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

In the Matter of	)	
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	)	
2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services	)))	WT Docket No. 01-14
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	)	
	)	

NOTICE OF PROPOSED RULE MAKING

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By the Commission: Commissioner Furchtgott-Roth concurring and issuing a separate statement.

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* The final version of this item was approved by the Commission on January 19, 2001.

I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (NPRM), we begin our reexamination of the need for Commercial Mobile Radio Services (CMRS) spectrum aggregation limits as part of our 2000 biennial regulatory review of the Commission's telecommunications regulations. Specifically, we are initiating our second comprehensive review of the two regulations that currently limit the aggregation of broadband CMRS spectrum: the CMRS spectrum cap and the cellular cross-interest rule. In September 1999, we generally found that these spectrum limits were still necessary to safeguard competition in CMRS markets, although we made certain modifications to each of them to provide more flexibility in permissible investment and partnering arrangements among carriers.[1] In this proceeding, pursuant to the mandate of section 11 of the Communications Act of 1934, as amended (Communications Act),[2] we seek comment on whether competitive or other developments in CMRS markets warrant elimination or modification of one or both of these regulations.

II. BACKGROUND

A. CMRS Spectrum Cap

2. The CMRS spectrum cap rule reads: "No licensee in the broadband PCS, cellular, or SMR services (including all parties under common control) regulated as CMRS . . . shall have an attributable interest in a total of more than 45 MHz of licensed broadband PCS, cellular and SMR spectrum regulated as CMRS with significant overlap in any geographic area, except that in Rural Service Areas (RSAs), . . . no licensee shall have an attributable interest in a total of more than 55 MHz of licensed broadband PCS, cellular, and SMR spectrum regulated as CMRS with significant overlap in any RSA."[3] No more than 10 MHz is attributed to an entity when calculating Specialized Mobile Radio (SMR) spectrum under the cap.[4] Thus, a total of 180 MHz of spectrum designated for services that could be regulated as CMRS is subject to the 45/55 MHz spectrum cap, namely the 120 MHz of broadband Personal Communications Services (PCS) spectrum, 50 MHz of cellular spectrum, and 10 MHz of attributable SMR spectrum.[5]

3. Section 20.6(d) of the Commission's rules provides generally that ownership interests of 20 percent or more are deemed attributable.[6] Once all the applicable CMRS spectrum attributable to a given

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[1] 1998 Biennial Regulatory Review, Spectrum Aggregation Limits for Wireless Telecommunications Carriers, WT Docket No. 98-205, *Report and Order*, 15 FCC Rcd 9219, 9223 ¶ 6 (1999) (*First Biennial Review Order*).

[2] 47 U.S.C. § 161.

[3] 47 C.F.R. § 20.6(a).

[4] *Id.* § 20.6(b). This ceiling on attributable SMR spectrum was adopted in 1994 because SMR spectrum was highly encumbered, was assigned on a station-by-station basis, and was not available as a contiguous block. *See* 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, 8112-14 ¶¶ 270-75 (1994) (*CMRS Third Report and Order*).

[5] *See, e.g., First Biennial Review Order*, 15 FCC Rcd at 9254-55 ¶ 80; *CMRS Third Report and Order,* 9 FCC Rcd at 7870 ¶ 97.

[6] *See generally* 47 C.F.R § 20.6(d). Specifically, under the CMRS spectrum cap, controlling interests are attributable. *Id.* § 20.6(d)(1). Also attributable are non-controlling ownership interests of 20 percent or more (40 percent if held by a small business or rural telephone company, or a passive institutional investor), including (continued….)

entity is identified, one then determines whether the attributable CMRS spectrum serves markets having a "significant overlap."[7] This inquiry is complicated by the fact that different licensing and service areas are used for cellular, broadband PCS, and SMR spectrum.[8] When a situation involves both a PCS license and a cellular or SMR license, a significant overlap exists when 10 percent or more of the population of the designated PCS licensed service area is within the CGSA or SMR service area(s) in question.[9]

4. In 1994, before the licensing of PCS and the advent of digital SMR service, and when only two cellular licensees offered mobile voice services in any given geographic market, the Commission established a 45 MHz CMRS spectrum cap to complement the then-existing 40 MHz broadband PCS spectrum cap and the PCS/cellular cross-ownership rule.[10] In 1996, the Commission eliminated these latter two service-specific limitations on licensees' ability to aggregate broadband PCS spectrum, and determined to rely solely on the 45 MHz CMRS spectrum cap to ensure that multiple service providers would be able to obtain broadband PCS spectrum and facilitate the development of competitive markets for wireless services.[11] The Commission reasoned that the CMRS spectrum cap was sufficient "to avoid

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general and limited partnership interests, voting and non-voting stock interests or any other equity interest, are considered attributable. *Id.* § 20.6(d)(2), (3), (4), (6). Officers and directors are attributed with their company's holdings, as are persons who manage certain operations of licensees, and licensees that enter into certain joint marketing arrangements with other licensees. *Id.* § 20.6(d)(7), (9), (10). Debt does not constitute an attributable interest for purposes of the spectrum cap, and securities affording potential future equity interests (such as warrants, options, or convertible debentures) are not considered attributable until they are converted or exercised. *Id.* § 20.6(d)(5). Finally, ownership interests held through successive subsidiaries are calculated by using a multiplier. *Id.* § 20.6(d)(8).

[7] *Id.* § 20.6(c).

[8] For spectrum cap purposes, the relevant geographic area for cellular spectrum is the Cellular Geographic Service Area (CGSA), *i.e.*, the composite 32 dBu service area contour within which the cellular system is entitled to protection from interference. *See id*. § 22.911. For broadband PCS spectrum, the relevant area is the licensed service area, which can be either a Major Trading Area (MTA) or a Basic Trading Area (BTA). *See id*. § 24.202. SMR service can be licensed by economic areas (EAs), by MTAs, or by service area contour. BTAs and MTAs are based on material copyrighted © 1992 Rand McNally & Company.

[9] *Id*. § 20.6(c). Where both MSA and RSA areas are included in a single PCS licensed area, those areas within MSAs where total spectrum exceeds 45 MHz and those areas within RSAs where total spectrum exceeds 55 MHz are considered in the calculation. *See* 1998 Biennial Regulatory Review, Spectrum Aggregation Limits for Wireless Telecommunications Carriers, WT Docket No. 98-205, *Memorandum Opinion and Order on Reconsideration*, FCC 00-376 (rel. Nov. 8, 2000) ¶ 22 (*First Biennial Review MO&O*). Where only PCS licenses are involved, however, this analysis does not apply, and any overlap between BTA-licensed and MTA-licensed spectrum is considered significant. Situations involving overlap of CGSAs generally do not arise because such holdings are generally prohibited under the cellular cross-interest rule, 47 C.F.R. § 22.942. *See infra* para. 9.

[10] Amendment of the Commission's Rules to Establish New Personal Communications Services, GN Docket No. 90-314, *Second Report and Order*, 8 FCC Rcd 7700, 7728 ¶ 61, 7745 ¶ 106 (1993) (limited broadband PCS licensees to 40 MHz of the total spectrum allocated to broadband PCS; limited cellular licensees to no more than 10 MHz of PCS spectrum in their cellular service areas); Amendment of the Commission's Rules to Establish New Personal Communications Services, GN Docket No. 90-314, *Memorandum Opinion and Order*, 9 FCC Rcd 4957, 4984 ¶ 67 (1994) (revised the PCS/cellular cross-interest rule to allow cellular licensees to increase their holding of PCS spectrum from 10 MHz to 15 MHz after January 1, 2000).

[11] Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap; Amendment of the Commission's Cellular/PCS Cross-
(continued….)

excessive concentration of licenses and promote and preserve competition," while also noting its belief that discouraging anticompetitive behavior must be accomplished while "maintaining incentives for innovations and efficiency."[12]

5. In the *First Biennial Review Order*, issued in September 1999 as part of the 1998 biennial review, we decided substantially to retain the CMRS spectrum cap (and the cellular cross-interest rule), with targeted modifications to reflect circumstances in rural areas and to permit passive institutional investors to acquire greater non-attributable interests in CMRS carriers.[13] We considered the danger that increased broadband spectrum aggregation would result in decreased service competition and in forgone consumer benefits. We also, however, took into consideration the need that certain carriers expressed for additional spectrum to deal with congestion on their networks and to implement new, advanced services. We concluded that a bright-line spectrum aggregation limit remained a simple and effective means of generally maintaining a proper balance between these public policy objectives.[14] In the order, we recognized that a major purpose of the CMRS spectrum cap was to provide additional opportunities for potential new entrants to particular CMRS markets to secure spectrum rights in those areas and begin offering service.[15] Specifically, we found that "CMRS markets differ from certain other telecommunications markets with respect to ease of entry because of the need to obtain a governmentally-granted spectrum license to provide CMRS."[16] Because CMRS market entry is subject to such necessary government control, we found that unregulated market entry alone cannot necessarily be relied on to discipline anticompetitive conduct.[17] Thus, we reaffirmed the 45 MHz limit as striking the proper balance (in non-rural areas) in providing carriers with sufficient spectrum until we could allocate additional amounts suitable for the provision of CMRS, while helping assuage the competitive consequences of the spectrum-related barriers to entry in today's CMRS markets.

6. The decision in the *First Biennial Review Order* generally to retain our spectrum aggregation limits rested to a great extent on our view that substantial consumer benefits had resulted from the dramatic increases in competition in CMRS markets over the previous few years. We found that our spectrum cap policies had played a positive role in the development of CMRS competition by ensuring the potential participation of four or more facilities-based competitors in most areas.[18] In particular, we

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Ownership Rule, WT Docket 96-59, GN Docket 90-314, *Report and Order*, 11 FCC Rcd 7824, 7869 ¶ 94 (1996) (*CMRS Spectrum Cap Report and Order*), *recon.* 12 FCC Rcd 14031 (1997) (*BellSouth MO&O*), *aff'd sub nom. BellSouth Corp. v. FCC*, 162 F.3d 1215 (D.C. Cir. 1999).

[12] *CMRS Spectrum Cap Report and Order,* 11 FCC Rcd at 7869 ¶¶ 94-95.

[13] *See First Biennial Review Order*, 15 FCC Rcd at 9249 ¶ 66. These two actions were necessary to facilitate deployment to rural areas and to increase the availability of capital to all CMRS carriers, respectively. *Id*.

[14] *Id.* at 9242-49 ¶¶ 49-65. In our *First Biennial Review MO&O*, we denied the generally framed petitions for reconsideration challenging our September 1999 decision to retain the CMRS spectrum cap. *See First Biennial Review MO&O* at ¶¶ 9-12. Recognizing the speed of change within the CMRS industry, we noted our intention to revisit the continued need for the cap in greater detail as part of our 2000 biennial review. *Id*. at ¶ 17.

[15] *First Biennial Review Order*, 15 FCC Rcd at 9234-35 ¶ 31.

[16] *Id.* at 9233 ¶ 28.

[17] *Id.* at 9234-35 ¶ 31.

[18] *Id.* at 9240 ¶ 44.

found that eliminating these regulations and enabling reconsolidation to occur could threaten reversal of the trends toward falling prices, improved service quality, product innovation, and product differentiation.[19] In this regard, we noted the differentiated products that have been offered by multiple service providers, and cited data showing that the bundled price per minute for cellular service had declined significantly with the entry of the fourth and fifth broadband CMRS carriers into a market.[20] We therefore rejected certain carriers' arguments that we should raise the cap (*e.g.*, to 60 MHz) because consolidation to three competitors would not adversely affect CMRS markets, stating instead that "significant benefits of competition are unlikely to be exhausted with the entry of a third carrier."[21] We also rejected similar arguments to raise the cap uniformly to 55 MHz, concluding that three carriers with 55 MHz each, with 15 MHz of spectrum for a fourth competitor, could result in a more highly concentrated and less competitive market than many CMRS markets were in 1999.[22] We based our conclusions, at least in part, on measurements of market concentration that were computed using customer subscription data, and relied to a significant degree on the Herfindahl-Hirschman Index (HHI), which indicated that all of the nation's largest CMRS markets were highly concentrated.[23]

7. We further determined that the asserted benefits from a repeal or fundamental modification of our spectrum aggregation limits that would permit fewer than four significant competitors in any given market were unsupported. We noted existing alternative spectrum that could be used to provide certain types of new services, as well as the alternative of allocating more spectrum suitable for the provision of CMRS.[24] We described a waiver process that could be used to meet the spectrum requirements for third-generation (3G) and other advanced wireless services until we could allocate additional spectrum for next generation applications.[25] With regard to the possible allocation of additional spectrum potentially suitable for CMRS, we decided that we would not necessarily subject any such spectrum to the current 45/55 MHz CMRS spectrum cap, but would consider its treatment in the service rules proceedings for such spectrum.[26] We also cited our belief that the cap "furthers the goal of diversity of ownership that we

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[19] *Id.* at 9242 ¶ 48.

