Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Service Rules for the 698-746, 747-762 And 777-792 MHz Bands	)	WT Docket No. 06-150
	)	
Former Nextel Communication, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the FCC's Rules	)	WT Docket No. 06-169
	)	
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band	)	PS Docket No. 06-229
	)	
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

REPLY COMMENTS OF GOOGLE INC.

Google Inc. ("Google"), by its attorneys, and pursuant to the Federal Communications Commission ("FCC" or "Commission") Public Notice,[1] files these reply comments in response to initial comments submitted in the above-referenced proceedings concerning Google's May 21, 2007 ex parte letter.[2]

I. OVERVIEW

In its May 21 ex parte letter, Google requested clarification from the Commission that any successful bidder in the upcoming 700 MHz auction subsequently could institute

[1] Public Notice, Comment Sought On Google Proposals Regarding Service Rules For 700 MHz Band Spectrum, Federal Communications Commission, WT Docket No. 06-150, e*t al*, DA 07-2197, released May 24, 2007 ("Notice").
[2] Letter from Richard S. Whitt, Esq., Google Inc., to Marlene H. Dortch, Secretary, FCC, filed on May 21, 2007 ("Google Ex Parte Letter").

dynamic spectrum management techniques, such as real-time auctions and per-device registration fees. Google also asked the Commission to posit whether it would be in the public interest to mandate such treatment for some, or all, of the available commercial spectrum. Finally, Google asked the Commission to require that the "E" block in the Lower 700 MHz band be reserved for broadband platforms.

Parties with widely disparate interests and viewpoints still appear to agree with Google on a central legal point: successful bidders in the upcoming 700 MHz auction already possess the requisite legal authority to engage subsequently in real-time, dynamic auctions of their spectrum holdings to end users. The Commission should confirm that understanding as part of its final order in this proceeding. Moreover, the Commission has ample discretionary authority to consider mandating dynamic auction techniques for at least some of the commercial spectrum. Finally, the critical imperative of deploying broadband services in the United States should be factored into the service rules applicable to the unpaired E Block in the Lower 700 Band.

II. INITIAL COMMENTS IN THIS PROCEEDING ONLY BOLSTER THE CASE FOR GRANTING GOOGLE'S REQUEST FOR CLARIFICATION

A. Google Appreciates the Enthusiastic Support of Many Parties

Initially, it is gratifying that many parties commented favorably on the substance of Google's ex parte letter. In particular, we are pleased that comments representing technology industry companies, wireless entrepreneurs, and potential auction bidders all support the central thrust of Google's request for clarification. The Computer and Communications Industry Association (CCIA) noted that Google's request include "practical marketing and business models that should not be excluded from any open and

competitive wireline broadband Internet access initiative."[3] Similarly, Frontline Wireless, LLC notes that "Google's comments are an important contribution to the record" and "highlight the critical importance of encouraging competition, entrepreneurship and innovation from the use of the 700 MHz spectrum."[4]

Perhaps most impressively, a distinguished array of wireless business entrepreneurs submitted a letter in which they "applaud the recent suggestion made by Google" to make spectrum "available to all comers via an auction."[5] Ranging from the founders of Virgin Mobile to one-time CEOs of PalmSource, Zingy, Aliph, Vindigo, and Fonav, these wireless pioneers did not achieve their notable successes by sticking to the conventional and playing it safe. Their forward-thinking views should be welcomed in this and other Commission proceedings.[6]

B. There Is A Near-Consensus Among The Parties That Licensees Are Free To Deploy Real-Time Auctions And Other Dynamic Wholesale Mechanisms

A majority of commentators expressed support for our overarching request: that the Commission should conclude that any successful bidder in the upcoming 700 MHz auction subsequently could institute dynamic spectrum management practices.[7] We are pleased that supporters of this position include not just the technology industry, but

