

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

In the Matter of	)	
	)	
Improving Public Safety Communications in the	)	WT Docket No. 02-55
800 MHz Band	)	
	)	
Consolidating the 900 MHz Industrial/Land	)	
Transportation and Business Pool Channels	)	

**COMMENTS OF INTEL CORPORATION**

Intel Corporation (“Intel”) is pleased to submit these comments in the above-captioned proceeding. In these comments, Intel is not making any recommendations on whether the Federal Communications Commission (“the Commission”) should resolve interference in the 800 MHz band on a case-by-case basis or by rulemaking. However, as illustrated in Section I below, we want to emphasize that the rebanding proposal advanced by Nextel Communications, Inc. (“Nextel”) would impose substantial costs on Intel even though our radio systems are not causing any interference. Contrary to Nextel’s proposal, as noted in Section II below, the Commission has always required the party causing interference to resolve the interference at its own expense.<sup>1</sup>

**I. NEXTEL’S PROPOSAL WOULD SIGNIFICANTLY IMPACT INTEL**

**A. Frequencies of Radio Systems Used At Intel Sites**

Intel has a manufacturing site in New Mexico that uses private radio systems with 10 channels between 855 MHz and 860 MHz. Intel also has several manufacturing sites in Oregon that use similar radio systems with 11 channels and frequencies ranging from 857 MHz to 860 MHz. Our other U.S. manufacturing sites, located in California, Massachusetts, Arizona, and Colorado, all rely on private radio systems that have channels in the 900 MHz band.

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<sup>1</sup> See e.g., 47 C.F.R. § 22.353; 47 C.F.R. § 27.58; 47 C.F.R. § 73.317. See also Graeme Freeman, et. al. v. Burlington Broadcasters, Inc., d/b/a WIZN et. al., 204 F.3d 311 (2<sup>nd</sup> Cir. 2000); Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Memorandum Opinion and Order On Reconsideration of the Sixth Report and Order, MM Docket No. 87-268 (1998) at para. 184; FM Broadcast Station Blanketing Interference, 57 RR 2d 126 (1984); Request for Declaratory Ruling on the Use of Digital Modulation by Multipoint Distribution Service and Instructional Television Fixed Service Stations, Declaratory Ruling and Order, 11 FCC Rcd 18839 (1996) at para. 25; Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service, Memorandum Opinion and Order, 12 FCC Rcd 3977 (1997) at para. 15; Terrestrial Systems in the Ku-Band Frequency Range, First Report and Order and Further Notice of Proposed Rule Making, 16 FCC Rcd 4096 (2000) at para. 274; Height and Power Increases in the Public Land Mobile Radio Service, Notice of Proposed Rule Making, CC Docket No. 88-135, 1 FCC Rcd 1710 (1988) CC Docket No. 88-135, 4 FCC Rcd 5303 (1989) at para. 30; Height and Power Increases in the Public Land Mobile Radio Service, Order On Reconsideration, CC Docket No. 88-135, 5 FCC Rcd 4604 (1990) at para. 34-36.

## **B. Nature of Uses of Intel Radio Systems**

At all of our manufacturing sites, the radios are used for life safety and security systems. This means the radios are used for medical and chemical emergency response; fire system response and coordination; facilities control response; coordination of shuttle services between campuses; security response, patrol and coordination; communication and coordination with the Emergency Operation Center (earthquakes, power outages, wind storm, etc.); and facility construction and tool installation for a safer and speedier process. Some of the radios are customized to enable communication through walls that are up to four feet thick in concrete.

Given the wide variety of uses, our radio systems are used quite frequently. For example, total talk time on the New Mexico system is around 15 hours a day distributed among a ten-channel trunking system. At our two facilities in Arizona, the radios are used quite often for on-site traffic issues, and during recent construction of a new factory, radios were utilized up to 5 hours per day of transmit time. Also, for these two sites, minor emergency response incidents where radio use can be critical averaged about 17-20/day, but have been as high as 27 in one day.

## **C. Costs if Intel Had to Move its 800 MHz Radio Systems to 900 MHz**

As noted above, several of our sites use radio systems in the 800 MHz band. All of the equipment involved is frequency specific and cannot be tuned or modified to support a different frequency band. Thus, new equipment would have to be purchased.

1. New Mexico – The value of the equipment that would have to be replaced is nearly \$2 million. The list of equipment, including spares for maintenance, includes:

- ✓ Kenwood 2-Way Repeater System: \$400,000
- ✓ Amplifiers: \$270,000
- ✓ Dual Band Couplers: \$24,000
- ✓ Antennas: \$5,000
- ✓ Radio Base Stations (32@\$500 each): \$16,000
- ✓ Hand Held Radios (1200@\$600 each): \$720,000
- ✓ Labor: \$500,000

2. Oregon: The value of the equipment that would have to be replaced is approximately \$2.1 million and includes:

- ✓ 800 MHz Head-end (High-end Motorola): \$450,000
- ✓ Labor: \$50,000
- ✓ Replace 1000 Portables (Motorola): \$1,000,000
- ✓ Replace Bi-direction Amplifier Network (TX/RX) Equipment: \$350,000
- ✓ Labor: \$250,000

In summary, under Nextel's proposal, the total costs to Intel to move its radio systems to the 900 MHz band would be more than \$4 million even though these radio systems are not causing any interference.

## II. NEXTEL HAS THE RESPONSIBILITY TO PAY FOR ITS INTERFERENCE

In the absence of a specific rule, the Commission has relied on the principle known as the “last in, fix it” to resolve interference disputes.<sup>2</sup> Based on this principle, it is clear that the Commission can require Nextel to remedy any interference at its own cost. Indeed, “Whether by imposition of specific conditions or by operation of law, a licensee building a new facility is obligated to take all necessary steps, including financial burden, to correct interference problems caused by new or modified construction.”<sup>3</sup>

In summary, Nextel is required by Commission rule and policy to remedy at its own cost the interference that it is causing.<sup>4</sup> Nextel’s proposal, however, would shift to licensees of private (non-safety) radio systems the cost of moving them to the 900 MHz band. It is imperative that the Commission apply its “last in, fix it” policy to the situation at hand, even if the Commission decides to make fundamental changes in the allocation in the 800 MHz band. This logic also applies to the 900 MHz band, where Nextel’s “cellularization” of that band may cause similar interference in the future.

Respectfully submitted,

INTEL CORPORATION

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<sup>2</sup> Midnight Sun Broadcasting Co. v. FCC, 11 FCC 1119 (1997); see also Sudbrink Broadcasting of Georgia, Inc. v. FCC, 65 FCC 2d 691 (1997); Jesse Willard Shirley, 24 RR 2d 982 (1972).

<sup>3</sup> *Common Carrier Public Mobile Services Information Republication of Standard Broadcast Reradiation and Tower Construction Authorized Under Part 22 Of The Rules*, Public Notice, 66 RR 2d 1777, released November 14, 1989. See also *Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service*, Memorandum Opinion and Order, 12 FCC Rcd 3977 (1997) at para. 15.

<sup>4</sup> Section 90.403(e) requires licensees to “take reasonable precautions to avoid causing interference.” See also Cordell Eng., Inc., 14 FCC Rcd 7440 (ECID 1999); Shawnee Broadcasting Co., 45 RR 2d 436 (1979).