[20] *Id*. at 9240 ¶¶ 43, 44.

[21] *Id.*

[22] *Id.* at 9256 ¶ 83.

[23] *Id.* at 9236-38 ¶¶ 35-38.

[24] *Id.* at 9247-48 ¶¶ 60-61, 63.

[25] *Id*. at 9255-56 ¶ 82 (describing factors that will be reviewed when considering a request for permanent waiver of the spectrum cap to provide advanced wireless services). Under this process, a carrier can obtain a waiver of the cap if it can credibly demonstrate in a particular geographic area that the applicable limit is having a significant adverse effect on its ability to provide advanced wireless services. *Id*.

[26] *Id*. The first occasion to apply this approach came four months later when we held that CMRS provided on the 746-764 MHz and 776-794 MHz bands would not be subject to in-band spectrum aggregation limits, nor to the general CMRS spectrum cap. *See* Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *First Report and Order*, 15 FCC Rcd 476 (2000) (*700 MHz First Report and Order*). We concluded that excluding the 700 MHz bands from the spectrum aggregation limits would best promote the availability of spectrum for advanced services while avoiding anticompetitive harm. *Id*. at 497-98 ¶¶ 52-53; *see also* Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Memorandum Opinion and Order*, FCC 00-224 (rel. June 30, 2000) at ¶ 73. We noted that our decision not to include the spectrum in these bands (continued….)

are mandated to promote under section 309(j)" of the Communications Act.[27]

8. We did conclude that the public policy tradeoffs were different in rural areas than in non-rural areas, and we raised the cap to 55 MHz in RSAs. We based this conclusion on findings that the potential consumer benefits in rural areas from competitive, facilities-based entry were likely to be limited by the economics of offering service to lower-density populations.[28] As a practical matter, because many RSAs are unlikely to see four or more competitors actually offering service, we determined that the costs of raising the cap in those areas are likely to be less than in urban and suburban areas. We found that a 45 MHz spectrum cap might affect the ability of rural cellular carriers (with 25 MHz licenses) and broadband PCS carriers (with 30 MHz licenses) to attain certain economies of scale and scope that could enhance efficiency without threatening competition. Therefore, we concluded that a 55 MHz spectrum ceiling recognizes the reality that higher concentration through efficiency-enhancing partnering and other arrangements is likely or inevitable in rural areas.[29]

B. Cellular Cross-Interest Rule

9. Adopted originally in 1991,[30] the cellular cross-interest rule substantially limits the ability of parties to have interests in cellular carriers on different channel blocks in a geographic area. Application of the cellular cross-interest rule requires comparison of the CGSAs of cellular licensees operating on A Block frequencies with those of cellular licensees operating on B Block frequencies. Because cellular licensees are authorized on frequencies in either one or the other of these channel blocks,[31] any geographic area generally will fall within the CGSAs of no more than two cellular licensees (one on each channel block).[32] To the extent licensees on different channel blocks have any degree of overlap between

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under the cap was premised on retaining the cap on the existing 180 MHz of broadband CMRS spectrum. *See id*. We considered the option of increasing the spectrum cap and including the 700 MHz bands within that cap, but concluded that doing so would risk harmful consolidation of spectrum within the existing CMRS bands. *700 MHz First Report and Order,* 15 FCC Rcd at 498 ¶ 53. By this decision, we identified additional suitable spectrum that would be made available for mid- and long-term use by CMRS carriers without compromising the consumer benefits of ensuring multiple facilities-based carriers.

[27] *First Biennial Review Order*, 15 FCC Rcd at 9230 ¶ 21 (citing *CMRS Spectrum Cap Report and Order,* 11 FCC Rcd at 7873 ¶ 102).

[28] *Id.* at 9256-57 ¶ 84.

[29] *Id*.

[30] *See* Amendment of Part 22 of the Commission's Rules to Provide for the Filing and Processing of Applications for Unserved Areas in the Cellular Service and to Modify Other Cellular Rules, CC Docket Nos. 90-6, 85-388, *First Report and Order and Memorandum Opinion and Order on Reconsideration,* 6 FCC Rcd 6185, 6228-29 ¶¶ 103-06. The original cellular rules restricted cellular-cross ownership by limiting ownership of cellular A block licenses to non-wireline carriers and ownership of cellular B block licenses to wireline carriers. These restrictions were lifted for cellular unserved area licenses in 1989 and for all cellular licenses in 1994. *See* Amendment of the Commission's Rules for Rural Cellular Service, CC Docket No. 85-388, *Order on Reconsideration of Second Report and Order*, 4 FCC Rcd 5377 (1989); 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).

[31] *See* 47 C.F.R § 22.905.

[32] We recently adopted an order permitting cellular carriers to disaggregate spectrum. *See* Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensees; Implementation of Section 257 of the Communications Act -- Elimination of Market Entry Barriers, WT Docket No. 96-148, GN (continued….)

their respective CGSAs, section 22.942 of the Commission's rules prohibits any entity from having a direct or indirect ownership interest of more than 5 percent in one such licensee when it has an attributable interest in the other licensee.[33] An attributable interest is defined generally to include an ownership interest of 20 percent or more, as well as any controlling interest.[34] Under the rule, however, an entity may have non-controlling and otherwise non-attributable direct or indirect ownership interests of less than 20 percent in licensees for different channel blocks in overlapping CGSAs.[35]

10. As part of our 1998 biennial review of the cellular cross-interest rule, we determined that the restriction continued to be necessary to protect against substantial anticompetitive threats from common ownership between the two cellular carriers in any given geographic area. We found that cellular carriers served approximately 86 percent of nationwide mobile telephone subscribers at the end of 1998, and determined that in only a few major metropolitan markets was that percentage less than 70 percent.[36] With two cellular carriers being the only providers of mobile telephone service in some markets and having the lion's share of subscribers in all markets, we concluded that economic competition alone would not ensure that the public interest objectives of the cellular cross-interest rule would be met.[37] We also concluded that reliance on the CMRS spectrum cap without a cellular cross-interest rule would allow cellular carriers to acquire too much of an ownership interest in the other cellular licensee in urban markets, and would permit one entity to acquire complete control of both cellular licensees in rural markets.[38] However, because competition from other services had increased on the whole since the rule's inception in 1991, we altered what had been a near absolute bar against cross-ownership[39] by relaxing application of the rule's attribution standards to the current limits under section 22.942.[40]

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Docket No. 96-113, *Second Report and Order*, FCC 00-141 (rel. May 19, 2000) (*Cellular Disaggregation Order*). To the extent that either cellular carrier disaggregates a portion of its spectrum on its channel block to another entity, there could be three, or more, cellular carriers in one geographic area. Our *Cellular Disaggregation Order* does not address the effect of disaggregation on the cross-interest rule. Accordingly, we seek comment below on how disaggregation may affect application of the rule. *See infra* para. 55.

[33] 47 C.F.R. § 22.942(a).

[34] *Id*. § 22.942(d)(1), (2). Other rules for determining attributable interests are set forth elsewhere in section 22.942(d). *See id*. § 22.942(d)(3)-(9).

[35] *Id*. § 22.942(b).

[36] *First Biennial Review Order*, 15 FCC Rcd at 9232 ¶ 25, 9251 ¶ 71.

[37] *Id*. at 9251-52 ¶¶ 70-72.

[38] *Id*. at 9252 ¶ 73. Specifically, in the absence of the cellular cross-interest rule, cellular carriers in MSAs would be permitted to acquire up to a 20 percent non-controlling interest in the market's other cellular licensee without triggering the spectrum cap's attribution standard; and, because the spectrum cap had been increased to 55 MHz in rural areas, a single entity could control both 25 MHz cellular licensees in an RSA. *Id*.

[39] As originally adopted, the Commission prohibited an entity with a controlling interest in the license for one cellular channel block from having any interest in the license for the other channel block in overlapping CGSAs. A single entity could, however, have interests of 5 percent or less in both channel blocks, so long as neither of those interests was controlling. 47 C.F.R. § 22.942(a) (1999).

[40] *See supra* text accompanying notes 33-35.

III. DISCUSSION

A. Section 11 Review of CMRS Spectrum Aggregation Limits

11. *Background*. Section 11 of the Communications Act imposes an affirmative obligation to eliminate or modify any of our rules for telecommunications services, such as our spectrum aggregation limits applicable to CMRS, if any such rule is determined to be no longer necessary in the public interest. In passing the Telecommunications Act of 1996[41] to significantly amend the Communications Act, Congress anticipated that, as competition developed, market forces would reduce the need for regulation.[42] Specifically, in adopting section 11, Congress required the Commission, every two years, to review all regulations that apply to "the operations or activities of any provider of telecommunications service" and to "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."[43] If we determine that, as the result of competition in CMRS markets, certain regulations applicable to CMRS providers are no longer necessary in the public interest, then we "shall repeal or modify" those regulations per Congress' mandate.[44]

12. *Discussion*. To determine whether the CMRS spectrum cap and the cellular cross-interest rule are no longer necessary in the public interest as the result of meaningful economic competition, we are here soliciting detailed comments from wireless telecommunications carriers, consumers of their services, and other interested parties on whether we should retain, repeal or modify these limits under the standards of section 11 of the Communications Act. Under section 11, our fundamental inquiry is whether, as a result of meaningful economic competition among providers of telecommunications services, spectrum aggregation limits are no longer necessary in the public interest, *e.g.*, to prevent harmful concentration of spectrum ownership or to ensure meaningful opportunities for broadband CMRS market entry. In order to make this determination, we seek comment regarding what providers of "telecommunications service" fall within the purview of our section 11 analysis of our spectrum aggregation policies. What constitutes "meaningful economic competition" under section 11, and to what degree have the relevant competitive conditions changed since our 1998 biennial review of these rules?[45] If meaningful competition between providers of telecommunications services now exists, have spectrum aggregation limits served their purpose and are they no longer in the public interest?[46] Or, are there public interest reasons to retain spectrum aggregation limits notwithstanding the development of meaningful economic competition? We

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[41] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) (1996 Act).

[42] *See* Joint Managers' Statement, S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. 113 (1996) at 1 (stating that the 1996 Act would establish a "pro-competitive, deregulatory national policy framework").

[43] 47 U.S.C. § 161(a)(1), (2); *see also* section 402(a) of the 1996 Act, 110 Stat. 56 (1996).

[44] 47 U.S.C. § 161(b).

[45] In our recently released Updated Staff Report on the biennial regulatory review 2000, we noted that the review of regulations undertaken in the 2000 biennial review builds upon the work completed in the 1998 biennial review. In the Matter of the 2000 Biennial Regulatory Review, CC Docket No. 00-175, *Report*, FCC 00-456 (rel. Jan. 17, 2001) ¶ 11 (*2000 Staff Report*).

[46] Prior to release of our *2000 Staff Report*, we received comments from representatives of the CMRS industry that the section 11 biennial review criteria support the elimination of the spectrum cap. *See id*. app. IV at 33 n.85 (referencing Comments of Alloy at p. 5 and Comments of CTIA at p. 3). We incorporate by reference all comments on the spectrum cap that we received in our *2000 Staff Report* proceeding.

ask commenters to consider generally the relation between "public interest" and "meaningful economic competition" under section 11's terms.

B. Reexamination and Public Interest Determination

13. In this review under section 11, we seek public comment and input, including the submission of specific market data and studies, to assist our public interest determination of whether the CMRS spectrum aggregation rules are no longer necessary in the public interest and, if they are necessary, whether our existing spectrum limits should be modified. First, we reexamine whether spectrum aggregation limits, including the cellular cross-interest rule, continue to promote procompetitive ends in today's CMRS marketplace. As part of this inquiry, we consider the development of meaningful economic competition, as well as the potential competitive consequences of consolidation that may occur without spectrum aggregation limits. We then invite comment on spectrum management and other regulatory considerations, particularly in the context of the specific scarcity considerations affecting the availability of spectrum suitable for broadband CMRS. Among other subjects, our inquiry examines any costs that our spectrum aggregation limits may impose on the development of advanced wireless services, the possible benefits of standards that create "bright lines" for industry, and whether these standards contribute to the development of efficient technologies. Finally, we seek comment on how recent international developments should affect our public interest determination.

