

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

In the Matter of)
)
FCC Seeks Comment on Recommendations) IB Docket No. 04-286
Approved by the Advisory Committee for the)
2007 World Radiocommunication Conference)
)

COMMENTS OF SPRINT NEXTEL CORPORATION

I. INTRODUCTION

To prepare for the upcoming World Radiocommunication Conference, the Commission has sought comment on what service definition it should ask the international community to adopt in the 698-806 MHz band.¹ At the most rudimentary level, the Commission's choice is simple: (A) support a service definition that could exclude WiMAX technologies from the 698-806 MHz band and other frequencies, or (B) support a definition that permits WiMAX to compete head-to-head with other technologies in these bands around the globe.

Rather than support artificial constraints on which technologies commercial operators can deploy in the 698-806 MHz band and other frequencies, Sprint Nextel joins with every other major proponent of WiMAX technologies in the United States in recommending that the Commission embrace a broadly inclusive definition of which technologies are suitable for deployment in the bands identified internationally for

¹ See *FCC Seeks Comment on Recommendations Approved by the Advisory Committee for the 2007 World Radiocommunication Conference*, Public Notice, IB Docket No. 04-286, DA 07-26 (Jan. 9, 2007).

advanced wireless services.² By urging the International Telecommunication Union (ITU) to adopt a broadly inclusive service definition, the Commission can help to promote competition, reduce prices, and increase technological innovation in the United States.

II. DISCUSSION

WiMAX is a standards-based technology for wireless broadband access.³ Service providers such as Sprint Nextel can buy interoperable WiMAX-certified equipment from more than one company based on price and innovation rather than the need to incorporate the same manufacturer's equipment into the system to avoid introducing undue complexity into the network. As with many products, moreover, an increase in the number of units produced causes a decrease in the average cost of each unit. Because the price of WiMAX equipment will decrease as the number of units produced increases, expanding the number of bands capable of implementing WiMAX technologies internationally will directly benefit the American public by lowering prices for wireless broadband access and associated devices here at home.

At bottom, Agenda Item 1.4 seeks comment on whether the international community should either: (A) narrowly circumscribe the technologies used for advanced wireless services to an aging collection of radio interfaces adopted more than seven years ago; or (B) expand the definition to incorporate newer broadband standards, such as

² In addition to Sprint Nextel, advocates for a competitively based open standard in the 698-806 MHz band and other frequencies identified for advanced wireless services include Intel, Motorola, Nortel, ArrayComm, Clearwire, and the Wireless Communications Association International, Inc. *Id.* at *8.

³ "WiMAX" is an acronym that stands for Worldwide Interoperability for Microwave Access.

WiMAX, on a competitively neutral basis.⁴ To reduce costs to consumers, Sprint Nextel supports View B of Agenda Item 1.4 of the 2007 World Radiocommunication Conference (WRC-07).

Sprint Nextel recently announced its intention to offer next-generation 2.5 GHz wireless broadband services to 100 million Americans by 2008.⁵ To meet this goal – and the aggressive build-out milestones that the Commission imposed on the company as a condition of merger – Sprint Nextel intends to invest roughly \$3 billion over the next two years to build a terrestrial network that supports portable computing, multimedia applications, and a wide variety of consumer electronic devices in rural and urban areas across the country. Sprint Nextel holds a substantial number of spectrum licenses and leases in the 2500-2690 MHz band, which is one of the bands identified internationally for use with International Mobile Telecommunications-2000 (IMT-2000) technologies.⁶ Unfortunately, WiMAX is a new standard that did not come into being until at least 2001

⁴ The ITU has included many different radio interfaces within the IMT-based standard, but has not updated the list of qualifying IMT radio interfaces since 1999.

