Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Service Rules for the 698-746, 747-762 and 777-792 MHz Bands	)	WT Docket No. 06-150
	)	
	)	
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band	)	PS Docket No. 06-229

SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: May 14, 2008 **Released: May 14, 2008**

By the Commission: Chairman Martin and Commissioners Copps, Adelstein, Tate, and McDowell issuing separate statements.

Comment Date: [30 days after publication in the Federal Register]
Reply Comment Date: [45 days after publication in the Federal Register]

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I. INTRODUCTION

1. In the *Second Report and Order*, we adopted rules for the establishment of a mandatory public/private partnership ("the 700 MHz Public/Private Partnership") in the upper portions of the 698-806 MHz band ("700 MHz Band") as the means for promoting the rapid construction and deployment of a nationwide, interoperable broadband public safety network that would serve public safety and homeland security needs.[1] Specifically, we required that the

[1] *See* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules, WT Docket No. 06-169, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. (continued….)

winning bidder of the commercial license in the Upper 700 MHz D Block (758-763/788-793 MHz) ("D Block") enter into the 700 MHz Public/Private Partnership with the nationwide licensee of the public safety broadband spectrum (763-768/793-798 MHz) ("Public Safety Broadband Licensee") to enable construction of this interoperable broadband network, which would span both the commercial D Block and public safety spectrum. As essential components of this partnership, the D Block licensee would be chiefly responsible for the construction and operation of a state-of-the-art shared wireless broadband network that would be used by public safety users as well as commercial users. In exchange for taking on these responsibilities, the D Block licensee would gain access to the public safety broadband spectrum for use by its commercial customers on a secondary preemptible basis. In turn, public safety users, through the Public Safety Broadband Licensee, would benefit from obtaining access to a state-of-the-art broadband network on their 700 MHz spectrum that would incorporate their unique requirements, which would not otherwise be possible given the limited availability of public funding.[2] In Auction 73, the recently concluded auction of commercial 700 MHz licenses, bidding for the D Block license did not meet the applicable reserve price of $1.33 billion and, pursuant to the Commission's rules, there was no winning bid for that license.[3] In the *D Block Post-Auction Order* released shortly after the close of Auction 73, we determined not to re-offer the D Block license immediately in order to "provide additional time to consider options with respect to the D Block spectrum."[4] Accordingly, in this Second Further Notice of Proposed Rulemaking ("Second Further Notice"), we revisit our decisions concerning the 700 MHz Public/Private Partnership – considering revisions to this partnership as well as alternative rules we should adopt in the event the D Block licensee is no longer required to enter into a mandatory public/private partnership.

2. First, we consider clarifications and revisions to the public safety component of the 700 MHz Public/Private Partnership that would better promote our public interest goals.[5] More specifically, we seek comment on whether, under Section 337 of the Communications Act of 1934, as amended ("Act"),[6] and Section 90.523 of the Commission's rules,[7] only entities that

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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, Declaratory Ruling on Reporting Requirement under Commission's Part 1 Anti-Collusion Rule, WT Docket No. 07-166, *Second Report and Order*, 22 FCC Rcd 15289 (2007) (*Second Report and Order*) *recon. pending*.

[2] *Id,* at 15295 ¶ 13, 15431 ¶ 396.

[3] The auction of these 700 MHz licenses, designated Auction 73, began on January 24, 2008, and concluded March 18, 2008. *See* http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=73.

[4] Auction of the D Block License in the 758-763 and 788-793 MHz Bands, AU Docket No. 07-157, *Order*, FCC 08-91, ¶ 3 (rel. Mar. 20, 2008) (*D Block Post-Auction Order*). In the *Second Report and Order*, the Commission decided that, if the reserve price for the D Block was not satisfied in the initial auction results, the Commission might either re-offer the license on the same terms in an immediate second auction, or re-evaluate the license conditions. *See Second Report and Order*, 22 FCC Rcd at 15404 ¶ 314.

[5] We use the term "700 MHz Public/Private Partnership" to refer specifically to a mandatory public/private partnership between the D Block licensee and the Public Safety Broadband Licensee, along the general lines initially set forth in the *Second Report and Order*.

[6] 47 U.S.C. § 337.

are providing public safety services, as defined in the Act, are eligible to use the public safety spectrum portion of the shared network established under the 700 MHz Public/Private Partnership, and whether such entities should be required to subscribe to the network. We also seek comment on whether to clarify the requirement that the Public Safety Broadband Licensee be a non-profit organization and specify that entities associated with the public safety component of the 700 MHz Public/Private Partnership, apart from outside advisors or counsel with no debt or equity relationship to the Public Safety Broadband Licensee, may not be for-profit entities. We seek comment on these and other clarifications or changes to the structure of the Public Safety Broadband Licensee and the criteria adopted in the *Second Report and Order*.

3. In addition, we seek comment on possible modifications to the various rules governing the D Block licensee and the Public Safety Broadband Licensee within the framework of the 700 MHz Public/Private Partnership (as revised or clarified). First, we seek comment on whether it remains in the public interest to require a public/private partnership between the nationwide D Block licensee and the Public Safety Broadband Licensee for the purpose of creating a nationwide, interoperable broadband network for both commercial and public safety network services. Next, to ensure a thorough consideration of the Commission's options in the event that we do continue to require a public/private partnership between these licensees, we seek comment on a broad set of possible revisions to the 700 MHz Public/Private Partnership, including revisions regarding the respective obligations of the D Block licensee and the Public Safety Broadband Licensee. In particular, we seek comment on the following issues: (1) the technical requirements of the shared wireless broadband network to be constructed by the D Block licensee, (2) the rules governing public safety priority access to the D Block spectrum during emergencies; (3) the D Block performance requirements and license term; (4) the respective roles and responsibilities of the D Block licensee and Public Safety Broadband Licensee in connection with the 700 MHz Public/Private Partnership and the shared wireless broadband network, including whether the Public Safety Broadband Licensee may assume responsibilities akin to a "mobile virtual network operator"[8]; (5) the various fees associated with the shared network; (6) the process for negotiating and establishing the Network Sharing Agreement, including the consequences of a failure to reach agreement; (7) certain auction-related issues, including whether to restrict who may participate in the new auction of the D Block license, how to determine any reserve price for such an auction, whether to adopt an exception to the impermissible material relationship rule for the determination of designated entity eligibility with respect to arrangements for the lease or resale (including wholesale) of the spectrum capacity of the D Block license, and whether we should modify the auction default payment rules with respect to the D Block winning bidder; and (8) relocation of the public safety narrowband operations. Finally, we seek comment on other revisions or clarifications that may be appropriate with regard to the 700 MHz Public/Private Partnership, including whether to

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[7] 47 C.F.R. § 90.523.

[8] A mobile virtual network operator is a non-facility-based mobile service provider that resells service to the public for profit. *See* Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, WT Docket No. 05-71, *Tenth Report*, 20 FCC Rcd 15908, 15920 ¶ 27 (2005).

license the D Block and public safety broadband spectrum on a nationwide or adopt a regional geographic service area basis such as Regional Economic Area Grouping (REAG).[9]

4. In addition to considering possible revisions to the 700 MHz Public/Private Partnership, we consider our options if the D Block is licensed without this 700 MHz Public/Private Partnership condition. We note that there are several circumstances where such options might be relevant. First, we might determine that we should not re-auction the D Block with the 700 MHz Public/Private Partnership condition, and instead immediately conduct an auction to license the D Block without such a condition. In addition, we might conclude that, even if we should retain the 700 MHz Public/Private Partnership condition in the next D Block auction, the condition should be removed if the next D Block auction fails to produce a winning bidder, or the winning bidder defaults or fails to negotiate a successful Network Sharing Agreement with the Public Safety Broadband Licensee. Therefore, for any circumstances where we determine that the 700 MHz Public/Private Partnership condition on the D Block should not be retained, we seek comment on revisions to the rules that would be appropriate with respect to the D Block license as well as revisions with regard to the Public Safety Broadband License that would ensure the development and deployment of a nationwide interoperable broadband network for public safety users.

5. Finally, we note that, in adopting the *Second Report and Order*, we took an innovative approach to addressing a vitally important problem: promoting interoperability, on a nationwide basis, for public safety communications. We intended that the mandatory public/private partnership model between two nationwide licensees – the commercial D Block licensee and the non-profit Public Safety Broadband Licensee – would facilitate access for public safety to a robust, advanced communications infrastructure and produce economies of scale inherent in a nationwide footprint. Importantly, we also found that this approach was the best means available to address the issue of funding for construction of a public safety communications infrastructure, which has proven a significant impediment to date. At the same time, however, we anticipated that the partnership would involve a balance between the commercial partner's obligation to construct a shared network infrastructure and the commercial partner's secondary access to the 700 MHz public safety broadband spectrum. By partnering these two spectrum assets, we intended to promote spectrum efficiency and innovation. Thus, we aimed to have the 700 MHz Public/Private Partnership between the D Block licensee and the Public Safety Broadband Licensee be complementary, and we designed this framework to strike the appropriate balance such that the maximum benefits accrued to both parties.

6. Although the initial sale of the D Block license did not result in a winning bidder, these goals remain. In reexamining our approach to the D Block following Auction 73, we continue to proceed with these objectives in mind. Accordingly, we initiate this Second Further Notice with the following principles and goals:

[9] As licensing the D Block on a REAG basis would result in issuing multiple D Block licenses, references herein to "the" D Block license and licensee should be understood to incorporate reference to any of multiple D Block licenses or licensees and vice versa, as appropriate.

- To identify concerns in the existing structure of the 700 MHz Public/Private Partnership to inform our decision making going forward;
- To promote wireless innovation and broadband network penetration while meeting the communications needs of the first responder community in a commercially viable manner;
- To facilitate public safety access to a nationwide, interoperable broadband network in a timely manner;
- To identify funding opportunities for the public safety community to realize the promise of a broadband communications infrastructure with a nationwide level of interoperability; and
- To maximize the commercial and public safety benefits of this unique piece of 700 MHz spectrum.

7. We invite comment broadly on these principles and goals, as well as the specific subjects discussed herein. While today's item raises a number of specific questions, it should not be seen as providing any limitation on the public safety issues that we seek comment upon. We are interested in any and all perspectives from interested parties on how the Commission can develop rules and procedures that will achieve the multiple goals enumerated above. Finally, before ultimately adopting final rules in response to this Second Further Notice, we plan to present for public comment, in a subsequent Further Notice of Proposed Rulemaking, a detailed proposal regarding the specific proposed rules.[10]

II. BACKGROUND

8. In the *Second Report and Order*, released August 10, 2007, we adopted a band plan and service rules affecting the upper portions of the 700 MHz Band in order to promote the creation of a nationwide, interoperable broadband public safety network through the establishment of the 700 MHz Public/Private Partnership. Specifically, with regard to the public safety spectrum in the 700 MHz Band, we designated the lower half of this spectrum (the 763-768 MHz and 793-798 MHz bands) for public safety broadband communications, and we consolidated existing narrowband allocations to the upper half of the spectrum (the 769-775 MHz and 799-805 MHz bands).[11] We also created a single nationwide license for the public safety broadband spectrum, and we specified the criteria, selection process, and responsibilities of the licensee assigned this spectrum, the Public Safety Broadband Licensee.[12] We required, for example, that no commercial interest may be held in the Public Safety Broadband Licensee, that

[10] In this subsequent Further Notice of Proposed Rulemaking, we plan to seek comment on an expedited basis, with comments due fourteen days after publication in the Federal Register, and reply comments due twenty-one days after such publication.

[11] *See Second Report and Order,* 22 FCC Rcd at 15406 ¶ 322. We also created an internal guard band in the 768-769 MHz and 798-799 MHz bands located between the broadband and narrowband allocations. *Id*.