1. Development of Meaningful Economic Competition

14. *Background*. Since we last reviewed spectrum aggregation limits in September 1999, CMRS markets have continued to grow in size, range of service offerings, and the pace of technological advances. In our *Fifth Annual CMRS Competition Report*, released in August 2000, we described considerable evidence that the mobile telephony market has experienced strong growth and competitive development.[47] We cite just a few indicia of these trends. By the end of 1999,[48] we had witnessed the largest twelve-month percentage increase in the total number of subscribers in the history of the mobile telephone sector. Specifically, total U.S. mobile telephone subscribership had reached 86 million,[49] and the Cellular Telecommunications and Internet Association (CTIA) has reported that total subscribership reached over 97 million as of June 2000.[50] On the competition front, we reported that, as broadband PCS licensees continued to roll out service and operational carriers expanded their nationwide footprints, about 88 percent of U.S. residents lived in counties that were served by three or more different broadband CMRS providers.[51] In the largest counties, where 69 percent of our population lives, we determined that

[47] Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Fifth Report*, FCC 00-289 (rel. Aug. 18, 2000) (*Fifth Annual CMRS Competition Report*).

[48] The *Fifth Annual CMRS Competition Report* relied to a large extent on 1999 data and figures to assess the overall state of CMRS competition and industry development. *See, e.g., id*. at 4-7.

[49] *Id*. at 4.

[50] CTIA's most recent Semi-Annual Wireless Industry Survey tabulating total subscribership as of June 2000 is available at http://www.wow-com.com/statsurv/survey/wireless.cfm.

[51] *Fifth Annual CMRS Competition Report* at 6. Because our analysis was limited to publicly available sources of information, this coverage percentage is based on the number of operators serving any portion of a particular county. Although the three or more identified operators may not necessarily all be providing service to (continued….)

at least five different mobile telephone operators were competing for subscribers.[52] We noted that carriers were taking advantage of the economies of scale and increased efficiencies that resulted from expanding their footprints nationwide.[53] As a result, there are now six nationwide or near-nationwide carriers offering service in the United States,[54] as well as a large number of regional and local CMRS providers. In addition, because of upgrades by cellular carriers to convert to digital technology and thereby expand their network capacity, we reported that 84 percent of the nation's population lived in areas with digital cellular coverage.[55] Including broadband PCS, digital cellular, and digital SMR, digital subscribers for the first time composed a greater percentage of the mobile telephone market than did analog subscribers, the traditional mainstay of the cellular industry.[56] Moreover, because digital subscribers tend to use mobile services more intensively than analog subscribers, the percentage of digital traffic in CMRS networks substantially exceeded 50 percent.[57] We also reported that non-cellular carriers had for the first time attracted a majority of the industry's total new subscribers.[58] As a result, cellular licensees' market share of mobile telephone subscribers nationwide had dropped from 86 percent at the end of 1998 to approximately 75 percent at the end of 1999.[59]

15. Concurrent with, and we believe largely as the result of, the continued growth of competition in the mobile telephony market, consumers have benefited from declining prices, rapidly expanding coverage areas, new service packages, and technological innovation. In our *First Biennial Review Order,* we noted that prices were falling, minutes of use (MOUs) were increasing, and service options were growing.[60] According to our analysis, entry by a fourth and fifth facilities-based competitor into mobile telephone markets was leading to significant declines in bundled per-minute prices for consumers.[61] Moreover, in our *Fifth Annual CMRS Competition Report,* we cited data that the entrance of new competitors into these markets continues to reduce prices and benefit consumers.[62] We further concluded

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the same portion of the county, we note that this analysis was nonetheless a more precise picture of network deployments than in prior years' reports where our analysis was based on BTAs. *Id*. at 17-18.

[52] *Id.* at 6.

[53] *Id.* at 10-12.

[54] *See, e.g., id*.

[55] *Id*. at 27-28.

[56] *See, e.g., id*. at 13.

[57] *See, e.g., id.* at 14.

[58] *Id*. at 22 (finding that non-cellular carriers had claimed between 50 and 64 percent of the industry's total new subscribers, and that this figure was expected to increase to 75 percent by mid-decade).

[59] We provided data in the *Fifth Annual CMRS Competition Report* that cellular licensees had approximately 75 percent of mobile telephone subscribers nationwide at the end of 1999. *See id.* at B-9 (table comparing tabulated figures for cellular subscribership with total cellular, broadband PCS, and SMR subscribership).

[60] *See First Biennial Review Order*, 15 FCC Rcd at 9231 ¶ 23.

[61] *Id*. at 9240 ¶¶ 43, 44.

[62] *See Fifth Annual CMRS Competition Report* at 18-20.

that the decreasing pricing trends are likely contributing to the increased MOUs and reliance on mobile wireless services.[63] In addition, consumers are also experiencing the increasing emergence of mobile data services. Specifically, there have been continuing developments, both domestically and internationally, regarding the provision of advanced mobile wireless services, including broadband, multi-media services such as Internet access.[64]

16. *Discussion*. In light of the developments in competition just discussed, we solicit comment on whether spectrum aggregation limits continue to promote our procompetitive goals in today's CMRS markets. In our *First Biennial Review Order*, we concluded that some spectrum aggregation limits were necessary to ensure that these competitive successes continued to be realized in CMRS markets. We now seek comment on whether these regulations continue to serve the public interest by promoting or protecting competition in CMRS services. Will our spectrum aggregation limits continue to contribute to the rise of competition and resulting benefits to consumers, as we have found in the past, or are they no longer necessary? In particular, we seek comment regarding the correlation between the number of competitors maintained by current spectrum aggregation limits and the growth and maintenance of competition that has produced the benefits to consumers that we have observed.

17. In September 1999, we determined that improvements in the various indicia of competition would be threatened by eliminating the spectrum cap, as doing so could enable reconsolidation to occur. We were especially concerned at that time that allowing individual carriers to acquire spectrum holdings in excess of the cap could lead to a reconsolidation of the broadband CMRS marketplace with negative impacts on competition, given the need to obtain spectrum licenses from the FCC to provide CMRS.[65] In reassessing the need for aggregation limits, we seek comment on whether competitive developments since that time have obviated the need for limits such as the spectrum cap to prevent potentially harmful reconsolidation. Are such limits still needed today, as we concluded then, to prevent retrogression and competition-eroding concentration in CMRS markets? Because incentives may exist for operational carriers to consolidate within markets, how valuable a role do spectrum limits play in preventing potentially harmful concentration versus allowing consolidations that benefit the public interest? In this regard, we note that spectrum aggregation limits do not appear to have prevented the consolidation of carriers into nationwide networks with the resulting beneficial service options for consumers.[66]

18. We ask for comment on the impact that these market trends, as well as the regulatory considerations discussed below,[67] should have on our assessment of the various economic relationships on which our spectrum cap policy is based. How do these developments affect our concern that limits were necessary in order to ensure a minimum number of competitors in any given geographic area? Should the relevant measures of market capacity (*e.g.*, assigned spectrum, subscriber shares, *etc*.) be weighted differently than in the past? What role should we continue to afford HHI calculations or similar measures of concentration of ownership or control, and what inputs should we use in calculating HHI? Moreover, should we redefine the relevant product market in light of increasing product convergence between providers subject to the CMRS spectrum cap and other service providers? Should we continue to apply

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[63] *Id*. at 22-23.

[64] *Id*. at 33-35.

[65] *See supra* para. 5-6.

[66] *See supra* para. 14.

[67] *See* discussion *infra* part III.B.2.

the cap to all broadband PCS, cellular, and SMR spectrum regulated as CMRS, regardless of the use to which the spectrum currently is dedicated; or, should we limit application of the cap to CMRS spectrum used for mobile voice service?[68] If we were to limit the cap to mobile voice services only, how would we further and clearly define the included and excluded product markets? Also in the increasingly converging marketplace, are these product markets truly segregable? Moreover, how would such a policy affect the spectrum cap's goal to guard against excessive accumulation of CMRS spectrum? Also, how should we define the relevant geographic market, especially in light of the trend toward nationwide footprints and affiliations? Commenters should specifically address whether today's CMRS markets will enable new entrants – both existing carriers seeking to expand their footprints and firms, including small businesses, seeking to enter the market *ab initio* – to have access to the limited spectrum that is practically available today for mobile telephone services.

19. We also seek comment on the implications for our spectrum aggregation limits of our authority under section 310(d) of the Communications Act to determine that a particular consolidation is not in the public interest.[69] If we were to eliminate or relax the spectrum cap, could we, or should we, incorporate other methods into the section 310(d) review process that would serve our goal of preventing consolidations that would eliminate the benefits brought by competition, while giving due consideration to the need for firms to achieve minimum efficient scale?[70] For example, could we adopt a processing standard that if a proposed transaction would cause an applicant to exceed 45 MHz of covered spectrum (or some other threshold amount), it must provide an additional public interest showing meeting certain criteria (*e.g*., HHI and/or other economic data demonstrating concentration of market)? Alternatively, would it be preferable to establish a threshold based on the number of competitors providing CMRS (or CMRS mobile voice telephony) in a geographic market?[71] Commenters advocating such a threshold should address how we should determine the number of competitors, as well as how to determine what service providers to include and the scope of the geographic markets. We seek comment on other standards or methodologies that would accomplish what is "necessary" from a competition perspective. We also seek comment on the benefits and detriments of providing bright-line criteria that do not substantially increase burdens on the public or Commission resources.[72] Commenters should consider the impact of any standards that will increase time and expense for small businesses, which often may not have the requisite resources for case-by-case reviews.

[68] Although our past orders have generally focused on competitive conditions in the market for mobile voice telephone services, *see, e.g., First Biennial Review Order,* 15 FCC Rcd at 9241 ¶ 46, the cap is not limited to CMRS spectrum used for real-time, two-way switched telephone service; it applies so long as cellular, broadband PCS, or SMR spectrum is used for any service within the definition of CMRS. *See First Biennial Review Order,* 15 FCC Rcd at 9227 ¶ 13, 9241 ¶ 46; *see also BellSouth MO&O*, 12 FCC Rcd at 14037 ¶ 10, 14040 ¶ 14; *BellSouth Corp. v. FCC*, 162 F.3d at 1222-24.

[69] 47 U.S.C. § 310(d).

[70] To the extent that we decide to eliminate the spectrum cap and rely on the section 310(d) review process, we note that attribution and ownership issues could also arise outside that process if licensees are permitted to lease spectrum usage rights without prior section 310(d) approval. *See* Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230, *Notice of Proposed Rulemaking*, FCC 00-402 (rel. Nov. 27, 2000) (*Secondary Markets NPRM*). *See also infra* para. 53.

[71] *Cf.* 47 C.F.R. § 73.3555 (multiple ownership rule applicable to broadcast stations).

[72] *See also infra* para. 30, 38.

20. More broadly, we seek comment on the implications of other agencies' enforcement of antitrust laws for our spectrum aggregation limits and our public interest review required by section 310(d). In our *First Biennial Review Order*, we identified certain benefits of the spectrum cap and cellular cross-interest rule that were not afforded by antitrust review and decided that "the antitrust laws should [not] be the exclusive tool for addressing competition issues of the nature we confront in CMRS markets."[73] We note, however, that in the past few years, the Department of Justice (DOJ) in some cases has entered into consent decrees with merging CMRS carriers to prevent competitive harm in overlapping markets after the merger.[74] Can we, and should we, defer to the DOJ in such matters, and if so, what form should such deference take? For example, can we, and should we, adopt an approach such that all transfers resulting in consolidation of spectrum below a spectrum threshold should be exempt from section 310(d) competitive analysis? Can we, and should we, eschew an independent review of the competitive implications of license transfers that are part of mergers that are subject to some specified level of DOJ review, and, if so, how should we define that level? What would be the legal and policy implications of adopting these or any alternative approaches? Antitrust laws may adequately focus on mergers that threaten to curtail actual competition harming consolidation.[75] Do spectrum aggregation limits continue to promote other public interest goals that stress policies such as the beneficial role of market entry?

21. If we conclude that spectrum aggregation limits remain necessary at this time, we ask commenters to address whether subsequent competitive developments could obviate the need for such limits and thereby enable us to sunset these regulations. In our 1998 biennial review, we sought comment on the possibility of establishing a sunset date for CMRS spectrum aggregation limits in some or all markets, but we ultimately declined to adopt a sunset, concluding that it was more appropriate to revisit the rules in our year 2000 biennial review.[76] We again seek comment on whether it is appropriate to adopt a sunset in light of anticipated competitive evolution of CMRS markets. Alternatively, we seek comment on whether there are public interest reasons not to sunset the rules even if such evolution occurs or whether we should reexamine the regulations in our year 2002 biennial review. If commenters believe that a sunset provision is appropriate, we seek further comment on whether it should be tied to a specific date in the future, and how best to predict the timing of the competitive developments on which it would be based. Alternatively, we seek comment on whether a sunset should be based on the development of specified competitive conditions or other criteria, in some or all markets, regardless of when they occur. We encourage commenters to provide specific economic evidence supporting their proposals and views.

