that the altering of cellular phones to emulate ESNs without receiving the permission of the relevant cellular licensee should not be permitted. Accordingly, we clarify that the fraudulent or unauthorized use of a cloned phone, whether by a third party or a legitimate subscriber, remains prohibited by federal law and by Commission policy.

D. It is not necessary to further modify the Commission's rules regarding emission limits for cellular and PCS.

52. *Background.* In the *Report and Order*, the Commission amended sections 22.917 and 24.238 of its rules, which specify out-of-band radio frequency emissions limits with respect to cellular and PCS operations.¹⁴⁷ The Commission sought to define the out-of-band emission limits in such a way as to provide an adequate measure of interference protection to other licensees and services in adjacent spectrum, while also allowing licensees the flexibility to establish a different limit where appropriate.¹⁴⁸ The Commission modified its rules based on the fact that it is pursuing a less regulatory approach with respect to its services and seeks to allow carriers to deploy technologies that best fit the needs of the market. The Commission specifically sought to make its rules more technology-neutral in order to encourage greater deployment of advanced technologies.¹⁴⁹ In adopting these changes, the Commission pointed out that, in the Wireless Communications Service (WCS), licensees are provided certain flexibility with respect to operations at the edge of their authorized spectrum.¹⁵⁰ Because the Commission seeks to ensure regulatory uniformity where possible, the Commission found it appropriate to amend sections 22.917 and 24.238 to also provide similar flexibility to cellular and PCS licensees regarding emissions limits. Also, the specific language adopted for the modified rules is consistent with International Telecommunications Union (ITU) standards for emissions.¹⁵¹ Therefore, in modifying the rules, the Commission sought to provide additional flexibility for cellular and PCS licensees, harmonize procedures in the WCS, PCS, and cellular rules as well as make the Commission's rules regarding out-of-band emissions consistent with ITU recommendations.

53. Lucent submitted comments with respect to the *2002 Biennial Regulatory Review* proceeding, arguing that further modifications to the Commission's rules regarding emissions limits are necessary.¹⁵²

¹⁴⁶ CTIA Petition at 7.

¹⁴⁷ *Report and Order*, 18 FCC Rcd at 18424-18426, paras. 43-46. The emission limits are used to minimize interference into adjacent spectrum.

¹⁴⁸ *Id.* at para. 44.

¹⁴⁹ *Id.* at 18425, para. 45.

¹⁵⁰ *Id.* at 18424, para. 44.

¹⁵¹ The ITU is an arm of the United Nations responsible for the global oversight and implementation of international telecommunications policy.

¹⁵² *See generally* Lucent 2002 Biennial Review Comments.

Lucent states that the evolution to third generation systems will enhance the growth of spread spectrum technology through the continued deployment of CDMA2000 and the planned use of Universal Mobile Telecommunications Systems (UMTS).¹⁵³ Lucent argues that the measurement procedures for emissions in sections 22.917(b) and 24.238(b), as modified in the *Report and Order*, subjects carriers that employ UMTS to more stringent requirements than carriers that deploy CDMA2000.¹⁵⁴ Lucent argues that because a UMTS system would be operating on a wider bandwidth than a CDMA2000 system, a UMTS carrier may not operate as close to the edge of its assigned spectrum at the same transmitting power as a CDMA2000 carrier. Lucent believes that emissions from either CDMA2000 or UMTS spread spectrum systems into the spectrum immediately outside and adjacent to the frequency block will be similar, and that the emission limitations should not discriminate between these spectrum technologies.

54. *Discussion.* We find insufficient basis to further modify section 22.917 and 24.238 as requested by Lucent. The changes made to sections 22.917 and 24.238 in the *Report and Order* enable licensees to operate transmitters on frequencies closer to the edge of their authorized spectrum than full compliance with sections 22.917 and 24.238 would normally allow by modifying how out-of-band emissions are measured. Sections 22.917 and 24.238 affect how close to the edge of its authorized spectrum that a licensee may operate as a function of the emission bandwidth in which it operates.¹⁵⁵ In other words, the emissions standard is one of proportionality: the wider the bandwidth used by a licensee, the farther the licensee must operate from the edge of its assigned spectrum in order to avoid affecting operations in adjacent spectrum.