[3] Comments of CCIA, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 4.
[4] Comments of Frontline Wireless, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 2, 7.
[5] Comments of Wireless Founders Coalition for Innovation, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 4.
[6] By contrast, AT&T's comments at times resort to a dismissive tone, for example in describing Google initially as "an entity that does not hold any FCC licenses or operate any network facilities." Comments of AT&T, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 1. Beside the fact that the observation has no relevance, AT&T is wrong factually on both counts. Perhaps the Commission should give less credence to filings submitted by entities that do not own, or apparently use, search engines.
[7] Comments of Verizon, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 2; Comments of CTIA, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 6.

several incumbent wireless carriers as well. Verizon goes so far as to call Google's request "unnecessary because the Commission has previously confirmed this right."[8] The Rural Telecommunications Group indicates that it "does not oppose the use of such [dynamic auction] mechanisms should a licensee elect to utilize them."[9] Nonetheless, it is disappointing – but not entirely surprising – that several incumbents present beside-the-point objections to Google's letter.

The most common critique is that Google does not provide sufficient detail on the dynamic auction concept.[10] Of course, the very point of the letter is that the Commission should not attempt to peer into the future and assess what specific business models and technologies should be encouraged, or even allowed. Nor should the FCC's spectrum auctions be reserved only for those who are relegated to narrowly defined business arrangements. Rather, the concept of dynamic spectrum management potentially covers many different technologies and commercial models, many of which have not yet been invented. Future innovations should not be forced into yesterday's regulatory boxes.

For example, in the initial example presented briefly in its letter, Google described what for this purpose could be labeled a "retail commons," where the end user gains temporary access to licensed spectrum (much as cellphone subscribers do today) but does not otherwise lease or own the spectrum outright. As Verizon and CTIA point out,[11] the Commission's *Secondary Markets* proceeding appears to include a second type of dynamic auction, under the rubric of a "private commons," where the relationship

[8] Verizon Comments at 2.
[9] Comments of Rural Telecommunications Group, Inc., WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 2.
[10] Comments of MetroPCS, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 10; AT&T Comments at 3-5.
[11] Verizon Comments at 3-4; CTIA Comments at 8.

between licensee and end user is more akin to a lessor and lessee.[12] CTIA's objections to the contrary,[13] nowhere in its letter did Google suggest that allowing the use of a private commons approach would not also entail complying with whatever rules and limitations would otherwise be applicable under the Commission's existing rules. However, this precedent may not cover the "retail commons" approach because, in that case, the actual ownership rights in the spectrum never pass from the licensee to the end user.[14]

A second critique is that Google is presenting a "radical proposal,"[15] one that will inevitably delay the auction.[16] As Google has made clear on numerous occasions, its primary interest is in seeing the auction occur promptly and without undue delay.[17] Because its chief request for clarification would be non-binding on a licensee, Google fails to see how the auction can be delayed at all by the agency's prompt consideration. Only nine days separate the filing dates for replies in the larger 700 MHz proceeding and this one, which should provide ample time for the Commission to clarify this one aspect of its service rules.[18]

Third, MetroPCS objects to Google's request based on what it calls "core legal issues" not addressed in Google's ex parte letter.[19] Those issues turn out to be peripheral speculations about licensees abiding by Title II of the Communications Act. Aside from the fact that the Commission recently has determined that wireless broadband Internet

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[12] *In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Report and Order, 18 FCC Rcd 20604 ("Secondary Markets Order")
[13] CTIA Comments at 7-8.
[14] CTIA also states that non-consensual use of licensed frequencies generally would be prohibited under findings in the *Interference Temperature* proceeding. *Id.* We do not intend to propose such usage, at least for purposes of the 700 MHz proceeding.
[15] MetroPCS Comments at 2.
[16] CTIA Comments 3-4; AT&T Comments at 6.
[17] *See, e.g.*, Comments of Google Inc., WT Docket No. 06-150 *et al*, filed on May 23, 2007, at 6.
[18] It is also notable that only the incumbents seem to view the supposedly "radical" nature of Google's dynamic auction concepts as a bad thing.
[19] MetroPCS Comments at 5-9.

