

Nextel Communications  
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February 2, 2004

Via Electronic Mail Delivery

Ms. Marlene Dortch, Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: *Ex Parte* Submission, WT Docket 02-55

Dear Ms. Dortch:

Nextel Communications, Inc. ("Nextel") hereby requests that this filing be associated with WT Docket 02-55, *Improving Public Safety Communications in the 800 MHz Band*.

Wireless Telecommunications Bureau staff has offered Nextel an opportunity to address the apparent disparity between Motorola's November 3, 2003 suggestion that 30 percent of the embedded base of 800 MHz, NPSPAC-capable radios may need to be replaced under the proposed Consensus Plan for 800 MHz Band Realignment and the Consensus Parties' one percent total replacement rate estimate.<sup>1</sup> This letter explains that the two estimates apply to different underlying radio counts; moreover, the Consensus Parties' estimate is based on a more comprehensive analysis. Therefore, as discussed below, Motorola's replacement figure cannot be compared directly to the radio replacement information set forth in the Consensus Plan and provides no basis to conclude that Nextel's \$850 million commitment will be insufficient to cover incumbent relocation costs under the Consensus Plan.

**I. The Consensus Parties' Estimate Is Based on a Comprehensive Analysis of 800 MHz Public Safety Radio Systems**

The Consensus Parties have provided detailed information to support their estimate of 800 MHz relocation costs, including the number of 800 MHz radios that will

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<sup>1</sup> Letter from Steve Sharkey, Motorola, to Edmond Thomas and John Muleta, FCC, WT Docket No. 02-55, at 11 (Nov. 3, 2003) (the "Motorola Letter"); Supplemental Comments of the Consensus Parties, WT Docket No. 02-55, at A-4 (Dec. 24, 2002) ("Consensus Parties Comments").

need to be replaced.<sup>2</sup> These estimates are based on comprehensive studies conducted by Nextel in close cooperation with public safety and private wireless parties. The studies included, among other things, a thorough review of the FCC's 800 MHz licensing database and third-party information sources, field visits and meetings with 16 representative public safety operators, and an APCO data collection survey designed to solicit additional information concerning public safety system architectures, operating requirements and active mobile unit counts. These studies have provided a complete and accurate picture of the radio retuning and replacement that will be required to implement the Consensus Plan.

## II. A Critique of Motorola's 30 Percent Replacement Radio Figure

First and foremost, Motorola's letter does not specify the actual number of public safety radios it believes are in service today. Nor does it specify the number of public safety radios it has sold over the past ten years. In other words, Motorola provides no base figure upon which to apply its 30 percent replacement rate estimate.<sup>3</sup> A percentage alone provides no basis on which to estimate the cost or number of radios that need to be replaced.

In contrast, the Consensus Parties provided both an estimate of the total number of public safety radios in use today, 2.6 million,<sup>4</sup> as well as an estimate that approximately one percent of those radios will have to be replaced because they cannot be retuned or reprogrammed. Without knowing whether the two replacement percentage estimates are being applied to comparable radio totals, comparing this information may be comparing apples to oranges.<sup>5</sup>

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<sup>2</sup> Consensus Parties Comments, Appendix A.

<sup>3</sup> Motorola offered no analysis or survey of the existing population of 800 MHz public safety systems to support its suggestion that 30 percent of NPSPAC radios might need to be replaced. Indeed, Motorola acknowledged that "[w]ithout the final details of a rebanding plan and an audit of individual public safety systems *Motorola does not have sufficient information to provide an estimate.*" Motorola Letter at 11 (emphasis added).

<sup>4</sup> The Consensus Parties have gathered more recent information from public safety parties which indicates that there are fewer 800 MHz public safety radios in service than initially estimated – about 2 million units. Nextel has nonetheless continued to use the higher count to provide additional security that its \$850 million commitment will be sufficient.

<sup>5</sup> This is illustrated by the fact that preliminary estimates of the cost of realignment Motorola has discussed with Nextel are not so different from the Consensus Plan's cost estimates as would be expected by the apparent difference between their respective replacement radio estimates. In other words, without a base public safety radio total, Motorola's letter is of little use in evaluating the accuracy of the Consensus Plan's 800 MHz realignment cost estimates.

Second, certain parties have misinterpreted or misstated what Motorola actually stated in its November 3, 2003 letter. These parties erroneously state that Motorola estimates that 30 percent of all embedded public safety radios will need to be replaced under the Consensus Plan for 800 MHz Realignment. That is not the case. What Motorola said was far narrower: that *30 percent of the NPSPAC-capable radios* it sold in the last ten years cannot be reprogrammed to operate in the new NPSPAC band, *not 30 percent of all public safety radios in use today*. Many public safety communications systems do not use the NPSPAC channels, particularly many of the older systems; the radios used on these systems can be retuned to operate on any of the other 800 MHz non-NPSPAC channels.<sup>6</sup>

Motorola's information confirms that out of the total universe of public safety radios, only those used by NPSPAC licensees may have to be replaced – Motorola's total sales in the 800 MHz band (particularly with respect to private wireless sales) are irrelevant. Only its sales of radios to public safety NPSPAC licensees are relevant in determining the potential replacement rate of Motorola radios during realignment. Thus, according to Motorola, 30 percent of an unspecified number of NPSPAC public safety radios might have to be replaced, not 30 percent of all public safety units.

