

Before the  
Federal Communications Commission  
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
)  
2000 Biennial Review )  
Spectrum Aggregation Limits for )  
Commercial Mobile Radio Services )

WT Docket No. 01-14

To: The Commission

**COMMENTS OF CINGULAR WIRELESS LLC**

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## SUMMARY

Cingular advocates elimination of the spectrum cap and cellular cross-ownership rule. The history of these spectrum restrictions demonstrates that:

- the market analysis on which the restrictions are based is seriously out-of-date;
- the restrictions were originally based on no economic analysis;
- when the court required the FCC to undertake such an analysis, the Commission did not correctly apply the DOJ's Merger Guidelines and instead relied only on a quasi-HHI calculation;
- the Commission has changed positions repeatedly and never clearly defined the relevant product or geographic market;
- the restrictions have always been backward-looking rather than forward-looking; and
- rather than continually truing-up the cap as market entry occurred, each spectrum allocation has been dealt with case-by-case to determine whether the cap should apply.

As mentioned, the spectrum cap is flawed because it is based only on a limited subset of allocated spectrum that can be used to provide mobile two-way services. Given that the amount of available spectrum that can be used for this purpose has expanded since the cap was first adopted, the relevant product market should be redefined to include *all allocated and likely to be allocated* spectrum for two-way mobile communications. The attached White Paper recalculates the HHI on the basis of such a product market, and concludes that carriers could aggregate up to *116 MHz* without causing the HHI to exceed 1898 — the concentration threshold previously used by the FCC.

Even if the Commission could justify defining the relevant market to include only that spectrum *currently* used for voice, or all cellular, broadband PCS, and SMR spectrum (consistent with the cap), meaningful economic competition exists to warrant the elimination of the CMRS spectrum cap. In the mobile voice market, the number of people served by five or more competitors has increased from 153 million people at the time of the *Fourth CMRS Competition Report* to 182 million people today — an *18 percent* increase. Likewise, consideration of *all* SMR as well as cellular and broadband PCS providers in the competition equation increases the number of operators offering CMRS services to as many as 16 in a given market. As measured by subscriber growth, demand for basic wireless services has grown by more than *300 percent* since the cap was first adopted.

In order to respond to this demand, carriers are paying previously unseen amounts to acquire additional spectrum and build out their systems. The high prices paid for licenses at auction are a natural impediment to any carrier who might contemplate the warehousing of spectrum to limit competition and drive up prices. Given the costs of acquiring the license and satisfying the FCC's

build-out requirements, a carrier has significant incentives to get customers on its system to pay down these capital expenditures as soon as possible, irrespective of the spectrum cap.

Elimination of the cap will not lead to harmful consolidation. Market factors serve as a natural barrier to harmful consolidation, *e.g.*, seeking out and finding a willing seller, access to sufficient capital, technical compatibility issues, the high cost of spectrum, and the presence of six *nationwide* competitors. Nevertheless, to the extent a threat to competition remains, regulatory oversight by DOJ acts as a final barrier to harmful consolidation. Finally, any consolidation which might occur may not be harmful, *e.g.*, consolidation to offer advanced services.

Elimination of the spectrum cap also serves the public interest. Currently, the cap stands as a barrier to the emergence of mobile Internet access and other data services as well as the introduction of innovative new technologies and services, including advanced wireless services such as 3G services. For example, the total amount of spectrum available for 1G, 2G, and 3G services in European countries is now between 250 MHz and 350 MHz, and some incumbents there have already reached aggregate amounts that significantly exceed the FCC's current cap. Given the high-spectrum demand for 3G services and the increasing competition in the wireless market, the spectrum cap simply does not make sense. Elimination of the cap will remove the type of regulation that then Commissioner Powell said "distort[s] the competitive process."

At a minimum, the cap should not apply to new spectrum allocations. The availability of additional spectrum is essential to allow carriers both to meet current capacity demands resulting from dramatic increases in wireless subscribership, as well as to support the deployment of new and advanced wireless services, *e.g.*, 3G services. Clearly, it would make no sense to apply the CMRS spectrum cap to new spectrum allocations that are intended to allow existing wireless carriers to satisfy these needs.

Finally, the cellular cross-interest rule should be repealed. The rule was adopted at a time when the Commission specifically restricted the provisioning of mobile telephone service to two carriers. Today, however, there are at least *six* mobile telephony providers licensed in virtually every major market, and the vast majority of markets now have between three and eight licensees *providing* mobile telephony service. Continued retention of the rule would also conflict with the Commission's regulatory parity mandate in Section 332 if the spectrum cap is eliminated.