[12] *See id*.

no commercial interest may participate in the management of the licensee, and that the licensee must be a non-profit organization.[13] With regard to the commercial spectrum in the 700 MHz Band, we designated one block – the D Block (the 758-763 MHz and 788-793 MHz bands) located adjacent to the public safety broadband spectrum block – for use as part of the 700 MHz Public/Private Partnership. As set forth in the *Second Report and Order*, we required the D Block licensee, working with the Public Safety Broadband Licensee in a public/private partnership, to construct and operate a nationwide network shared by both commercial and public safety users.[14]

9. *The 700 MHz Public/Private Partnership.* In the *Second Report and Order*, we determined that promoting commercial investment in the build-out of a shared network infrastructure for both commercial and public safety users through the 700 MHz Public/Private Partnership would address "the most significant obstacle to constructing a public safety network – the limited availability of public funding."[15] We concluded that providing for a shared infrastructure using the D Block and the public safety broadband spectrum would help achieve significant cost efficiencies. We noted that this would allow public safety agencies "to take advantage of commercial, off-the-shelf technology and otherwise benefit from commercial carriers' investments in research and development of advanced wireless technologies."[16] We also stated that this approach could benefit the public safety community by providing it with access to an additional 10 megahertz of broadband spectrum during emergencies, when it is needed most. Most importantly, it was our view that this particular public/private partnership approach would provide all of these benefits on a nationwide basis and thus provide the most practical means of speeding deployment of a nationwide, interoperable, broadband network for public safety service that is designed to meet their needs in times of crisis. At the same time, we pointed out that the 700 MHz Public/Private Partnership would provide the D Block licensee with rights to operate commercial services in the 10 megahertz of public safety broadband spectrum on a secondary, preemptible basis, which would both help to defray the costs of build-out and ensure that the spectrum is used efficiently.[17]

10. We established various features of the 700 MHz Public/Private Partnership. First, we set forth the essential components of this partnership.[18] In particular, we specified certain parameters for the shared wireless broadband network, including features relating to the technology platform, signal coverage, robustness and reliability, capacity, security, operational capabilities and control, and certain equipment specifications.[19] With regard to the spectrum shared by the common network, we required that the Public Safety Broadband Licensee lease the public safety broadband spectrum for commercial use by the D Block licensee on a secondary,

[13] *See id.* at 15421 ¶ 373.

[14] *Id*. at 15428 ¶ 386.

[15] *Id.* at 15431¶ 396.

[16] *Id*. (citing Sprint Nextel *700 MHz Further Notice* Comments at 7-8).

[17] *Id*.

[18] *Id*. at 15432 ¶ 399.

[19] *Id*. at 15432 ¶ 399, 15433-44 ¶¶ 403-06.

preemptible basis and provided that the public safety entities would have priority access to the D Block spectrum during emergencies.[20] We also established certain minimal performance requirements relating to construction and build-out of the shared 700 MHz Public/Private Partnership network.[21]

11. Next, we established that the terms of the 700 MHz Public/Private Partnership would be governed both by Commission rules and by a Network Sharing Agreement ("NSA") to be negotiated by the winning bidder for the D Block license and the Public Safety Broadband Licensee.[22] Throughout the *Second Report and Order* we identified certain elements that the parties were required to address in the NSA. These included, for instance, the details of certain mandatory network specifications established in the order and a detailed build-out schedule as jointly agreed upon by the Public Safety Broadband Licensee and the D Block licensee.[23] We also determined that the NSA should include, among other things, specification of all service fees that public safety entities would pay with respect to access and use of the shared network, both in terms of fees applicable for normal network service and fees for priority access to the D Block spectrum in an emergency.[24]

12. We established rules governing the establishment of the NSA to ensure timely completion of the negotiations and to resolve any disputes that may arise.[25] Among other rules, we required the winning bidder of the D Block license and the Public Safety Broadband Licensee to negotiate in good faith, and we provided that the D Block license application would not be granted until the parties obtained Commission approval of the agreement, executed, and then filed the NSA with the Commission.[26] We also required the negotiations to begin by a date certain and conclude within six months. Further, we specified rules to govern in the event of a negotiation dispute. Specifically, we provided that if, at the end of the six month negotiation period, or on their own motion at any time, the Chiefs of the Public Safety and Homeland Security Bureau ("PSHSB") and the Wireless Telecommunications Bureau ("WTB") found that negotiations had reached an impasse, they could take a variety of actions to resolve any disputes, including but not limited to issuing a decision on the disputed issues and requiring the submission of a draft agreement consistent with their decision.[27]

13. *Narrowband Relocation.* In the *Second Report and Order*, we found that, in order to maximize the benefits of the 700 MHz Public/Private Partnership to deploy a nationwide, interoperable broadband communications network, the current 700 MHz narrowband public

[20] *Id*. at 15432 ¶ 399, 15434-43 ¶¶ 407-31.

[21] *Id*. at 15432 ¶ 399, 15443-46 ¶¶ 432-43.

[22] *Id*. at 15432 ¶¶ 399-400, 15447-49 ¶¶ 444-54.

[23] *Id.* at 15448-49 ¶¶ 448-53.

[24] *Id*. at 15448-49 ¶¶ 450-52.

[25] *Id.* at 15448 ¶ 447.

[26] *Id*. at 15448 ¶ 447.

[27] *Id*. at 15465 ¶ 508.

safety operations must be consolidated and cleared no later than the DTV transition date.[28] To effectuate the consolidation of the narrowband channels, we required the D Block licensee to pay the costs of relocating narrowband radios to the newly consolidated portion of the band and capped the disbursement amount for such relocation costs at $10 million.[29] We also cautioned that any narrowband equipment deployed in the 764-770 MHz and 794-800 MHz bands (channels 63 and 68), or in the 775-776 MHz and 805-806 MHz bands (the upper one megahertz of channels 64 and 69), more than 30 days following the adoption date of the *Second Report and Order* would be ineligible for relocation funding.[30] In addition, we prohibited authorization of any new narrowband operations in that spectrum, as of 30 days following the adoption date of the *Second Report and Order*.[31]

14. *Rules for an Auction to License the D Block.* In addition to adopting service rules for the 700 MHz commercial spectrum, including the D Block, we also made several determinations regarding the auction of the 700 MHz commercial licenses. In particular, we concluded that block-specific aggregate reserve prices should be established for each commercial license block – the A, B, C, D, and E Blocks – to be auctioned in Auction 73, and directed WTB to adopt and publicly disclose those reserve prices prior to the auction, pursuant to its existing delegated authority and consistent with our directions.[32] For the D Block, we concluded that WTB should consider certain factors in setting the D Block reserve price, including the 700 MHz Public/Private Partnership conditions, which might suggest a reserve price of $1.33 billion. We provided that, in the event that bids for the D Block license did not meet the reserve price, we would leave open the possibility of offering the license on the same terms or re-evaluating the D Block license conditions.[33]

15. In an effort to encourage the widest range of potentially qualified applicants to participate in bidding for the D Block license, in the *Second Report and Order*, we enabled eligible applicants for this license to seek designated entity bidding credits for small businesses as a means to create incentives for investors to provide innovative small businesses with the capital necessary to compete for the D Block license at auction.[34] We subsequently decided to waive, on our own motion, the application of our "impermissible material relationship" rule[35] for purposes of determining an applicant's or licensee's designated entity eligibility solely with respect to arrangements for lease or resale (including wholesale) of the spectrum capacity of the

[28] *Id.* at 15410 ¶ 332.

[29] *Id.* at 15412 ¶ 341.

[30] *Id.* at 15412 ¶ 339.

[31] *Id.*

[32] *See id.* at 15400 ¶ 301.

[33] *See id.* at 15404 ¶ 314.

[34] 47 C.F.R. § 27.502.

[35] 47 C.F.R. § 1.2110(b)(3)(iv)(A).

D Block license.[36] Given the unique characteristics of the regulations governing the D Block license, we concluded that a waiver of the impermissible material relationship rule served the public interest.[37]

16. *Petitions for Reconsideration.* Ten parties filed petitions for reconsideration seeking review of various aspects of the *Second Report and Order*.[38] Three of the petitions sought reconsideration of the rules governing the 700 MHz Public/Private Partnership specifically,[39] and two petitioners sought reconsideration of the aggregate reserve prices set for the commercial license blocks, including the D Block.[40] These petitioners presented related arguments in the pre-auction process.[41] After considering the arguments, WTB established reserve prices consistent with the direction of the *Second Report and Order*.[42] Two other parties filed petitions seeking reconsideration of some or all of the requirements regarding public safety narrowband relocation, and also filed requests for waiver of some of these requirements.[43] All of the petitions remain pending.

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[36] *See generally* Waiver of Section 1.2110(b)(3)(iv)(A) of the Commission's Rules For the Upper 700 MHz Band D Block License, *Order*, 22 FCC Rcd 20354 (2007) (*D Block Waiver Order*) *recon. pending.*

[37] *Id.* at 20354 ¶ 1.

[38] AT&T Inc. Petition for Reconsideration and Clarification, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 24, 2007); Blooston Rural Carriers Petition for Partial Reconsideration and/or Clarification (filed Sept. 24, 2007); Petition for Reconsideration of the Ad Hoc Public Interest Spectrum Coalition (filed Sept. 24, 2007); Cyren Call Communications Corporation Petition for Reconsideration and for Clarification (filed Sept. 24, 2007); Frontline Wireless, LLC Petition for Reconsideration (filed Sept. 24, 2007); Pierce Transit Petition for Reconsideration (filed Sept. 24, 2007); Rural Telecommunications Group, Inc. Petition for Reconsideration (filed Sept. 24, 2007); Commonwealth of Virginia Petition for Reconsideration (filed Sept. 24, 2007); NTCH, Inc. Petition for Partial Reconsideration (filed Sept. 21, 2007); MetroPCS Communications, Inc. Petition for Clarification and Reconsideration (filed Sept. 20, 2007).

[39] *See* AT&T Petition for Reconsideration; Cyren Call Petition for Reconsideration; Frontline Petition for Reconsideration. The Frontline September 20, 2007 Request also seeks changes to the rules governing the 700 MHz Public/Private Partnership. *See* Request to Further Safeguard Public Safety Service by Frontline Wireless, WT Docket No. 06-150 (filed Sept. 20, 2007) (Frontline September 20, 2007 Request).

[40] *See* Frontline Petition for Reconsideration; MetroPCS Petition for Reconsideration.

[41] *See* Auction of 700 MHz Band Licenses Scheduled for January 24, 2008; Notice and Filing Requirements, Minimum Opening Bids, and other Procedures for Auctions 73 and 76, *Public Notice,* 22 FCC Rcd 18141, 18194-95 ¶¶ 197-90 (2007) (*Auction 73/76 Procedures Public Notice*).

[42] *See id.* at 18193-96 ¶¶ 194-200.

[43] *See* Commonwealth of Virginia Petitions for Reconsideration; Pierce Transit Petition for Reconsideration. Pierce Transit and Virginia have been granted limited waiver relief. *See* Implementation of a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, PS Docket No. 06-229, WT Docket No. 96-86, *Order*, 22 FCC Rcd 20290 (2007); Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010; Request for Waiver of Pierce Transit, PS Docket No. 06-229, WT Docket No. 96-86, *Order*, 23 FCC Rcd 433 (PSHSB 2008).

