

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

In the Matter of	)	
	)	
Former Nextel Communications, Inc.	)	WT Docket No. 06-169
Upper 700 MHz Guard Band	)	
Licenses and Revisions to Part 27 of	)	
the Commission's Rules	)	
	)	
Development of Operational,	)	WT Docket No. 96-86
Technical and Spectrum	)	
Requirements for Meeting Federal,	)	
State and Local Public Safety	)	
Communications Requirements	)	
Through the Year 2010	)	
To: The Commission		

**REPLY COMMENTS  
OF NORTHROP GRUMMAN INFORMATION TECHNOLOGY, INC.**

Northrop Grumman Information Technology, Inc. ("Northrop Grumman") hereby submits its Reply Comments in response to the *Notice of Proposed Rulemaking* in the above-captioned proceeding,<sup>1</sup> wherein the Commission seeks comment on possible rule changes affecting the A Block and B Block of guard band spectrum in the Upper 700 MHz band.<sup>2</sup>

As the Commission notes, two important developments prompt this query – the return of a large majority of the B Block spectrum by Nextel Communications, Inc. ("Nextel"),<sup>3</sup> and the new "hard" date by which television broadcast stations must vacate the Upper 700 MHz band as part of their digital television transition.<sup>4</sup> These two changes open a unique window of

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<sup>1</sup> 21 FCC Rcd 10413 (2006) ("NPRM"). A summary of the *NPRM* was published in the Federal Register on September 21, 2006, 71 Fed. Reg. 55149. The Commission extended the due date for reply comments in this proceeding to this date by *Order*, DA 06-2116, 21 FCC Rcd 11985 (2006).

<sup>2</sup> See *NPRM* at ¶¶ 1-2, 7-11.

<sup>3</sup> 42 of the 52 B Block licenses were returned by Nextel to the Commission as part of the 800 MHz public safety remediation proceeding. *Id.* at 2, 12

<sup>4</sup> *NPRM* at ¶ 2.

opportunity to repurpose the underutilized<sup>5</sup> commercial A and B Blocks, unlocking this spectrum to be used in a more efficient and flexible manner. In combination with the Commission's two other pending rule makings involving the 700 MHz band,<sup>6</sup> the Commission here can make rule changes that will create a synergistic "multiplier effect" benefiting both the Public Safety and commercial segments of the Upper 700 MHz band.

All of this is possible if the Commission adopts the Broadband Optimization Plan, and associated changes to technical and services rules for the reconfigured A Block, being advanced by Access Spectrum, LLC ("Access Spectrum") and Pegasus Communications Corporation ("Pegasus") in this proceeding and in the *Public Safety 700 MHz Broadband* and *Commercial 700 MHz* proceedings.<sup>7</sup> As Access Spectrum and Pegasus have demonstrated in detail, these modifications would: 1) ensure that the auction of remaining 700 MHz commercial spectrum occurs on a timely basis; 2) maximize spectral efficiency and technological flexibility, enabling more efficient and effective wireless broadband networks; and 3) harmonize the public safety and commercial allocations in the 700 MHz band, and confer a substantial benefit to the public safety community by providing it with an additional 3 MHz of spectrum, better enabling public safety to leverage the technological advances and cost efficiencies of wireless broadband technology and applications available in the commercial wireless marketplace.<sup>8</sup>

Northrop Grumman has extensive experience as a systems integrator designing, building, and maintaining the types of systems public safety agencies will deploy in the Upper 700 MHz

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<sup>5</sup> See *NPRM* at ¶ 13.

<sup>6</sup> *Eighth Notice of Proposed Rulemaking, The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010* (WT Docket No. 96-86), 21 FCC Rcd 3668 (2006) ("*Public Safety 700 MHz Broadband* proceeding"); *Notice of Proposed Rule Making, Fourth Further Notice of Proposed Rule Making, and Second Further Notice of Proposed Rule Making, Service Rules for the 698-746, 747-762 and 777-792 MHz Bands* (WT Docket No. 06-150, CC Docket No. 94-102 and WT Docket No. 01-309), 21 FCC Rcd 9345 (2006) ("*Commercial 700 MHz* proceeding").

<sup>7</sup> See *Comments of Access Spectrum and Pegasus Communications Corporation* in this proceeding, filed October 23, 2006 ("*Access/Pegasus Comments*").

