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

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| In The Matter Of | ) | |
| | ) | |
| Service Rules for the 698-746, 747-762 and 777-792 MHz Bands | ) | WT Docket No. 06-150 |
| | ) | |
| Revision of FCC's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems | ) | CC Docket No. 94-102 |
| | ) | |
| Section 68.4(a) of the FCC's Rules Governing Hearing Aid-Compatible Phones | ) | WT Docket No. 01-309 |
| | ) | |
| Biennial Regulatory Review- Amendment of Parts 1, 22, 23 27, and 90 to Streamline and Harmonize Rules Affecting Wireless Services | ) | WT Docket 03-264 |
| | ) | |
| Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses & 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 & Spectrum Requirements for Meeting Federal, State, & Local Public Safety Communications Requirements Through the Year 2010 | ) | WT Docket No. 96-86 |
| | ) | |

**REPLY COMMENTS OF QUALCOMM IN OPPOSITION TO GOOGLE'S PROPOSALS FOR SERVICE RULES FOR 700 MHz SPECTRUM**


Dean R. Brenner
Vice President, Government Affairs
QUALCOMM Incorporated
2001 Pennsylvania Ave., N.W.
Suite 650
Washington, D.C. 20006
(202) 263-0020


Dated: June 13, 2007

## SUMMARY

Not a single commenter supported Google's proposal that the Commission re-visit its 2002 decision making a flexible allocation for the Lower 700 MHz Band, including the E Block within that band, and instead prohibit all uses of the E Block except for what Google calls "interactive, two-way broadband services, connected to the public internet, and used to support innovative software-based applications, services, and devices."[1] The commenters who joined QUALCOMM in opposing Google's proposal ran the gamut from large carriers (Verizon Wireless and AT&T), small rural carriers (the Rural Telecommunications Group), and the wireless industry trade association (CTIA). It is telling to see such unanimous opposition to this unwarranted proposal.

The commenters agreed with QUALCOMM that Google's premise, namely that under existing rules, the Lower 700 MHz E Block lacks any commercial value, is simply wrong. Moreover, the commenters joined QUALCOMM in opposing Google's attempt to have the Commission dictate that only one type of use of the E Block is permissible because such a mandate is just the type of invasive, command and control approach to regulation that the Commission abandoned over a decade ago.

Accordingly, the Rural Telecommunications Group argued that the Commission should not engage in the command and control regulatory scheme proposed by Google because to do so "would distort the marketplace for spectrum and services and would quash innovation of potential new and innovative services."[2] AT&T opposed Google's proposal because it would be

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[1] Google Ex Parte Letter, dated May 21, 2007 at Pages 4-5.

[2] Comments of Rural Telecommunications Group (filed June 6, 2007) at Page 3.

"inconsistent with the doctrines of licensee flexibility and technical and service neutrality."[3] Verizon Wireless asked the Commission to "summarily dismiss" Google's proposal because mandating the use of the E Block would impair licensee flexibility and would likely diminish, not enhance, innovation."[4] Finally, CTIA strongly opposes Google's proposal for the Lower 700 MHz E Block because "restrictions on the use of the 700 MHz E Block license would adversely impact the 700 MHz auction and would adversely affect competition in mobile services generally."[5] QUALCOMM agrees thoroughly with these arguments and requests that the Commission reject Google's proposal for the Lower 700 MHz E Block.

Furthermore, QUALCOMM requests that the Commission reject Google's other proposal, that the Commission mandate that 700 MHz licensees use so-called dynamic auction mechanisms. On this issue, QUALCOMM is joined in its opposition by not only the foregoing commenters, but also the National Public Safety Telecommunications Council and MetroPCS Communications ("MetroPCS"). On the other side, Vanu, Inc. ("Vanu") argues that the Commission should allow licensees to offer their spectrum to short term lessees in dynamic auctions and the Computer & Communications Industry Association ("CCIA") likewise asks the Commission to permit licensees to use dynamic auctions. However, as Verizon Wireless noted, the Commission has already confirmed that licensees may use what Google is calling dynamic spectrum leases.[6]

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[3] Comments of AT&T (filed June 6, 2007) at Page 10.

[4] Further Comments of Verizon Wireless (filed June 6, 2007) at Page 7.

[5] CTIA Comments (filed on June 6, 2007) at Page 3.