17. *Auction 73*. The auction of 700 MHz Band licenses, designated Auction 73, commenced on January 24, 2008, and closed on March 18, 2008.[44] While the bids for licenses associated with the other 700 MHz Band blocks (the A, B, C, and E Blocks) exceeded the applicable reserve prices, bids for the D Block license did not meet the reserve price and there was no winning bid for that license.[45]

18. *D Block Post-Auction Order*. On March 20, 2008, we determined that we would not proceed immediately to re-auction the D Block license.[46] We made this decision in order to provide additional time to consider our various options with respect to the D Block spectrum.[47]

19. *Inspector General's Report*. On April 25, 2008, the Office of Inspector General (OIG) issued a report on its investigation relating to allegations relating to whether certain statements made by an advisor to the Public Safety Broadband Licensee to potential bidders for the D Block license in Auction 73, particularly those regarding the spectrum lease payments that the Public Safety Broadband Licensee would request from the D Block licensee for use of public safety spectrum, had the effect of deterring various companies from bidding on the D Block.[48] The OIG determined that the statements in question were "not the only factor in the companies' decision not to bid on the D Block." Rather, it concluded that "the uncertainties and risks associated with the D Block, including, but not limited to, the negotiation framework with [the Public Safety Broadband Licensee], the potential for default payment if negotiations failed, and the costs of the build-out and the operations of the network, taken together, deterred each of the companies from bidding on the D Block."[49]

III. DISCUSSION

20. In this Second Further Notice, we revisit our decisions concerning the public safety broadband spectrum, the 700 MHz Public/Private Partnership, and the shared wireless broadband network it is intended to create, as we move toward a new auction to license the D Block spectrum in the near future.[50]

21. First, in reevaluating the 700 MHz Public/Private Partnership in light of the results of Auction 73, we find it appropriate to consider clarifications and revisions to the public safety component of the partnership that would better promote our public interest goals. More specifically, in section A, we seek comment on our proposed clarifications regarding the entities

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[44] *See* http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=73.

[45] *See id.*; *see also* "Auction of 700 MHz Band Licenses Closes," *Public Notice*, DA 08-595 (rel. Mar. 20, 2008) (*700 MHz Auction Closing Public Notice.*

[46] *See D Block Post-Auction Order* at ¶ 5.

[47] *See id.* at ¶ 5.

[48] *See Office of Inspector General Report*, from Kent R. Nilsson, Inspector General, to Chairman Kevin J. Martin (OIG rel. Apr. 25, 2008) (*OIG Report*).

[49] *OIG Report* at 2.

[50] As noted above, before ultimately adopting final rules in response to this Second Further Notice, we plan to present for public comment, in a subsequent Further Notice of Proposed Rulemaking, a detailed proposal regarding the specific proposed rules.

that are eligible to use the public safety spectrum in the shared wireless broadband network as public safety users rather than as commercial users. We also seek comment on possible clarifications of or changes to the rules governing the structure and criteria of the Public Safety Broadband Licensee,[51] including whether to clarify further the requirement that the Public Safety Broadband Licensee must be a non-profit organization.

22. In section B, we seek comment on possible changes to the rules requiring and governing the 700 MHz Public/Private Partnership. As noted above, we seek comment on whether the 700 MHz Public/Private Partnership between the D Block licensee and the Public Safety Broadband Licensee, with appropriate revisions and clarifications, would best serve the public interest in ensuring the development of a nationwide, interoperable broadband network for public safety users. We therefore explore a variety of possible revisions to the 700 MHz Public/Private Partnership to provide greater assurance to potential bidders for the D Block license that the shared wireless broadband network will be commercially viable and to help ensure that this partnership will be successful in making a nationwide, interoperable, broadband network available to public safety users. We also seek comment on issues related to the negotiation of the Network Sharing Agreement. In addition, we request comment on select issues relating to auctioning the D Block license, including eligibility to participate in the auction, a reserve price, and potential default payments. Finally, we seek comment on issues relating to narrowband relocation and on whether to continue to license the D Block on a nationwide basis or adopt a regional geographic service area basis such as REAGs.

23. Finally, in section C, we examine our options in the event we decide not to condition the D Block on the establishment of the 700 MHz Public/Private Partnership with the Public Safety Broadband Licensee, either immediately in the next auction or if the next auction fails to produce a winning bidder. First, we seek comment on various revisions that might be appropriate with respect to the D Block spectrum. Then we invite comment on what additional revisions might be appropriate with regard to the Public Safety Broadband License in order to ensure the development and deployment of a nationwide interoperable broadband network for public safety users.

A. The Public Safety Broadband License

1. Eligible Users of the Public Safety Spectrum in the Shared Network

24. Background. To meet anticipated public safety and homeland security needs, we proposed a comprehensive plan in the *Second Report and Order* to promote the rapid deployment of a nationwide, interoperable, broadband public safety network. This plan was based on taking "a centralized and national approach to maximize public safety access to interoperable, broadband spectrum in the 700 MHz Band."[52] In particular, we required that a single, nationwide public safety broadband license be assigned to the Public Safety Broadband Licensee. That licensee would be responsible for negotiating a Network Sharing Agreement with the winning bidder of the D Block licensee, pursuant to which the D Block licensee would construct and operate a shared, nationwide 700 MHz interoperable broadband network that

[51] *See* 47 U.S.C. § 316 (permitting the Commission to modify any license if, in the judgment of the Commission, such action will promote the public interest, convenience, or necessity).

[52] *See Second Report and Order*, 22 FCC Rcd at 15419 ¶ 365.

serves the public safety entities seeking access to the network, and the D Block licensee would, in turn, gain access to the 700 MHz public safety broadband spectrum for use by its commercial users on a secondary preemptible basis.[53]

25. The eligibility rules for the 700 MHz public safety band, including both the narrowband and broadband segments, are contained in Section 90.523 of our rules.[54] By linking eligibility to the provision of statutorily-defined "public safety services," Section 90.523 attempts to ensure compliance with the statutory mandate of Section 337(a)(1) of the Communications Act, which requires the Commission to allocate 24 megahertz of spectrum between 746 MHz and 806 MHz for "public safety services."[55] The statutory definition of "public safety services," which is set forth in Section 337(f) of the Act, provides as follows:

> (f) Definitions
>
> For purposes of this section:
>
> (1) Public safety services
>
> The term "public safety services" means services -
>
> (A) the sole or principal purpose of which is to protect the safety of life, health, or property;
>
> (B) that are provided -
>
> (i) by State or local government entities; or
>
> (ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and
>
> (C) that are not made commercially available to the public by the provider.[56]

26. The eligibility rules of Section 90.523 that apply to the narrowband licensees of the 700 MHz public safety band limit operations to the provision of public safety services, as defined in Section 337(f)(1). Thus, all such licensees are either state or local governmental entities[57] or authorized non-governmental organizations (NGOs),[58] which provide services that are not made commercially available to the public and are for the sole or principal purpose of protecting the safety of life, health, or property.[59]

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[53] *See id.* at 15419 ¶ 366.

[54] 47 C.F.R. § 90.523.

[55] 47 U.S.C. § 337(a)(1).

[56] 47 U.S.C. § 337(f).

[57] *See* 47 C.F.R. § 90.523(a).

[58] *See* 47 C.F.R. § 90.523(b).

[59] *See* 47 C.F.R. § 90.523(a) – (d).

27. With respect to the broadband licensee – *i.e.*, the Public Safety Broadband Licensee – the Commission crafted eligibility requirements that were also intended to limit operations to the statutorily-defined public safety services in order to ensure that the band remained allocated to such services, as required by Section 337(a)(1), and to focus the Public Safety Broadband Licensee exclusively upon the needs of public safety entities that stand to benefit from the interoperable broadband network.[60] Specifically, we required that the Public Safety Broadband Licensee satisfy the following eligibility criteria: (1) no commercial interest may be held in this licensee, and no commercial interest may participate in the management of the licensee, (2) the licensee must be a non-profit organization, (3) the licensee must be as broadly representative of the public safety radio user community as possible, including the various levels (*e.g.*, state, local, county) and types (*e.g.*, police, fire, rescue) of public safety entities, and (4) to ensure that the Public Safety Broadband Licensee is qualified to provide public safety services, an organization applying for the Public Safety Broadband License was required to submit written certifications from a total of at least ten geographically diverse state and local governmental entities, with at least one certification from a state government entity and one from a local government entity.[61] The written certifications from these state and local governmental entities were required to verify that: (1) they have authorized the applicant to use spectrum at 763-768 MHz and 793-798 MHz to provide the authorizing entity with public safety services; and (2) the authorizing entities' primary mission is the provision of public safety services.[62]

28. Discussion. As a preliminary matter, our review of the eligibility provisions that apply to the narrowband licensees and those that apply to the Public Safety Broadband Licensee have led us to identify two elements of the statutory definition of "public safety services" that the rules do not appear to apply explicitly enough to the Public Safety Broadband Licensee: (a) the Section 337(f)(1)(A) element that requires the "sole or principal purpose [of the services to be for the] protect[ion of] the safety of life, health, or property," and (2) the Section 337(f)(1)C) element that bars such services from being "made commercially available to the public by the provider."[63] In addition, there is some degree of ambiguity as to the applicability of the narrowband eligibility provisions in Sections 90.953(a)-(d) to the Public Safety Broadband Licensee. Accordingly, we seek comment on whether to make minor amendments to Section 90.523 to (a) clarify that the services provided by the Public Safety Broadband Licensee must conform to all the elements of the Section 337(f)(1) definition of "public safety services," and (b) clearly delineate the differences and overlap in the respective eligibility requirements of the narrowband licensees and the Public Safety Broadband Licensee.

29. As discussed in more detail below, it would appear that, under Section 337 of the Act and in furtherance of the policies that have led to the creation of the Public Safety Broadband Licensee, the eligible users of the public safety broadband network that are represented by the Public Safety Broadband Licensee should be restricted to entities that would

[60] *Second Report and Order*, 22 FCC Rcd at 15421 ¶ 373.

[61] *See* 47 C.F.R. § 90.523(e).

[62] *See* 47 C.F.R. § 90.523(e)(i), (ii).

[63] 47 U.S.C. § 337(f)(1)(A), (C).

be eligible to hold licenses under Section 90.523. Thus, only entities providing public safety services, as defined in the Act, would be eligible to use the public safety spectrum of the shared network of the 700 MHz Public/Private Partnership on a priority basis, pursuant to the representation of the Public Safety Broadband Licensee. Accordingly, we also seek comment on whether all other users of the shared network, including critical infrastructure users, should consequently be treated as commercial users who would obtain access to spectrum only through commercial services provided solely by the D Block licensee.

30. *Eligible Users of the Public Safety Broadband Network.* As the licensee of the broadband portion of spectrum within the 700 MHz public safety band, the Public Safety Broadband Licensee occupies a somewhat unique position insofar as it will not use its licensed spectrum to serve its own communications needs. Rather, the Public Safety Broadband Licensee will ensure the provision of public safety service by providing spectrum access to others via the nationwide shared public/private network.[64] Thus, the question of whether the Public Safety Broadband Licensee's service qualifies as a "public safety service" under Section 337(f)(1) will turn (in part) on the nature of the spectrum use by the entities that it permits to gain access to the network. To the extent that these entities are public safety entities that use this access to provide themselves with communications services in furtherance of their mission to protect the safety of life, health or property, the Public Safety Broadband Licensee's services related to the public safety broadband spectrum would fall well within the Section 337(f)(1) definition of "public safety services" and would comport with the Commission's obligation under Section 337(a)(1) to allocate a certain amount of spectrum to such services.

31. We note that, pursuant to the statutory definition, a service can still be considered a "public safety service" even if its purpose is not solely for protecting the safety of life, health or property, so long as this remains its "principal" purpose.[65] Accordingly, the service provided by the Public Safety Broadband Licensee –providing public safety entities access to the spectrum for safety-of-life/health/property communications operations – could conceivably include the provision of spectrum access to public safety entities for uses that do not principally involve the protection of life, health or property, so long as it can be said that the principal purpose of the Public Safety Broadband Licensee's services is to protect the safety of life, health or property.

32. Taken to an extreme, this reasoning could even permit the Public Safety Broadband Licensee to provide spectrum access to small numbers of entities with no connection to public safety under the rationale that the bulk of the Public Safety Broadband Licensee's services would remain that of providing the public safety entities access to spectrum for use in safeguarding life, health or property. Moreover, the Public Safety Broadband Licensee could arguably leave entire pockets within its nationwide service area served only by such non-public safety entities, based on this same rationale that the small amount of non-public safety use – relative to the nature of the overall use across the country – does not alter the fact that the principal purpose of the service remains public safety. Such a result appears patently inconsistent with the spirit of Section 337(f)(1)(A), and we seek comment on whether, or to what degree, the Public Safety Broadband Licensee would be statutorily precluded by that subsection

[64] *See Second Report and Order*, 22 FCC Rcd at 15426 ¶ 383.

