

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of)
)
Amendment of Part 2 of the Commission's) ET Docket No. 00-258
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)
Services)

To: The Commission

REPLY COMMENTS OF CINGULAR WIRELESS LLC

Cingular Wireless LLC (“Cingular”), by its attorneys, hereby replies to those comments submitted in response to the Commission’s *Notice of Proposed Rule Making* in this docket.¹ The record demonstrates that if Third Generation (“3G”) systems are to become a reality in the United States, a minimum of 160 MHz of additional unencumbered spectrum must be made available. Expeditious action is equally important to preserve the leadership role of the United States in the global wireless marketplace.

The FCC faces some hard choices regarding the source of this 160 MHz spectrum allocation. Consistent with the positions espoused by the United States at the 2000 World Radiocommunication Conference (“WRC-2000”), the bulk of this spectrum must come either from the Federal Government bands or the Multipoint Distribution Service/Instructional Fixed Television Service (“MDS/ITFS”) bands. Cingular’s preference from a technical and harmonization perspective is to use the Federal Government

¹*Notice of Proposed Rule Making*, FCC 00-455 (rel. Jan. 5, 2001) (“*NPRM*”), summarized, 66 Fed. Reg. 7438 (Jan. 23, 2001).

bands if they can be cleared and made available for 3G systems as soon as possible. Nevertheless, if the yet to be released report of the National Telecommunications and Information Administration (“NTIA”) reveals that sufficient spectrum in the government bands cannot be quickly made available and cleared of incompatible uses, the Commission must find a way to clear the MDS/ITFS bands and relocate the incumbents to comparable spectrum.

DISCUSSION

The majority of parties addressing the issue of how much spectrum is necessary to support 3G systems agrees with Cingular that at least 160 MHz of additional spectrum is required.² That amount was recognized at WRC-2000 as the minimum amount of spectrum that will be required to satisfy demand in the near term.³ As the Association Group notes, this amount is *in addition to* the spectrum already used for First Generation (“1G”) and Second Generation (“2G”) mobile services and the spectrum previously identified for 3G at the 1992 World Administrative Radiocommunication Conference (“WARC-92”).⁴ For

²See, e.g., Comments of Canadian Wireless Telecommunications Association (“CWTA”) at 1; Cellular Telecommunications & Internet Association, Telecommunications Industry Association, and Personal Communications Industry Association (“Association Group”) at 3; Cook Inlet Region Inc. (“Cook Inlet”) at 3; Motorola, Inc. (“Motorola”) at 7-8; Nortel Networks, Inc. (“Nortel”) at 3; Personal Communications Industry Association (“PCIA”) at 7; Qwest Wireless, LLC (“Qwest”) at 4; Radio Advisory Board of Canada (“RABC”) at 7-8; Telephone and Data Systems, Inc. (“TDS”) at 3 (arguing for a minimum allocation of 180 MHz); *see also* Comments of AT&T Wireless Services, Inc. (“AT&T Wireless”) at 3-4; Telecommunications Industry Association (“TIA”) at 2-3; Verizon Wireless (“Verizon”) at 4; *cf.* Association of America’s Public TV Stations at 4-5.

³See *NPRM* at ¶ 4 (citing Resolution 223, “Additional Frequency Bands Identified for IMT-2000,” Provisional Final Acts of the World Radiocommunication Conference (Istanbul, WRC-2000) (“WRC Resolution 223”); Comments of Motorola at 8 (noting that “the ITU recommendation of 160 MHz appears to be conservative when compared to more recent predictions”); PCIA at 7 (noting the need for “a new allocation of *at least* 160 MHz”).

⁴See Association Group Comments at 3; Resolution 223, *supra* note 3.

this additional spectrum to be sufficient, however, it must be in relatively large, contiguous blocks of spectrum and fully cleared.⁵ Prompt action is necessary to prevent the United States from falling further behind Europe and Asia, parts of which have already completed the licensing process and are expected to deploy 3G systems in as little as three months.⁶ In fact, as Verizon demonstrates, the total spectrum currently allocated for mobile services in the United States is approximately half of what is allocated in some of its European counterparts.⁷

Comments questioning the need for additional spectrum for 3G systems⁸ are contrary to the record⁹ and the express findings made at WRC-2000.¹⁰ Moreover, as Cingular noted in its comments, an Executive Memorandum dated October 2000 has already stated both the need and the urgency for the

⁵See, e.g., Comments of Association Group at 4; CWTA at 5; Cingular at 8-11; Cook Inlet at 4-5; PCIA at 8; TDS at 7-9. No matter what spectrum blocks are chosen for 3G in the United States, spectrum clearing will be required.