[6] Verizon Wireless Comments (filed on June 6, 2007) at Pages 2-4.

The real issue, then, is whether the Commission should take the unprecedented and radical step of mandating that some or all 700 MHz licensees use dynamic spectrum auctions, and Google provides no specifics on what it has in mind with its vague proposal for a new mandate, much less any persuasive justification for this proposed sweeping new mandate. Frontline Wireless ("Frontline") calls Google's proposal "brilliant" and urges the Commission to mandate that at least twenty five percent of the network capacity of the Upper 700 MHz E Block licensee be offered in open active auctions.[7] But, there is simply no basis for the Commission to impose such a radical regulation, which would reverse the last fifteen or more years of spectrum policy in which the Commission has refrained from making such dictates on how the wireless carriers carry on their retail businesses. As AT&T points out, such a mandate would "seriously interfere with an orderly auction" and would "violate the principles of technical and service neutrality and licensee flexibility."[8] QUALCOMM again urges the Commission not to impose the new mandate on 700 MHz licensees that Google seeks.

Finally, to the extent that Google, in advocating per device registration fees, is proposing that unlicensed devices be allowed to operate involuntarily on the 700 MHz licensed spectrum as an underlay, QUALCOMM joins with Verizon Wireless and CTIA in opposing such a proposal. The Commission terminated its proceeding on interference temperature, wherein it was considering allowing the involuntary operation of unlicensed devices on licensed spectrum. Google has not shown any reason for the Commission to depart from that recent ruling.

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[7] Frontline Comments (filed June 6, 2007) at Page 2.

[8] Comments of AT&T at Pages 7, 8.

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**REPLY COMMENTS OF QUALCOMM IN OPPOSITION TO GOOGLE'S PROPOSALS FOR SERVICE RULES FOR 700 MHz SPECTRUM**

QUALCOMM Incorporated ("QUALCOMM"), by its attorneys and pursuant to the Public Notice released by the Wireless Telecommunications Bureau in these proceedings, DA 07-2197, released May 24, 2007, hereby submits its reply comments in opposition to the proposals made by Google in its ex parte letter of May 21st. In submitting this reply,

QUALCOMM again incorporates its Comments and Reply Comments filed in these proceedings on May 23 and June 4, 2007, respectively.

## I. No Commenter Supported Google's Proposal That the Commission Revise Its 2002 Ruling and Prohibit All Services from the E Block Except for "Interactive, Two-Way Broadband Services, Connected to the Public Internet, and Used to Support Innovative Software-Based Applications, Services, and Devices"

As already noted supra, not a single commenter supported Google's proposal that the Commission prohibit all uses of the Lower 700 MHz E Block except for "interactive two-way broadband services, connected to the public internet, and used to support innovative software-based applications, services, and devices."[9] To the contrary, AT&T, CTIA, the Rural Telecommunications Group, and Verizon Wireless all opposed Google's proposal and made arguments similar to those made by QUALCOMM in its comments. For example, AT&T argued that the Commission should reject the proposal because it would be "inconsistent with the doctrines of licensee flexibility and service neutrality."[10] AT&T contended that the market will determine the highest and best use of the spectrum, and AT&T pointed out that Google made its proposal way too late to be considered.[11]

Verizon Wireless points out that Google presents no real rationale for its proposed limitation on the use of the Lower 700 MHz E Block.[12] Verizon Wireless argues that such a limitation would "impair licensee flexibility" and "would likely diminish, not enhance,

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9 Google May 21, 2007 Ex Parte at Page 5.

10 AT&T Comments at Page 10.

11 Id.

12 Further Comments of Verizon Wireless at Page 7.

innovation."[13] Moreover, Verizon Wireless noted that Google's proposal to restrict the use of the E Block is inconsistent with Google's argument that the Commission should ensure that "a particular slice of spectrum ends up in the hands of the user who values it most at any particular time and place."[14]

For its part, the Rural Telecommunications Group ("RTG") made similar arguments against Google's proposal. The RTG argued that the Commission should not engage in the type of command and control regulatory scheme that Google is advocating. As the RTG put it, "(t)o do so would distort the marketplace for spectrum and services and would quash innovation of potential new and innovative services."[15] The RTG noted that if the Commission adopted Google's proposal, the Commission would be prohibiting use of the E Block for innovative mobile video services such as QUALCOMM's MediaFLO service, which is deployed on the adjacent D block.