[65] *See* 47 U.S.C. § 337(f)(1)(A).

from representing and allowing any entity to use the network for services that are not principally for public safety purposes. We also seek comment on whether there are other grounds – specifically, the authorization requirement of Section 337(f)(1)(B)(ii) and policy reasons – for prohibiting the Public Safety Broadband Licensee from providing network access to non-public safety entities or from permitting public safety entities that it represents to use the network for services that do not have as their principal purpose the protection of the safety of life, heath or property. With respect to Section 337(f)(1)(B)(ii), we observe that, in order for the Public Safety Broadband Licensee's services to meet the public safety services definition, the Public Safety Broadband Licensee, as a nongovernmental organization, must receive authorization from "a governmental entity whose primary mission is the provision of [public safety] services." We believe it unlikely that the intended scope of the authorization from such governmental entity or entities would include providing spectrum access, even on an occasional or limited basis, to entities that provide no public safety services.[66] On the policy front, the finite amount of spectrum available to the public safety community – particularly for interoperability purposes – strongly argues against any provision of spectrum access by the Public Safety Broadband Licensee to entities the sole or principal purpose of which is not the protection of the safety of life, health, or property. For these reasons, we seek comment on whether the public interest would be served by prohibiting the Public Safety Broadband Licensee from providing an entity with access to the network if that entity fails to meet the eligibility requirements of Section 90.523 of our rules.

33. We seek comment on which types of public safety users can be expected to use the national public safety broadband network (rather than legacy or new local networks) and on what timeframes. Which public safety communication functions (e.g., voice, remote data access, video upload, video download, photo download) are likely to migrate to the new broadband network (in the short- and or long-term) and which will remain on existing networks? What factors will local jurisdictions weigh when making such decisions?

34. We seek comment on the extent to which the public safety broadband network will or should be interoperable with existing voice and data networks. How can the Commission encourage interoperability with legacy public safety systems and should interoperability with existing voice and data networks be a mandatory feature of the new broadband network? Can the use of multi-mode handsets (that support legacy networks and the new public safety broadband network) enhance interoperability? How can the Commission encourage or mandate the development and use of such handsets? How would any proposed policies in this regard affect the cost of handsets and network construction/operation? How does the use of 10 or 20 megahertz of shared spectrum affect the throughput of the broadband network and the functions it can support? What throughput can reasonably be expected on a network with this amount of spectrum? What functionalities can only be supported on a network with additional spectrum?

35. We also seek comment on issues arising from the possibility that in some areas a local jurisdiction may not elect to make use of the public safety broadband network. How extensive are such areas likely to be in the short- and long-term? Should the D Block licensee be permitted to use the entire 20 megahertz of shared spectrum for commercial service in such areas? Should the local jurisdiction receive compensation in these instances? Could such

[66] 47 U.S.C. § 337(f)(1)(B)(ii).

compensation discourage local jurisdictions to ever make use of the public safety broadband network? Would restriction of such compensation to use in purchasing public safety equipment such as radios for the public safety broadband network be an appropriate policy? What incentives can the Commission give the D Block licensee to encourage and facilitate use of the broadband network by local jurisdictions?

36. *Potential Pool of Users of the Public Safety Broadband Network.* We seek comment on the number of public safety providers in the country that have no interoperable broadband network. What is the size of the potential pool of public safety providers that may work with the Public Safety Broadband Licensee? We also seek comment on the extent to which some public safety providers already have established interoperable broadband networks. We especially encourage comment from parties that may have an inventory or database that collects this information. Where have such networks been established, and under what types of arrangements? To what extent are current interoperable public safety systems able to obtain lower prices and/or superior quality for commercially available, off-the-shelf technologies? Have public safety and commercial operations been developed on shared/parallel systems, and if so, how have they addressed network security issues? We further seek comment on how previously developed systems have addressed issues such as network reliability, including hardening of the network, provisions for back up power, etc. How do such developed networks envision connecting to an interoperable, nationwide network? Finally, to the extent some public safety providers already have established interoperable broadband networks, might these providers have less incentive to participate with the Public Safety Broadband Licensee? If this is the case, how might the rules established in this proceeding help provide a nationwide, interoperable network?

37. *Mandatory Usage of the Public Safety Broadband Network*. While we seek comment above regarding what users of the network are eligible to receive service from the public safety spectrum, we also seek comment on whether such eligible public safety users should be required to subscribe to the network for service, at reasonable rates or be subject to some alternative obligation or condition promoting public safety network usage in order to provide greater certainty to the D Block licensee. For example, should we require the purchase of a minimum number of minutes and, if so, on whom and in what way would this obligation be imposed? We seek comment on whether any such obligation should be conditioned on the availability of government funding for access, for example, through interoperability grant money from the United States Department of Homeland Security, and whether we should require public safety users to pay for access with such money. We ask further questions below regarding whether and how we should regulate the fees charged to public safety users for network access. Would it be possible to ensure that small public safety providers pay a "Most Favored Nation" rate for broadband services, or for equipment? How should the Commission ensure that smaller public safety entities can participate in the network?

38. We note that the State of Arizona used a grant from the Department of Homeland Security ("DHS") to build a broadband network for both public safety and commercial purposes using WiFi technology.[67] This network serves a portion of the I-19 corridor running north of the Mexican border, a sparsely populated area that previously had little or no coverage for

[67] *See* http://www.dhs.gov/xnews/releases/press_release_0515.shtm (last visited May 12, 2008).

commercial or public safety communications.[68] We seek comment on this and similar programs, especially those instituted by State agencies, and by both large and small municipalities. What specifications (*e.g.*, reliability of service, network hardening, etc.) have been required for this and similar projects to promote broadband communications for public safety providers?[69] What lessons have been learned from these projects, and how might these lessons be applied to a variety of public safety providers, including those in very rural areas and those in urban areas? For example, do network congestion issues make sharing between commercial and public safety users more of a challenge in urban areas, and are such concerns lessened in rural areas?

2. Provisions Regarding the Public Safety Broadband Licensee

a. Non-Profit Status

39. Background. Among other criteria for eligibility to hold the Public Safety Broadband License that we established in the *Second Report and Order*, we provided that no commercial interest may be held in the Public Safety Broadband Licensee, that no commercial interest may participate in the management of the licensee, and that the licensee must be a non-profit organization.[70] We indicated, however, that, as part of its administration of public safety access to the shared wireless broadband network, the Public Safety Broadband Licensee might assess "usage fees to recoup its expenses and related frequency coordination duties."[71]

40. Discussion. With respect to the requirements that the Public Safety Broadband Licensee must be a non-profit organization, we seek comment on whether to clarify this non-profit requirement by specifying that the Public Safety Broadband Licensee and all of its members (in whatever form they may hold their legal or beneficial interests in the Public Safety Broadband Licensee) must be non-profit entities. We further seek comment on whether to clarify that the Public Safety Broadband Licensee may not obtain debt or equity financing from any source, whether debt or equity, unless such source is also a non-profit entity. We also seek comment more generally on whether the Commission should restrict the Public Safety Broadband Licensee's business relationships pre- and post-auction with commercial entities, and if so, what relationships should and should not be permitted.

41. We do anticipate that the Public Safety Broadband Licensee may contract with attorneys, engineers, accountants, and other similar advisors or service providers to fulfill its responsibilities to represent the interests of the public safety community, as required by the Commission. Under the approach on which we seek comment above, capital or operational funding mechanisms for the Public Safety Broadband Licensee involving private equity firms or other commercial or financial entities would not be permitted, unless they are non-profit entities

[68] *See* http://gita.state.az.us/tech_news/2006/7_19_06.htm (last visited May 12, 2008).

[69] We note, however, that use of Part 15 devices may not be appropriate for mission-critical public safety communications, in light of the requirement for Part 15 devices to accept interference from other Part 15 devices and from licensed operations. *See, e.g.*, Continental Airlines Petition for Declaratory Ruling Regarding the Over-the-Air Reception Devices (OTARD) Rules, ET Docket No. 05-247, *Memorandum Opinion and Order*, 21 FCC Rcd 13201, 13214 (2006).

[70] *See Second Report and Order*, 22 FCC Rcd at 15421 ¶ 421.

[71] *Id.* at 15426 ¶ 383.

and are controlled, if at all, by non-profit entities, in order to ensure that the financial considerations of the Public Safety Broadband Licensee remain aligned with serving the public safety community, and that no "for-profit" incentives inadvertently influence the Public Safety Broadband Licensee's priorities. We seek comment on these restrictions. In particular, are the restrictions on financing warranted to ensure that the Public Safety Broadband Licensee is not unduly influenced by for-profit motives or outside commercial influences in carrying out its official functions within the 700 MHz Public/Private Partnership? If so, in what ways might we allow necessary financing while still ensuring the independence of the Public Safety Broadband Licensee? Specifically, should we allow working capital financing from commercial banks and, if so, should we restrict the assets of the Public Safety Broadband Licensee that can be pledged as security for such a loan? Are there other types of loans or alternative funding sources that we should allow the Public Safety Broadband Licensee to employ? How can the Commission establish incentive-compatible rules for the Public Safety Broadband Licensee and parties with which it may have a relationship, such as advisors, contractors, and investors?

42. More generally, we seek comment on the best way to fund Public Safety Broadband Licensee operations. For example, should the D Block licensee or license winner be required to pay the Public Safety Broadband Licensee's administrative costs? If so, should we limit the D Block licensee's maximum obligations in this regard, and what would be a reasonable cap or limitation on expenses? Assuming government-allocated funding were available, would this be the best solution for funding the Public Safety Broadband Licensee? In addition, we seek comment on the extent to which we can adopt incentive-compatible rules for the Public Safety Broadband Licensee and the public safety providers it represents. What set of rules would encourage most or all public safety providers to collaborate with the Public Safety Broadband Licensee to establish a nationwide, interoperable broadband network? Under what circumstances might some public safety providers choose not to participate in a relationship with the Public Safety Broadband Licensee?[72]

43. We seek comment on whether the Commission has legal authority to use the Universal Service Fund to support the Public Safety Broadband Licensee's operational expenses.[73] If the Commission has legal authority to do so, should it exercise this authority? What degree of support would be appropriate? Similarly, can the Commission facilitate funding of the Public Safety Broadband Licensee's operational expenses through entities such as the Telecommunications Development Fund?[74]

44. We also seek comment on how any excess revenue generated by the fees or other sources of financing obtained by the Public Safety Broadband Licensee from non-profit entities should be used. First, we seek comment on whether any excess revenues should be permitted at all. If we do allow any excess revenue generation, should we limit this amount? How should we determine what that amount should be? Should we allow the Public Safety Broadband Licensee to hold a certain amount of excess income as a reserve against possible future budget shortfalls or should we require that excess income be used for the direct benefit of the public safety users

[72] *See Second Report and Order*, 22 FCC Rcd at 15454 ¶ 470.

[73] *See, e.g.,* 47 U.S.C. § 254(c)(1), (h).

