Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets	)	WT Docket No. 00-230
	)	
	)	

REPLY COMMENTS OF THE BOEING COMPANY

The Boeing Company ("Boeing"), by its attorneys, hereby replies to the comments that were filed in response to the Commission's Report and Order and Further Notice of Proposed Rulemaking ("*Secondary Markets Order*" or "*FNPRM*") in the above-captioned proceeding.

The Commission's *Secondary Markets Order* significantly liberalizes the regulatory environment for licensees in the commercial wireless services. It permits the leasing of spectrum to non-licensees and, in certain circumstances, allows leasing without prior Commission approval consistent with newly adopted criteria for maintaining *de facto* control over FCC-issued licenses. The scope of the Commission's *Secondary Markets Order*, however, extends beyond commercial wireless services; it applies to other communications services, such as Business and Industrial/Land Transportation ("B/ILT") services.[1]

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[1] *See In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Report and Order and Further Notice of Proposed Rulemaking, 18 RCC Rcd 20604, ¶ 84 n.181 (2003) ("*Secondary Markets Order*" or "*FNPRM*") The Commission included within the scope of its *Secondary Markets Order* Part 90 B/ILT channels above 512 MHz as well as those in the 470-512 MHz band where licensees have exclusive spectrum rights, but excluded B/ILT channels in the 470-512 MHz band where licensees do not have exclusive spectrum rights, and channels below 470 MHz, including those licensed pursuant to 47 C.F.R. § 90.187(b)(2)(v). *See id.*

For example, the Commission's *Secondary Markets Order* permits spectrum leasing by licensees with exclusive authorizations on B/ILT frequencies, but appropriately requires that such leases be made only to entities that are eligible to hold B/ILT licenses and use those licenses for industrial and business purposes.[2] Such restrictions are appropriate to ensure the continued availability of B/ILT frequencies for the communications needs of manufacturers and businesses in the United States. Such regulatory safeguards are also necessary to ensure that further encroachment by commercial services into B/ILT frequencies does not result in additional harmful interference to existing and future business and industrial operations.

Despite the importance of the restrictions adopted by the Commission in its *Secondary Markets Order*, the accompanying *FNPRM* inquires whether the Commission's regulatory safeguards should be modified to permit long-term leasing of B/ILT spectrum to commercial providers of wireless services.[3] Several parties filed comments in support of the Commission's general proposal, each of them commercial providers of wireless services that would appear to have little to lose as a result of a further erosion of B/ILT allocations.[4]

In assessing the possibility of permitting long-term commercial leasing of B/ILT frequencies, the *FNPRM* asks whether guidance can be gleaned from the Commission's 2000

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[2] *See id.*, ¶¶ 109-112 & 143-144; *see also id.*, ¶¶ 91-92 & 137; *NPRM*, ¶ 247. In the *Secondary Markets Order*, the Commission permits B/ILT licensees to lease their spectrum to commercial carriers for "short term" (less than 360 days) *de facto* use so long as the lessees comply with all of the technical, operational, and interference-related requirements placed on the licensees. *See Secondary Markets Order*, ¶ 172. The Commission, however, indicated that it will scrutinize short-term leasing arrangements to ensure that they are not used as proxies for longer-term relationships and as vehicles to circumvent B/ILT use restrictions. *See id.*, ¶¶ 169 & 175.

[3] *See FNPRM*, ¶ 304; *see also Secondary Markets Order*, ¶ 19.

[4] *See* Winstar Comments at 3-4; BellSouth Comments at 2, n.8; PCIA Comments at 5-6; Blooston Rural Carriers Comments at 12; Nextel Comments at 8-9.

decision to permit some B/ILT licensees to convert their spectrum to commercial operations or to assign private licenses to commercial licensees in certain defined circumstances.[5] Specifically, the Commission decided in its Section 309(j) implementation proceeding to permit B/ILT licensees operating in the 800 MHz band to assign or transfer spectrum to commercial mobile radio service ("CMRS") licensees for use in CMRS operations.[6] The Commission further allowed B/ILT licensees to modify their licenses in order to convert their systems into CMRS networks.[7]

The Commission made these changes despite strong objections from many B/ILT licensees, including Boeing, and public safety licensees, all of which expressed concern regarding the continued availability of B/ILT frequencies for business and industrial purposes, as well as other problems that might result from the increased interleaving of different services.[8]

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[5] *See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies*, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 22709 (2000).

[6] *See id.*, ¶ 110.

[7] *See id.*, ¶ 111.