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**COMMENTS OF CINGULAR WIRELESS LLC**

Cingular Wireless LLC (“Cingular”) hereby submits comments in response to the *Notice of Proposed Rulemaking* in the above-referenced proceeding which seeks comment on whether to retain spectrum aggregation limits for certain commercial mobile radio service (“CMRS”) providers.<sup>1</sup> Cingular opposes the imposition of spectrum caps, especially where there is no evidence of market failure. Given the robust competition in the CMRS industry, Cingular urges the Federal Communications Commission (“FCC” or “Commission”) to eliminate the 45 MHz limitation on CMRS spectrum contained in Section 20.6 (“spectrum cap”) and the cellular cross-ownership prohibition contained in Section 22.942 of its rules as part of this biennial review. Attached in support of these comments is a White Paper prepared by Strategic Policy Research.<sup>2</sup>

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<sup>1</sup> *2000 Biennial Regulatory Review — Spectrum Aggregation Limits for Commercial Mobile Radio Services*, WT Docket No. 01-14, *Notice of Proposed Rulemaking*, FCC 01-28 (rel. Jan. 23, 2001) (“*NPRM*”), *summarized*, 66 Fed. Reg. 9798 (Feb. 12, 2001).

<sup>2</sup> White Paper on Elimination of the Spectrum Cap, prepared by Strategic Policy Research (April 12, 2001) (“White Paper”).

## INTRODUCTION

This proceeding is part of the Commission's statutorily required review of the regulations it applies to providers of telecommunications services 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."<sup>3</sup> If the regulation no longer has an economic basis, the Commission has "an affirmative obligation to repeal or modify that regulation."<sup>4</sup>

The *NPRM* proposes a comprehensive review of two regulations that currently limit the aggregation of certain CMRS spectrum: the CMRS spectrum cap and the cellular cross-ownership rule. The spectrum cap limits CMRS carriers to 45 MHz of cellular, broadband personal communications service ("PCS"), and specialized mobile radio ("SMR") spectrum in any given market<sup>5</sup> and was imposed "to avoid excessive concentration of licenses and promote and preserve competition."<sup>6</sup> The cellular cross-ownership rule prohibits any entity from having a direct or indirect ownership interest of more than 5% in one cellular license when it has an attributable interest in the

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<sup>3</sup> 47 U.S.C. § 161(a)(2)(Supp. IV 1998).

<sup>4</sup> *Amendment of Parts 20 and 24 of the Commission's Rules — Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, *Report and Order*, 11 F.C.C.R. 7824, n.1 (1996) (citing 47 U.S.C. § 161(b)) ("Report and Order"), *aff'd sub nom. BellSouth Corp. v. FCC*, 162 F.3d 1215 (D.C. Cir. 1999); *see also Cincinnati Bell Telephone Co. v. FCC*, 69 F.3d 752, 767-68 (6th Cir. 1995) (stating that the FCC cannot restrict eligibility without an economic rationale justifying such action); *Geller v. FCC*, 610 F.2d 973, 980 (D.C. Cir. 1979) (stating that the Commission is statutorily required to consider whether a rule still serves the public interest).

<sup>5</sup> 47 C.F.R. § 20.6(a). The cap contains an exception allowing carriers to aggregate up to 55 MHz of spectrum in rural service areas ("RSAs"). *Id.*

<sup>6</sup> *Report and Order*, 11 F.C.C.R. at 7869.

other license.<sup>7</sup> Attributable interest is defined generally to include an ownership interest of 20% or more, as well as any controlling interest.<sup>8</sup>

The fundamental inquiry in this biennial review process is whether, as a result of meaningful economic competition among CMRS providers since the cap's inception, these limits are still necessary and in the public interest. Cingular demonstrates below that: (i) the original cap was flawed; (ii) it is unnecessary given the substantial facilities-based and other competition within the CMRS industry; and (iii) it actually limits innovation such as the roll-out of advanced services nationally. The White Paper prepared by Strategic Policy Research concludes that:

the Commission's aging spectrum cap is most unlikely to embody an optimal efficiency tradeoff that maximizes the nation's current and future economic welfare. A hat that fits an infant is unlikely to continue to fit the child as the child grows. . . . As the spectrum cap *shrinks* in relation to the "extent of the market". . . and the efficient scale and scope of operations, the adverse consequences for economic welfare grow.<sup>9</sup>

The White Paper adds that the "rich array of communications capabilities [today] . . . is like the ocean pounding the seashore — the notion that one supplier or set of suppliers can significantly constrain or prevent the water from reaching the beach is hard to accept."<sup>10</sup>

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<sup>7</sup> 47 C.F.R. § 22.942(a).

<sup>8</sup> 47 C.F.R. § 22.942(d).

<sup>9</sup> White Paper at 8-9 (emphasis in original).

<sup>10</sup> White Paper at 13.

## **I. HISTORY OF FCC SPECTRUM CAP RULES AND THE CELLULAR CROSS-OWNERSHIP PROHIBITION**

To fully appreciate why the present-day spectrum aggregation limits have outlived their usefulness, it is helpful to review their evolution. As shown below, the cap has not had a satisfactory economic basis.

### **A. Early Development of the Cellular and PCS Caps**

In 1993, the Commission adopted spectrum aggregation limits governing two new personal communications services described as narrowband and broadband PCS. Prior to adoption of these caps, the sole limitation on mobile communication spectrum holdings was the cellular cross-ownership rule which precluded a given party from holding more than one of the two 25 MHz cellular telephone licenses in a single market.<sup>11</sup>

#### **1. Narrowband PCS Cap**

In adopting its narrowband PCS rules in 1993, the Commission decided to limit the amount of narrowband PCS spectrum that could be held by a single company. The Commission determined that, “in order to ensure that narrowband PCS services would be offered on a competitive basis,” no single licensee would be permitted to hold licenses for more than three channels, either paired or unpaired, in any geographic area.<sup>12</sup>

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<sup>11</sup> The current version of this rule is contained in 47 C.F.R. § 22.942.