22. We ask for comment on the potential harms or benefits of adopting limits other than the

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[73] *First Biennial Review Order*, 15 FCC Rcd at 9244-46 ¶¶ 56-57.

[74] *See, e.g.*, United States v. SBC Communications Inc. and Ameritech Corporation, No. 1:99CV00715 (D.D.C. filed Aug. 2, 1999) (final judgement); United States v. SBC Communications Inc. and BellSouth Corporation, No. 1:00CV02073(PLF) (D.D.C. filed Aug. 30, 2000) (final judgement). Indeed, some DOJ consent decrees require the spin-off of overlapping spectrum licenses to a level below that required by our spectrum aggregation limits. *See* United States v. Bell Atlantic Corporation, GTE Corporation, and Vodafone AirTouch PLC, No. 1:99CV01119(LFO) (D.D.C. filed Apr. 18, 2000) (final judgement).

[75] *See, e.g., First Biennial Review Order*, 15 FCC Rcd at 9245-46 ¶ 57.

[76] *See id.* at 9232 ¶ 26 n.75. We also note that we have utilized sunsets in other CMRS rules, s*ee, e.g.*, 47 C.F.R. § 20.20(f) (sunset of the separate affiliate requirements for incumbent local exchange carrier (ILEC) provision of in-region broadband CMRS); § 20.12(b) (sunset of the CMRS resale rule), and LMDS ownership rules, § 101.1003 (sunset of LMDS eligibility restrictions for ILECs).

current 45/55 MHz spectrum cap thresholds. Under increased thresholds, which combinations would harm or benefit consumers? For example, a 60 MHz spectrum cap would permit an A Block broadband PCS carrier to combine with the B Block PCS carrier, or with a cellular carrier, in any given geographic area. Under a 55 MHz spectrum cap, a 25 MHz cellular carrier and a 30 MHz broadband PCS carrier would be able to merge their operations in non-rural areas.[77] Assuming consolidation between broadband PCS and cellular operators, a 55 MHz cap would still ensure at least four broadband competitors under the 180 MHz of covered spectrum. However, under such a limit, it is possible that one competitor could have significantly less spectrum than the other three under current allocations.[78] Would such an eventuality allow harmful reconsolidation, or would consumers potentially benefit? Do the current aggregation limits potentially serve as the best guarantee that new entrants, including small businesses, can obtain the needed spectrum licenses to gain access to compete in CMRS markets?

23. In addition to seeking comment on these issues with respect to the spectrum cap, we also seek comment on whether we should repeal the cellular cross-interest rule. The distinctions between cellular and PCS services appear to have decreased since our 1998 biennial review.[79] In addition, we note that according to recent estimates, cellular licensees' market share of mobile telephone subscribers nationwide has dropped from 86 percent at the end of 1998, as noted in the *First Biennial Review Order,* to approximately 75 percent by year-end 1999, a trend that industry analysts expect to continue in the coming years.[80] On the other hand, most broadband PCS operators are still deploying their networks and do not yet provide facilities-based coverage comparable to the current combined nationwide cellular footprint.[81] We therefore seek comment on whether the need for a separate cellular cross-interest rule has lessened, or whether the cellular sector may still have the potential to undermine the level of CMRS competition we have seen so far. In a marketplace where carriers are building nationwide networks that combine different CMRS services, can we continue to make distinctions and compare competitive differences between "cellular carriers" and their competitors, *e.g.*, "PCS carriers"? In inviting comment on whether maintaining separate cellular cross-ownership limits is still necessary in the public interest, we ask commenters to provide empirical evidence and/or studies on the relative competitive and buildout status of cellular, SMR, and broadband PCS carriers on a market-by-market as well as comprehensive basis.

24. We also seek comment on whether the cellular cross-interest rule may still be necessary to prevent cellular carriers from merging in certain markets where there is limited or no competition from other CMRS providers. There still appear to be some geographic markets where no broadband PCS provider has yet initiated service.[82] Also, in rural areas where cellular carriers are the dominant providers

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[77] We note that under a 55 or 60 MHz spectrum cap, the cellular cross-interest rule would still prevent two cellular carriers from combining.

[78] *See, e.g.*, *First Biennial Review Order*, 15 FCC Rcd at 9256 ¶ 83.

[79] *See, e.g., Fifth Annual CMRS Competition Report* at 15-16.

[80] *See supra* text accompanying note 59. We note that the cellular licensees' market share of customers does not include additional customers that some of these same licensees serve by virtue of PCS licenses. *See Fifth Annual CMRS Competition Report* at B-9 (showing that several cellular licensees also serve mobile telephone customers under PCS licenses).

[81] *See, e.g., id.* at 29.

[82] *See, e.g., id*.

and the CMRS spectrum cap is 55 MHz, the spectrum cap alone would not prevent the two cellular carriers from merging. Could the purpose of the cross-interest rule still be served by its application in these circumstances? Or would our ability to review consolidations on a case-by-case basis under section 310(d) suffice to prevent monopolistic cellular consolidation?[83]

25. Finally, one of the primary goals of the 1996 Act is to promote competition in local telecommunications markets.[84] We seek comment on whether and, if so, how our spectrum aggregation limits affect CMRS providers' ability to enter into and compete in local telecommunications markets. Since September 1999, has the spectrum cap enhanced or impeded the provision of wireless services as a competitive alternative to wireline services? How significant are the opportunity costs of dedicating broadband CMRS spectrum to mobile services when other spectrum bands are available for fixed wireless services?[85] To the extent that incumbent licensees build networks using CMRS spectrum that are targeted mainly to particular services, are opportunities for entry and development of competition in other services limited in the short to medium term? In addition, how should these considerations affect our identification and analysis of the appropriate CMRS product markets for our biennial review?[86]

2. Spectrum Management and Other Regulatory Considerations

26. *Background*. We must also review the CMRS spectrum aggregation rules in light of our spectrum management responsibilities, pursuant to which we issue the licenses for spectrum necessary to provide CMRS, as well as other regulatory considerations. We begin by acknowledging that, relative to demand, there is a limited amount of spectrum available that, as a practical matter, is suitable for the provision of broadband CMRS within the foreseeable future. For example, the propagation characteristics of spectrum above approximately 3 GHz make it generally unsuitable for mobile use using current technology. In addition, many bands below 3 GHz are allocated for multiple uses other than CMRS, including broadcast operations, private mobile and fixed services, and various types of satellite operations. Moreover, significant amounts of spectrum below 3 GHz are allocated for important federal government uses, such as defense, national security, law enforcement, and air traffic control. Because scarcity issues to some degree affect all users of spectrum (and, indeed, all users of any finite natural resource) and all spectrum bands, scarcity in and of itself is not sufficient to justify a limit on the aggregation of spectrum. However, significant shortages of spectrum relative to demand raise concerns, especially in service markets where there are few close non-spectrum substitutes.[87] The Commission has found that the particular conditions that apply to broadband CMRS spectrum support the use of

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[83] *See generally supra* para. 19-20.

[84] *See* 47 U.S.C. §§ 251-261 (Development of Competitive Markets); Joint Managers' Statement, S. Conf. Rep. No. 104-230, 104th Cong. 2d Sess. (1996).

[85] *See First Biennial Review Order,* 15 FCC Rcd at 9248-49 ¶ 64.

[86] *See supra* para. 18.

[87] Whereas fixed wireless services compete with wireline services, there are no close substitutes for mobile wireless services – mobility is a unique attribute of spectrum below 3 GHz. The scarcity of this spectrum relative to demand is evidenced by the increasing market value of broadband CMRS licenses. For example, the on-going Auction No. 35 of C and F block PCS licenses is producing net high bids that are substantially higher than those that have prevailed in any previous spectrum auctions. *See, e.g.*, Auction No. 35 Summary Measures by Round, *available a*t http://www.fcc.gov/wtb/auctions/c f blk/35press2.pdf.

aggregation limits in the bands currently used for these services.[88] In other bands, where different conditions prevail, we have taken a different approach. For instance, there are several substantial, technologically suitable bands allocated for fixed wireless services, and we do not impose any aggregation limits on such spectrum.[89] Moreover, wireline services are for many customers close substitutes for such wireless services and so aggregation of such spectrum in a small number of licensees would not necessarily raise competitive concerns.

27. There have been a number of regulatory actions since the last biennial review that may affect our decisions here regarding CMRS spectrum aggregation limits. For example, we recently reconfigured the licenses available in the broadband PCS C and F block auction – Auction No. 35 – to better enable all carriers to acquire additional CMRS spectrum in most markets without triggering any CMRS spectrum cap concerns.[90] First, we removed the entrepreneur auction eligibility restrictions and established "open" bidding for a substantial portion of the available spectrum licenses. Second, given our determination that the vast majority of carriers have 35 MHz or less of spectrum in most geographic areas, we divided each available 30 MHz C block license into three 10 MHz C Block licenses, to increase the ability of these carriers to obtain additional spectrum at auction. By these two decisions, the Commission intended to help carriers obtain PCS spectrum for economies of scale and the introduction of 3G services, while maintaining the current CMRS spectrum cap to prevent excessive CMRS consolidation.[91]

28. In addition, we decided to exclude from spectrum aggregation limits the 700 MHz bands that will be auctioned early this year. This decision may permit entry by new competitors as well as increase the availability of significant spectrum for the introduction of 3G services over the medium to long term.[92] We also eliminated the separate narrowband PCS spectrum aggregation limit earlier this year.[93] We did so based on our findings that narrowband PCS licensees increasingly compete with other sectors of the wireless industry, including broadband PCS and SMR, and that the risk that lifting the limit could lead to anticompetitive concentration or spectrum warehousing was low due to the intense competition from all

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[88] *See, e.g.*, *CMRS Spectrum Cap Report and Order*, 11 FCC Rcd at 7871 ¶ 99 ("CMRS markets have significant barriers to entry, most notably the need for spectrum, the expense of obtaining the license and the high costs of construction and operation of new communications systems."). In evaluating the prospects for broadband CMRS competition, our focus has been on "the allocation of a scarce resource, spectrum," to ensure that incumbent broadband CMRS licensees could not aggregate such quantities of spectrum that the disciplining force of market entry would be thwarted. *First Biennial Review Order*, 15 FCC Rcd at 9233 ¶ 29; *see also CMRS Spectrum Cap Report and Order*, 11 FCC Rcd at 7871, 73 ¶¶ 99, 101

[89] *See, e.g.*, Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92-297, *Third Report and Order and Memorandum Opinion and Order*, 15 FCC Rcd 11857 (2000).

[90] *See generally* Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees, WT Docket No. 97-82, *Sixth Report and Order and Order on Reconsideration*, FCC 00-313 (rel. Aug. 29, 2000) (*PCS Sixth Report and Order*).

[91] *Id*. at ¶¶ 15, 60.

[92] *See 700 MHz First Report and Order*, 15 FCC Rcd at 497-98 ¶ 52.

[93] Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, GEN Docket No. 90-314, ET Docket No. 92-100, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 15 FCC Rcd 10456, 10464-65 ¶ 16 (2000).

wireless sectors.[94]

29. Another significant regulatory consideration is spectrum efficiency. Increases in the number of competitors and the associated demand for CMRS spectrum are leading to increases in spectrum efficiency. As operators seek to increase mobile voice capacity and deploy spectrum-intensive, advanced wireless services such as high-speed Internet access and mobile video conferencing, we see the marketplace responding with technological solutions that are increasing the technical capacity of wireless networks. For example, in our *Fifth Annual CMRS Competition Report*, we noted that U.S. carriers are migrating to 3G systems by beginning to implement new technologies and infrastructure upgrades that will offer faster data speeds.[95] The development of these capacity-enhancing technologies demonstrates that increasing efficiency where spectrum is limited can be accomplished by engineering more capacity from the same bandwidth per square kilometer. In addition to the development of these efficiencies through techniques such as compression and modulation methods, the deployment of infrastructure upgrades that involve spatial reuse designs – *e.g*., cell splitting and frequency reuse – will also result in more efficient wireless systems. Thus, all of these innovations in spectrum efficiency promise to permit data communications sessions to multi-mode handsets, increased numbers of telephone calls in densely populated areas, and other benefits to consumers.