[74] *See, e.g.,* 47 U.S.C § 614.

of the network, such as for the purchase of handheld devices? Should we further specify what would be a "direct benefit" or permissible use of such funds? In this regard, we note that the quarterly financial accounting we required in the *Second Report and Order* will enable the Commission to continually monitor the finances of the Public Safety Broadband Licensee.[75]

45. Finally, we seek comment on whether the Public Safety Broadband Licensee may legitimately incur certain reasonable and customary expenses incurred by a business, consistent with the constitution of the Public Safety Broadband Licensee and the nature of its obligations as established by the Commission.

b. Other Essential Components

46. Background. In the *Second Report and Order*, we instituted certain minimum criteria that the Public Safety Broadband Licensee must meet in order to ensure that it "focuses exclusively on the needs of public safety entities that stand to benefit from the interoperable broadband network."[76] To that end, we established certain criteria for the Public Safety Broadband Licensee eligibility, including a requirement that the Public Safety Broadband Licensee must be broadly representative of the public safety community.[77] Further, we required that the Public Safety Broadband Licensee be governed by a voting board consisting of eleven members, one each from the nine organizations representative of public safety, and two at-large members selected by the Public Safety and Homeland Security Bureau and the Wireless Telecommunications Bureau, jointly on delegated authority.[78] On reconsideration, we revised and expanded the voting board, and increased the at-large membership to four.[79]

47. In the *Second Report and Order*, we further required that certain procedural safeguards be incorporated into the articles of incorporation and bylaws of the Public Safety Broadband Licensee.[80] For example, in the *Second Report and Order* we specified that the term

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[75] *Second Report and Order*, 22 FCC Rcd at 15425 ¶ 377.

[76] *Id.* at 15421-22 ¶ 373.

[77] *Id.* at 15421-25 ¶¶ 373-375.

[78] The nine organizations included: the Association of Public Safety Communications Officials (APCO); the National Emergency Number Association (NENA); the International Association of Chiefs of Police (IACP); the International Association of Fire Chiefs (IAFC); the National Sheriffs' Association; the International City/County Management Association (ICMA); the National Governor's Association (NGA); the National Public Safety Telecommunications Council (NPSTC); and the National Association of State Emergency Medical Services Officials (NASEMSO). *Second Report and Order*, 22 FCC Rcd at 15422-23 ¶ 374.

[79] On reconsideration, we removed NPSTC and included the Forestry Conservation Communications Association (FCCA), the American Association of State Highway and Transportation Officials (AASHTO), and the International Municipal Signal Association (IMSA), and added two additional at-large positions. Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 96-86, *Order on Reconsideration*, 22 FCC Rcd 19935 (2007). The Chiefs of the Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau jointly appointed to the voting board the American Hospital Association (AHA), the National Fraternal Order of Police (NFOP), the National Association of State 9-1-1 Administrators (NASNA), and the National Emergency Management Association (NEMA). *See* "Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Announce the Four At-Large Members of the Public Safety Broadband Licensee's Board of Directors," *Public Notice*, 22 FCC Rcd 19475 (2007).

[80] *Second Report and Order*, 22 FCC Rcd at 15423-26 ¶ 375.

of the Public Safety Broadband Licensee officers would be two years, and that election would be by a two-thirds majority vote. A two-thirds majority was also required for certain other Public Safety Broadband Licensee decisions, including amending the articles of incorporation or bylaws. In addition, we recognized that Commission oversight in the affairs of the Public Safety Broadband Licensee would be necessary and appropriate in light of the nature of the public safety broadband spectrum licensed to the Public Safety Broadband Licensee as a national asset, and in furtherance of the Commission's role in ensuring the protection and efficient use of such asset for the benefit of the safety of the public.[81] Meaningful oversight in this respect requires a level of transparency, and to that end we required the Public Safety Broadband Licensee to submit certain reports to the Commission, including quarterly financial disclosures.[82]

48. Discussion. In light of the scope of the subjects discussed elsewhere herein addressing a number of aspects of the 700 MHz Public/Private Partnership between the D Block licensee and the Public Safety Broadband Licensee, we believe it appropriate to reexamine the structure of the Public Safety Broadband Licensee and the criteria adopted in the *Second Report and Order* to ensure they are most optimal for establishing and sustaining a partnership with a commercial entity, as well as efficiently and equitably conducting the business of the Public Safety Broadband Licensee. We seek comment on whether we should reevaluate any of these criteria, whether we should clarify or increase the Commission's oversight of the Public Safety Broadband Licensee, and, aside from retaining its nationwide scope, whether we should make other changes to the license or license eligibility criteria. We further seek comment on how the Commission can ensure an oversight role for Congress, both in the operations of the Public Safety Broadband Licensee and the 700 MHz Public/Private Partnership. Should Congress designate some of the Public Safety Broadband Licensee's board members?

49. *Articles of Incorporation and By-laws.* Specifically, with respect to the articles of incorporation and bylaws, we seek comment on the adequacy of the provisions specified. Should we require additional provisions, and if so, what should they be? Should we amend or eliminate any of the current requirements? Should we require a unanimous vote in certain instances? For example, should a unanimous vote be required for a major undertaking of the Public Safety Broadband Licensee? What would such an undertaking include? In the alternative, should we require a supermajority vote in such instances instead of a unanimous vote? In addition, should we provide for Commission review of decisions requiring a unanimous or supermajority vote, or should the Commission make certain decisions for the Public Safety Broadband Licensee if unanimity or supermajority is not achieved?

50. With respect to the voting board, we seek comment on the composition of the board, and its size. Should we include additional or fewer entities? If so, what qualifications should we require of such entities? We also seek comment on whether we should eliminate altogether the requirement of inclusion of specific voting board members. If we eliminate this requirement, how should we ensure that broad representation of the public safety community is adequately addressed? With respect to the leadership of the board, should we revise the terms of the officers? Should we require a unanimous vote for appointment of officers? Should we

[81] *Id.* at 15426 ¶ 376.

[82] *Id.* at 15426 ¶ 377.

require a rotating chairmanship among the voting board members? Should the Commission appoint a chairperson if unanimous consent cannot be attained?

51. *Commission oversight.* We also seek comment on how the Commission can better exercise oversight over the activities of the Public Safety Broadband Licensee and the commercial partner. Is quarterly financial reporting adequate, or are additional disclosures by the Public Safety Broadband Licensee or commercial partner necessary? What additional measures, if any, should the Commission take to ensure the appropriate level of oversight. For example, should Commission approval of certain activities be required before the Public Safety Broadband Licensee may undertake them? For example, should Commission approval be required before the Public Safety Broadband Licensee enters into contracts of a particular duration or cumulative dollar amount? Should we require or reserve the right to have Commission staff attend meetings of the voting board?

52. *Role of State Governments.* We seek comment on whether providing a nationwide, interoperable broadband network might be more effectively and efficiently accomplished by allowing State governments (or other entities that have or plan interoperable networks for the benefit of public safety) to assume responsibility for coordinating the participation of the public safety providers in their jurisdictions. To the extent commenters believe the State governments should assume such a role, we seek comment on the proper relationship between the State governments and the Public Safety Broadband Licensee and on our authority to establish such a role for State governments. Should the Public Safety Broadband Licensee be authorized to choose a minimum standard for any public safety broadband operation, with the State governments given the responsibility to work with public safety providers to implement operations in their jurisdictions? Would such an approach allow State governments wanting higher-grade networks to implement separately these more-advanced systems, while those wanting networks at the minimum standard avoid what they may consider unnecessary expenses? Are State governments better situated to address implementation challenges that cross public safety jurisdictions (*e.g.*, coordinating use by sheriffs departments in neighboring counties) as well as intra-jurisdictional challenges (*e.g.*, coordinating use by the police versus fire departments)? On the other hand, if different jurisdictions chose different grades of networks, would there be a lack of economies of scale and thus higher equipment costs for all public safety users?

53. *Reissuance of the Public Safety Broadband License and selection process.* In light of the changes contemplated above and the corresponding changes contemplated with respect to the D Block, we seek comment on whether we should rescind the current 700 MHz Public Safety Broadband License and seek new applicants. If so, should we use the same procedures as before, *i.e.,* delegating authority to the Chief, Public Safety and Homeland Security Bureau to solicit applications, specifying any changed criteria that may be adopted following this Second Further Notice, and having the Commission select the licensee? Are there considerations other than those above or previously considered that should be taken into account in selecting the licensee? Recognizing the need to identify the licensee quickly to enable the effective development of the 700 MHz Public/Private Partnership, what mechanism should the Commission use to assign the license if there is more than one qualified applicant?

B. Possible Revisions/Clarifications Relating to the 700 MHz Public/Private Partnership

54. As a preliminary matter, we seek comment on whether the public interest would best be served by the development of a nationwide, interoperable wireless broadband network for both commercial and public safety services through the 700 MHz Public/Private Partnership between the D Block licensee and the Public Safety Broadband Licensee, and whether we should therefore continue to require that the D Block licensee and Public Safety Broadband Licensee enter into the 700 MHz Public/Private Partnership. Below, we consider in detail the Commission's options in the event that we continue this requirement. We seek comment on a broad set of possible revisions to the 700 MHz Public/Private Partnership, including revisions and/or clarifications with regard to the respective obligations of the D Block licensee and the Public Safety Broadband Licensee.

55. First, we address the terms of the 700 MHz Public/Private Partnership, including (1) what the D Block licensee is required to construct; and (2) the operational roles of the D Block licensee and Public Safety Broadband Licensee once the network is constructed. With regard to network construction requirements, we seek comment on (1) the technical specifications of the network; (2) whether to provide public safety users with access to D Block spectrum during emergencies and, if so, under what terms; and (3) the build-out obligations of the D Block licensee, and whether such obligations should be revised in conjunction with a modification to the D Block license term. Regarding operational roles, we seek comment on the respective roles and responsibilities of the D Block licensee and Public Safety Broadband Licensee with regard to the operation of the network, including the management of users on the network, and we seek comment regarding service or spectrum usage fees.

56. Next, we address the procedures by which the winning bidder of the D Block license will enter into a Network Sharing Agreement (NSA) with the Public Safety Broadband Licensee that will further define and govern the 700 MHz Public/Private Partnership. Specifically, we seek comment on possible revisions to the rules relating to both the negotiation of the NSA and the dispute resolution procedures applicable in the event the parties are unable to reach agreement on NSA terms. In particular, we seek comment on whether, following a default due to the failure of a winning bidder for the D Block license to execute an NSA with the Public Safety Broadband Licensee, we either should offer the license to the party with the next highest bid, in descending order, or promptly auction alternative license(s) for the D Block spectrum without the 700 MHz Public/Private Partnership conditions and subject to alternative service rules.

57. We then seek comment on a number of issues related to the auction of the D Block license, including (1) whether to restrict who may participate in the new auction of the D Block license; (2) how to determine any reserve price for such an auction; (3) whether to adopt an exception to the impermissible material relationship rule for the determination of designated entity eligibility with respect to arrangements for the lease or resale (including wholesale) of the spectrum capacity of the D Block license; and (4) whether we should modify the auction default payment rules with respect to the D Block winning bidder. We also seek comment on the rules governing the relocation of public safety narrowband operations and the D Block license winner's obligations to fund that relocation, and on any other revisions that may be appropriate with regard to the 700 MHz Public/Private Partnership. Finally, we seek comment on other

revisions or clarifications that may be appropriate with regard to the 700 MHz Public/Private Partnership, including whether to license the D Block and public safety broadband spectrum on a nationwide or REAG basis.

1. The 700 MHz Public/Private Partnership

a. Network/System Requirements

58. Assuming that we determinate that we should continue to require the 700 MHz Public/Private Partnership, in this section, we seek comment on whether to adopt changes to the requirements of the network that the D Block licensee is required to construct, and whether to modify the required schedule for that construction.[83] We seek comment on what changes will best serve the Commission's goal of making a broadband, interoperable network available on a nationwide basis to public safety entities, which requires providing sufficient assurances to bidders for the D Block license that the required shared network will be commercially viable. We also are seeking comment below on the costs to build and operate such a broadband, interoperable network, including the specific costs necessary to meet public safety needs and the additional costs of covering remote areas.