<sup>12</sup> *Amendment of the Commission’s Rules to Establish New Narrowband Personal Communications Services*, GEN Docket No. 90-314, *First Report and Order*, 8 F.C.C.R. 7162, 7168, n.21 (1993) (“*Narrowband Order*”), *recon.*, *Memorandum Opinion and Order*, 9 F.C.C.R. 1309, *appeal dismissed sub nom.*, *BellSouth Corp. v. FCC*, 17 F.3d 1487 (D.C. Cir. 1994).

Last year, however, the Commission eliminated this cap because the paging/messaging industry is highly competitive.<sup>13</sup> The Commission concluded that the narrowband PCS spectrum aggregation limit was no longer needed to prevent an undue concentration of licenses.<sup>14</sup> Perhaps most importantly, the Commission recognized that retention of the aggregation limit could have been harmful because (i) it may have had the effect of disadvantaging narrowband PCS licensees in competition with other services; and (ii) it precluded narrowband PCS licensees from obtaining enough spectrum to support new and innovative services.<sup>15</sup>

## 2. Broadband PCS Cap

In addition to the narrowband PCS cap, the Commission also limited the amount of broadband PCS spectrum that could be held by a particular entity. The Commission adopted an overall 40 MHz cap on the amount of broadband PCS spectrum that could be aggregated by parties not also holding cellular licenses.<sup>16</sup> The Commission indicated that the purpose of the cap was “to prohibit excessive spectrum aggregation.”<sup>17</sup> Thus, the cap was designed “to provide for between three and seven PCS licensees in each area [which] will ensure that there is a robust and competitive

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<sup>13</sup> *Amendment of the Commission’s Rules to Establish New Personal Communications Services*, GEN Docket No. 90-314, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 15 F.C.C.R. 10456, 10464-65 (2000) (“*Narrowband Second R&O*”).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Amendment of the Commission’s Rules to Establish New Personal Communications Services*, GEN Docket No. 90-314, *Second Report and Order*, 8 F.C.C.R. 7700, 7727-28 (1993) (“*Second Report*”), *recon.*, *Memorandum Opinion and Order*, 9 F.C.C.R. 4957 (1994) (“*MO&O*”), *recon.*, *Order on Reconsideration*, 9 F.C.C.R. 4441, *further recon.*, *Third Memorandum and Order*, 9 F.C.C.R. 6908 (1994), *remanded sub nom. Cincinnati Bell*, 69 F.3d at 752.

<sup>17</sup> *MO&O*, 9 F.C.C.R. at 4983.

market for PCS services.”<sup>18</sup> The Commission specifically rejected a larger cap for rural areas because “the demand in rural areas is expected to be sufficiently low that there should be no need for more than 40 MHz by any one provider.”<sup>19</sup>

### 3. Cellular/PCS Cap

In adopting the broadband PCS cap, the Commission felt that “a comparable separate limit should be placed on cellular providers since they already hold 25 MHz of clear spectrum and already have a large number of existing wireless customers.”<sup>20</sup> The Commission was concerned that “because of cellular’s ‘headstart’ in the wireless telephone market, existing infrastructure and large base of customers, cellular carriers might be able to dominate the wireless market if they receive more than 10 MHz of PCS spectrum.”<sup>21</sup> Accordingly, the Commission adopted a 35 MHz cap on the amount of combined broadband PCS and cellular spectrum a single entity could aggregate — 25 MHz of cellular plus 10 MHz of broadband PCS.<sup>22</sup>

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<sup>18</sup> *Second Report*, 8 F.C.C.R. at 7728.

<sup>19</sup> *MO&O*, 9 F.C.C.R. at 4983. The Commission further noted that “the demand in rural areas is expected to be sufficiently low that there should be no need for more than 40 MHz by any one provider. . . . [I]t would be preferable to have additional competitors serve these customers rather than to license more than 40 MHz of spectrum to one entity.” *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.* at 4982-83.

<sup>22</sup> *Second Report*, 8 F.C.C.R. at 7728-29, 7744-7747, 7813; *MO&O*, 9 F.C.C.R. at 4983-85, 5066-67.

## **B. Development of the CMRS 45 MHz Spectrum Cap**

### **1. Initial Development of the Cap**

In 1994, within six months of finalizing its broadband PCS cap, the FCC initiated a proceeding to consider, among other things, whether there should be a spectrum cap applicable to all CMRS.<sup>23</sup> The Commission also sought comment on whether the cap should be imposed only on a subset of CMRS services, saying that if “CMRS consists of several discrete markets that do not compete with one another, it could be argued that an overarching spectrum cap is not justified because there is no danger that market power in one market will affect competition in another.”<sup>24</sup> The Commission found that the record developed in response to the Commission’s spectrum cap proposal effectively established that CMRS consisted of two submarkets — narrowband services and broadband services.<sup>25</sup>

The Commission decided that the CMRS spectrum cap should not apply to all CMRS, but should only apply to *certain* broadband services — “a subset of services with significant (more than 5 MHz) bandwidth.”<sup>26</sup> Although the Commission never expressly defined the relevant product market, it found that the cap should apply to broadband services because “a large amount of

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<sup>23</sup> See *Regulatory Treatment of Mobile Services*, GN Docket 93-252, *Further Notice of Proposed Rulemaking*, 9 F.C.C.R. 2863, 2881-84 (1994) (“*CMRS NPRM*”).