30. Finally, we found in the *First Biennial Review Order* that bright-line rules like the spectrum cap and cellular cross-interest rules hold many benefits over alternative regulatory tools. In particular, we reconfirmed that the spectrum cap would allow review of CMRS acquisitions in an administratively simple manner and lend certainty to the marketplace.[96] We determined that bright-line rules reduce burdens placed on both the Commission and industry, especially small businesses, as well as give industry advance notice of which types of cross-ownership situations the Commission would find anticompetitive.[97] We also stated that use of other regulatory tools, such as case-by-case review under section 310(d), would eventually lead to an understanding of which types of cross-ownership interests the Commission believes are anticompetitive. We concluded, however, that this would require the Commission and industry to expend significant resources in reviewing individual cross-ownership proposals before sufficient precedent would be set to establish the line.[98] As the U.S. Court of Appeals for the D.C. Circuit has recognized, "[a] spectrum cap, unlike many other regulations, might actually require a bright-line rule to be effective."[99] In recognition that any bright-line test may be over-inclusive or under-inclusive in individual cases, we specifically provided that parties who believed that individualized analysis is appropriate could always request a waiver of the spectrum cap and/or cross-interest rule.[100]

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[94] *Id*. at 10464-65 ¶¶ 16-18.

[95] *See Fifth Annual CMRS Competition Report* at 36-44.

[96] *First Biennial Review Order*, 15 FCC Rcd at 9242-43 ¶¶ 49-53, 9244 ¶ 55.

[97] *Id*.

[98] *See id.*

[99] *BellSouth Corp. v. FCC*, 162 F.3d at 1225.

[100] *See First Biennial Review Order*, 15 FCC Rcd at 9243 ¶ 52, 9255-56 ¶ 82. We concluded that bright-line rules with a waiver process would create more regulatory certainty than would unguided case-by-case review (continued….)

31. *Discussion*. We seek comment on the implications of the above considerations for our spectrum aggregation limits. Choices about CMRS spectrum aggregation limits appear to involve market structure and fundamental spectrum management issues regarding this limited amount of spectrum. For example, in response to the scarcity of spectrum suitable for CMRS, the U.S. Government has undertaken a number of initiatives to identify additional spectrum for these services. As part of its plans for the transition to digital television, Congress has directed the reallocation for commercial use of certain spectrum suitable for mobile services that is currently reserved for broadcast services.[101] In addition, the Commission is exploring the possible use of several frequency bands below 3 GHz to support the introduction of new advanced wireless services, including 3G wireless systems.[102] At the same time, we have found that any new market entry is unlikely to be sufficiently timely or sufficiently certain to discipline markets adequately in the near term.[103] Accordingly, we seek comment on our above analysis of CMRS spectrum scarcity issues and its implications for our decisions on CMRS spectrum aggregation limits.[104]

32. We seek comment on the potential efficiency benefits or costs of our spectrum aggregation limits. We described above the significant technological developments and service offerings that have occurred since September 1999. As we explained in our *First Biennial Review Order*, there may be reduced incentives to implement more efficient technologies in a regulatory environment without spectrum aggregation limits.[105] Thus, have such limits provided incentives to the development and deployment of spectrum-efficient technologies that will better serve the public interest in the middle and long term? Or, would such innovation have occurred independent of our spectrum aggregation limits? Can promoting the expansion of capacity through technological advances (as opposed to simply affording more spectrum to the market) serve as an effective disciplinary force on potential anticompetitive conduct in CMRS markets where market entry is limited? Or, do spectrum limits do more to impede the efficient development of new 3G technologies that may be spectrum-intensive in the short term?

33. We ask commenters to address any costs of constraining control of CMRS spectrum by individual carriers. In particular, we seek comment on the extent, if any, to which our regulations impede beneficial economies of scale and the introduction of innovative new technologies and services. We have stated that mobile telephone service providers are beginning to deploy 2.5G technologies and test 3G equipment that could potentially drive the migration to the provision of high-speed, multimedia services as part of CMRS.[106] As early as this year, some operators intend to begin offering commercial Internet

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for anticompetitive consolidations or post-auction issuance of licenses. *See generally id.* at 9242-46 ¶¶ 49-58; *Biennial CMRS Spectrum Cap MO&O* at ¶ 12.

[101] 47 U.S.C. § 337; s*ee, e.g.*, *700 MHz First Report and Order*.

[102] *See generally* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, *Notice of Proposed Rulemaking*, FCC 00-455 (rel. Jan. 5, 2001).

[103] *First Biennial Review Order*, 15 FCC Rcd at 9234-35 ¶ 31.

[104] *See supra* para. 26.

[105] *First Biennial Review Order*, 15 FCC Rcd at 9248 ¶ 62.

[106] *Fifth Annual CMRS Competition Report* at 38-44.

access service at speeds that will increase current rates by a factor of ten or more.[107] We seek specific comment on how the decision to limit carriers' access to CMRS spectrum affects the deployment of next-generation services and the migration of 2G service providers to those services. How do aggregation limits impact the emergence of mobile Internet access and other data services? We seek comment on how to promote advanced wireless services while simultaneously ensuring that meaningful economic competition continues to develop. Are new data technologies developing as rapidly as they could despite current limits on access to spectrum? As a general matter, how do we best manage the spectrum resource designated for use of CMRS and factor in other relevant regulatory considerations to maximize both the benefits to consumers that result from multiple facilities-based competitors and the opportunity for carriers that rely on this resource to offer advanced mobile wireless services?

34. We also seek updated comment on how our spectrum aggregation limits may impair potential efficiencies for all CMRS markets, including those within urban areas. In 1999, we found that spectrum aggregation limits may inhibit economies of scope in rural areas that would permit greater investment there by CMRS providers.[108] We also noted more generally that up to a point, horizontal concentration in CMRS markets may be in the public interest because it could allow efficiencies and economies that would otherwise not be achievable.[109] In today's CMRS markets, would achieving such economies be in the public interest despite any potential increased risk of anticompetitive consolidation? Commenters should address the extent to which the current 45 MHz aggregation limit may be thwarting the realization of potential economies in non-rural areas, and commenters should submit evidence on the magnitude and time frame of any such potential savings or efficiencies in particular market settings.

35. In discussing the availability of spectrum for advanced wireless services, commenters should address the extent to which companies' ability to use alternative spectrum – *i.e*., spectrum outside of the broadband PCS, cellular and SMR bands subject to the cap – should affect our analysis here. For example, in our *First Biennial Review Order*, we identified numerous alternatives to CMRS spectrum that can be used for delivering services in fixed access networks.[110] Other frequency bands, such as the 700 MHz bands that will soon be auctioned, could be used to introduce advanced wireless services. The Commission also is exploring the possible use of other frequency bands below 3 GHz for advanced wireless services. Thus, we seek comment on how the current availability of additional spectrum affects the need for CMRS spectrum aggregation limits. Similarly, we seek comment on what effect our allocation of additional spectrum in the future, suitable for mobile voice and data services, will have on the appropriate aggregation limits for the spectrum at issue here. To the extent that future spectrum bands like 700 MHz are not subject to the cap, does this lessen the need to increase the spectrum cap by creating opportunities for CMRS incumbents to obtain spectrum in these bands? Or, will new spectrum eliminate the access-to-spectrum barrier to entry faced by potential competitors, and thus lessen the need to maintain a spectrum cap at all?

36. Similarly, we seek comment on how to assess the treatment of newly allocated spectrum for

[107] *Id*. at 77.

[108] *See First Biennial Review Order*, 15 FCC Rcd at 9256-57 ¶ 84.

[109] *Id*. at 9233 ¶ 29 n.78 (citing *CMRS Spectrum Cap Report and Order,* 11 FCC Rcd at 7869 ¶ 95 in explaining that the Commission should remain focused on the longer term in pursuing its competitive objectives).

[110] *See id.* at 9247-48 ¶ 61. Although carriers have the flexibility to use cellular, broadband PCS, and SMR spectrum for a variety of service offerings, CMRS carriers are not limited to this spectrum for purposes of providing services that can substitute for local wireline service. *See id.*

spectrum cap purposes. As a general matter, we believe that newly available CMRS-suitable spectrum either should be excluded from the spectrum cap or, if it is included, that the cap should be adjusted accordingly. We seek comment on the factors to consider in deciding between these two options. We invite comment as well on any other cap-related issues that we may encounter when we make new CMRS-suitable spectrum available. We request that commenters provide analytical and factual support for their conclusions. While we will not be making specific decisions in this proceeding on what, if any, constraints ought to apply to concentration of ownership in newly available spectrum bands, we plan to consider an analytical framework to apply to such bands.

37. We also seek comment on whether the impact of the spectrum cap on development of advanced services could be adequately addressed by continuation of the waiver policy that we adopted in the *First Biennial Review Order.* In this regard, it appears that most PCS carriers still have not yet deployed up to the limits of their licensed capacity; in addition, we have not received any waiver requests as contemplated in our *First Biennial Review Order*.[111] Does our specific waiver process enable carriers with a demonstrable need for additional spectrum, especially for advanced wireless services, to obtain such spectrum? We again seek comment on the flexibility of this waiver standard for meeting carriers' needs, and whether we should modify the waiver test.[112] In answering these questions, we request parties to provide specific evidence and concrete examples of the extent to which carriers' holdings in markets approach or are at the 45/55 MHz cap.

38. Commenters are also asked to address whether any developments in the last year should lead us to alter our determination that a bright-line approach remains preferable to exclusive reliance on case-by-case review under section 310(d). Our conclusion that straightforward application of spectrum aggregation limits promotes regulatory certainty and efficiency was based to a large extent on an understanding that clear standards would best provide the industry with incentives to make investments in advanced mobile wireless services, as well as speed the processing of efforts to restructure spectrum holdings to create nationwide footprints. The speed with which the Commission processes transfers and assignments remains an issue of significant controversy.[113] We seek comment on the extent to which our approach has facilitated these goals for licensees, including licensees that are small businesses. Commenters should discuss the fact that in large merger proceedings, the transfer and assignment of CMRS licenses are typically resolved in principle more quickly and with less controversy than are other major issues not governed by analogous rules. As spectrum management tools, do these bright-line standards remain preferable to reliance on section 310(d) review or other alternative regulatory mechanisms? Commenters are encouraged to provide specific examples where our aggregation limits either did or did not provide the certainty or efficiency that a particular marketplace transaction required.

39. Finally, we seek specific comment on whether we should make any fundamental changes in

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[111] We note that some carriers requested waiver of or forbearance from applying the cap to PCS C and F Block licenses currently being auctioned in Auction No. 35, alleging that the cap would impair their ability to deploy advanced wireless services. However, we have previously determined that the generalized assertions in these requests were not sufficiently specific to satisfy the waiver standard set forth in the *First Biennial Review Order* or in the Commission's rules. *See PCS Sixth Report and Order* at ¶ 59.

[112] This waiver standard is distinct from the limited instances in the past where the Commission has granted temporary waivers to carriers assembling nationwide networks to allow them to maintain operations during the divestiture process.

[113] *See, e.g.*, "Public Forum Streamlining FCC Review of Applications Relating to Mergers," *Public Notice*, DA 00-334 (rel. Feb. 18, 2000).

rural and high-cost markets, which appear not to have seen the development of competition in mobile wireless services to the degree that is evident in urban areas. The available information suggests that many of the nation's residents living in rural and other high-cost areas do not yet have meaningful competitive alternatives to the incumbent cellular carriers.[114] In September 1999, we recognized that the spectrum cap might affect the ability of a CMRS provider to attain certain economies of scale and scope in these areas.[115] Spectrum may be made newly available for commercial use through partitioning and disaggregation, but the economics of offering service to these lower-density populations may nevertheless limit the extent of competitive, facilities-based entry. In considering whether to make further changes, we seek comment on whether increasing the existing spectrum cap last year in rural areas has had any impact on the delivery of service to rural customers in terms of prices, availability of digital services, or other factors. Wireless carriers who have aggregated 55 MHz in these areas should describe these efficiencies and any other public interest benefits. Should we, at a minimum, continue to retain the cellular cross-interest rule until increased PCS and other service deployments become more firmly established?