55. Although Lucent argues that the Commission's rules regarding out-of-band emissions impose greater restrictions on UMTS as compared with CDMA2000, sections 22.917 and 24.238 in fact apply the same emissions requirement on both types of systems. As noted, the amount of bandwidth used influences how far from the band edge a provider may operate without causing interference to adjacent spectrum. Because UMTS systems have greater bandwidth and capacity than CDMA2000 systems, a UMTS provider must operate farther from its assigned band edge than would a CDMA2000 licensee. Allowing UMTS licensees to operate as proposed by Lucent runs the risk of increasing the effect of the UMTS operations on licensees operating in adjacent spectrum. Although Lucent states that emissions

¹⁵³ CDMA2000 is a 3G wireless standard based on CDMA (IS-95); UMTS, also known as wide-band CDMA (W-CDMA), is a 3G wireless protocol that is the successor to GSM.

¹⁵⁴ Lucent 2002 Biennial Review Comments at 1-2. Specifically, Lucent states that, consistent with the requirement that the power of any emission outside of authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$, a CDMA2000 system would be allowed emissions of -13 dBm in a 12.5 KHz band (one percent of the CDMA2000 carrier band width of 1.25 MHz) within the 1 MHz band immediately adjacent to the frequency block, but a UMTS system would be required to meet the -13 dBm objective in 50 KHz (one percent of the UMTS carrier band width of 5 MHz). Lucent asserts that this results in a requirement that is approximately 6dB more stringent for UMTS emissions. Lucent argues that because a resolution bandwidth of 12.5 kHz is currently allowed and is appropriate for the 1.25 MHz CDMA system, it should also be appropriate for the wider bandwidth UMTS system as well. Lucent 2002 Biennial Review Comments at 2-3.

¹⁵⁵ In order to determine compliance with the out-of-band emission limit, sections 22.917(b) and 24.238(b) both specify that

“...in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.” See 47 C.F.R. §§ 22.917(b), 24.238(b).

from either CDMA2000 or UMTS spread spectrum systems into the spectrum immediately outside and adjacent to the assigned frequencies will be similar, it does not provide support for this argument. We find that the modifications previously made to sections 22.917 and 24.238 were sufficient to provide ample flexibility to licensees, while also treating all technologies consistently, and, accordingly, we decline to further modify these rules.¹⁵⁶

IV. PROCEDURAL MATTERS

A. Supplemental Regulatory Flexibility Act Certification.

56. The Regulatory Flexibility Act of 1980, as amended (RFA)¹⁵⁷ requires that a regulatory flexibility analysis be prepared for rulemaking proceedings, unless the agency certifies that "the rule will not have a significant economic impact on a substantial number of small entities."¹⁵⁸ The RFA generally defines "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."¹⁵⁹ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.¹⁶⁰ A small business concern is one which: (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. As required by the RFA, a Final Regulatory Flexibility Analysis was incorporated in the *Report and Order*. This Supplemental Final Regulatory Flexibility Analysis is limited to matters raised on reconsideration.

57. In this *Order on Reconsideration*, we affirm the decision to establish a five-year sunset period for the analog requirement. We also affirm the decision to remove the rule section governing electronic serial numbers (ESNs) in cellular telephones, but clarify that the fraudulent and unauthorized use of ESNs remains contrary to federal law and Commission policy. Further, we reconsider and adopt a proposal to permit, in certain circumstances, cellular carriers to extend on a secondary basis into neighboring unserved without prior Commission approval. We also decline a request to further modify our rules regarding emissions limitations.

¹⁵⁶ Lucent also raised this issue in the Commission's proceeding regarding Advanced Wireless Services. See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Report and Order*, 18 FCC Rcd 25162 (2003). In that proceeding the Commission stated: "We continue to believe that the existing rule, as adopted in the [*Report and Order*], provides the most appropriate way of measuring out-of-band emissions into adjacent spectrum. Our goal in developing out-of-band emission standards is to provide for a minimal and predictable level of interference into adjacent spectrum. Our existing rule serves that purpose. The modification proposed by Lucent, however, could enable licensees with emission bandwidth greater than 1.25 MHz to potentially place greater amounts of energy into adjacent bands. We therefore decline to adopt this proposal to modify our rules" (citations omitted). *Id.* at para. 94.