⁵ Sprint Nextel Corporation, News Release, *Sprint Nextel Announces 4G Wireless Broadband Initiative with Intel, Motorola, and Samsung*, available at http://www2.sprint.com/mr/news_dtl.do?id=12960 (August 8, 2006) (“The company’s deployment plans target a launch of the advanced wireless broadband services in trial markets by the end of 2007 with plans to deploy [a 2.5 GHz] network that reaches as many as 100 million people in 2008. Sprint Nextel plans to expand mobile WiMAX network coverage thereafter Sprint Nextel is expecting to invest \$1 billion in 2007 and between \$1.5 billion and \$2 billion in 2008 relating to the 4G mobile broadband network.”).

⁶ Other bands identified for IMT-based interfaces include the 806-960 MHz, 1710-2025 MHz, and 2110-2200 MHz. *International Telecommunication Union Radio Regulations*, Ed. 2004, nn.5.317A, 5.384A, & 5.388. While Sprint Nextel and other companies are actively working to expand the IMT-based standards to include WiMAX technologies in ITU Working Party 8F and other fora, the success of this effort is by no means assured. Many of the same parties opposed to a broadly inclusive standard under Agenda Item 1.4 also oppose the efforts to broaden the IMT-based standard to include WiMAX technologies.

and, therefore, WiMAX does not fall within the ITU's aging IMT-based classification, which dates from 1999 and earlier.⁷

To avoid artificially precluding new WiMAX technologies from accessing spectrum identified internationally for advanced wireless services, View B would establish that the 698-806 MHz band and the other bands identified for IMT-2000 are suitable for *both* IMT “*and other broadband wireless access systems,*” which would include WiMAX technologies.⁸ If adopted internationally, View B would potentially open the 698-806 MHz spectrum and other bands to direct, head-to-head competition between the “IMT” standards that Ericsson, Nokia, the CDMA Development Group embrace and the newer, more innovative WiMAX standards that Sprint Nextel believes offer consumers greater flexibility, higher capacity, and faster innovation at lower cost.

The Commission, of course, need not choose between the technologies that Ericsson, Nokia, and the CDMA Development Group support and the newer, more open, standards-based systems that Intel, Motorola, Clearwire, Sprint Nextel and other companies support. Instead, the Commission should simply adopt View B of Agenda

⁷ The Institute of Electrical and Electronics Engineers (IEEE) first approved the initial 802.16 standard for wireless MAN for the 10-66 GHz frequency range in December 2001, extended the standard to bands below 11 GHz in January 2003, and approved the 802.16e mobility standard in December 2005. *See generally, e.g.,* WiMAX Forum, Frequently Asked Questions (visited Jan. 31, 2007), *available at* <http://www.wimaxforum.org/about/faq/>.

⁸ Supporters of View A attempt to cloud the exclusion of WiMAX technology from the bands identified internationally for wireless broadband through reference to arcane distinctions between IMT, IMT-2000 and a new and entirely undefined category of “systems beyond IMT-2000.” While perhaps relevant in other contexts, the distinctions are meaningless here. WiMAX is a radio interface that is not currently included within either IMT or IMT-2000. In addition, the term “systems beyond IMT-2000” has no established meaning within the ITU. Even if “systems beyond IMT-2000” had some widely accepted meaning within the international treaty organization, this term is, at best, likely to remain ill-defined for many years to come, which would delay the competitive entry of WiMAX into certain internationally identified advanced wireless services bands.

Item 1.4 as the only approach that offers the same opportunity for IMT-based and WiMAX technologies to access wireless broadband spectrum bands throughout the globe while still providing globally harmonized spectrum for advanced commercial wireless applications.

III. CONCLUSION

Sprint Nextel supports View B of Agenda Item 1.4. No government agency can reliably predict public demand for specific services or the future direction of new technologies. For years, the United States has battled with parochial interests that have advocated government-mandated standards and artificial constraints on market innovation. Adopting the open, market-based approach of View B not only maintains United States global leadership on standards issues internationally, but also promises to help lower prices on wireless broadband goods and services to consumers in the United States and around the world.

Respectfully submitted,

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