access is an information service,[20] the three "core legal issues" presented in the MetroPCS comments – nondiscrimination, cost-based pricing, and truth-in-billing -- are nonsensical. Title II of the Act requires reasonable nondiscrimination, not absolute nondiscrimination, and it seems quite a stretch to deem it discriminatory to allow the market laws of supply and demand to result in lower prices for rural users than urban users. Nor do the FCC's cost-based pricing requirements for wireline ILECs in Section 251(c)(3) have anything at all to do with market-based rates by non-ILEC wireless providers. As to truth-in-billing, the price and terms mediation capabilities that can be built into end user devices will be far more responsive to the user's ultimate wishes than the existing rate plans and service terms promulgated by many incumbents. Nonetheless, as the Commission considers our request for clarification, it may decide to make explicit what types of service within the 700 MHz commercial spectrum (if any) may be subject to certain common carrier requirements.

Thus, aside from non-germane objections, the comments support Google's modest request for clarification. The Commission should grant such clarification.

C. The Commission Should At Least Consider Mandating Dynamic Spectrum Allocation Techniques For Suitable Situations

Google's ex parte letter suggested that the FCC may find it in the public interest to require dynamic auction techniques for certain uses.[21] Several commenting parties claim that the FCC does not have the authority to mandate dynamic, real-time auctions, and in any event should not do so.[22]

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[20] *In the Matter of Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, Report and Order, WT Docket No. 07-53. FCC 07-30, rel. March 23, 2007.
[21] Google Ex Parte Letter at 4.
[22] AT&T Comments at 6-9; Verizon Comments at 4-6.

Google strongly believes in the development of a "highly flexible marketplace-driven spectrum regime."[23] Such a framework ideally should take into account new technologies which have not yet been developed or deployed, and allow business models such as dynamic auctions to develop according to industry usage. By the same token, within the confines of the existing "command and control" regime, there may well be instances where requiring the employment of certain technologies would mesh particularly well with the existing service rules. As one example, should the Commission adopt the Frontline Wireless "E" Block proposal -- core components of which Google strongly supports -- one possible overlay to the wholesale/open access obligations could be dynamic auction techniques. Frontline itself has suggested a similar proposal.[24] The key point is that the Commission should look for ways to use its existing licensing authority to encourage more efficient and innovative spectrum usage.

D. Significant Public Interest Benefits Warrant Mandating Broadband Platforms in the Lower 700 MHz Band

In its letter, Google suggested that the Commission require that the unpaired 6 MHz "E" Block in the Lower 700 Band be used for broadband communications platforms.[25] Qualcomm and others object that the FCC should not impose its judgment on what business models should be employed for that particular piece of spectrum.[26]

This Commission consistently has expressed its view that encouraging ubiquitous broadband deployment is one of our nation's top priorities. In its recent Broadband Data

[23] Google Ex Parte Letter at 3.
[24] Frontline Comments at 3-4.
[25] Google Ex Parte Letter at 4-5.
[26] Qualcomm Comments at 1-6; CTIA Comments at 4; AT&T Comments at 3; Rural Telecommunications Group Comments at 2.

NPRM, for example, the Commission notes that it has "consistently recognized the critical importance of broadband services to the nation's present and future prosperity and is committed to adopting policies to promote the development of broadband services, including broadband Internet access services."[27]

Individual FCC Commissioners also have stressed this theme time and again. On numerous occasions Chairman Martin has stated that promoting broadband deployment and penetration is one of his highest priorities,[28] noting in particular the critical link to economic growth.[29] Commissioner Copps puts it succinctly: "bringing high-speed broadband to every corner of the country is the central infrastructure challenge we face."[30] Commissioner Adelstein has testified before Congress on the importance of broadband deployment, and the FCC's efforts to ensure the extension of "affordable, high speed broadband infrastructure to every corner of this country."[31] Similarly, Commissioner Tate has called for the development of ubiquitous, affordable broadband services.[32] Commissioner McDowell has applauded how the FCC is "rushing to create new opportunities for more competition through the construction of new delivery platforms."[33]