<sup>24</sup> *Id.* at 2882.

<sup>25</sup> *Regulatory Treatment of Mobile Services*, GN Docket 93-252, *Third Report and Order*, 9 F.C.C.R. 7988, 8105-08 & n.480, 8111 (1994).

<sup>26</sup> *Id.* at 8105-06 (footnote omitted).

spectrum is beneficial for providing mobile telephone service.”<sup>27</sup> Therefore, the Commission subjected only cellular, broadband PCS, and SMR spectrum to the 45 MHz spectrum cap.<sup>28</sup>

The Commission specifically excluded “all terrestrial narrowband radio services,” such as paging and narrowband PCS, from the 45 MHz cap.<sup>29</sup> It reasoned that providers of such services were “highly unlikely” to “accumulate as much as 5 MHz” of spectrum, and that there was, accordingly, “little risk that an entity could use narrowband allocations to exert market power over CMRS as a whole.”<sup>30</sup> The Commission also excluded mobile satellite services from the 45 MHz CMRS spectrum cap, even though such services utilize more than 5 MHz and provide broadband-type services, reasoning that the “capacity per geographic market” of such carriers is much less than that of terrestrial broadband service providers.<sup>31</sup>

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<sup>27</sup> *Id.* at 8105 n.480.

<sup>28</sup> *Id.* at 8109 (codified at 47 C.F.R. § 20.6(a)). In subjecting SMR spectrum to the cap, the Commission focused exclusively on SMR service that was similar to cellular mobile telephone service, specifically addressing Nextel’s position as a competitor to cellular-like telephone service providers. *Id.* at 8113-14. It noted that SMR spectrum, like broadband PCS spectrum, could be aggregated “for cellular-type services,” and that SMRs had the “potential . . . to offer services that are nearly identical to those offered by both cellular and broadband PCS.” *Id.* at 8108-09. It also said that by treating SMR spectrum the same as cellular and broadband PCS, it was “establish[ing] effective parity” between these competing, similar services. *Id.* at 8110.

<sup>29</sup> *Id.* at 8111. The FCC, however, did not exempt 900 MHz SMR spectrum used exclusively for non-voice service. *See* 47 C.F.R. § 20.6.

<sup>30</sup> 9 F.C.C.R. at 8111.

<sup>31</sup> *Id.* at 8112.

## 2. *Cincinnati Bell v. FCC and the Commission's Revisitation of the CMRS Spectrum Cap*

Because the spectrum caps had a questionable economic basis, an appeal was taken in the Sixth Circuit. In November 1995, the court held that the 35 MHz cellular/PCS spectrum cap lacked an adequate basis. The Court found:

while avoiding excessive concentration of licensees certainly is a permissible goal under the Communications Act, simply precluding a class of potential licensees from obtaining licenses (without a supported economic justification for doing so) solves the problem arbitrarily. . . . The need to avoid "excessive concentration of licenses" does not provide the requisite "reasoned basis." Without any economic rationale, the Cellular eligibility rules are nothing more than an arbitrary regulation of who may bid on which Personal Communications Service licenses.<sup>32</sup>

On remand, the Commission issued a *Report and Order* eliminating both the 35 MHz PCS/cellular and the 40 MHz PCS spectrum caps, but retaining the 45 MHz broadband "CMRS spectrum cap" applicable to broadband PCS, cellular, and SMR services.<sup>33</sup> Because the Sixth Circuit had explicitly required the Commission to base any rules limiting access to spectrum on an "economic rationale," the *Report and Order* supported retention of the 45 MHz CMRS spectrum cap by applying a "quasi" Herfindahl-Hirschman Index ("HHI") analysis to a series of hypothetical CMRS market share scenarios, using selective spectrum blocks as a proxy for market share.<sup>34</sup> The

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<sup>32</sup> *Cincinnati Bell*, 69 F.3d at 764 (citation omitted).

<sup>33</sup> *Report and Order*, 11 F.C.C.R. at 7869.

<sup>34</sup> *Id.* at 7869-71, 7899-04 (Appendix A). The HHI is a measure of economic concentration used by the Department of Justice and the Federal Trade Commission in evaluating horizontal mergers. See Department of Justice and Federal Trade Commission 1992 Horizontal Merger Guidelines, 4 Trade Reg. Rep. (CCH) ¶ 13104, § 1.5 (dated Apr. 2, 1992, as revised, Apr. 8, 1997) ("*Merger Guidelines*").

