

April 25, 2002

Federal Communications Commission  
Washington, DC 20554

Reference: **Notice of Proposed Rulemaking (WT- 02-55) - Improving Public Safety Communications in the 800 MHz Band**

### **Comments of the Federal Express Corporation (FedEx)**

Over the past twenty years, FedEx has made substantial financial investments in the development, manufacture and nationwide deployment of highly specialized mobile radio and data terminal equipment in the 800 Mhz band. Any proposed solution to the Public Safety interference issue that involves the relocation of the Business and Industrial/Land Transportation (B/ILT) incumbents in this band would have significant financial and operational implications to the corporation.

We are acutely aware of the nature and potential severity of the interference that Public Safety is experiencing. FedEx operates in the same wide area, noise limited mode as Public Safety, and localized interference from CMRS, at the FedEx mobile receiver, has become a common occurrence. However, as Public Safety deals with safety of life issues, the consequences of this interference can be much more disastrous.

While we have no expertise in spectrum management, and offer no specific band realignment plan as a solution to this dilemma, our practical experience in the 800 MHz band leads us to believe that the harmful effects of this interference would be substantially reduced by the removal of CMRS from the current interleaved channel configuration within the band. Traditional coordination techniques could then be employed at the band edges to minimize the impact of the residual interference. However, of the two 800 Mhz band realignment plans that that would eliminate channel interleaving, as described in the above referenced NPRM (WT-02-55), neither plan provides alternate channels in the Canadian border regions for B/ILT licensees. FedEx operates a nationwide network that supports over a thousand mobile units in these border areas alone.

FedEx strongly opposes NexTel's proposed plan as outlined in this NPRM, to move certain non-CMRS incumbents to alternate bands. While there may be some mechanism crafted to compensate incumbents to move within their existing band, the cost related for relocation to an alternate band would be a hundred fold. A move outside of the traditional 800 MHz band (851 to 866) will require replacement, not retuning, of all RF equipment. Even if the extremely high cost of replacement equipment could be justified, this equipment is not

currently available. Add the fact that the alternate bands being discussed are heavily encumbered, and the impractical nature of this solution becomes obvious.

In conjunction with relocating to alternate bands, a reduction in authorized channel bandwidth has also been mentioned in the NPRM. While this may be a means of gaining efficiency in certain circumstances, it has the opposite effect on those licensees that have already gone to the expense of developing and implementing high-speed digital airlinks designed around current channel bandwidths. In the early 90's, due to the lack of unassigned 800 MHz channels in many markets, FedEx was forced to develop a proprietary digital airlink that allowed increased loading of our channels, from a nominal one hundred, to several hundred mobiles per channel, to accommodate our ongoing business growth. Any reduction in authorized bandwidth, either in the current 800 MHz band, or an alternate band, would require additional channels be assigned to the licensee to offset this unavoidable loss of digital signaling capacity. Technical complexities such as these will negatively influence, and could substantially delay the development of replacement equipment required for the exploitation of alternate bands.

Despite an aggressive technology development and deployment program in the mid 90's, by the end of the decade, FedEx found its private wireless bandwidth lacking. This situation was most certainly accelerated by the "licensing mills" of that period, but it was inevitable. By this time, commercial wireless service providers had identified a potential market for integrated data services and were willing to commit to the required deployment. Subsequently, the necessary hardware and software was developed by FedEx to allow the interconnection of the private and commercial networks to collectively accommodate the wireless bandwidth requirement of the corporation.

This operational reality in no way diminishes the importance of the FedEx private radio network. It is this private network that will continue to provide most of the geographic coverage of FedEx's route structure for many years to come.

FedEx trusts that a workable plan can be developed and carried forward that will minimize the interference to Public Safety from other radio services in the 800 MHz band, and at the same time allow incumbent B/ILT licensees to continue operation of their nationwide networks in the same band.

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