3. International Developments

40. *Background*. We also wish to examine the significance for our reexamination of spectrum aggregation limits of foreign mobile licensing policies, and particularly the 3G licensing process now taking place in Europe and Asia. A recent study issued by the Organization for Economic Cooperation and Development (OECD) has documented a global trend in mobile licensing policy towards increasing numbers of operators in a given market, a trend that predates the 3G licensing process.[116] Moreover, many Western European countries are using the 3G licensing process as an opportunity to promote the development of competitive market structures. All of the Western European countries that have completed the 3G licensing process have licensed four or more 3G operators, and a number of these countries (United Kingdom, Germany, the Netherlands, Italy and Austria) have licensed five or more 3G operators.[117] In addition, the majority of these countries (the United Kingdom, Germany, Italy, Austria, Spain, Switzerland, Norway, Sweden and Portugal) have awarded at least one more 3G license than the number of incumbent mobile operators, thereby ensuring that one or more new operators enter the market.[118] These countries have assured a minimum number of competitors either by using spectrum aggregation limits analogous to our spectrum cap, as in Germany and Austria,[119] or, more commonly, by

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[114] *See, e.g., Fifth Annual CMRS Competition Report* at 18, 29.

[115] *See First Biennial Review Order*, 15 FCC Rcd at 9256-57 ¶ 84.

[116] *See* Sam Paltridge, *Cellular Mobile Pricing Structures and Trends*, OECD, May 2000, at 16, *available at* http://www.oecd.org/dsti/sti/it/. According to this OECD study, between 1989 and 1999 the number of mobile operator "equivalents" competing in the markets of OECD Member Countries increased from 35 to 94. The last mobile monopoly in the OECD area was eliminated in 1998. The study also predicted that, by the year 2000, there would be only three to four OECD Member countries with mobile duopolies, and that more than half the OECD countries would have four or more operators by the end of 2000.

[117] Germany and Austria have licensed six 3G operators. *See European 3G Auction Guide*, Financial Times, August 15, 2000 (updated periodically), *available at* http://news.ft.com/news/industries/telecommunications.

[118] The number of incumbent mobile operators in these countries prior to the 3G licensing process is provided in Sam Paltridge, *Cellular Mobile Pricing Structures and Trends*, OECD, May 2000, at 76.

[119] In particular, in both Germany and Austria small blocks of paired and unpaired spectrum were offered for auction so that the number and size of 3G licenses would be determined through the auction process. However, to prevent excessive concentration, the auction rules restricted individual bidders to winning a (continued….)

fixing the size and number of licenses in advance and limiting each operator to one national license. On the other hand, some countries have used fixed national licenses to authorize a limited number of competitors with large spectrum blocks rather than to increase the number of competitors. In Japan, for example, the Ministry of Posts and Telecommunications has licensed only three 3G operators, and countries such as China and Brazil currently maintain a duopoly in mobile telecommunications services.[120]

41. European countries are able both to ensure a minimum number of competitors and to permit each provider access to more spectrum because substantially more suitable spectrum has been allocated for commercial mobile telecommunications services in Europe than in the United States. Prior to the start of the 3G licensing process in Europe, the total amount of spectrum available for mobile telephony services in most countries was roughly comparable to the 180 MHz allocation in the United States.[121] However, with the additional 140 to 145 MHz of spectrum that most Western European countries have allocated to licensed 3G use, the total amount of spectrum available for mobile telephony services in these countries now exceeds 180 MHz, in most cases by a wide margin. In particular, we estimate that the total amount of spectrum available for first-, second- and third-generation mobile communications services in most Western European countries is generally about 250-300 MHz, and ranges from a high of almost 365 MHz in the United Kingdom to a low of about 187 MHz in Norway.[122]

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maximum of three blocks of 10 MHz each, or 30 MHz total, of paired spectrum. *Rules for Conduct of the Auction for the Award of Licenses for UMTS/IMT-2000 3G Mobile Communications*, Ruling by the President's Chamber, Feb. 18, 2000, at 3-9, *available at* http://www.regtp.de/en/reg_tele/start/fs_05.html; Telekom Control Auction Web Site, *available at* http://www.tkc.at/www/tkc_main.nsf/pages/Willkommen-e. Given the total amount of paired spectrum offered for auction in Germany and Austria, this bidding limit ensured a minimum of four competitors in each market. Ultimately, all the successful bidders in both the German and Austrian auctions ended up with 20 MHz of paired spectrum, the minimum required to obtain a license. As a result, both auctions resulted in the award of six licenses.

[120] On 3G licensing in Japan, see *The Principles on Radio Station Licenses for IMT-2000*, Press Release, The Ministry of Posts and Telecommunications of Japan, Dec. 10, 1999, available at http://www.mpt.go.jp/pressrelease/english/telecomm/news991210.html. Brazil's duopoly policy in mobile telecommunications services is detailed in Felix Gilman, *International Spectrum Auction Handbook: Policies for Licensing Radio Spectrum in Nations around the World*, Telecommunications Reports International, Inc., 2000, at 60-64. Brazil plans to end the mobile duopoly in 2001 with the auction of three additional mobile licenses in each region. *See* Nathalia Jabur, *Brazil Seeks US$3.4 Billion for Mobile*, Reuters, November 29, 2000. In July 2000, the Chinese government ordered the military to surrender control of a third mobile operator, Great Wall Telecom, to China United Telecommunications Corp. (China Unicom), the second largest mobile operator in China. Matt Pottinger, *Chinese Military to Hand Mobile Business to Unicom*, Reuters, July 13, 2000.

[121] *ERO Information Document on GSM Frequency Utilisation within Europe*, European Radiocommunications Office, March 2000, *available at* http://www.ero.dk/. The only two Western European countries in which the total amount of spectrum available for first- and second-generation mobile communications services combined exceeds 180 MHz are the United Kingdom (nearly 225 MHz) and the Netherlands (nearly 212 MHz). In the remaining Western European countries, the total amount of first- and second-generation mobile spectrum is less than 180 MHz.

[122] This estimate includes Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. The total amount of mobile telephony spectrum in Norway is relatively low because Norway has a duopoly in second-generation mobile services. The total amount of first- and second-generation mobile spectrum available in these countries is provided in *ERO Information Document on GSM Frequency Utilisation within Europe*, European
(continued….)

42. Prior to the start of the 3G licensing process, the average amount of spectrum assigned to individual mobile operators in most Western European countries was generally within the limits of the Commission's CMRS spectrum cap.[123] Licenses awarded to both new and incumbent operators in the 3G licensing process have ranged in size from 35 MHz to 20 MHz.[124] Those 3G licensees that are not incumbent mobile operators are limited to the amount of spectrum they acquired in the 3G licensing process. In contrast, the additional spectrum to which incumbent mobile operators have gained access as a result of the 3G licensing process puts each of these operators' total spectrum holdings (for 1G, 2G, and 3G services) in excess of the Commission's CMRS spectrum cap.[125] Thus, because most European countries have allocated more total spectrum for mobile telecommunications services, they are able to allow individual carriers to acquire larger total spectrum holdings than would be permitted under our spectrum cap policy, while at the same time ensuring that there are at least four, and often more, competitors in their markets.

43. We also note that other countries limit the amount of spectrum operators can acquire in the secondary market. In the vast majority of countries, including EU Member States, strict limits on trading of wireless licenses and/or spectrum rights render a spectrum cap largely superfluous. Apart from the United States, only a relative few countries, including Canada, Australia and New Zealand, allow spectrum licenses to be traded both in whole and in part.[126] In Canada, as in the United States, spectrum trading is subject to a spectrum cap, although Canada has adopted a 55 MHz cap for its CMRS spectrum allocation.[127] Both Australia and New Zealand rely on general competition law, rather than a spectrum cap or other special restrictions on spectrum acquisition, to control an operator's ability to acquire access to spectrum in the secondary market.[128] In Australia, spectrum aggregation limits have been used to restrict bidding in spectrum auctions, but these spectrum caps generally expire once the auction ends and

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Radiocommunications Office, March 2000. Information about the amount of 3G spectrum available in these countries comes from the web sites of the relevant national regulatory authorities.

[123] *Id*. In particular, the average amount of spectrum assigned to individual operators for first- and second-generation mobile services is less than 45 MHz in Austria, Belgium, Denmark, Finland, Germany, Greece, Italy, Netherlands, Norway, Portugal, and Sweden. We estimate that the average assignment of first- and second-generation mobile spectrum combined exceeds 45 MHz in the United Kingdom, France, Switzerland, Spain and Ireland. The average assignment of spectrum designated for second-generation mobile services (that is, excluding spectrum for first-generation analog services) exceeds 45 MHz in only three of these countries, the United Kingdom, France and Switzerland.

[124] Information about the size of 3G licenses comes from the web sites of the relevant national regulatory authorities. In the United Kingdom, the largest license, 35 MHz, was reserved for a new entrant. In Italy, if new entrants succeeded in winning one of five 25 MHz licenses offered for auction, they became eligible to purchase one of two additional 10 MHz blocks of spectrum reserved for new entrants. In the remaining countries, licenses were open to incumbents and new entrants on an equal basis regardless of size.

[125] The amount of first- and second-generation mobile spectrum assigned to individual incumbent European operators is provided in *ERO Information Document on GSM Frequency Utilisation within Europe*, European Radiocommunications Office, March 2000. Information about the amount of 3G spectrum assigned to these operators comes from the web sites of the relevant national regulatory authorities.

[126] Felix Gilman, *International Spectrum Auction Handbook: Policies for Licensing Radio Spectrum in Nations around the World*, Telecommunications Reports International, Inc., 2000, at 54, 91, 132.

[127] *Id*. at 132.

[128] *Id*. at 57, 91.

the spectrum is assigned. The Australian Competition and Communications Commission (ACCC) is empowered to intervene to prevent trades of spectrum licenses where it believes the acquisition of a license will result in a substantial lessening of competition, and it has demonstrated a willingness to exercise this authority.[129]

44. *Discussion*. We generally seek comment on the lessons to be learned from experience internationally, as summarized above. In addressing these issues, commenters should consider the significance of the differences between the United States and foreign countries. For instance, for a number of reasons, the availability of spectrum below 3 GHz, which is generally considered the frequency range best suited for mobile services, appears to be less constrained abroad than in the United States. This allows other countries to allocate larger amounts of technically suitable spectrum to CMRS than in the United States, which in turn allows them to permit higher overall aggregation limits for individual carriers without compromising the ability to maintain multiple facilities-based providers. We further note that countries in both the European Union (EU) and Asia are generally less flexible than the United States in their approach to spectrum management. In particular, unlike our "flexible use" approach in the United States, spectrum management policies abroad generally do not afford wireless operators the flexibility to deploy 3G technologies on spectrum currently licensed for 2G services. Moreover, in contrast to our rules on transferability of licenses and partitioning and disaggregation, laws in the EU and Asia typically do not as yet permit licensees to trade rights to use radio spectrum, but require that any transfer of spectrum be back to the licensing authority.[130]

45. We also seek comment generally on how international developments relate to the question of whether to eliminate spectrum limits to direct the course of development in U.S. CMRS markets. We note that most EU Member States have already licensed 3G spectrum or are planning to do so by the first half of 2001 to give operators sufficient lead time to plan for 3G deployment. Spectrum aggregation limits may affect U.S. development of advanced wireless services over the short term. We ask parties to comment on the trade-offs that we will face in the United States during this time, compared to other countries that appear able to maintain a competitive market structure using mechanisms such as limiting the number of licenses per carrier, while also allocating larger quantities of unencumbered spectrum because they have more spectrum available. We also seek comment on whether U.S. carriers may require smaller amounts of total spectrum for 2G and 3G services than their counterparts in Europe and Asia because our policies afford U.S. carriers more flexibility with respect to spectrum use and alternative means of acquiring access to spectrum. Finally, we seek comment on whether any of the mechanisms other countries use to ensure they have an adequate number of competitors in their markets might be adapted to the U.S. market, as an alternative to our spectrum cap approach. Commenters should provide data on these and any other international issues that they believe will assist us in our review of these regulations.

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[129] For example, in May 1999, the ACCC decided to block a bid by C&W Optus to take over AAPT Ltd, based in part on the ground that C&W Optus would thereby have gained access to spectrum that it had been prohibited from acquiring under spectrum aggregation limits that had applied to the earlier PCS and LMDS auctions. *Id*. at 57.

[130] The EU has drafted legislation that would permit Member States to make provision for licensees to trade rights to use radio spectrum, but only where such rights have been assigned by national regulatory authorities through an auction. Article 8.4, Proposal for a Directive of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, Commission of the European Communities, July 12, 2000, at 20, *available at* http://europa.eu.int/ISPO/infosoc/telecompolicy/review99/Welcome.html.

