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December 23, 2003

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Room TW-A325
Washington, DC 20554

Re: WT Docket No. 02-55
***Ex Parte* Presentation**

Dear Ms. Dortch:

In light of recent *ex parte* submissions regarding 800 MHz public safety operations in Denver, Colorado, AT&T Wireless Services, Inc. (“AT&T Wireless”) is pleased to provide the Commission with the following information regarding the interference mitigation program underway in Denver. AT&T Wireless reiterates here its commitment to work with the City and County of Denver (“Denver”) to resolve interference to Denver’s 800 MHz public safety system. As discussed further below, working with Denver public safety officials and Nextel, we have identified sources of interference and have undertaken substantial measures to reduce interference to the Denver system. We remain committed to these ongoing collaborative efforts. As a matter of policy, we believe that all relevant stakeholders must do their part to mitigate the 800 MHz interference problem, and we note our support for the Balanced Approach, which would create a pro-active framework to identify sources of interference and ensure that all “contributors to the interference shall correct the interference” based on a well-developed standard of mitigation techniques.¹

In the last several years, AT&T Wireless – which has extensive cellular operations in the 800 MHz band utilizing nearly 12,000 cell sites nationwide – has been contacted about interference to public safety operations at approximately 110 individual

¹ *800 MHz User Coalition Balanced Approach* at 5 (attached to Letter to Marlene Dortch, Secretary, FCC, from Jill Lyon, Vice President and General Counsel, United Telecom Council (May 29, 2003), which expressed support for the Balanced Approach by many parties, including AT&T Wireless).

locations in communities across the country. On those occasions, AT&T Wireless has promptly responded by working closely with the public safety community and Nextel to investigate and resolve any instances of interference. These cases have been nearly evenly split between those in which Nextel was the sole contributor to interference and those in which AT&T Wireless operations were, at least to some extent, involved. In these latter cases, interference has been predominantly the result of public safety receiver-generated intermodulation, most often created in combination with Nextel operations. In nearly all of these instances, AT&T Wireless has relied on straightforward mitigation techniques – namely, retuning and occasionally retuning and power reduction – to successfully mitigate the interference.

The Denver Case. As the Commission has recognized, public safety interference in the 800 MHz band requires a solution that remedies the problem and balances the myriad issues and providers involved in the 800 MHz band.² The circumstances in Denver are particularly challenging as a result of the nature, usage, and capacities of the commercial systems involved. AT&T Wireless has implemented a series of interference mitigation techniques, applying the APCO Best Practices Guide and additional mitigation approaches as well. As detailed below, we have made progress and are confident that, consistent with the proposals in the Balanced Approach including “enhanced” Best Practices, mitigation solutions are available to resolve the Denver situation.

By way of summary, Denver originally identified 24 locations where users of the 800 MHz public safety system experienced interference. Denver public safety officials, Denver’s engineering consultant Pericle Communications Company, Nextel, and AT&T Wireless together conducted a series of tests to determine the extent and source of the interference. Testing determined that Nextel was the sole contributor at 18 of the sites; at five other locations, AT&T Wireless operations contributed to public safety receiver-generated intermodulation, primarily in combination with Nextel operations.³ AT&T Wireless subsequently has been identifying and implementing solutions to mitigate interference to which it contributes.

AT&T Wireless has assigned a team of senior level engineers to mitigate the Denver interference problem. We have explored numerous mitigation techniques and have implemented many measures that have reduced interference to the 800 MHz public safety system in Denver. Our actions have included multiple frequency retunes, downlink power control, and flexible channel assignments. AT&T Wireless has been

² See *Involving Public Safety Communications in the 800 MHz Band*, WT Docket No. 02-55, Notice of Proposed Rulemaking, FCC 02-81, ¶ 5 (rel. Mar. 15, 2002) (identifying “the goal of resolving interference with minimum disruption to existing services”).

³ We note that although Denver originally identified 24 locations as problematic, subsequent investigation addresses a combined total of 23.

meeting with Denver public safety officials and Nextel on a regular basis to assess the impact of mitigation measures and to consider solutions to mitigate remaining interference. We will continue to work with these entities to resolve the interference problem to Denver's satisfaction.