⁶See, e.g., Comments of Association Group at 2, 3-4; CWTA at 1-2; Cingular at 6-8; Cook Inlet at 5; Motorola at 8-10; PCIA at 8-9; Verizon at 6-7. For example, one Japanese carrier has just announced that it is on schedule to roll out the world's first 3G network on May 31, 2001. See "NTT DoCoMo Stands Firm on 3G Rollout," CTIA Daily News (Mar. 7, 2001); see also PCIA Comments at 9.

⁷See Verizon Comments at 6-7.

⁸See, e.g., Ad Hoc MDS Alliance ("Ad Hoc") at 3; National ITFS Association ("NIA") at 17-21; Network for Instructional TV, Inc. at 17-19; Wireless Communications Association International, Inc. ("WCA") at 5-6 n.14.

⁹See *supra* notes 2-3 and accompanying text.

¹⁰See Resolution 223, *supra* note 3; RABC Comments at 7-8 (providing an extract from the Conference Preparatory Meeting Report to WRC-2000 that describes the methodology used to establish the additional spectrum required).

United States to select additional spectrum to satisfy 3G service needs.¹¹ The record also reveals that while existing allocations may be used to *begin* the roll-out of 3G services in limited circumstances, they are insufficient to support the expected demand for the full range of such services given the increasing demand for current-generation services.¹² Although wireless carriers are also seeking to improve their spectral efficiency through technological advances, these efforts cannot serve as a substitute for the massive additional bandwidth needed.¹³ Moreover, many carriers are limited by regulatory requirements such as the need to continue offering analog service — thus constraining migration to fully digital technologies.¹⁴ Finally, spectrum in the 700 MHz band cited by some commenters as a possible solution to 3G spectrum needs has yet to be auctioned and is not an option in the near-term. It is currently heavily encumbered by existing broadcast operations which are not required to be cleared until the end of 2006 or, more likely, beyond.¹⁵

¹¹See U.S. Department of Commerce, National Telecommunications and Information Administration (“NTIA”), “Federal Operations in the 1755-1850 MHz Band: The Potential for Accommodating Third Generation Mobile Systems,” Interim Report at xi, 2 (rel. Nov. 15, 2000 (“Commerce Interim Report”)) (citing Executive Memorandum, Advanced Mobile Communications/Third Generation Wireless Systems (rel. Oct. 13, 2000)).

¹²See Comments of Association Group at 4; AT&T Wireless at 4; Cingular at 3-4 & n.9 (citing comments); Cook Inlet at 2; RABC at 5; Verizon at 5-6.

¹³See Comments of Association Group at 4; Cook Inlet at 2;

¹⁴See Cingular Comments at 3-4.

¹⁵See 47 U.S.C. § 309(j)(14); CTIA Comments at 10 n.24 (noting that because the 2006 deadline is only triggered if 85 percent of all televisions are DTV compatible, there is serious concern whether the deadline will be met). Moreover, the Administration just announced efforts to postpone the auction until 2004. See “Bush’s Spectrum Policy Catches Congress, FCC, Industry Off-Guard,” TR Daily (Mar. 1, 2001).

Given the heavy use of currently allocated spectrum for 1G and 2G services,¹⁶ and the questionable near-term availability and utility of currently allocated spectrum in the 700 MHz band, the bulk of the 160 MHz of required spectrum must come from either the Federal Government bands (1710-1755 MHz and 1755-1850 MHz) or the MDS/ITFS bands (2500-2690 MHz), if 3G services are to become a reality in the United States.¹⁷ Cingular agrees with commenters that the use of the Federal Government bands will advance global as well as regional harmonization efforts, as these are the bands identified for 3G use in Region 2.¹⁸ Harmonization should not be pursued, however, at the expense of rapid spectrum identification and band clearing.¹⁹ Because the main guardian of these bands, NTIA, noted that its comments will be supplied in a report to be released March 30, 2001, it is premature to speculate as to the viability of these bands for 3G.²⁰ Nevertheless, despite its preference for the Federal Government bands, Cingular agrees with concerns that the Commission's ability to responsibly allocate spectrum to 3G from these bands may

¹⁶*See supra* note 12 and accompanying text; *see also NPRM* at ¶ 36.