Commission failed to properly identify the relevant product market — a critical component of any HHI analysis — and only included cellular, broadband PCS, and the largest interconnected SMR licensees in its analysis.<sup>35</sup> The Commission determined that 1898 would be the relevant HHI threshold for excessive concentration in a market and would be used as a “bright-line” test, rather than as a triggering mechanism for an in-depth competitive analysis.<sup>36</sup>

The Commission determined that the 35 MHz cellular/PCS spectrum cap and the 40 MHz PCS cap would be rendered unnecessary by retention of the 45 MHz CMRS cap. The FCC concluded that a “single 45 MHz cap will now enable cellular licensees to obtain 20 MHz of broadband PCS spectrum.”<sup>37</sup> The 45 MHz cap effectively prevented cellular carriers from acquiring the A, B and C block 30 MHz PCS licenses, thus forcing the introduction of at least 3 new competitors in every market.

### 3. 1998 Biennial Review

In 1999, the Commission revisited the cap and the cellular cross-ownership prohibition and decided to retain both rules with slight modifications.<sup>38</sup> The Commission recognized the substantial increase in competition in CMRS markets since the adoption of the cap in 1994.<sup>39</sup> Nevertheless, the

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<sup>35</sup> *Id.* at 7870-71.

<sup>36</sup> *See id.* at 7872. To date, no waivers of the 45 MHz spectrum cap have been granted.

<sup>37</sup> *Report and Order*, 11 F.C.C.R. at 7875.

<sup>38</sup> *1998 Biennial Regulatory Review — Spectrum Aggregation Limits for Wireless Telecommunications Carriers*, WT Docket 98-205, *Report and Order*, 15 F.C.C.R. 9219, 9222-23 (1999) (“*Biennial Order*”) *recon.*, *Memorandum Opinion and Order on Reconsideration*, 15 F.C.C.R. 22072 (2000) (“*Biennial Recon.*”).

<sup>39</sup> *Biennial Order*, 15 F.C.C.R. at 9222, 9231-32.

majority felt that regulatory barriers were needed to protect against industry consolidation.<sup>40</sup> Moreover, despite its prior statements that there would be no reason to raise spectrum aggregation limits in rural areas,<sup>41</sup> the Commission increased the amount of spectrum that could be aggregated in rural areas to 55 MHz.<sup>42</sup>

The Commission also decided to retain the separate cellular cross-interest rule, and rejected suggestions that it should rely solely upon the spectrum cap.<sup>43</sup> Without the cross-ownership limitation, the Commission was concerned that a single entity could obtain “an attributable interest in one of the cellular licensees, including control, and up to 20 percent equity ownership interest in the other cellular licensee in the same market.”<sup>44</sup>

In the “spirit of compromise,” then Commissioner Powell concurred in the decision to retain these limits but stated:

I was expecting — in view of the public interest guidance in section 11 and the optimistic outlook for competition in the CMRS industry — a repeal or significant modification of the spectrum cap; at least a sunset. Truthfully, this item before us today is not what I expected.

I cannot imagine any other industry segment that can better laud their state of economic competition as “meaningful.” Prices are down and falling. Innovation, churn and penetration are up and still climbing. And, as this item points out, the newer PCS licensees are adding more

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<sup>40</sup> *Id.* at 9232-33.

<sup>41</sup> *MO&O*, 9 F.C.C.R. at 4983.

<sup>42</sup> *Biennial Order*, 15 F.C.C.R. at 9256-57.

<sup>43</sup> *Id.* at 9251-52. The Commission did modify the rule, however, to permit an entity with a controlling interest in one cellular license to obtain a non-controlling interest of 5 percent or less in the other cellular license in the market. *Id.* at 9252-53.

<sup>44</sup> *Biennial Order*, 15 F.C.C.R. at 9252.

new customers than the incumbent cellular carriers. All of this seems pretty “meaningful” to me. . . .

Well, this time we are not doing much to modify or eliminate the rule and I do not necessarily agree with all of the findings and competitive analysis in the item. For example, I think that the barriers to “reconsolidation” (including searching for and finding a willing seller, capital constraints, technical compatibility issues, and FCC and antitrust review) are pretty high. Thus, *I do not think that elimination of the cap will result in massive consolidation at the local level immediately.*<sup>45</sup>

For similar reasons, Commissioner Furchgott-Roth dissented:

Evidence supporting the increasingly bright CMRS competitive landscape continues to accumulate. Yet, in today's decision, the Commission perpetuates largely unchanged its 45 MHz CMRS spectrum cap and cellular cross interest rules. These provisions have as their purported goals the promotion and protection of competition, and the prevention of undue concentration of CMRS spectrum. In my view, however, the facts and the data simply do not support the retention of these rules. I would have preferred that we simply eliminate them. Competition in the wireless sector is flourishing, and I continue to have great faith in the Department of Justice's ability to root out and protect consumers from anticompetitive behavior should it arise.<sup>46</sup>

On reconsideration, Commissioner Powell stated that he agreed with Commissioner Furchgott-Roth that “the spectrum cap has outlived its usefulness” and that he looked forward to revisiting the issue as part of the upcoming 2000 biennial review.<sup>47</sup>

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<sup>45</sup> *Id.* at 9296 (Separate Statement of Commissioner Michael Powell) (emphasis added).

<sup>46</sup> *Id.* at 9294 (Dissenting Statement of Commissioner Harold Furchgott-Roth).

