

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Part 22 of the Commission's Rules	)	WT Docket No. 03-103
To Benefit the Consumers of Air-Ground	)	
Telecommunications Services	)	
	)	
Biennial Regulatory Review – Amendment of	)	
Parts 1, 22, and 90 of the Commission's Rules	)	

**REPLY COMMENTS OF VERIZON WIRELESS**

Verizon Wireless hereby submits its reply comment in response to the Notice of Proposed Rulemaking, FCC 03-95, released April 28, 2003, (“NPRM”). As discussed below, the Commission should not amend the airborne cellular rule in any way. The Commission likewise should not amend the air-ground rules to permit terrestrial use of the air-ground frequencies. The initial comments do not support changing these rules, and in fact present ample reason why they should remain as is. The comments show that the Commission’s original policy to separate the spectrum allocated for air-to-ground services from spectrum allocated for terrestrial services remains proper, and that allowing “flexible” use of either band to provide the other service would create significant risks of interference. Moreover, there is little support for making these changes. Given the record, the Commission should leave these rules intact.

**I. THE COMMISSION SHOULD NOT MODIFY THE AIRBORNE CELLULAR PHONE RULE.**

In the NPRM, the Commission asked whether it should repeal or modify its prohibition against the use of cellular equipment while airborne, Section 22.925. Only

two parties, AirCell and SITA, support modifying the airborne cellular rule, but only for technologies that are proven not to cause harmful interference to terrestrial cellular operations.<sup>1</sup> As discussed in Verizon Wireless' and Cingular Wireless' comments, however, there is no technology existing today that has been proven not to cause harmful interference to terrestrial cellular operations.<sup>2</sup> Neither AirCell nor SITA submitted any technical data demonstrating that this is the case. Other commenting parties strongly oppose modifying the rule to allow airborne cellular use.<sup>3</sup> Accordingly, there is no record basis for the Commission to modify or eliminate the airborne cellular rule.

Moreover, Verizon Wireless and other cellular licenses hold exclusive licenses to operate on the cellular RF spectrum. The Commission could not modify this rule to authorize other parties to operate in the cellular frequencies without violating its own exclusive licensing approach for the cellular spectrum. Nor could it allow air-to-ground use of the PCS band.<sup>4</sup> The one waiver that the Commission has granted for air-to-ground use of the cellular frequencies was deliberately limited to existing cellular licensees, to permit them to offer AirCell's airborne service from the geographic areas that had been

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<sup>1</sup> AirCell Comments at 11-12; SITA Comments at 6-7. AirCell comments that the rule should be modified now, while SITA states that the rule should be modified once trials demonstrate that on-board use of mobile phones pose no threat of harmful interference. *Id.* Neither commenter, however, provides any concrete standard for how such determinations could be made.

<sup>2</sup> Verizon Wireless Comments at 2-9; Cingular Wireless Comments at 10-17.

<sup>3</sup> Cingular Wireless Comments at 10-17; Qualcomm Comments at 9-10.

<sup>4</sup> Verizon Wireless and Qualcomm asked in their initial comments that a parallel prohibition on the use of PCS spectrum to provide airborne service be adopted. No party opposed these requests.

licensed to them.<sup>5</sup> A generic rule change that would open up cellular frequencies to airborne use, even on a non-interfering basis, would undermine existing licensees' rights that the law grants to them.<sup>6</sup> For this reason as well, Section 22.925 should not be modified to permit airborne use of the cellular spectrum.

## **II. THE COMMISSION SHOULD NOT ALLOW TERRESTRIAL USE OF AIR-GROUND FREQUENCIES.**

In the NPRM, the Commission sought comment on whether it should grant licensees the flexibility to provide terrestrial wireless services in the air-ground spectrum. The Commission asks whether allowing this expanded flexibility would raise any co-channel, adjacent channel, or other interference issues.<sup>7</sup>

There is no record support for this flexibility proposal, again confirming the wisdom of the Commission's existing rules that segregate air-to-ground from terrestrial spectrum uses. Initial comments do not support allowing licensees to provide terrestrial wireless services on the air-ground spectrum. Commenters addressing the issue either

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<sup>5</sup> The validity of that waiver is on appeal. See *AT&T Wireless Services, et al v. FCC*, Case No. 03-1043, United States Court of Appeals for the District of Columbia Circuit.

<sup>6</sup> See, e.g., 47 U.S.C. Sections 301 and 303.

<sup>7</sup> NPRM at 11, para. 20-21.

directly opposed allowing terrestrial use of the spectrum<sup>8</sup> or expressed concerns with the interference potential associated with expanding permissible uses of the air-ground band.<sup>9</sup>

Verizon Wireless agrees that allowing terrestrial operations to occur in the air-ground spectrum would present significant interference issues. First, the air-ground technical rules are such that air-ground base stations transmit in spectrum adjacent to the spectrum on which cellular B band base stations receive. As a result, there are potential interference problems whenever an air-ground base station is located near a cellular B band base station. Because there are relatively few air-ground base stations needed for air-ground service, B band cellular providers can avoid interference issues by careful cell placement and special filters.<sup>10</sup> However, should terrestrial service be allowed on the air-ground spectrum, licensees of that spectrum will need to put in more base stations thereby increasing the potential for interference with cellular B band carrier operations.

Second, as Motorola points out in its comments, the air-ground spectrum lies between the cellular radio service spectrum and public safety and other private wireless services spectrum. Motorola argues that, given the technical restrictions placed on the air-ground spectrum use, the air-ground spectrum serves as a guard band between cellular

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<sup>8</sup> AirCell Comments at 5 (citing the growing and critical demand for air-ground services); Cingular Comments at 6-7 (citing concerns that terrestrial use will degrade concurrent air-ground use of the same frequencies).

<sup>9</sup> American Mobile Telecommunications Association Comments at 4 (expressing concerns about interference to public safety services); Motorola Comments at 2-3 (stating concerns that increased use of the air-ground bands could increase the potential for interference to adjacent bands).

<sup>10</sup> See Cingular Comments at 10. The potential for interference is also reduced because air-ground service providers do not typically use high towers.

and the other services.<sup>11</sup> However, if the air-ground technical rules were amended to permit terrestrial use, interference issues could arise between these terrestrial operations and the adjacent users.

In order to avoid these interference concerns, the Commission should not amend the air-ground technical rules to permit terrestrial use of the air-ground spectrum.

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<sup>11</sup> Motorola Comments at 2-3.

### III. CONCLUSION

For the reasons stated above, the Commission should not amend the airborne cellular rule in any way. The Commission likewise should not amend the air-ground rules to permit terrestrial use of the air-ground frequencies.

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Respectfully submitted,

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