(i) Technical Requirements for the Shared Wireless Broadband Network

59. Background. In the *Second Report and Order*, we found that in order to ensure a successful public/private partnership between the D Block licensee and the Public Safety Broadband Licensee, with a shared nationwide interoperable broadband network infrastructure that meets the needs of public safety, we must adopt certain technical network requirements.[84] Accordingly, among other requirements, we mandated that the network incorporate the following technical specifications:

- Specifications for a broadband technology platform that provides mobile voice, video, and data capability that is seamlessly interoperable across agencies, jurisdictions, and geographic areas. The platform should also include current and evolving state-of-the-art technologies reasonably made available in the commercial marketplace with features beneficial to the public safety community (*e.g.*, increased bandwidth).
- Sufficient signal coverage to ensure reliable operation throughout the service area consistent with typical public safety communications systems (*i.e.*, 99.7 percent or better reliability).
- Sufficient robustness to meet the reliability and performance requirements of public safety. To meet this standard, network specifications must include features such as hardening of transmission facilities and antenna towers to withstand harsh weather and disaster conditions, and backup power sufficient to maintain operations for an extended period of time.

[83] 47 C.F.R. §§ 27.1305, 27.14(m).

[84] *Second Report and Order*, 22 FCC Rcd at 15433 ¶ 405.

- Sufficient capacity to meet the needs of public safety, particularly during emergency and disaster situations, so that public safety applications are not degraded (*i.e.*, increased blockage rates and/or transmission times or reduced data speeds) during periods of heavy usage. In considering this requirement, we expect the network to employ spectrum efficient techniques, such as frequency reuse and sectorized or adaptive antennas.
- Security and encryption consistent with state-of-the-art technologies.[85]

60. We required that the parties determine more specifically what these technical specifications would be and implement them through the NSA. In addition, we required that the parties determine and implement other detailed specifications of the network that the D Block licensee would construct.[86] We determined that allowing the parties to determine specific details, including the technologies that would be used, subject to approval by the Commission, would provide the parties with flexibility to evaluate the cost and performance of all available solutions while ensuring that the shared wireless broadband network has all the capabilities and attributes needed for a public safety broadband network.[87]

61. Discussion. We seek comment on whether we should clarify or modify any aspect of the technical network requirements adopted in the *Second Report and Order* or otherwise establish with more detail the technical requirements of the network. To guide the discussion that follows, and to enable more focused comment that better assists the Commission as we address these technical requirements, we attach as an appendix a possible technical framework ("Technical Appendix") that identifies in greater detail potential technical parameters for the shared wireless broadband network. We thus seek detailed comment on this Technical Appendix, as well as on the following discussion points.

62. Would clarifications in this regard provide appropriate additional certainty, prior to re-auction, regarding the obligations of the D Block licensee and the costs of the network that this licensee would be expected to construct? Would such specification enhance the abilities of the winning bidder of the D Block license and the Public Safety Broadband Licensee to negotiate the NSA? Would modifications provide greater assurance that the required network would be economically viable? Conversely, would greater specificity hinder the NSA negotiations or otherwise inadvertently impact the success of the 700 MHz Public/Private Partnership?

63. We seek comment on whether, as a general matter, maintaining parties' flexibility to negotiate most details of the network specifications would best serve the public interest goals of the partnership. We seek comment on what technical requirements should be specified in advance, rather than being left to be negotiated after the auction, and whether there are any critical aspects of the network, either in the existing requirements or beyond those already addressed, that it would be beneficial to specify or clarify in the rules in order to increase bidder certainty regarding the cost of the D Block obligations. In addition, are there network

[85] *Id.*

[86] *Id.* at 15434 ¶ 406.

[87] *Id.* at 15426 ¶ 383.

specifications that would be particularly difficult to negotiate in the absence of further clarification by the Commission?

64. Are any changes to requirements needed to reflect the practical differences between the architecture of traditional local wireless public safety systems and the architecture of nationwide commercial broadband network systems? If so, we seek comment on what requirements, modifications, or clarifications we should adopt. Conversely, we seek comment on whether to require national standardization in the implementation of these network requirements, and the extent to which national standardization will help the network to achieve efficiency and economies of scale and scope.

65. We also welcome comments on other specifications we required of the network. These included:

- A mechanism to automatically prioritize public safety communications over commercial uses on a real-time basis and to assign the highest priority to communications involving safety of life and property and homeland security consistent with the requirements adopted in the *Second Report and Order*;
- Operational capabilities consistent with features and requirements specified by the Public Safety Broadband Licensee that are typical of current and evolving state-of-the-art public safety systems (such as connection to the PSTN, push-to-talk, one-to-one and one-to-many communications, etc.);
- Operational control of the network by the Public Safety Broadband Licensee to the extent necessary to ensure public safety requirements are met; and
- A requirement to make available at least one handset that would be suitable for public safety use and include an integrated satellite solution, rendering the handset capable of operating both on the 700 MHz public safety spectrum and on satellite frequencies.[88]

66. Commenters with proposals should provide detailed information regarding their proposed technical network specifications, and the extent to which such proposals are typical of current wireless public safety or commercial systems. For example, with regard to any particular network requirement, are there any established public safety standards in the broadband context? To what extent have these standards been implemented in commercial networks? Commenters should also discuss how such proposals will ensure that the goals of the 700 MHz Public/Private Partnership are met, in particular by enabling the creation of a viable commercial network that addresses the unique needs of the public safety community.

67. We seek comment on how the technical specifications of existing or anticipated future public safety networks differ from existing or anticipated commercial networks. Commenters are encouraged to be as specific as possible in answering these questions, providing detailed technical data where possible. How different are the technical specifications of existing or anticipated public safety networks from other public safety networks? How do the technical

[88] *Id.* at 15433-34 ¶ 405. We seek comment on the responsibilities of the D Block licensee with regard to the operation of the shared network elsewhere herein.

requirements of different public safety networks differ based upon factors such as intended user base and local morphology (e.g., urban vs. rural environments; fire, police, emergency medical service and other first responders; in-building vs. outdoor usage; high-speed vehicular vs. pedestrian public safety users, etc.)? How do these technical requirements differ based upon factors such as type of use (mission-critical voice and data versus non-mission-critical communications)? What purposes, if any, do public safety users make of commercial wireless networks today for mission-critical and/or non-mission-critical communications? How distinct in practice is the line between mission-critical and non-mission-critical communications? How do network construction and operation costs vary among different types of public safety networks and between public safety and commercial networks? To what extent can a commercial provider make use of publicly-owned or leased property, and how could use of such facilities affect the cost of constructing and operating a public safety broadband network?

68. We seek comment on the payment and funding models employed by public safety users when building and operating dedicated public safety networks (e.g., construction and operation by municipal employees, construction and operation by private subcontractors). Similarly, we seek comment on the payment and funding models employed by public safety users when they rely upon commercial wireless services. Are fees assessed based on usage, number of users, or other factors? What provisions are typically made for unanticipated demand for services and how are these reconciled with fixed budgets? Again, commenters are encouraged to be as specific as possible in answering these questions, providing specific cost data or concrete numerical estimates where possible.

69. We note that the Public Safety Spectrum Trust ("PSST"), after it was designated Public Safety Broadband Licensee by the Commission, released what it referred to as a Bidders Information Document ("BID"), which, it stated, was offered to provide "high-level information regarding the PSST's expectations of the D Block partner in building and operating the shared Public/Private network" and "to define and detail certain expectations that the PSST has for this partnership."[89] We emphasize that the BID has no formal legal role in the development of the nationwide, broadband public safety network under the existing rules and we express no view on the positions taken by the PSST as reflected in the BID. We take this opportunity, however, to seek comment on the impact of the BID on the previous auction, whether any particular aspects of the PSST's "expectations" were of particular concern to potential bidders or of particular importance to public safety entities, whether the release of the BID was helpful in clarifying costs, what role the BID played in pre-auction discussions and what formal role, if any, that a document similar to the BID such as a statement of requirements should play in establishing or clarifying the technical requirements of the nationwide, broadband public safety network under revised rules. We note, for example, that one commercial entity has suggested that the Public Safety Broadband Licensee should be required to release a statement of requirements before auction, and that the statement of requirements should constrain the elements that the Public

[89] *See* Letter from Harlin R. McEwen, Chairman, Public Safety Spectrum Trust to Prospective D Block Bidders (Nov. 30, 2007) (*available at* http://www.psst.org/documents/BID2_0.pdf) at 3. The PSST released an initial version of this document on November 15, 2007, and released version 2.0, the final version, on November 30, 2007. *See* http://www.psst.org/bidsummary.jsp.

Safety Broadband Licensee can require in the shared network.[90] We seek comment on this suggestion.

70. With these questions and issues in mind, we seek comment on whether the Commission should itself establish in a detailed and comprehensive fashion the technical obligations of the D Block licensee with regard to the network, and if so, what specifications it should adopt. For example, we seek comment on whether the attached Technical Framework could, following comment on its specific components, provide for establishing an appropriate set of requirements for the shared wireless broadband network. We also seek comment on a number of particular technical issues, as set forth below.

71. *Specification for broadband technology platform.* We seek comment on whether we should modify or further clarify any aspect of the broadband technology platform specifications provided in the *Second Report and Order*. Would clarifying that the D Block winning bidder has the right to make the final technical determinations with regard to the network platform serve the public interest? Should the Commission specify the precise public safety services and applications that must be carried or that need not be carried, beyond typical broadband applications (*e.g.*, Internet access, video, multimedia), such as cellular telephony, dispatch voice service, push-to-talk, etc., and if so, what should they be? Should we establish limits on the obligation to accommodate applications similar to those established in the C Block? For example, should we provide that there is no obligation to carry customized applications where accommodating such applications would require modifying network infrastructure or back-office systems?[91] What impact might any of these determinations have on the utility of the network for public safety purposes?

72. We ask commenters to provide detailed information regarding any proposed broadband platform solution. How can we establish a set of requirements that will meet public safety's needs while providing prospective bidders with sufficient certainty that it will be possible to construct a system that is economically viable? How can we best meet this objective without impeding flexibility regarding network design or inadvertently deterring potential bidders from participating in the auction?

73. *Reliability*. We seek comment on whether we should modify any aspect of the reliability standard established in the *Second Report and Order*. Should we eliminate the specific requirement of 99.7 percent network reliability and impose only the general requirement of "reliable operation throughout the service area consistent with typical public safety communications," leaving the specific level of reliability to negotiations? Should we specify a different level of reliability, such as 95 percent reliability over 95 percent of a defined area?[92] Does the latter standard better reflect a typical level of reliability in public safety communications systems? Further, is the typical level of reliability in public safety systems a relevant factor for cellularized broadband systems? Are there any real-world examples of reliability based on cellularized broadband systems used by public safety?

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[90] *See* AT&T Petition for Reconsideration at 4-5.

[91] *See Second Report and Order*, 22 FCC Rcd at 15371 n.502.

[92] *See* Cyren Call Petition for Reconsideration at 8; Frontline Petition for Reconsideration at 23.

74. We also seek comment on whether, in the event we continue to require a specific level of reliability, we should nevertheless expressly provide that the parties have flexibility to mutually agree to a different level in particular geographic areas. Are there specific provisions related to reliability that would create unreasonable challenges in establishing the network? If so, what limitations should we establish? Finally, we seek comment on how the reliability standard impacts the performance requirement, *e.g.*, might it effectively transform the population-based performance requirements into geographic benchmarks?

75. *Robustness and hardening.* We seek comment on whether to further specify or modify the requirements of the network regarding robustness and hardening. For example, should we further specify the particular environmental conditions (temperature range, wind, vibration, etc.) that the installations must be designed to withstand? Should we specify the minimal number of hours that base stations and network equipment must be capable of operating in the event of a power outage? Should we require an onsite power generator and a specific supply of fuel for each base station? Should we simply provide that the network must meet the same requirements regarding backup power applicable to commercial mobile radio service providers, given that these requirements were themselves established to meet homeland security and public safety goals?[93] Should we address whether and to what extent redundant infrastructure must be provided, such as provisions for overlapping cell sites that could provide backup coverage in an emergency, and if so, how would such provisions impact the viability of the system and its cost? Should we establish minimum obligations to have access to backup equipment and systems, such as cellular systems on wheels, or minimum timeframes for system restoration? Alternatively or additionally, should we establish ceilings on the extent of robustness and hardening that may be required of the D Block licensee?