<sup>47</sup> *Biennial Recon.*, 15 F.C.C.R. at 22072, 22085 (Separate Statement of Commissioner Michael Powell).

### C. Applicability of the Spectrum Cap to New Wireless Allocations

Since adoption of the 45 MHz cap, the Commission has allocated new spectrum which can be used for mobile voice services without adjusting the cap. Although the allocation of new spectrum most certainly would impact any HHI analysis, a revised analysis has never been undertaken. Instead, each allocation has been reviewed case-by-case to determine whether it should be subject to the cap. For example:

- **Wireless Communications Services (“WCS”):** This service was allocated for mobile use and is classified as CMRS. Moreover, the Commission modeled the WCS rules largely after the cellular and PCS rules, with one notable exception — the spectrum cap. The Commission determined that WCS spectrum holdings would not be subject to the CMRS spectrum cap.<sup>48</sup>
- **General Wireless Communications Services (“GWCS”):** GWCS may provide a variety of fixed and mobile communications services, including: voice, video, and data transmission, private microwave, broadcast auxiliary, and ground-to-air voice and video.<sup>49</sup> The Commission determined, however, that although GWCS licensees may be CMRS licensees, they will not be subject to the CMRS spectrum cap.<sup>50</sup>
- **700 MHz services:** The Commission permitted the use of the 746-764 MHz and 776-794 MHz bands for mobile services comparable to those offered on cellular, broadband PCS, and SMR spectrum, but determined that the spectrum would not be subject to the cap.<sup>51</sup> In essence, the Commission determined that the CMRS

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<sup>48</sup> *Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service*, GN Docket No. 96-228, *Report and Order*, 12 F.C.C.R. 10785, 10787-88 (1997).

<sup>49</sup> *See Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use*, ET Docket No. 94-32, *Second Report and Order*, 11 F.C.C.R. 624, 640 (1995).

<sup>50</sup> *See Id.* at 644-45.

<sup>51</sup> *Service Rules for the 746-764 and 776-794 MHz Bands*, WT Docket No. 99-168, *First Report and Order*, 15 F.C.C.R. 476, 496-98 (2000), *recon.*, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 99-168, FCC 00-224 (rel. June 30, 2000).

spectrum cap was a sufficient safeguard against consolidation of spectrum to refrain from extending the cap to new spectrum allocations.<sup>52</sup>

This case-by-case approach undermines the usefulness of the cap as a bright-line rule.<sup>53</sup> As noted in the White Paper: “A ‘bright line rule’ might produce ‘bad’ results (as is the case here) but at least it offers some certainty. On the other hand, a poorly conceived ‘bright line rule,’ coupled with the use of case-by-case exceptions, is the worst of both worlds.”<sup>54</sup>

## II. THE 45 MHz CMRS SPECTRUM CAP SHOULD BE ELIMINATED

### A. The Relevant Product and Geographic Market at Which the Cap is Aimed Has Never Been Clear

Consistent with the Department of Justice’s (“DOJ”) *Merger Guidelines*, the Commission has previously stated that “[w]e begin our competitive analysis by determining the relevant product and geographic markets.”<sup>55</sup> The *Guidelines* themselves provide that *any assessment of competitive*

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<sup>52</sup> *Id.* at 497-98.

<sup>53</sup> See White Paper at 17.

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

<sup>55</sup> *Pittencrieff Comm., Inc. and Nextel Comm., Inc.*, DA 97-2260, *Memorandum Opinion and Order*, 13 F.C.C.R. 8935, 8943 (WTB 1997); see *Ameritech Corp. and GTE Consumer Services Inc.*, DA 99-1677, *Memorandum Opinion and Order*, 15 F.C.C.R. 6667, 6671 (1999); *LEC Provision of Interexchange Services Originating in the LEC’s Local Exchange Area, Second Report and Order* in CC Docket No. 96-149 and *Third Report and Order* in CC Docket No. 96-61, 12 F.C.C.R. 15756, 15768 (1997), *recon.*, 12 F.C.C.R. 8730 (1997); *Non-Accounting Safeguards*, CC Docket No. 96-149, *Notice of Proposed Rulemaking*, 11 F.C.C.R. 18877, 18932 (1996); *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, CS Docket No. 95-61, *Second Annual Report*, 11 F.C.C.R. 2060, 2122 (1995); see also *NYNEX Corp. and Bell Atlantic Corp.*, *Memorandum Opinion and Order*, 12 F.C.C.R. 19985, 20014 (1997); *MCI Comm. Corp. and British Telecomm. plc*, GN Docket No. 96-245, *Memorandum Opinion and Order*, 12 F.C.C.R. 15351, 15368 (1997).