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[27] *In the Matter of Development of Nationwide Broadband Data, et al*, WC Docket No. 07-38, *et al*, Notice of Proposed Rulemaking, FCC 07-17, released April 16, 2007, at 1 ("Broadband Data NPRM").
[28] Statement of Chairman Kevin J. Martin, Broadband Data NPRM, at 8.
[29] Prepared Testimony of Kevin J. Martin, Chairman, FCC, U.S. Senate Committee on Commerce, Science and Transportation, Subcommittee on Telecommunications and the Internet, Hearing on Oversight of the Federal Communications Commission, March 14, 2007, at 3.
30 FCC Press Release, "Commissioner Copps Reiterates Call for a National Broadband Strategy to Address America's Drop in Broadband Rankings," April 23, 2007.
[31] Written Testimony of Jonathan Adelstein, Commissioner, FCC, Subcommittee on Rural and Urban Entrepreneurship Small Business Committee, Hearing on Maximizing the Value of Broadband Services to Rural Communities, U.S. House of Representatives, May 9, 2007, at 1.
[32] Statement of FCC Commissioner Deborah Taylor Tate, *In the Matter of Service Rules for the 698-746, 747-762, and 777-792 MHz Bands, et al*, WT Docket No. 06-150 et al, Report and Order and Further Notice of Proposed Rulemaking, FCC 07-72, released April 27, 2007, at 1.
[33] Luncheon Address by Commissioner Robert M. McDowell, Broadband Policy Summit III, June 7, 2007, at 14. Available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-273742A1.pdf.

While Google is no fan of the agency's current "command-and-control" spectrum regime, this is the system we have been bequeathed, at least for now. Legacy decisions of the past continue to haunt the potential uses of this resource. Despite the rhetoric of some, the current spectrum auction process little resembles a true free market. The Commission is called upon to make significant judgment calls about license geographies, spectrum block placement and sizes, power limits, and a host of other critical details, each of which directly impacts the economic and social value of the spectrum. Within the confines of this flawed system, the Commission should make one other decision: the optimal uses of spectrum to best serve the country's needs. With regard to the unpaired E Block in the Lower 700 Band, the Commission should determine that a two-way Internet access service would better further the "critical importance of broadband services to the nation's present and future prosperity."

E. Google's Proposal Does Not Disturb -- And Should Only Enhance -- The Use Of Public Safety Spectrum

The National Public Safety Telecommunications Council (NPSTC) and the National Emergency Number Association (NENA) separately call for protection of adjacent public safety operations, including not subjecting the priority access proposal to prescribed conditions.[34] Google agrees. Our request for clarification did not intend to suggest placing any mandatory conditions on the 700 MHz spectrum assigned for public safety usage. At the same time, Google believes that at least allowing the use of dynamic auctions can help facilitate an interoperable nationwide communications network for first

[34] Comments of NPSTC, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 3; Comments of NENA, WT Docket No. 06-150, *et al*, filed on June 6, 2007, at 4-5.

responders. Further, the end goal of accelerating broadband deployment and pursuing efficient spectrum usage should lead to more innovative services and overall cost savings for all users, including the public safety community.

III. CONCLUSION

While several incumbent commentators express discomfort at the prospects of Google's dynamic auctions proposal, none has offered any serious rationale why the Commission should not allow licensees the flexibility to employ novel spectrum management techniques. For the foregoing reasons, Google requests that the Commission accept its request and clarify that successful bidders in the upcoming 700 MHz auction have the authority to adopt dynamic auctions. In addition, the Commission should consider mandating the use of dynamic auction techniques in certain pertinent situations, and should direct that the E Block in the Lower 700 Band be reserved for Internet-connected broadband platforms.

Respectfully submitted,

Google Inc.

Richard S. Whitt, Esq.
Washington Telecom and Media Counsel

1001 Pennsylvania Avenue, NW
Suite 600 South
Washington, D.C. 20004
202.742.6536

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