Most recently, on December 2, 2003, the parties conducted field tests to gather public safety radio performance data. We found that one of the five sites, at Federal and I-70, is now interference- and problem-free, and mitigation efforts have reduced the area of interference at each of the other four locations. As a result, the parties are considering conducting a new interference study to gauge the current scope of interference at each of the locations. At the same time, AT&T Wireless continues to work with Denver and Nextel to explore additional solutions to ensure robust public safety system operations in Denver.

Localized Solutions. AT&T Wireless believes that interference to 800 MHz public safety operations are localized incidents that can and should be resolved through localized solutions. In contrast, the Consensus Plan's nationwide 800 MHz rebanding proposal will impose enormous costs and inconvenience on all 800 MHz licensees and will offer no benefit to a substantial portion of the country. AT&T Wireless therefore supports the Balanced Approach, which combines a pro-active framework to identify sources of interference with a set of enhanced mitigation techniques and a commitment that contributors to interference will be responsible for mitigating interference. The Balanced Approach will resolve incidents of interference well before any rebanding option would take effect.

The Consensus Plan, moreover, will not ensure that the current interference dynamic will be adequately addressed. It should be noted that the Consensus Plan proposed that non-cellular operations, including public safety and private users, be afforded interference protection only if they meet certain requirements; the Consensus Parties subsequently revised the threshold requirements as follows: 1) the desired signal levels at the non-cellular receiver must meet or exceed -101 dBm for portable (handheld) mobile units and -104 dBm for mobile (vehicular-based) units, and 2) the users' receivers must meet the Telecommunications Industry Association Class A performance specifications, or they will be afforded less protection.⁴ In areas where these threshold conditions are not met, the party receiving interference must resolve any interference that occurs. This could be the case in Denver. An analysis produced by Denver's engineering consultant, Pericle Communications Company, reveals that even if rebanding were adopted, third-order intermodulation products could still occur because relevant

⁴ Ex Parte Submission of the Consensus Parties, WT Docket No. 02-55, at 47-48 and Revised App. F §§ 2.1.1 and 4.1.1b (Aug. 7, 2003) (revising Supplemental Comments of the Consensus Parties, WT Docket No. 02-55, at 41 and App. F §§ 2.1.1 and 4.1.1b (Dec. 24, 2002)).

Ms. Marlene H. Dortch
December 23, 2003
Page 4

channels would not be relocated.⁵ Pericle has observed further that the locations experiencing interference “usually have [a] mean signal of -90 to -110 dBm.”⁶ If, in fact, the public safety system has a signal strength below -101 dBm or -104 dBm in cases involving portables or mobiles respectively and interference were to occur, the Consensus Plan would offer no interference mitigation. In sum, the Consensus Plan may not solve all of the interference problems in Denver.

* * *

Again, AT&T Wireless appreciates the opportunity to provide this report on the Denver situation. We share the Commission’s concerns regarding interference to public safety and we intend to keep you informed of our efforts and successes. We would be pleased to discuss the Denver mitigation program with Commission staff and would be more than willing to do so in conjunction with representatives of Denver public safety and Nextel, if you deem this appropriate. Please do not hesitate to contact the undersigned if you have any questions.

Respectfully Submitted,

/s/

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⁵ A Nextel frequency at 863.0375 MHz and an AT&T Wireless frequency at 871.080 MHz could produce a third-order product on 854.995 MHz, a Denver frequency. See Letter to Marlene H. Dortch, Secretary, FCC from Alan S. Tilles, Counsel to City and County of Denver, Att. at 11 (June 11, 2003); see also Letter to Marlene H. Dortch, Secretary, FCC from Christine M. Gill, Counsel to Southern LINC, at 4 (Oct. 21, 2003).

⁶ Letter to Marlene H. Dortch, Secretary, FCC from Alan S. Tilles, Counsel to City and County of Denver, Att. B 800 MHz Interference In Denver, CO at 5 (Sept. 17, 2003).