Finally, CTIA noted that contrary to Google's argument, the Lower 700 MHz E Block does have value for bidders and should not be burdened with the prohibitions on use that Google is seeking to impose.[16] CTIA went on to show that Google's proposed restriction would adversely impact the 700 MHz auction and competition in mobile services generally. CTIA noted that there is no basis to preclude a one way mobile video service such as MediaFLO from the Lower 700 MHz E Block spectrum.

QUALCOMM agrees with all of these commenters. There is no legitimate reason for the Commission to prohibit certain uses of the E Block and allow only other particular uses. The

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13 Id.

14 Id. (quoting Google Ex Parte at Page 4).

15 Comments of Rural Telecommunications Group (filed June 6, 2007) at Page 3.

16 Comments of CTIA at Page 3.

adoption of such prohibitions would substantially de-value the Lower 700 MHz E Block spectrum and would alter the market for no good purpose. The Commission made the right decision in 2002 when it adopted a flexible allocation for the E Block, and Google has not shown any reason whatsoever for the Commission to change course now. For all of these reasons, QUALCOMM respectfully requests that the Commission reject Google's proposed limitation on the use of the Lower 700 MHz E Block.

## II. The Commission Should Not Mandate the Use of Dynamic Auctions

The second new mandate proposed by Google, a requirement that 700 MHz licensees utilize dynamic auctions (whatever that means), also came under attack from several commenters in addition to QUALCOMM. For example, AT&T began its comments by noting that Google has not shown how it would implement these dynamic auctions or how that implementation would fit within existing Commission rules.[17] AT&T noted that in the absence of more specific information from Google, there is nothing for the Commission to evaluate. AT&T also stated that it is too late for Google to come forward with this proposed mandate—the Commission's 700 MHz rulemakings have been underway since 1999, and Google did not make any proposal until now, eight years later.

AT&T explained that mandating that all or some auction winners use dynamic auctions would interfere with the Commission's auction process because it would be difficult for bidders to value the spectrum since they would not have full flexibility to use it. According to AT&T, the proposal seems designed to benefit Google, who has publicly disavowed any interest in bidding, and it would not be fair to those who have adopted their own business plans for the

[17] Comments of AT&T at Pages 3, 6.

Commission to force them to shift to a business strategy favored by Google.[18] Finally, AT&T argues that mandating the use of dynamic auctions would violate the principles of technical and service neutrality and licensee flexibility.

MetroPCS identified a series of inconsistencies in Google's filings: a) Google urged the Commission to hold the 700 MHz auction without delay, but then filed the instant proposal for radical regulatory changes two days before the comment deadline in these 700 MHz proceedings so that the Commission would have to delay the auction if it wanted to conduct a thorough study of Google's proposal; b) Google professes strong support for a flexible, marketplace-driving spectrum regime, and then made the instant proposal, by which the government would micro-manage use of the spectrum; and, c) Google asks the Commission to skew its 700 MHz rules to maximize opportunities for new entrants to provide a third broadband pipe to the home, and then concedes that there is no clear evidence that a wireless commercial platform on 700 MHz spectrum can compete with incumbents.[19]

In addition, MetroPCS pointed to a host of legal issues with Google's proposal that Google did not address—whether a mandatory system of dynamic auctions, which amounts to a mandatory system of price discrimination, is lawful under Section 202 of the Communications Act; whether Google's proposal violates the Commission's policy in favor of cost-based pricing; and whether Google's proposal would comply with truth-in-billing regulations.[20]

RTG simply wrote that while it does not oppose the use of dynamic auctions, the Commission should not mandate them because licensees "should be free to determine how they

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18 Id. at Page 7.

19 MetroPCS Comments at Pages 2 to 4.

20 Id. at Pages 5 to 8.

will utilize their spectrum and how they will provide service to their end users (e.g., through a traditional provider-subscriber relationship or on an "on demand" basis)."[21] RTG opposed the Commission adopting a mandate for any particular business model.

For its part, NPSTC expressed concerns about the use of dynamic auctions on the Upper 700 MHz E Block if the Commission adopts some form of the Frontline proposal. As NPSTC put it, "Google proposals must cause no encroachment to public safety use of the 700 MHz band."[22]

QUALCOMM agrees with all of these comments. In particular, as QUALCOMM noted in its own comments, the Commission long ago got out of the business of mandating particular business models, and it should reject Google's efforts to put the Commission back into that business. No commenter made any persuasive argument to the contrary.