*effects cannot be made unless and until the relevant markets have been defined.*<sup>56</sup> Unfortunately, the Commission has inconsistently defined the relevant product market supporting the cap, as indicated below:

- In 1996, the Commission stated that “the relevant product market is mobile two-way voice communications service.”<sup>57</sup> The spectrum cap, however, does not apply to all mobile two-way voice services (*e.g.*, MSS) and does apply to spectrum used for non-voice purposes (*e.g.*, some 900 MHz SMR).
- Later in 1996, the WTB denied a waiver request filed by BellSouth to exclude its non-voice, data-only spectrum from the cap because the waiver was based on “the mistaken assumption that the underlying purpose of the CMRS spectrum cap is only to ensure competition in voice transmission” when the rule was actually designed to prevent “excessive aggregation of spectrum” that “could reduce competition by precluding entry” and “might thus confer excessive market power on incumbents.”<sup>58</sup>
- On September 10, 1997, the Commission stated: “The spectrum cap is not limited to real time, two-way switched phone service; rather it covers a variety of services within the definition of CMRS.”<sup>59</sup>
- On appeal, the D.C. Circuit affirmed the FCC based on Commission statements “that it was concerned with the effect of CMRS spectrum aggregation on the development of market power and on the competitive market for mobile services *as a whole* in light of the predicted potential for various services along that spectrum to converge. The general cap on CMRS spectrum thus reflects concern for the CMRS market generally.”<sup>60</sup>

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<sup>56</sup> *Merger Guidelines* at §§ 1.1, 1.2; *see also* Peter C. Ward, *Federal Trade Commission: Law, Practice and Procedure*, § 8.04[4] (2000).

<sup>57</sup> *Report and Order*, 11 F.C.C.R. at 7904.

<sup>58</sup> Letter to John Beasley, BellSouth, from Chief, ADWTB, 11 F.C.C.R. 9970, 9971 (WTB 1996).

<sup>59</sup> *Application for Review of BellSouth Wireless, Inc., Amendment of Parts 20 and 24 of the Commission’s Rules*, WT Docket No. 96-59, *Memorandum Opinion and Order*, 12 F.C.C.R. 14031, 14039 (1997), *aff’d sub nom.*, *BellSouth Corp. v. FCC*, 162 F.3d 1215 (D.C. Cir. 1999).

<sup>60</sup> *BellSouth Corp.*, 162 F.3d at 1222 (emphasis added).

- In its *1998 Biennial Review Order*, however, the Commission appeared to select the interconnected mobile voice telephone market as the relevant product market.<sup>61</sup> BellSouth filed a petition for reconsideration asking the Commission to clarify the relevant product and geographic product markets and requested that, if the only relevant product market was voice services, the CMRS spectrum cap rule be modified consistent with this rationale.
- On November 8, 2000, the Commission denied reconsideration and restated that the relevant product market was voice services, which was separate and distinct from the market for data and other non-voice offerings:

*[O]ur focus on competitive conditions in the market for mobile voice telephone services is appropriate. Consumers obtain their mobile telephone services principally from cellular, PCS, or digital SMR carriers. Our finding that mobile voice services constitute a separate product market is consistent with previous decisions by the Commission in which it has defined interconnected voice services as a separate product market and concluded that consumers obtain such service principally from broadband PCS, cellular, and digital SMR licensees, even though CMRS licensees may also provide other types of communications services.\**

\* *See id.* These services may include, for example, trunked dispatch, paging/messaging services, and two-way mobile data services. We note also that our determination is consistent with analyses by the U.S. Department of Justice when reviewing large mergers of telecommunications companies. *Id.*<sup>62</sup>

- In the instant *NPRM*, however, the Commission states:

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

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<sup>61</sup> *Report and Order*, 15 F.C.C.R. at 9248-49.

<sup>62</sup> *Biennial Recon.*, 15 F.C.C.R. at 22078 (emphasis added) (citations omitted).

PCS, or SMR spectrum is used for any service within the definition of CMRS.<sup>63</sup>

Although extremely unclear, it appears that the relevant product market is two-way mobile voice services and that the spectrum cap is designed to prevent the excessive concentration of spectrum capable of being used for mobile voice services, regardless of whether it is actually used for this purpose. If so, the economic basis for the cap is fatally flawed because the HHI analysis supporting the cap fails to consider all two-way mobile voice services.

The cap's relevant geographic market is equally difficult to discern. The spectrum cap rule itself used PCS license areas — metropolitan trading areas (“MTAs”) and basic trading areas (“BTAs”) — as the starting point for analyzing whether a party holds too much spectrum in the PCS, cellular, and SMR bands. In fact, the cap applies to a “significant overlap” *within the PCS licensing area* — and not all cellular or SMR spectrum within the PCS license area may even be deemed “significant.” According to Section 20.6(c)(1), “significant overlap of a PCS licensed service area and CGSA(s) . . . or SMR service area(s) occurs when at least 10 percent *of the population of the PCS licensed service area . . . is within the CGSA(s) and/or SMR service areas.*”<sup>64</sup> In other words, a carrier's cellular or SMR spectrum counts toward the spectrum cap only if the carrier is licensed to serve 10 percent or more of the population of the designated PCS service area. As a result, the rule would not consider 25 MHz of cellular spectrum to be “significant,” even if the entire metropolitan statistical area (“MSA”) overlapped with the MTA, as long as the MSA's population (“pops”) is less than one-tenth of the MTA's pops. In fact, 200 of the 305 MSAs contain less than

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<sup>63</sup> See *NPRM* at ¶ 18 n.68.

<sup>64</sup> 47 C.F.R. § 20.6(c)(1) (emphasis added).