¹⁷*See* Cingular Comments at 15; *see also id.* at 23 (noting that 3G systems can also utilize spectrum at 2110-2150 and 2160-2165 MHz, which could be paired with other spectrum or allocated as an unpaired band that may be well-suited for Time Division Duplex ("TDD") systems).

¹⁸*See* Comments of AT&T Wireless at 11; CWTA at 2; Lucent Technologies, Inc. at 9; Nortel at 6; TDS at 9-10; University of North Carolina at 8.

¹⁹*See* Cingular Comments at 11-12. If these bands are chosen, in order to be viable this spectrum must be promptly cleared to the greatest extent possible. *See, e.g.,* Comments of Verizon at 10-11.

²⁰*See* NTIA Comments at 1-2. The Association Group's proposal may alleviate a number of concerns in this band. *See generally* Report of the Industry Association on the Identification of Spectrum for 3G Services ("Association Group Report"), appended to Comments of Association Group; *see also* Comments of Verizon at 10-11, 15-19. Cingular and other interested parties, however, will still need to review the NTIA report when it is issued in order to make informed comments about any 3G spectrum allocation in these bands.

be adversely impacted by the slow pace of discussions with government users of these frequencies²¹ and the unlikely prospect that the spectrum will be cleared.

If it appears that sufficient contiguous blocks of spectrum cannot be promptly cleared in Federal Government bands based upon the NTIA report, then the bulk of the additional spectrum must come from the MDS/ITFS band.²² Because this band remains the only large block of spectrum under consideration over which the FCC actually has control, Cingular believes that the Commission must begin to take a more serious look at the utilization of spectrum in these bands to satisfy 3G requirements. Cingular recognizes that any reallocation of these bands presents complex issues, but does not believe that they are insurmountable. Unfortunately, two weeks is an insufficient time frame within which to conduct a thorough engineering and economic analysis of the information provided by those who argue against reallocating this spectrum.²³ Cingular agrees, however, that sharing between fixed MDS/ITFS users and mobile 3G services is not an option;²⁴ thus, for this spectrum to be used for 3G purposes it must be cleared and incumbents relocated to comparable facilities. Cingular expects to address this issue more thoroughly upon

²¹See Universal Wireless Communications Consortium (“UWCC”) Comments at 5-6 (noting that discussions with government users “have not yet produced enough information about possible sharing and/or relocation scenarios that would allow the band, or any portion of it, to be made available for 3G services”).

²²See, e.g., AT&T Wireless Comments at 3, 9.

²³See, e.g., Comments of Ad Hoc; NIA; Sprint Corporation (“Sprint”); WCA; WorldCom, Inc. (“WorldCom”).

²⁴See, e.g., Association Group Report at 11; Comments of Sprint at 16-20; WCA at 26-29; WorldCom at 21-22; Verizon at 19.

the Commission's release of a final report on the availability of spectrum in the MDS/ITFS bands.²⁵ In the final analysis, if 3G is to be provided on a wide scale in the United States, the Commission must find a way to make use of the MDS/ITFS bands work if the Federal Government bands are not made available — there is no other option.

CONCLUSION

For the foregoing reasons, the Commission should expeditiously adopt 3G spectrum policies consistent with the views expressed by Cingular herein and in its initial comments.

Respectfully submitted,

CINGULAR WIRELESS LLC

By: /S/ J. R. Carbonell
J. R. Carbonell
Carol L. Tacker
5565 Glenridge Connector
Suite 1700
Atlanta, GA 30342
(404) 236-6030

Its Attorneys

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²⁵See *NPRM* at ¶ 7; cf. *Qwest Comments* at 2.