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April 18, 2005

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: In the Matter of Nextel Communications Inc. and Sprint Corporation for Consent to the Transfer of Control of Entities Holding Commission Licenses and Authorizations. (WT Docket No. 05-63)

Dear Ms. Dortch:

I am writing to state Intel's belief that the proposed aggregation of the 2.5 GHz (2496-2690 MHz) spectrum holdings of Sprint Corporation ("Sprint") and Nextel Communications, Inc. ("Nextel") into a combined entity ("Sprint Nextel") will create the synergies necessary to accelerate the deployment of broadband wireless data networks and enable the next generation of rich media and new mobile applications and services.

Ubiquitous broadband wireless access will revolutionize people's lives by enabling untethered high-speed access to rich interactive multimedia content and other new productivity-enhancing products and services. In many rural areas or markets lacking a well-developed wired infrastructure, broadband wireless technology will likely represent the fastest, cheapest and possibly the only practical path to wide-scale broadband deployment. Wireless technology can bridge the "Digital Divide" by bringing broadband access into the homes and businesses of millions of people in traditionally underserved rural markets as well as in developing markets worldwide. Finally, the deployment a nationwide broadband wireless data network would enhance U.S. competitiveness in the global marketplace.

Intel provides high-performance silicon and platform solutions to the broadband wireless industry. Intel believes that broadband wireless deployment will be accelerated through industry collaboration defining broadly adoptable technical criteria for building-block components and

enabling the adoption of products based on such standards through compatibility and interoperability testing. Accordingly, Intel has actively participated in both IEEE and the WiMAX Forum efforts to develop the WiMAX standard.

The benefits associated with an standards-based approach include:

- Economies of scale lower costs and investment risks at all points in the value chain

- Multiple vendor choices for service providers due to equipment interoperability

- Lower-cost and higher-performance equipment, as equipment manufacturers are able to innovate based on a common, standards-based platform

Intel anticipates that WiMAX will be deployed in three phases: the first phase of WiMAX technology (based on IEEE 802.16-2004) will provide fixed wireless connections via outdoor antennas. In its second phase, WiMAX will be available for indoor installation, with smaller antennas similar to a Wi-Fi access point today. In this fixed indoor model, WiMAX will be available for use in wide consumer residential broadband deployments, as these devices become "user installable," lowering installation costs for carriers. In its third phase, WiMAX technology will be integrated into mobile computers, which will further reduce device costs and enable portable service.[1]

Last September, Intel announced that it would begin customer trials on its first broadband wireless chip design. Code-named "Rosedale," this component is expected to be the first "system-on-a-chip" design for cost-effective customer premise equipment (CPE) that supports the IEEE 802.16-2004 standard.[2] Rosedale will be launched on April 18, 2005. Intel has and will be committing significant resources to drive the development of the WiMAX ecosystem and has a vested interest in ensuring that the WiMAX market segment is both competitive and efficient. Moreover, Intel does not currently have a technology commitment from either Sprint or Nextel regarding 2.5 GHz deployment efforts. While Sprint and Nextel have not made a technology commitment, Intel believes that their efforts at 2.5 GHz

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[1] Scott Richardson, *Emerging Broadband Networks: The Case for WiMAX*, Intel Technology Journal, Volume 8, Issue 03 <http://www.intel.com/technology/itj/2004/volume08issue03/foreword.htm> (August 20, 2004)

[2] *Intel Discloses Key Emerging WiMAX Silicon Plans*, Intel Corporation Press Release, <http://www.intel.com/pressroom/archive/releases/20040907net.htm?iid=search&> (September 7, 2004).

are very promising and Intel is working diligently to develop appropriate technical criteria and to advance trials in the band.