C. Possible Modifications to the CMRS Spectrum Cap and Cellular Cross-Interest Rule

46. In the event that we do not eliminate our spectrum aggregation limits, we also request comment on whether specific attributes of the CMRS spectrum cap and cellular cross-interest rule should be modified to allow some of the benefits that may arise from additional cross-ownership interests.[131] To the extent that certain revisions to these rules would reduce any public interest costs of our limits or promote objectives discussed above, we seek comment on how to implement them without significantly increasing barriers to entry for new competitors or risk reducing benefits to wireless consumers.

1. Possible Modifications to the CMRS Spectrum Cap

47. In addition to the possible fundamental modification of the amount of spectrum permitted to be held under the cap discussed above,[132] we seek comment on other aspects of the CMRS spectrum cap that could be modified to increase carriers' flexibility and promote our various public policy objectives. Because there are a number of options available for consideration when evaluating the aggregation of CMRS spectrum within geographic areas, proponents of each alternative should explain why it is necessary in the public interest and should support their assertions with specific data and analysis.

48. To begin, we seek comment on the effect of recent changes in CMRS markets, particularly the emergence of broadband PCS licensees as competitors to cellular licensees,[133] on the rationale for a 10 percent population overlap threshold. What are the public interest benefits of increasing the threshold and do those benefits outweigh any potential for reduced consumer benefits from the concentration of ownership or control of CMRS licenses? Would increasing the threshold facilitate in any way carriers' buildout of seamless nationwide service footprints? If we were to adopt a different approach to overlap analysis, would we need to increase the current 10 percent threshold?

49. We solicit comment on whether there is a mechanism for triggering the application of a spectrum cap in given geographic areas that might be superior to our current overlap standard. In a regulatory environment where partitioning is permitted and geographic authorizations are increasingly issued for all spectrum subject to the cap, clarifying and/or modifying our rule to treat licensees in each service similarly may be in the public interest. Under the current rule, any overlap between attributable PCS licensed service areas (*i.e.,* between MTAs and BTAs) is subject to the cap, while a cellular CGSA or station-defined SMR service area only counts towards the cap if it overlaps 10 percent or more of the PCS licensed service area's population. Moreover, although SMR is no longer licensed only on a site-by-site basis, the current rule's overlap analysis focuses on "SMR service area(s)."[134] Accordingly, we ask for comment on the pros and cons of adopting a simplified overlap standard that turns on a certain allowable percentage of overlap between *licensed* service areas. For example, assuming a 10 percent threshold, one possible approach would be a standard where a PCS BTA-based license's overlap with a partitioned MTA-based license would not come under the cap if the population covered by the overlap were less than 10 percent of the total population of the PCS BTA *and* less than 10 percent of the total population of the partitioned PCS MTA. Similarly, if we were to eliminate the cellular cross-interest rule

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[131] Similarly, commenters should address any possible interim modifications that would benefit the public interest in the event that we decide to sunset our spectrum aggregation limits in the future.

[132] *See supra* para. 22, 39.

[133] *See generally* discussion *supra* para. 14-15.

[134] 47 C.F.R. § 20.6(c).

under such a standard, an A-Block cellular license's overlap in CGSA with the CGSA of a B-Block cellular license would not trigger the cap if the population covered by the overlap were less than 10 percent of the total population of the A-Block CGSA *and* less than 10 percent of the total population of the B-Block CGSA. A variation of this standard would be to exempt overlaps from the cap if the population in the overlap area were less than 10 percent of the total population of the more populous licensed service area. In addition, the threshold could be set at some level other than 10 percent. We seek comment on these and any other possible approaches.

50. With respect to SMR spectrum licensed on a site-by-site basis, the current rules require that, in calculating the amount of attributable spectrum, an entity must count all 800- and 900-MHz channels located at any SMR base station inside the geographic area where there is significant overlap with PCS or cellular licensees.[135] The rule also provides that all 800-MHz channels located on an least one of those identified base stations count as 50 kHz (25 kHz paired) and all 900-MHz channels located on at least one of those identified base stations count as 25 kHz (12.5 kHz paired).[136] Regardless of how much 800-MHz and 900-MHz SMR spectrum an entity actually controls, no more than 10 MHz of such spectrum is attributed to it for purposes of determining compliance with the cap.[137]

51. We seek comment here on whether recent developments in the SMR industry warrant any modification of the special provisions for SMR overlap analysis and calculation of attributable spectrum. The original justification for the maximum attribution of 10 MHz was based on the conclusion that SMR spectrum is not equivalent to cellular or broadband PCS. Specifically, we noted that it was encumbered by existing licensees, that channels were historically assigned on a station-by-station basis, rather than by geographic area, and that the spectrum was not available as a contiguous block.[138] We seek comment on whether the rationale for this 10 MHz limit continues in today's marketplace for broadband CMRS. For example, how have our recent auctions of SMR spectrum affected the rationale to limit the amount of SMR spectrum attributed to a carrier? Do we need to clarify our spectrum cap analysis to account for application of the cap when these auctioned geographic-based SMR licenses overlap with PCS licensed service areas?[139] In addition, should significant recent acquisition and merger activity lead us to question the assumption that SMR spectrum is difficult to reconfigure? If we were to revise our approach to station-defined SMR spectrum, should we increase the maximum attributable amount from 10 MHz to a higher figure (*e.g*., 15 or 20 MHz), or should we simply attribute to each carrier the actual spectrum it has in each market? If we were to adopt the latter approach, how would we determine the amount of spectrum and define the geographic area for our overlap analysis?

52. We also seek comment on whether we should modify the ownership attribution standards. The Commission chose a 20 percent attribution level for broadband CMRS to help ensure the availability of capital investment without compromising incentives for full competition, which could arise with too

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[135] *Id*. § 20.6(b).

[136] *Id*.

[137] *Id*.

[138] *See CMRS Third Report and Order*, 9 FCC Rcd at 8112-14 ¶¶ 270-75.

[139] Section 20.6(c) only compares an SMR "service area" to a PCS "licensed service area"; because SMR is no longer licensed only on a station-defined basis, the rule may need to be modified to apply to SMR "*licensed* service areas" (which would include station-defined and geographic based authorizations).

much common ownership of competitors.[140] The Commission permits small businesses, rural telephone companies, and passive institutional investors to hold ownership interests up to 40 percent in CMRS providers without attribution. Similarly, the Commission allows entities to hold non-controlling equity interests up to 40 percent in a broadband PCS licensee or applicant that is a small business. Should the 20 percent general attribution standard be modified? If so, what are the public interest benefits and/or harms of modifying the 20 percent standard? We also seek comment on the effect that a 40 percent attribution standard has had on the ability of CMRS providers to obtain capital. Have small businesses benefited from their general 40 percent attribution standard? Again, commenters proposing a different standard should provide analytical support for their proposals.

53. We also seek comment on whether any of our other ownership attribution criteria should be modified. In the past we have found that even a noncontrolling interest in a competitor would significantly reduce competitive incentives.[141] Are there situations where an entity can acquire effective control over another entity that are not adequately contemplated under our attribution standards? Alternatively, are there situations proscribed by our attribution rules that do not pose a threat to competition? Should we attribute spectrum used pursuant to potential spectrum leasing arrangements,[142] or to management and joint marketing agreements?

2. Possible Modifications to the Cellular Cross-Interest Rule

54. We sought comment above on the possible repeal of the cellular cross-interest rule. In the alternative, can we modify the rule so that it does not apply in certain circumstances where other regulations will provide adequate safeguards? One possibility we have mentioned would be to have the rule apply only in markets where there are a limited number of competitors to the existing cellular providers.[143] Accordingly, we seek comment on whether there is a need to maintain any cellular-specific restrictions in more urban areas, where there is generally a larger number of competitive choices for consumers. Would the absence of service-specific restrictions, along with maintaining the general 45 MHz spectrum cap, foster secondary markets in disaggregated cellular spectrum while providing sufficient protection from potentially anticompetitive behavior by preventing the outright consolidation of two 25 MHz cellular licensees? Although cellular providers still maintain large market shares in MSAs, would cellular/cellular combinations be more anticompetitive than cellular/PCS or PCS/PCS combinations if the cellular cross-interest rule is repealed in MSAs? Commenters should focus on whether cellular combinations would be able to sustain prices above the competitive level without reduction in market shares and explain their conclusions with specific data such as customer churn percentages and whether these are price driven, quality/coverage driven, or both.

55. Another possibility, given that cellular licensees can now disaggregate their spectrum, would be to replace the current rule with a separate cellular spectrum cap of 35 MHz (or some other amount). Under the current cross-interest rule, an entity with an attributable interest in a cellular license cannot hold a 5 percent interest in a disaggregated license for even 1 MHz of spectrum on the other channel

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[140] *See generally CMRS Spectrum Cap Report and Order*, 11 FCC Rcd at 7879-87 ¶¶ 117-32.

[141] *Id.*

[142] *See Secondary Markets NPRM* at ¶ 49.

[143] *See, e.g., First Biennial Review Order*, 15 FCC Rcd at 9257 ¶ 85.

block in an overlapping CGSA. Such a rule change would allow increased opportunities for partnering[144] while maintaining protection against the complete consolidation of two 25 MHz cellular carriers. We seek comment on the potential effects of such a change of the cellular cross-interest rule. In addition, we ask parties to comment on any modifications necessary to permit parties to disaggregate spectrum as contemplated in our *Cellular Disaggregation Order*.[145]

56. In addition, we seek comment on the public interest benefits and/or harms of increasing the 5 percent ownership interest limit in a cellular licensee when one has a controlling or otherwise attributable interest in the other licensee in an overlapping CGSA. In general, a higher attribution standard may permit increased investment, but it would also potentially allow greater consolidation of cellular interests. Moreover, although the cross-interest rule prohibits interests greater than 5 percent, our ownership disclosure standards for wireless telecommunications services only require licensees to report interests greater than 10 percent.[146] We therefore seek comment on whether conformity between these two provisions would permit the Commission more accurately to regulate compliance with the cellular cross-interest rule.

57. We also seek comment on whether we should modify the divestiture provisions related to this rule. For example, should we revise the rule to operate similar to the spectrum cap? Currently, both regulations require divestiture of interests acquired as a result of an assignment of authorization or transfer of control to occur prior to the consummation of the transfer or assignment. With respect to the spectrum cap, however, we consider parties to have come into compliance with the rule once they have submitted an application for assignment or transfer of control of sufficient spectrum to comply with the cap.[147] By contrast, under the cross-interest rule a party would be required to obtain a rule waiver if it could not completely divest the prohibited cross-ownership interest prior to consummation. Commenters are asked to address the competitive and public interest implications of harmonizing these and any other provisions of the two rules.

IV. CONCLUSION

58. Pursuant to the mandate in section 11 of the Communications Act, we hereby seek comment in this NPRM on whether the CMRS spectrum cap and cellular cross-interest rule, as currently formulated, are no longer necessary in the public interest. We seek public input and data, so that we may best assess the impact of recent competitive trends, our spectrum management responsibilities, and the international developments discussed above.

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[144] For example, a 25 MHz cellular carrier could theoretically combine with a carrier holding 10 MHz of cellular spectrum on the other channel block, while the carrier holding the remaining 15 MHz of cellular spectrum in that market could pair with a 30 MHz PCS licensee without triggering the 45 MHz general CMRS spectrum cap.

[145] *See generally Cellular Disaggregation Order*.

[146] *See* 47 C.F.R. § 1.919.

[147] *See id*. § 20.6(e)(4)(A).

V. PROCEDURAL MATTERS

A. Regulatory Flexibility Act

59. As required by the Regulatory Flexibility Act,[148] the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible impact on small entities of the proposals in the Notice of Proposed Rulemaking. The IRFA is set forth in the Appendix. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the NPRM, and they must have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer Information Bureau, Reference Information Center, will send a copy of this NPRM, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act.[149]

B. *Ex Parte* Rules

60. This is a permit-but-disclose notice and comment rule making proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in Commission rules.[150]

C. Filing Procedures

61. Pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's Rules,[151] interested parties may file comments on or before [60 days after publication in the Federal Register] and reply comments on or before [30 days after comment date]. Comments and reply comments should be filed in WT Docket No. 01-14. All relevant and timely filings will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, interested parties must file an original and four copies of each filing. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 12th St., S.W., Rm. TW-A325, Washington, D.C. 20554, with a copy to Michael J. Rowan, Commercial Wireless Division, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th St., S.W., Rm. 4A-131, Washington, D.C. 20554. One copy of all filings should also be sent to the Commission's copy contractor.