76. We also seek comment on whether these requirements should be subject to variation. Should we specify circumstances in which the robustness and hardening obligations may vary, such as to account for local zoning restrictions, geography, or patterns of weather? Should we alternatively specify that the extent and circumstances of variation will be left to the parties to negotiate? Commenters advocating particular requirements relative to robustness and hardening should also explain how their proposals compare to the standards for current public safety wireless systems.

77. *Capacity, throughput, and quality of service.* As stated in the *Second Report and Order*, NPSTC contended that capacity is a key consideration, arguing that "the Commission should require a detailed capacity plan as one of the central elements in the negotiated agreement . . . ."[94] Should we further specify the minimum levels of capacity or throughput (*i.e.* data transmission rates), or ceilings on such levels, that the network must provide? If so, how should such levels be defined? Should they vary by geographic location, or other conditions? Should we establish other quality of service parameters, such as resource reservation and session control mechanisms? What means should be made available by the D Block licensee to enable public

[93] *See*, *e.g.*, Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, EB Docket No. 06-119, WC Docket No. 06-63, *Order on Reconsideration*, 22 FCC Rcd 18013 (2007).

[94] *Second Report and Order*, 22 FCC Rcd at 15433 ¶ 404 (quoting NPSTC *700 MHz Further Notice* Comments at 13).

safety to monitor the quality of service in an unobtrusive way and without the addition of significant cost to the network? Should the means be nationally standardized and/or be limited to those provided by the D Block licensee? Is there a need for a formal process to address future increases in demand?

78. As we have emphasized throughout this Second Further Notice, one of the key elements of the 700 MHz Public/Private Partnership is the D Block licensee's access to the public safety broadband spectrum on a secondary basis to defray the cost of building a nationwide network serving both commercial and public safety users. We thus invite comment as to whether there are any particular services or applications that might be too inefficient or far removed from typical public safety communications needs, or that may overburden or otherwise not be viable for a broadband network, such that they may frustrate this key element by excessively limiting or precluding the secondary access to this spectrum contemplated in the *Second Report and Order*. For example, would it be appropriate to prohibit or restrict use of the network for continuous or routine video surveillance from fixed locations as being an inefficient or inappropriate use of the capacity of the shared wireless broadband network?[95] Would such use create undue uncertainty concerning network availability for either the D Block licensee or for public safety users? If there are such concerns, how else should they be addressed? Are other frequencies available to public safety users more appropriate for fixed video applications? Could such networks be made interoperable with the public safety broadband network using 700 MHz spectrum? What are the relative costs of using alternative frequencies? What cost savings, if any, would there be to incorporating video into the 700 MHz network as compared to allowing individual jurisdictions to develop their own fixed video wireless networks? Should we set certain parameters to determine or predict capacity needs of public safety users? We could, for example, base the capacity needs on the levels of authority within the public safety community, the existence or absence of an "emergency" (further discussed below), or type, time, or location of communication. Are there any technical, operational, or cost-based means to monitor or regulate capacity needs of certain public safety entities? Should we require the Public Safety Broadband Licensee to forecast public safety use on a regular basis (monthly, quarterly), or otherwise provide the assistance needed for the D Block licensee to make such predictions? Commenters proposing any limits to address such capacity concerns should provide detailed information on how such limitations could be implemented without compromising public safety. Would payment obligations of public safety users for network use be sufficient incentive for users to voluntarily limit use? Would a rate-of-return or cost-plus pricing mechanism provide the appropriate incentives? Alternatively, should we vary the obligations of the D Block licensee, its right to recover costs from public safety, or other terms of the NSA, based on the extent to which the public safety broadband spectrum is available for commercial operations? Or is it sufficient to clarify that the parties may negotiate such variations?

[95] *See*, *e.g.*, "DC OCTO Wireless Broadband Network Wins Police Chiefs' Technology Award," http://newsroom.dc.gov/show.aspx/agency/octo/section/2/release/6342 (stating that the DC wireless broadband network is designed to provide, among other applications, "remote video surveillance"); *see also* http://govtsecurity.com/state_local_security/close_watch/ (stating, with regard to Baltimore, Maryland video surveillance system, that "[m]any of the city's surveillance cameras and all of its housing cameras are wireless" and that "[w]ireless camera signals from groups of cameras are brought back to a fiber node . . . .").

79. *Security and encryption.* Should we provide greater specificity regarding what the D Block licensee must provide with regard to security and encryption, or establish an alternate requirement? Should we identify further what constitutes "state-of-the-art" security and encryption technology? Should we limit the requirement to technical network solutions or standards for security and encryption implemented on a nationwide basis? We seek comment on the costs and practical challenges of implementing such measures in the public/private network to be constructed by the D Block licensee, particularly in the event that we permit local variation in the security solutions and standards.

80. *Combined use of spectrum*. We seek comment on whether, in order to provide the D Block licensee with appropriate flexibility to achieve an efficient and effective implementation of the 700 MHz Public/Private Partnership obligations, we should amend our rules to clarify that the D Block licensee may construct and operate the shared wireless broadband network using the entire 20 megahertz of D Block spectrum and public safety broadband spectrum as a combined, blended resource. In particular, we seek comment on whether, in designing and operating the shared network, the 10 megahertz of D Block spectrum and the 10 megahertz of public safety broadband spectrum may be combined, in effect, into a single and integrated 20 megahertz pool of fungible spectrum that may be assigned to users without regard to whether a public safety user is being assigned frequencies in the D Block or a commercial user is being assigned frequencies in the public safety broadband spectrum, so long as the network provides commercial and public safety users with service that is consistent with the respective capacity and priority rights of the D Block license and Public Safety Broadband License and with our rules. For example, such a network would have to guarantee that public safety users have priority access to at least 10 megahertz of spectrum capacity consistent with the 10 megahertz associated with the Public Safety Broadband License, but, at any particular time, the network might be using frequencies associated with either the D Block license or the Public Safety Broadband License to provide that capacity.[96]

81. We seek comment on whether permitting the combined use of spectrum in this fashion would provide for a more efficient and effective use of spectrum, whether it provides further flexibility to evaluate and use all available wireless broadband technologies to build and operate the network and thus promote our ultimate goal of making available a nationwide interoperable broadband network for public safety users. We also seek comment on whether such combined use would be consistent with the different rights and obligations associated with the D Block license and the Public Safety Broadband License, respectively, and whether, in light of these and other considerations, it would be in the public interest to allow such use. Commenters should also discuss whether permitting such combined use of the spectrum associated with these two licenses would be consistent with the requirements of Sections 337(a) and (f) and the Commission rules allotting specific frequencies for use by the Public Safety Broadband Licensee and the D Block licensee.

82. *Power flux density, and related notification, and coordination requirements*. In the text of the *Second Report and Order*, we indicated that we would not adopt any power flux

[96] We note that, under current rules for the 700 MHz Public/Private Partnership, public safety users would be entitled in emergencies to the full combined 20 megahertz of capacity on a priority basis. Elsewhere in this Second Further Notice, we seek comment on whether to eliminate or clarify this requirement.

density (PFD) limit requirement in the public safety broadband segment, based on the limited record received on this issue.[97] We also noted that, should additional facts be presented, we might revisit this issue.[98] The applicable rules adopted by the *Second Report and Order,* however, require the Public Safety Broadband Licensee to meet a PFD limit when operating base stations at power levels above 1 kW ERP.[99] In light of this discrepancy between the text of the order and the rules, we seek comment on whether we should retain this PFD requirement for the public safety broadband spectrum.[100] Further, we note that Verizon Wireless ("Verizon") filed a petition for reconsideration of the *First Report and Order*[101] with regard to certain of the notification and coordination obligations placed on commercial 700 MHz licensees.[102] First, Verizon requests that we eliminate the PFD/notification requirement for Upper 700 MHz C and D Block licensees when operating base stations at power levels above 1 kW ERP in non-rural areas. And second, with respect to Upper 700 MHz C and D Block licensees operating in rural areas, Verizon requests that such licensees: (1) should only have to coordinate with adjacent block licensees (*i.e.*, not all other 700 MHz licensees) when seeking to operate at power levels greater than 1 kW ERP; (2) should be permitted to use a power level of "1 kW ERP and 1 kW/MHz ERP" as the trigger for coordination instead of 1 kW ERP; [103] and finally, (3) should be subject to a PFD/notification requirement, rather than a coordination requirement, when operating base stations at power levels greater than 1 kW ERP and 1 kW/MHz ERP.[104] In light of this petition, we seek comment on whether to apply any or all of Verizon's proposed rule changes to the public safety broadband spectrum.

83. *Other technical requirements.* As noted above, we also seek comment on whether to establish, modify, or clarify the requirements with regard to any other critical aspect of the network that may significantly affect its commercial viability or its ability to meet the needs of

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[97] *See id*., 22 FCC Rcd at 15417 ¶ 358.

[98] *Id*.

[99] *See* 47 C.F.R. § 90.542(a)(5), (b).

[100] This requirement had initially been imposed on Upper 700 MHz C and D Block licensees to protect public safety narrowband licensees from interference.

[101] *See* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission'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, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 8064 (2007) (*First Report and Order*).

[102] Petition for Reconsideration of Verizon Wireless, WT Docket No. 06-150 (filed June 14, 2007) (Verizon Petition).

[103] Upper 700 MHz C and D Block licensees may operate base stations at power levels up to 2 kW/MHz ERP in rural areas.

[104] Verizon Petition at 8-12.

public safety. For example, should we further specify the technical requirements and standards with regard to interoperability or network availability?

(ii) Priority Public Safety Access to Commercial Spectrum During Emergencies

84. Background. In addition to requiring that the network meet certain technical specifications, we also required that the D Block licensee provide the Public Safety Broadband Licensee with priority access, during emergencies, to the spectrum associated with the D Block license (in addition to the 700 MHz public safety broadband spectrum). At the same time, we noted that the potential disruption of commercial service in the D Block, while appropriate in an emergency situation, must be limited to the most serious occasions in order to avoid jeopardizing the commercial viability of the 700 MHz Public/Private Partnership. To balance these competing concerns, we thus required the parties to define "emergency" for purposes of priority access to D Block license spectrum as part of the NSA.[105] We also provided that in the event that the parties are unable to agree that an emergency situation requires priority access to the D Block license spectrum, especially in circumstances that do not clearly fall within the definition of "emergency" negotiated by the parties in the NSA, the Public Safety Broadband Licensee may request that the Commission declare, on an expedited basis, that particular circumstances warrant emergency priority access.[106]

85. Discussion. We seek comment on whether we should continue to require that the D Block licensee provide the Public Safety Broadband Licensee with priority access, during emergencies, to the spectrum associated with the D Block license. We seek comment on whether this obligation is essential to ensure that the network capacity will meet public safety wireless broadband needs, or whether removing the obligation could significantly improve the chances that this proceeding will succeed in achieving our goal of making available to public safety users a nationwide, interoperable, broadband network that incorporates the greater levels of reliability, robustness, security, and other features required for public safety services.

86. If we continue to require that the D Block licensee provide the Public Safety Broadband Licensee with priority access, during emergencies, to the spectrum associated with the D Block license, we seek comment on whether we should provide more clarity on the circumstances that would constitute an "emergency" for this purpose. If so, we ask whether any or all of the following events should define an "emergency:"

- The declaration of a state of emergency by the President or a state governor.
- The issuance of an evacuation order by the President or a state governor impacting areas of significant scope.
- The issuance by the National Weather Service of a hurricane or flood warning likely to impact a significant area.

[105] *Second Report and Order*, 22 FCC Rcd at 15441-42 ¶ 426.

[106] *Id.* at 15442 ¶ 427. We delegated authority to the Defense Commissioner to decide these requests. See 47 C.F.R. § 0.181.