Third, Motorola's 30 percent figure overstates the actual number of public safety radios that will need to be replaced because it appears to include radio models that are rarely used in public safety systems. Motorola's letter acknowledges that a significant number of the radio models Motorola lists as requiring replacement do not have the feature sets typically required by public safety users and therefore are infrequently used in public safety systems. As Motorola states, "*[m]ost of the current products that cannot be reprogrammed are generally not specifically intended for the public safety market, however some public safety agencies may still purchase these products.*"<sup>7</sup>

For example, the Motorola Letter lists the MaxTrac mobile radio as requiring replacement. While this radio probably has been Motorola's top selling 800 MHz land mobile radio model over the past 10-12 years, public safety communications operators rarely purchased this radio model for mission critical use because it does not contain the desired public safety feature set. Accordingly, the number of these models being used by public safety first responders is very limited.<sup>8</sup> A number of other models included in Motorola's Table 1 listing of models that cannot be retuned or reprogrammed are also not

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<sup>6</sup> See Motorola Letter at 6. ("For the most part, a Public Safety or Private radio customer's 800 MHz radio currently operating *only* in the 806-821/851-866 MHz non-NPSPAC portion of the band can be retuned to operate in the 809-821/854-866 MHz non-NPSPAC portion of the new band plan.")

<sup>7</sup> Motorola Letter at 10 (emphasis added).

<sup>8</sup> A recent joint *ex parte* submission by the City of San Diego and the County of San Diego indicates that the City has only 377 MaxTrac radios out of a total of 5,163 units operating on its 800 MHz public safety communications system. Moreover, the

typically found in mission-critical first responder use.<sup>9</sup> Thus, the number of non-retunable NPSPAC-capable Motorola radio models actually being used in public safety systems today is likely far smaller than suggested by Consensus Plan opponents relying on the information contained in Motorola's November 3, 2003 letter.<sup>10</sup>

### **III. Motorola Did Not Offer a Full Explanation by Model for its Conclusions on the Feasibility of Reprogramming, Rather than Replacing, Public Safety Radios**

Motorola explained in general why some radio models may need to be replaced rather than retuned or reprogrammed; Motorola, however, did not explain in any depth why a particular model radio must be replaced, rather than reprogrammed or retuned. Instead, Motorola simply stated that reprogramming certain radios is not economically "feasible"<sup>11</sup> or that doing so would be "cost prohibitive."<sup>12</sup> Motorola has not described what these costs are or why they are prohibitive; it has only concluded that it would be too much.

The circumstances of this rule making proceeding represent a unique cooperative partnership of public and private operators working through the Commission's public procedures to solve the problem of commercial – public safety interference at 800 MHz. Implementing 800 MHz realignment requires retuning numerous radio systems within the 800 MHz band – a potentially very different economic equation than evaluating modifications of legacy radios vs. buying replacement units in a routine marketplace scenario. What may be "cost-prohibitive" under typical marketplace circumstances may not be cost-prohibitive when applied to tens of thousands of legacy public safety radios. Motorola's letter does not indicate whether it considered these or similar factors in

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City does not operate on any NPSPAC channels; accordingly, the only MaxTrac units it may have to replace would be those programmed for interoperable use with the County's network, which includes NPSPAC channels. *See Ex Parte* Comments of the City and County of San Diego, WT Docket No. 02-55, at 5 (Dec. 24, 2003). Similarly, at a recent 800 MHz symposium held by APCO in Orlando, Florida, over 100 attendees were asked whether they used the MaxTrac radio for their public safety communications. *Not one attendee indicated that it uses the MaxTrac radio on a NPSPAC public safety system.* This anecdote further indicates the limited use of the MaxTrac radio model in first responder communications systems.

<sup>9</sup> Motorola Letter at 2-3.

<sup>10</sup> *See, e.g.*, Letter from Diane Cornell, CTIA, to Marlene Dortch, FCC Secretary, WT Docket No. 02-55, Attachment at 10 (Nov. 10, 2003).

<sup>11</sup> *See* Motorola Letter at 2.

<sup>12</sup> *See* Motorola Letter at 6.

determining whether reprogramming or retuning a specific public safety radio model is economically feasible.

Nextel respectfully submits that these factors should be considered before reaching any definitive conclusions based on the information in Motorola's letter. Upon such evaluation, Motorola may find that reprogramming and/or retuning solutions are economically feasible for additional models of NPSPAC-capable radios under the unique circumstances of this proceeding.<sup>13</sup> Once the Consensus Plan is adopted, the affected stakeholders (public safety, Nextel and equipment suppliers such as Motorola) will be able to work together to ensure that realignment costs are minimized for all parties and that reprogramming existing radios, rather than the potentially more expensive alternative of replacement, is achievable for a large proportion of affected units.

#### **IV. Conclusion**

Motorola's suggestion regarding the percentage of public safety radios requiring replacement cannot be compared directly to the radio replacement information set forth in the Consensus Plan. Motorola did not provide the most significant figure – the base number of radios in use by public safety licensees, particularly those used by NPSPAC licensees. Motorola's 30 percent figure also includes a number of non-retunable NPSPAC-capable Motorola radio models that may not be in use in public safety systems and thus would be unaffected by realignment. Finally, Motorola may not have considered the unique circumstances present here in its evaluation of the economic feasibility of reprogramming or retuning certain mobile radio units. For these reasons, the Commission should be wary of the reliability of any cost conclusions based on the misinterpretation of information contained in Motorola's letter.

Respectfully submitted,

/s/ Lawrence R. Krevor

Lawrence R. Krevor  
Vice President – Government Affairs

cc: Michael Wilhelm

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<sup>13</sup> For example, due to the volume of radios that may need to be reprogrammed, developing new software and reprogramming may be a cost-efficient alternative to replacing certain radio models as part of solving the CMRS-public safety interference problem. As indicated in the Motorola Letter at 3, Motorola continues to investigate whether reprogramming, rather than replacement, is feasible for its Spectra model radio.