¹⁵⁷ The RFA, see 5 U.S.C. § 601 et. seq., has been amended by the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Act of 1996 (SBREFA).

¹⁵⁸ 5 U.S.C. § 605(b).

¹⁵⁹ 5 U.S.C. § 601(b).

¹⁶⁰ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with 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 definitions(s) in the Federal Register."

58. The general effect of this decision on small business entities will be to allow cellular carriers to avoid processing delays in certain situations. Otherwise, the *Order on Reconsideration* affirms or codifies decisions previously made in the *Report and Order*. Accordingly, we certify that this decision will not have a significant economic impact on a substantial number of small entities. The Commission will send a copy of the *Order on Reconsideration* including a copy of this certification, in a report to Congress pursuant to the Congressional Review Act of 1996.¹⁶¹ In addition, the *Order on Reconsideration* and this certification will be sent to the Chief Counsel for Advocacy of the Small Business Administration, and will be published in the Federal Register.

B. Paperwork Reduction Act Analysis.

59. The *Order on Reconsideration* has been analyzed with respect to the Paperwork Reduction Act of 1995, Pub. L. 104- 13, and found to impose new or modified recordkeeping requirements or burdens on the public. Implementation of these new or modified reporting or recordkeeping requirements will be subject to approval by the Office of Management and Budget (OMB) and will go into effect upon publication in the Federal Register of OMB approval.

V. ORDERING CLAUSES

60. Accordingly, IT IS ORDERED that, pursuant to sections 1-4, 222, 227, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151- 154, 222 and 227; and section 1.108 of the Commission's Rules, 47 C.F.R. §§ 1.108, this *Order on Reconsideration* in WT Docket No. 01-108 IS ADOPTED.

61. IT IS FURTHER ORDERED that, pursuant to section 405 of the Communications Act of 1934, as amended, 47 U.S.C. § 405, and section 1.429 of the Commission's rules, 47 C.F.R. § 1.429, the petition for Limited Reconsideration filed by Dobson Communications Corporation, Inc., is GRANTED to the extent indicated herein.

62. IT IS FURTHER ORDERED that, pursuant to section 405 of the Communications Act of 1934, as amended, 47 U.S.C. § 405, and section 1.429 of the Commission's rules, 47 C.F.R. § 1.429, the Petition for Reconsideration filed by the Cellular Telecommunications and Internet Association is GRANTED to the extent indicated herein.

63. IT IS FURTHER ORDERED that, pursuant to section 405 of the Communications Act of 1934, as amended, 47 U.S.C. § 405, and section 1.429 of the Commission's rules, 47 C.F.R. § 1.429, the Petition for Reconsideration filed by the AT&T Wireless Service, Inc., is DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

¹⁶¹ See 5 U.S.C. § 801(a)(1)(A).

APPENDIX**List of Petitioners and Commenters****Petitions**

AT&T Wireless Services, Inc. (AWS)
Cellular Telecommunications & Internet Association (CTIA)
Dobson Communications Corporation (Dobson)

Comments/Oppositions

American Honda Motor Co., Inc., ATX Technologies, Inc., Deere & Company; General Motors Corporation, Mercedes-Benz USA, LLC, OnStar Corporation, Toyota Motor North America, Inc., Volkswagen of America, Inc. (Joint Telematics Commenters)
Rural Cellular Association (RCA)
Self Help For Hard Of Hearing People (SHHH)
Sprint Corporation (Sprint)
Telecommunications For The Deaf, Inc.
Western Wireless Corporation (Western Wireless)

Reply Comments

AWS
Joint Telematics Commenters

Ex Partes

AWS
Joint Telematics Commenters, including Sprint and RCA
OnStar Corporation

**STATEMENT OF
COMMISSIONER KEVIN J. MARTIN
APPROVING IN PART AND CONCURRING IN PART**

Re: Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission’s Rules To Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, Order on Reconsideration, WT Docket No. 01-108

I approve in part and concur in part for the reasons stated in my earlier statement in this proceeding. *See Separate Statement of Commissioner Kevin J. Martin, Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission’s Rules To Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, Report and Order, 17 FCC Rcd 1840 (2002).* Moreover, as I have explained, I disagree with the 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).*