62. Comments may also be filed using the Commission's Electronic Comment Filing System (ECFS).[152] Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. Parties may also submit an electronic comment by Internet E-Mail. To obtain filing instructions for E-Mail comments, commenters should send an E-mail to ecfs@fcc.gov, and should include the following words in the body of the message: "get form <your E-Mail address>." A sample form and directions will be sent in reply. Or you may obtain a copy of the ASCII Electronic Transmittal Form (FORM-ET) at

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[148] *See* 5 U.S.C. § 603.

[149] *See id*. § 603(a).

[150] *See generally* 47 C.F.R. §§ 1.1202, 1.1203, 1.1206.

[151] *Id*. §§ 1.415, 1.419.

[152] *See* Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24,121 (1998).

<http://www.fcc.gov/e-file/email.html>.

63. Comments and reply comments will be available for public inspection during regular business hours at the FCC Reference Information Center, Rm. CY-A257, at the Federal Communications Commission, 445 12th St., S.W., Washington, D.C. 20554. Copies of comments and reply comments are available through the Commission's duplicating contractor: International Transcription Service, Inc. (ITS, Inc.), 1231 20th Street, N.W., Washington, D.C. 20037, (202) 857-3800.

VI. ORDERING CLAUSES

64. Accordingly, IT IS ORDERED, pursuant to the authority of sections 1, 4(i), 11, 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 161, 303(g), and 303(r), that this Notice of Proposed Rulemaking is ADOPTED.

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

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

APPENDIX

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act (RFA),[1] the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and proposals in this Notice of Proposed Rulemaking (NPRM), WT Docket No. 01-14. Written public comments are requested on this IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the rest of this NPRM, as set forth in paragraph 61, *supra*, and they must have a separate and distinct heading designating them as responses to the IRFA. The Commission will send a copy of this NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA) in accordance with RFA.[2] In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.[3]

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

2. As part of our biennial regulatory review, pursuant to section 11 of the Communications Act,[4] we solicit comment on whether we should retain, modify, or eliminate the commercial mobile radio services (CMRS) spectrum cap.[5] We also seek comment on whether we should retain, modify, or repeal the cellular cross-interest rule.[6] In asking these questions, the NPRM looks at recent competitive changes in CMRS markets, reexamines the public interest objectives that the spectrum limits are designed to achieve, and asks whether there are alternatives to the existing rules that avoid any potential public interest costs. It seeks comment on how international trends and developments in the marketplace since the completion of our last biennial review in September 1999 may affect our analysis. The NPRM discusses reliance on case-by-case analysis of the potential competitive effects of a proposed spectrum holding pursuant to section 310(d) of the Communications Act as one potential alternative to the current rules, and it discusses possible modifications to the spectrum cap and cross-interest rules. These include, among other things: 1) increasing the amount of spectrum that a single entity may hold in a given geographic area beyond 45/55 MHz; 2) modifying the spectrum cap's 10 percent population overlap threshold and/or attribution rules; 3) eliminating or modifying the rule that limits attributable Specialized Mobile Radio (SMR) spectrum to 10 MHz; 4) altering the cellular cross-interest rule's provisions as they relate to disaggregation of spectrum and/or post-licensing divestiture; and 5) modifying the ownership attribution standards under both rules. Through the process of seeking public comment and collecting data, we hope to assess the impact of recent competitive trends, international developments, and spectrum management and other regulatory considerations.

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[1] *See* 5 U.S.C. § 603. 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 Fairness Act of 1996 (SBREFA).

[2] *See* 5 U.S.C. § 603(a).

[3] *Id*.

[4] 47 U.S.C. § 161.

[5] *Id*. § 20.6.

[6] *Id*. § 22.942.

B. Legal Basis

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

C. Description and Estimate of the Small Entities Subject to the Rules

4. The RFA requires that an initial regulatory flexibility analysis be prepared for notice-and-comment rulemaking proceedings, unless the Agency certifies that "the rule will not, if promulgated, have a significant impact on a substantial number of small entities."[7] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[8] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[9] 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 SBA.[10] This IRFA describes and estimates the number of small-entity licensees that may be affected if the proposals in this NPRM are adopted.

5. This NPRM could result in rule changes that, if adopted, would affect small businesses that currently are or may become licensees in the cellular, broadband Personal Communications Services (PCS) and/or SMR services.

6. **Cellular Radiotelephone Service**. Neither the Commission nor the SBA has developed a definition of small entities applicable to cellular licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to radiotelephone (wireless) companies. This provides that a small entity is a radiotelephone company employing no more than 1,500 persons.[11] According to the Bureau of the Census, only twelve radiotelephone firms from a total of 1,178 such firms, which operated during 1992, had 1,000 or more employees.[12] Therefore, even if all twelve of these firms were cellular telephone companies, nearly all cellular carriers were small businesses under the SBA's definition. In addition, we note that there are 1,758 cellular licenses; however, a cellular licensee may own several licenses. In addition, according to the most recent *Telecommunications Industry Revenue* data, 808 carriers reported that they were engaged in the provision of either cellular service or PCS, which are placed together in the data. We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of cellular service carriers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 808 small

[7] 5 U.S.C. § 603(b)(3).

[8] *Id*. § 601(6).

[9] *Id*. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." *Id.*

[10] Small Business Act, 15 U.S.C. § 632 (1996).

[11] 13 C.F.R. § 121.201, SIC code 4812.

[12] *1992 Census, Series UC92-S-1*, at Table 5, SIC code 4812.

cellular service carriers that may be affected by these proposals, if adopted.

7. **Broadband Personal Communications Service (PCS)**. The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of less than $40 million in the three previous calendar years.[13] For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[14] These regulations defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.[15] No small businesses within the SBA-approved definition bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders initially won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.[16] On March 23, 1999, the Commission reauctioned 347 C, D, E, and F Block licenses; there were 48 small business winning bidders. Based on this information, we conclude that the number of small broadband PCS licensees will include the 90 winning C Block bidders and the 93 qualifying bidders in the D, E, and F blocks plus the 48 winning bidders in the re-auction, for a total of approximately 231 small entity PCS providers as defined by the SBA and the Commission's auction rules. In addition, the Commission anticipates that a total of 422 licenses will be auctioned in the broadband PCS reauction of the C & F Blocks that began December 12, 2000. Therefore, we conclude that the number of additional C & F Block broadband PCS licensees that may ultimately be affected by these proposals could be as many as 422.

8. **Specialized Mobile Radio (SMR)**. Pursuant to 47 C.F.R. § 90.814(b)(1), the Commission has defined "small business" for purposes of auctioning 900 MHz SMR licenses, 800 MHz SMR licenses for the upper 200 channels, and 800 MHz SMR licenses for the lower 230 channels on the 800 MHz band as a firm that has had average annual gross revenues of $15 million or less in the three preceding calendar years.[17] The SBA has approved this small business size standard for the 800 MHz and 900 MHz auctions. The auction of the 1,020 900 MHz SMR geographic area licenses for the 900 MHz SMR band began on December 5, 1995, and was completed on April 15, 1996. Sixty (60) winning bidders for geographic area licenses in the 900 MHz SMR band qualified as small businesses under the $15 million size standard. The auction of the 525 800 MHz SMR geographic area licenses for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten (10) winning bidders for geographic area licenses for the upper 200 channels in the 800 MHz SMR band qualified as small businesses under the $15 million size standard.

9. The lower 230 channels in the 800 MHz SMR band are divided between General Category channels (the upper 150 channels) and the lower 80 channels. The auction of the 1,053 800 MHz SMR

[13] *See* Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap; Amendment of the Commission's Cellular/PCS Cross-Ownership Rule, WT Docket 96-59, GN Docket 90-314, *Report and Order*, 11 FCC Rcd 7824, 7850-52 ¶¶ 57-60 (1996) (*CMRS Spectrum Cap Report and Order*); *see also* 47 C.F.R. § 24.720(b).

[14] *See CMRS Spectrum Cap Report and Order,* 11 FCC Rcd at 7852 ¶ 60.

[15] *See*, *e.g*., Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, *Fifth Report and Order*, 9 FCC Rcd 5532, 5581-84 (1994).

[16] FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (released Jan. 14, 1997).

[17] *Id*. § 90.814(b)(1).

geographic area licenses (1,050 - 800 MHz licenses for the General Category channels, and 3 - 800 MHz licenses for the upper 200 channels from a previous auction) for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. At the close of the auction, 1,030 licenses were won by bidders. Eleven (11) winning bidders for geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the $15 million size standard. The auction of the 2,800 800 MHz SMR geographic area licenses for the lower 80 channels of the 800 MHz SMR service began on November 1, 2000, and was completed on December 5, 2000. Nineteen (19) winning bidders for geographic area licenses for the lower 80 channels in the 800 MHz SMR band qualified as small businesses under the $15 million size standard. In addition, there are numerous incumbent site-by-site SMR licensees on the 800 and 900 MHz bands. The Commission awards bidding credits in auctions for geographic area 800 MHz and 900 MHz SMR licenses to firms that had revenues of no more than $15 million in each of the three previous calendar years.[18]

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

10. This NPRM neither proposes nor anticipates any additional reporting, recordkeeping or other compliance measures.

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

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

12. In our September 1999 *First Biennial Review Order*, we concluded that retention of the CMRS spectrum cap and cellular cross-interest rule serves the public interest. We found that the benefits of these bright-line rules in addressing concerns about increased spectrum aggregation continued to make these approaches preferable to exclusive reliance on case-by-case review under section 310(d). By setting bright lines for permissible ownership interests, we found that the rules continued to benefit both the telecommunications industry and subscribers, including small businesses, by providing regulatory certainty and facilitating more rapid processing of transactions. Specifically, we noted that case-by-case review is especially expensive and time-consuming for small businesses, which often do not have the requisite resources.

13. In our 2000 biennial regulatory review pursuant to section 11, we here reexamine our findings and determinations in September 1999. Since that time, there have been international and economic developments that have significantly affected CMRS markets. For example, consolidation within the CMRS industry in an effort to create national service footprints has tended to reduce the number of smaller entities providing broadband CMRS on a purely local level. As part of this 2000 biennial review, we seek to develop a record regarding whether the CMRS spectrum cap and cellular cross-interest rule continue to make regulatory and economic sense in CMRS markets in the current-, mid-, and long-term. In doing so, we generally request comment on whether retention, modification, or elimination of the CMRS spectrum cap and/or cellular cross-interest rule is appropriate with respect to

[18] 47 C.F.R. § 90.814(b)(1).

small businesses that are licensees in the cellular, broadband PCS and/or SMR services. We seek comment on whether there continues to be a need for these rules to ensure that new entrants, including small businesses, have access to spectrum licenses both at auction and in the secondary market. We inquire whether these bright-line rules continue to create efficiencies and reduce transaction costs for small business. We consider the impact on small businesses if we were to adopt alternative approaches that rely more heavily on case-by-case review. We also seek specific comment on various aspects of these rules that particularly affect small business, such as the whether our September 1999 decision to increase attribution standards to 40 percent has benefited small businesses.

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

14. None.

CONCURRING STATEMENT OF COMMISSIONER HAROLD FURCHTGOTT-ROTH

Re: 2000 Biennial Regulatory Review—Spectrum Aggregation Limits for Commercial Mobile Radio Services, Notice of Proposed Rulemaking, WT Docket No. 01-14, (rel. January 23, 2001).

The use of a spectrum cap is a drastic regulatory remedy that continues to search for a corresponding competitive ill. To the extent the marketplace was ever genetically predisposed to such a malady (a disputable proposition in itself), I believe such treatment has long ago outlived its effectiveness.[1] In light of this diagnosis, I would have crafted today's Notice in a substantially different way. There is nothing in the Communications Act that requires the FCC to promulgate any type of spectrum cap. As I have stated before, other agencies are fully capable of monitoring the competitive health of the CMRS marketplace. Nor is there any policy rationale for the continued application of the technology- and efficiency-stifling caps. Thus, I would have tentatively concluded here that the caps should be eliminated. Finally, I have grown impatient with the Commission's repeated re-examinations of these issues without substantial alterations in our policy approach. Nonetheless, in light of our current policy posture, I fully support fulfilling our promise to re-examine the caps as part of this year's biennial review. I look forward to a full record on these issues and prompt resolution by the Commission.

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[1] *See Separate Statement of Commissioner Harold Furchtgott-Roth, 1998 Biennial Review, Spectrum Aggregation Limits for Wireless Carriers, Memorandum Opinion and Order on Reconsideration,* WT Docket No. 98-205 (rel. Nov. 8, 2000)*; Separate Statement of Commissioner Harold Furchtgott-Roth in 1998 Biennial Review, Spectrum Aggregation Limits for Wireless Telecommunications Carriers,* 15 FCC Rcd 9219 (1999).