10 percent of the pops in their respective MTAs.<sup>65</sup> Moreover, the Commission’s HHI analysis appears to be based exclusively upon concentration in cellular license areas, particularly MSAs, rather than MTAs.<sup>66</sup> If an MSA is truly the relevant market, it would not be rational for the rule to exclude 25 MHz of cellular spectrum from the cap because of the small relative size of the MSA, as well as up to 45 MHz of MTA-wide spectrum, for a total of 70 MHz.

**B. The Cap’s Reliance on A Historical Rather Than A Forward-Looking Review of Market Share is Inappropriate Given the Rapidly Changing Market**

Another basis for eliminating the cap is that it is based on historical rather than forward-looking competitive factors. For example, the cap relies upon historical or static market share proxies that are no more than a snapshot from a moment in time. Reliance upon historical data is inappropriate, however, given the fact that, in a fluid and dynamic CMRS marketplace, market share figures are constantly changing. Rather, in keeping with DOJ’s approach in the *Merger Guidelines*, market shares should “be calculated using the best indicator of firms’ *future competitive significance*.”<sup>67</sup>

The Commission has recognized the importance of forward-looking market shares in citing an economic analysis by Brookings Institution economists Robert W. Crandall and Robert H. Gertner, noting that “Crandall and Gertner caution against using HHIs because the CMRS sector is

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<sup>65</sup> For example, every MSA in the Carolinas MTA is less than 10 percent of the MTA’s pops. There are also many MSAs in the New York MTA that are less than 10 percent of the MTA, and Austin (which has more than one million pops) is less than 10 percent of the Dallas MTA.

<sup>66</sup> See *Biennial Order*, 15 F.C.C.R. at 9236-38.

<sup>67</sup> *Merger Guidelines* at § 1.41 (emphasis added).

such a dynamic industry.”<sup>68</sup> The Commission itself agreed that “[t]hese data provide important evidence that static measures of market share . . . do not fully describe competitive conditions in these markets. As a result of these findings, we recognize that conditions are changing rapidly.”<sup>69</sup>

Nevertheless, the spectrum cap remains in place based on historical data even though the industry is changing rapidly. As noted in the White Paper:

the cap is “backward-looking” rather than “forward-looking.” The Commission’s cap was set with reference to a particular *historical* set of circumstances—the desire to expand the number of wireless service suppliers at the time PCS licenses were being assigned. The numerical limit was set to prevent the existing cellular licensees from bidding for (or otherwise obtaining) the A, B and C block PCS licenses. . . . [T]he Commission cannot escape the fact that the particular numerical limit chosen is an artifact of an earlier day and has no discernible grounding in the rapidly changing wireless marketplace of today. Since the cap can be said to have accomplished its *historical* purpose (*i.e.*, has produced additional nationwide competitors), it is time for the Commission to declare victory and withdraw.<sup>70</sup>

Because the Commission has taken this historical approach, it has been unable to properly conduct a competitive assessment of the industry.

The Commission also has relied upon an arbitrary measure of input (spectrum blocks) rather than productive capacity:

The crucial issue for preserving competition is not how much spectrum has been allocated and assigned, but the productive capacity of that spectrum given advances in technology, changes in underlying

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<sup>68</sup> *Biennial Order*, 15 F.C.C.R. at 9238 (citing Comments of Bell Atlantic Mobile, Inc. at 17 (Jan. 25, 1999)).

<sup>69</sup> *Id.* (citation omitted).

<sup>70</sup> White Paper at 10.

rules and so forth. If the caps were recalculated to reflect, for example, call-carrying capacity assuming the most efficient technology, network design, *etc.*, it is likely that the numbers would come out differently.<sup>71</sup>

The White Paper concludes that the “[f]ailure to recalibrate the cap to reflect the effects of changes in relevant underlying [market] conditions results in loss of operating economies, diminution of productivity and inefficient utilization of spectrum resources.”<sup>72</sup>

**C. Current Economic Analyses of All Available and Proposed Two-Way Mobile Allocations Support Elimination of the Cap**

The Commission has asked for comment on the extent to which companies’ ability to use alternative spectrum outside of the broadband PCS, cellular, and SMR bands subject to the cap should affect its analysis of whether to retain the cap.<sup>73</sup> In particular, the Commission notes that other frequency bands, such as 700 MHz, will soon be auctioned and will allow the provisioning of wireless services, and it is exploring the possible use of other frequency bands below 3 GHz for advanced wireless services.<sup>74</sup> The Commission specifically seeks comment on what effect the

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<sup>71</sup> White Paper at 11.

<sup>72</sup> White Paper at 18.

<sup>73</sup> See *NPRM* at ¶ 35.

<sup>74</sup> *Id.*; see *Allocation of Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Services*, ET Docket No. 00-258, *Notice of Proposed Rule Making*, FCC 00-455 (rel. Jan. 5, 2001); see also FCC, “Spectrum Study of the 2500-2690 MHz Band: The Potential for Accommodating Third Generation Mobile Services,” Final Report (Mar. 30, 2001); NTIA, “The Potential for Accommodating Third Generation Mobile Systems in the 1700-1850 MHz Band: Federal Operations, Relocations Costs, and Operational Impacts,” Final Report (Mar. 2001).