<sup>8</sup> *Id.*

band. That experience demonstrates that the greater the number of technology options, the greater the benefits in system deployments and the greater the cost savings. Northrop Grumman has participated extensively in the *Public Safety 700 MHz Broadband* proceeding, urging the Commission to modify the 700 MHz Public Safety band to create larger segments of contiguous public safety spectrum to accommodate public safety wireless broadband operations and offer the widest variety of technology options for public safety agencies.<sup>9</sup>

While Northrop Grumman has detailed how the 700 MHz Public Safety band can be modified to accommodate wireless broadband operations regardless of whether the Commission adopts the Broadband Optimization Plan,<sup>10</sup> Northrop Grumman continues to urge the Commission to consider the big picture of potential improvements in both the public safety and commercial bands that can be achieved via the Broadband Optimization Plan.<sup>11</sup> Public safety would significantly benefit from the transfer of the 3 MHz of present B Block spectrum, creating two 5.5 MHz blocks of contiguous spectrum available for wireless broadband use and enabling the greatest range of commercially available wireless broadband standards and technologies, now and in the future.<sup>12</sup>

Northrop Grumman urges the Commission to transfer this 3 MHz of B Block spectrum to public safety as set forth in the Broadband Optimization Plan, and not to reallocate to -- or create any eligibility or entitlement for -- other classes of users, such as “interoperability” functions of “critical infrastructure industries” proposed previously by Motorola, Inc. and the United Telecommunications Council. Public safety would be ill served by, as the Commission

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<sup>9</sup> See *Comments of Northrop Grumman Information Technology* in WT Docket No. 96-86, filed on June 6, 2006 (“*NG Public Safety Comments*”); *Reply Comments of Northrop Grumman Information Technology* in WT Docket No. 96-86, filed on July 6, 2006 (“*NG Public Safety Reply Comments*”).

<sup>10</sup> See *NG Public Safety Comments* at 6-8; *NG Public Safety Reply Comments* at 1-3.

<sup>11</sup> See *NG Public Safety Comments* at 8-10; *NG Public Safety Reply Comments* at 2-3, 6.

<sup>12</sup> See, e.g., *NG Public Safety Comments* at 6-7, 8-10; *NG Public Safety Reply Comments* at 6; *Access/Pegasus Comments* at 8.

describes, “creating this separate class of interoperability channels, distinct from the interoperability that may be possible between critical infrastructure industries and public safety entities within the public safety block.”<sup>13</sup> Public safety entities themselves face a need for additional spectrum resources to meet the nation’s public safety requirements.<sup>14</sup> Consistent with Nextel’s recommendation when it relinquished its B Block licenses,<sup>15</sup> this 3 MHz of spectrum that would function as guard band for public safety operations is best placed exclusively in the hands and under the management of public safety, without injecting the involvement and operations of third parties into this critical environment.<sup>16</sup> This will increase the total amount of spectrum in the Public Safety band while ensuring that public safety operations are protected from interference.

### **Conclusion**

The return of much of the B-Block guard band spectrum by Nextel, and the fixed date for digital television transition, create a unique opportunity. The Commission can meaningfully improve both the public safety and commercial spectrum band plans in the Upper 700 MHz band

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<sup>13</sup> *NPRM* at ¶ 38.

<sup>14</sup> *See NG Public Safety Reply Comments* at 3.

<sup>15</sup> *See id.* at ¶ 39.

<sup>16</sup> Northrop Grumman respectfully takes issue with the Commission’s “concern that re-designating the spectrum for public safety applications may result in increased interference to public safety.” *Id.* at ¶ 39. The ideal state is to have this asset that is protecting public safety (the 3 MHz of former B Block spectrum functioning as guard band) *in the hands of public safety*. Only then are the incentives perfectly aligned to achieve the paramount goal of protection, while allowing the “protected” to self-manage and assess and balance the desirability of running any applications on such spectrum.

by adopting the Broadband Optimization Plan, and associated changes to the technical and services rules for the reconfigured A Block, proposed by Access Spectrum and Pegasus.

Respectfully submitted,

**NORTHROP GRUMMAN INFORMATION  
TECHNOLOGY, INC.**



Robert F. Brammer, Ph.D.

Vice President and Chief Technology Officer

Mark S. Adams  
Chief Architect  
Networks and Communications  
Office of the CTO

Northrop Grumman Information Technology, Inc.  
7575 Colshire Drive  
McLean, Virginia 22102  
(703) 227-8631

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