Vanu's comments consisted of their views on cognitive radio and software radio technologies. Vanu did not advocate a mandate with respect to dynamic auctions. Rather, Vanu asked that licensees be permitted to use dynamic auctions. Vanu provided no reason for the Commission to mandate the use of dynamic auctions.

Frontline began its comments with the premise that 700 MHz spectrum should not go unused. Frontline did not, and cannot, explain how mandating the use of dynamic auctions on the Upper 700 MHz E Block will ensure the use of 700 MHz spectrum. Frontline repeated its canard that the U.S. wireless industry is anticompetitive, a position utterly at war with the Commission's own findings in its September 2006 report on the state of competition in the

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[21] RTG Comments at Page 2.

[22] NPSTC Comments at Page 3.

wireless industry, which found that the U.S. wireless market is robustly competitive.[23] Frontline's argument is direct: the FCC should not allow Verizon and AT&T to acquire all the 700 MHz spectrum.[24] Frontline's comments give the impression that its real concern is not dynamic auctions, but rather convincing the Commission to preclude Verizon and AT&T from acquiring 700 MHz spectrum. That is not a legitimate basis for the Commission to adopt Google's proposal. Frontline apparently wants the Commission to adopt sweeping eligibility restrictions in advance of the 700 MHz auction. Knowing that the Commission would be extremely reluctant to do so, Frontline has lined up behind Google's proposal, in the hopes of having the Commission erect an indirect eligibility restriction by mandating dynamic auctions. The Commission should not restrict eligibility for the 700 MHz auction, either directly or indirectly.

As QUALCOMM has argued previously, the Commission should auction the 700 MHz spectrum to all comers and let the competitive market work. The Commission should not exclude any companies from the auction, and they should not do so indirectly by mandating the use of dynamic auctions, contrary to Frontline's argument.

Finally, the CCIA argues that the Commission should "give new entrants maximum flexibility in terms of spectrum use" and let the market work and evolve.[25] In fact, the Commission's existing policy is to give all parties, both existing licensees and new entrants, maximum flexibility in terms of spectrum use, and Google's proposal for a new mandate is directly contrary to that policy.

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[23] Eleventh Report, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, 21 FCC Rcd 10947 (2006).

[24] Frontline Comments at Page 3.

[25] CCIA Comments at Page 2.

For all of these reasons, QUALCOMM respectfully requests that the Commission reject Google's proposal that 700 MHz licensees be mandated to use dynamic auctions.

## III. The Commission Should Not Permit Unlicensed Devices to Operate Involuntarily on the 700 MHz Licensed Spectrum

QUALCOMM agrees wholeheartedly with Verizon Wireless and CTIA, who both argue that to the extent that Google's May 21st ex parte letter can be read as proposing that unlicensed devices be allowed to operate involuntarily on 700 MHz spectrum, such a proposal is contrary to the Commission's recent decision terminating its Interference Temperature proceeding.[26] Therein, the Commission stated that "(c)ommenting parties generally argued that the interference temperature approach is not a workable concept and would result in increased interference in the frequency bands in which it would be used."[27]

As the developer of technologies for both licensed and unlicensed spectrum, QUALCOMM believes that both have a role to play—unlicensed for short range, low power operations, and licensed for wide area, higher power operations. Each should be confined to its own dedicated spectrum. Google does not even attempt to provide any technical, economic, legal, or other justification for the Commission to allow unlicensed operations in licensed bands, and the Commission should not re-visit its recent ruling terminating its proceeding on this matter.

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[26] Establishment of an Interference Temperature Metric to Quantify and Manage Interference and to Expand Available Unlicensed Operation in Certain Fixed, Mobile, and Satellite Frequency Bands, ET Docket No. 03-237, released May 4, 2007.

[27] Id. at para. 2.

## IV. Conclusion

Wherefore, for the foregoing reasons, QUALCOMM respectfully requests that the Commission reject Google's proposals.

Respectfully submitted,

By: /s/Dean R. Brenner

Dean R. Brenner
Vice President, Government Affairs
QUALCOMM Incorporated
2001 Pennsylvania Ave., N.W.
Suite 650
Washington, D.C. 20006
(202) 263-0020

Dated: June 13, 2007