[8] *See Letter from Kelly A. Quinn, Squire, Sanders & Dempsey LLP, to Magalie Roman Salas, Secretary, Federal Communications Commission* (Oct. 29, 1999) (providing *ex parte* notice of Boeing meeting with Commission staff regarding conversion of 800 MHz B/ILT frequencies to CMRS use); *Letter from Sheldon R. Bentley, Manager, Frequency Management Services, The Boeing Company, to Magalie R. Salas, Secretary, Federal Communications Commission* (Oct. 27, 1999) (providing written *ex parte* comments expressing concern regarding conversion of 800 MHz B/ILT frequencies to CMRS use); *Reply Comments of The Boeing Company*, Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, WT Docket No. 99-87 (Sept. 30, 1999); *Comments of The Boeing Company*, Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, WT Docket No. 99-87 (Aug. 2, 1999); *Letter from Kelly A. Quinn, Squire, Sanders & Dempsey LLP, to Magalie Roman Salas, Secretary, Federal Communications Commission* (May 21, 1999) (providing *ex parte* notice of Boeing meeting with Commission staff to express concern regarding conversion of 800 MHz licenses to CMRS use); *see also Letter from Sheldon R. Bentley, Manager, Frequency Management Services, The Boeing Company, to Magalie R. Salas, Secretary, Federal*

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The Commission has since acknowledged that "a serious interference problem" has developed in the 800 MHz band as a result of these conflicting spectrum uses.[9] As the Commission indicated in its *800 MHz Band NPRM*, interference to critical public safety operations in the 800 MHz band has increased as cellular-type CMRS systems "engaged in more vigorous frequency reuse – with a greater number of digital [Specialized Mobile Radio ("SMR")] and cellular base station sites and a greater number of frequencies in use at those base station sites."[10] The Commission also acknowledged reports by major industrial trade associations that B/ILT licensees were also receiving harmful interference from low power, low site, digital SMR stations operating in 800 MHz spectrum.[11]

The Commission has since been required to devote substantial resources to rectify the serious interference problems that have developed in the 800 MHz band. Although significant disagreement continues to exist regarding the best approach for resolving the 800 MHz interference problems, there appears to be consensus that, once a solution is implemented, future

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Communications Commission (Sept. 23, 1999) (providing written *ex parte* comments on Petition for Rulemaking filed by the American Mobile Telecommunications Association, Inc. addressing private land mobile radio licenses in the 450-470 MHz band); *Letter from Sheldon R. Bentley, Manager, Frequency Management Services, The Boeing Company, to Magalie R. Salas, Secretary, Federal Communications Commission* (May 20, 1999) (providing written *ex parte* comments on Nextel requests for waivers in order to convert private land mobile radio licenses into CMRS authorizations in the 800 MHz band).

[9] *See Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels*, Notice of Proposed Rulemaking, WT Docket No. 02-55, 17 FCC Rcd 4873, ¶ 20 (2002) ("*800 MHz Band NPRM*").

[10] *Id.*, ¶ 10.

[11] *See id.*, ¶ 19 (*citing letter from Jerry Jasinowski, President, National Association of Manufacturers and Clyde Morrow, Sr., President, MRFAC, Inc., to Michael Powell, Chairman, Federal Communications Commission* (Dec. 21, 2001)).

conversion of 800 MHz B/ILT frequencies to CMRS services should be prohibited in order to prevent the problem from re-emerging.[12]

This same insight should be employed in the Commission's *Secondary Markets* proceeding. The Commission should not adopt a regulatory framework that will facilitate the creation of other untenable band arrangements. Instead, the Commission should keep in place the regulatory safeguards on leasing of B/ILT spectrum that were adopted in the *Secondary Markets Order*. Such safeguards will help to ensure that important business and industrial communications services are not disrupted by the Commission's evolving regulatory treatment of commercial wireless spectrum.

Boeing relies on B/ILT licenses to provide critical safety and productivity functions, such as security, emergency services, aeronautical and industrial regulatory compliance, research and development, and manufacturing support. Internal analysis reveals that Boeing's communications and control system requirements cannot be adequately satisfied through the use of commercially available CMRS equipment and services. Ongoing access to private use B/ILT spectrum, free from harmful interference caused by disparate co-channel or adjacent channel uses, is therefore essential to Boeing's operations.

The uninterrupted integrity of Boeing's communications networks is particularly important with respect to internal safety and emergency services. In addition to responding to emergencies at Boeing facilities, Boeing is also a party to several mutual aid agreements with local public safety entities in Washington, Missouri, and Kansas. Under these cooperative

[12] *See, e.g.*, *Comments of The Boeing Company*, WT Docket No. 02-55 at 24 (May 6, 2002).

agreements, Boeing supplements local public safety entities by serving as the "first responder" to public safety emergencies occurring near Boeing's operations.[13]

Because of the critical nature of Boeing's emergency and manufacturing communications networks, interference-free transmissions are vital. The Commission should therefore protect the integrity of B/ILT communications networks by maintaining the restrictions on leasing of B/ILT frequencies that were appropriately adopted by the Commission in its *Secondary Markets Order*. Pursuant to these rules, the Commission should continue to limit the leasing of B/ILT frequencies solely to parties that qualify as B/ILT licensees and solely for B/ILT communications.

Respectfully submitted,

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[13] For example, Boeing's mutual aid agreements were utilized during the Seattle earthquake of February 2001 and during the Wichita tornado of May 1999, when Boeing provided first responder public safety services to the affected communities surrounding its operations.