The combined spectrum holdings of Sprint Nextel would result in a 2.5GHz footprint covering nearly 85% of the population in the top 100 BTAs. Intel believes that this aggregation of spectrum will have the following substantial, pro-competitive public interest benefits:

Economies of Scale. The aggregation of a nationwide 2.5GHz footprint in a single entity would enable the same efficiencies that led to the aggregation of the cellular/PCS spectrum, creating national carriers from an initially highly fragmented industry. Importantly, it would create the opportunity to leverage economies of scale to amortize costs associated with the development and deployment of wireless broadband services in the 2.5 GHz band over a larger nationwide subscriber base. Their combined assets would also help Sprint Nextel attract the capital investment required to deploy a nationwide wireless broadband network in the 2.5 GHz band.

The scale of a potential service offering from Sprint Nextel would also foster the development of complementary mobile applications, equipment and services by third parties – vital to the rapid and robust deployment of an integrated service offering. The nationwide 2.5 GHz footprint would promote the deployment of a common technology for data services, improving the potential that a standards-based broadband wireless access technology, such as WiMAX, will be utilized in such deployment. High CPE costs have historically been a barrier to mass market consumer adoption of new broadband wireless service offerings.

Importance of the 2.5 GHz Band. WiMAX is targeted for licensed deployment in the 2.5 GHz and 3.5 GHz bands. Without sufficient globally harmonized spectrum, manufacturers will not be able to achieve the economies of scale from high volume production of WiMAX components. The WiMAX community and Intel are working with various governments around the world to allow the use of WiMAX in these spectrum bands.

In this regard the 2.5 GHz band is particularly important in the United States for two reasons:

- In the United States, the 3.5GHz band is available on a "licensed non-exclusive" basis only and is thus susceptible to quality of service issues associated with unlicensed bands. Furthermore, the 3.5 GHz band is not available along certain coastline areas therefore making it difficult to currently deploy a nationwide service offering at 3.5 GHz.

- Our internal analyses indicate that, in rural/suburban deployment scenarios, the capital expense cost of a network at 3.5 GHz may

approximate 1.5 times the cost of a network at 2.5 GHz, principally due to the less favorable propagation characteristics for of the 3.5 GHz band.[3]

No Significant Competitive Threat. Intel believes the aggregation of the 2.5 GHz holdings of Sprint and Nextel does not constitute a significant threat to competition. A new broadband wireless service on these frequencies will face competition from established cable modem and DSL providers and several wireless broadband alternatives. Even focusing on the broadband wireless market, the resulting Sprint Nextel aggregation of 2.5 GHz spectrum will face many competitive challenges. Sprint and Nextel make several compelling arguments[4]:

- The 2.5 GHz spectrum actually licensed to Sprint Nextel would represent only 19% of the total spectrum available at 2.5 GHz. The remaining 2.5 GHz spectrum held by Sprint Nextel would be subject to term-limited lease arrangements (a significant portion of which expire within five years).

- The broadband service provider business model is evolving from a commodity access service to an integrated data services driven model. In order to effectively compete against other broadband multimedia service offerings, Sprint Nextel would need access to sufficient quantities of spectrum.

- There is very little overlap between the areas where Nextel holds 2.5 GHz spectrum and the areas where Sprint holds 2.5 GHz spectrum. While expanding the footprint of Sprint Nextel, the aggregation of the 2.5 GHz spectrum holdings of Sprint and Nextel will have little impact on the availability of the 2.5 GHz band for competitive service offerings.

- There is nearly 300 MHz of spectrum in other licensed bands available for use by potential competitors to launch competitive service offerings. This spectrum occupies lower frequency bands than the 2.5 GHz band and therefore generally possesses superior propagation characteristics than the 2.5 GHz spectrum held by Sprint Nextel.

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[3] Peter K. Pitsch, *Spectrum Policy: The DTV Transition*, Presentation at Intel Developers Forum in San Francisco (September 8, 2004).

[4] *Joint Opposition of Sprint and Nextel to Petitions to Deny and Reply to Comments*, WT Docket No. 05-63 (April 11, 2005),

For the reasons set forth above, Intel views the aggregation of the 2.5 GHz spectrum holdings of Sprint and Nextel as creating important public interest benefits.

Thank you for your attention to this important matter.

Sincerely,

/s/ Ian K. Loo

Ian K. Loo
Senior Attorney
Intel Corporation