- The occurrence of other major natural disasters, such as tornado strikes, tsunamis, earthquakes, or pandemics.
- The occurrence of manmade disasters or acts of terrorism of a substantial nature.
- The occurrence of power outages of significant duration and scope.
- The elevation of the national threat level, as determined by the Department of Homeland Security, to either orange or red for any portion of the United States, or the elevation of the threat level in the airline sector or any portion thereof, as determined by the Department of Homeland Security, to red.

87. Are there any other events, or modifications to the above, that would assist in removing uncertainty in reaching a definition of "emergency?" Would this proposed definition of "emergency" be too burdensome on the D Block licensee? If we adopted some or all of the above event-defining emergencies, should we permit the parties to the NSA to propose different or additional scenarios that should be considered emergencies? Further, should we make explicit that priority access in emergency situations be limited to the geographic and/or jurisdictional area directly affected by the emergency? Should we establish time limits on the duration of priority access? If so, how should such time limits be based? Alternatively, should we establish limits on the priority access given to the D Block spectrum capacity, for example by limiting public safety's priority access to D Block spectrum capacity in emergencies to 50 percent?

(iii) Performance Requirements Relating to Construction of the Network

88. Background. In the *Second Report and Order*, we decided that the D Block license would be issued for a period of 10 years and imposed unique performance requirements for the D Block license in connection with the construction of the shared wireless broadband network. Specifically, we required the D Block licensee to provide signal coverage and offer service to at least 75 percent of the population of the nationwide D Block license area by the end of the fourth year, 95 percent by the end of the seventh year, and 99.3 percent by the end of the tenth year.[107] We further specified that "the network and signal levels employed to meet these benchmarks be adequate for public safety use . . . and that the services made available be appropriate for public safety entities in those areas."[108]

89. Certain other requirements were imposed to further ensure coverage of highways and certain other areas such as incorporated communities with a population in excess of 3000.[109] We concluded that these build-out requirements "will ensure that public safety needs are met."[110] We also required, however, that, "to the extent that the D Block licensee chooses to provide commercial services to population levels in excess of the relevant benchmarks, the D Block licensee will be required to make the same level of service available to public safety entities."[111]

[107] *Second Report and Order*, 22 FCC Rcd at 15445 ¶ 437.

[108] *Id.* at 15446 ¶ 440.

[109] *See id.* at 15445 ¶ 438 – 15446 ¶ 440.

[110] *Id.* at 15445 ¶ 437.

[111] *Id.* at 15446 ¶ 440.

90. Discussion. We seek comment on whether we should revise the performance requirements that we imposed on the D Block licensee with regard to building out the nationwide, interoperable broadband network and, if so, how those requirements should be revised. We also invite comment on whether to extend the license term for that license, and possibly the Public Safety Broadband License, if we determine to provide for construction benchmarks that extend past the initial license term that we established for the D Block license.

91. We seek comment on whether we should retain the existing end-of-term population benchmark of 99.3 percent or whether instead we should adopt a lower population benchmark that is equal to or more aggressive than the 75 percent benchmark that is applicable to the C Block. We note that each of the top four nationwide carriers is currently providing coverage to approximately 90 percent or more of the U.S. population.[112] Given that existing commercial wireless infrastructure already covers approximately 90 percent of the population, we seek comment on whether it is reasonable to expect that the D Block licensee would be able to meet at least a 90 percent of the population coverage requirement or more, or whether some other coverage requirement is appropriate.

92. Based on extrapolations from one estimate in the record, it appears that reducing the population coverage level from 99.3 to 98 percent would result in a potential cost savings for the D Block licensee of approximately $3.1 billion in capital expenditures and reducing the coverage level to 95 percent would result in a potential cost savings of approximately $6.1 billion in capital expenditures.[113] Even assuming that a more reasonable estimate of potential cost savings may amount to around half these figures, reducing the coverage level to 98 percent would result in a potential cost savings of approximately $1.6 billion and reducing the coverage level to 95 percent would result in a potential cost savings of around $3.1 billion.[114] We seek comment on these specific estimates, as well as any other estimates that commenters can provide

[112] UBS Warburg Investment Research, U.S. Wireless 411, at 17 (Mar. 18, 2008).

[113] *See* Frontline Petition for Reconsideration at 22 (stating that increasing the 10-year coverage requirement from 99 percent of the population to 99.3 percent added $1 billion in costs to the network). Commission staff extrapolated from Frontline's analysis to estimate potential cost savings associated with various coverage levels. First, Commission staff estimated Frontline's implied network cost per square mile by taking the difference in square miles between CONUS population coverage at 99.3 percent and 99 percent (149,048 square miles), and then dividing Frontline's $1 billion cost savings by this difference in square miles. Using this methodology, Commission staff estimated Frontline's implied network cost per square mile to be approximately $6,700. In estimating the difference in square miles between population coverage at 99 percent and 99.3, Commission staff used U.S. Census-based population data by county, starting with the county that has the highest population density, and working down in counties to arrive at 99 and 99.3 percent of the U.S. population. Using the implied network cost per square mile derived from the Frontline data, Commission staff estimated that reducing the CONUS population coverage level from 99.3 to 98 percent would result in a reduction of 913,612 square miles covered by the network. This reduction in square miles is multiplied by the implied cost of $6,700 to arrive at potential network cost savings for the D Block licensee of approximately $3.1 billion. Similarly, Commission staff estimated that reducing the CONUS population coverage level from 99.3 to 95 percent would result in a reduction of 462,591 square miles covered by the network. This reduction in square miles is multiplied by the implied cost of $6,700 to arrive at potential network cost savings for the D Block licensee of approximately $6.1 billion.

[114] By reducing this estimated implied network cost per square mile by 50 percent (from $6,700 to $3,355), Commission staff estimated a potential cost savings of approximately $1.6 billion if the coverage level were reduced to 98 percent, and a potential cost savings of $3.1 billion if the coverage level were reduced to 95 percent.

relating to the incremental additional costs associated with covering each percentage (in whole or part) of the population above 95 percent. We also note that reducing the population coverage level for the end-of-term benchmark from 99.3 percent to 98 percent or 95 percent would also reduce the geographic area covered by the network. We estimate, for example, that under the current 99.3 percent end of term build-out benchmark, approximately 61 percent of the geographic area of the country would be covered by the network. By contrast, with a 95 percent end-of-term build-out benchmark, we estimate that approximately 40 percent of the geographic area of the country would be covered.[115] We seek comment on these estimates, or on any related estimates.

93. More generally, we seek comment on how much a dedicated, nationwide, interoperable broadband network for public safety, built to the requirements outlined in the *Second Report and Order*, costs to build and operate. We seek as much detail on these costs as commenters can provide. How should the Commission balance the potential savings associated with adopting less stringent performance requirements with our goal of establishing a nationwide interoperable public safety network?

94. As we consider appropriate construction benchmarks for the D Block license, we note that for the 22 megahertz C Block we required licensees to provide signal coverage and offer service to at least 40 percent of the population in each EA of the license area within four years and to at least 75 percent of the population in each EA of the license area by the end of the ten-year license term.[116] Given that the licenses in the C Block were successfully auctioned in Auction 73, and that at least one bidder has put together a nearly nationwide geographic footprint with these licenses, we assume that the D Block licensee should, at the very minimum, be able to meet these benchmarks with respect to its nationwide license. We seek comment on this assumption.

95. Depending on which performance benchmarks we may ultimately adopt, should we include benchmarks that extend beyond the end of the initial 10 year license term? If so, should we also extend the term of the D Block license accordingly? Would doing so make it easier for the D Block licensee to meet the performance requirements the Commission adopted? If, for example, we were to adopt a 15 year license term, would such a modification increase the commercial viability of the required network while still meeting public safety needs? If we were to adopt a 15 year license term, how should the interim build-out benchmarks be modified? We could, for example, require the D Block licensee to provide signal coverage and offer service to at least 50 percent of the population of the nationwide license area by the end of the fifth year, 80 percent of the population of the nationwide license area by the end of the tenth year, and 95 percent of the population of the nationwide license area by the end of the fifteenth year. Would modifying the license term and performance requirements in this way, or similar way, serve the public interest? Alternatively, if we extend the overall license term, should we add additional interim benchmarks to reflect the longer deployment period? What potential impact would these

[115] See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, *Twelfth Report*, 23 FCC Rcd 2241, at 5 (2008) (Twelfth CMRS Competition Report).

[116] *Second Report and Order*, 22 FCC Rcd at 15351 ¶¶ 162-63.

revised terms and benchmarks have on the near-term and long-term needs of public safety? Would roaming be a possible solution to increased coverage needs?

96. We also seek comment on how making changes to the license term and performance requirements as described above would affect other aspects of the rules that we adopted, such as the requirement that the D Block licensee and Public Safety Broadband Licensee negotiate inclusion into the build-out schedule coverage of major highways and interstates, as well as incorporated communities with a population in excess of 3,000 people?[117] In addition, we seek comment on whether any aspect of the renewal requirements for the D Block licensee should be revised. In the *Second Report and Order*, we determined that, at the end of the 10 year license term, the D Block licensee will be allowed to apply for license renewal that will be subject to its success in meeting the material requirements set forth in the NSA as well as all other license conditions, including meeting the performance benchmark requirements.[118] Because the initial NSA term will expire at the same time, we also required the D Block licensee to file a renewed or modified NSA for Commission approval at the time of its license renewal application.[119] Should we make any changes to these requirements?

97. How will the possibility of NSA re-negotiation at some point in the future affect the incentives of public safety users to develop reliance on the public safety broadband network? What steps could provide public safety users with confidence that using the broadband network will remain attractive after potential changes to the NSA at renewal time?[120] What are the downsides to such an approach?

98. As discussed above, we are seeking comment on whether the license term of the D Block should be revised. In adopting the ten-year license term for the Public Safety Broadband Licensee, we sought to harmonize the license terms to facilitate the contemplated leasing arrangement and build out requirements. Accordingly, should we determine to extend the term of the D Block license, we seek comment on whether we also should extend the Public Safety Broadband Licensee term in a corresponding manner. Further, we determined in the *Second Report and Order* that the NSA was to have a term not to exceed 10 years from February 17, 2009, to coincide with the term of the D Block license. Thus, we also ask whether we should extend the term of the NSA to be co-extensive with any extended term we may adopt for the D Block.

99. We also seek comment on whether we should revise our rules to permit the D Block licensee to use Mobile Satellite Service to help it meet its build-out benchmarks. In the *Second Report and Order*, we found that satellite services can enable public safety users to communicate in rural and remote areas that terrestrial services do not reach. We also stated that

[117] We do not revisit our decision to prohibit geographic partitioning and spectrum disaggregation for the D Block licensee in the context of the 700 MHz Public Private Partnership. We continue to find that such restriction is necessary to ensure the integrity of the public/private partnership and nationwide broadband network.

[118] *Second Report and Order*, 22 FCC Rcd at 15450 ¶ 458.

[119] *Id*.

[120] *See* A New Proposal for a Commercially-Run Nationwide Broadband System Serving Public Safety by Jon M. Peha, Associate Director, Center for Wireless and Broadband Networking, Professor of Electrical Engineering and Public, PS Docket No. 06-229, WT Docket No. 96-86 (filed Feb. 27, 2007), at 9.

satellite technology can provide the only means of communicating where terrestrial communications networks have been damaged or destroyed by wide-scale natural or man-made disasters.[121] As a result, we required that the D Block licensee make available to public safety users at least one handset that includes a seamlessly integrated satellite solution.[122] In addition, we strongly encouraged the D Block licensee and the Public Safety Broadband Licensee to negotiate large-scale satellite service agreements that could be used to either expand or expedite build-out in rural areas and to replace terrestrial services where terrestrial facilities are damaged or destroyed.[123]

100. In light of the potential for Mobile Satellite Services to supplement the D Block licensee's coverage, we seek comment in this Second Further Notice on whether it would serve the public interest to permit the D Block licensee to utilize Mobile Satellite Service as a way to meet, in part, its build-out requirements. We seek comment on whether this proposal could better enable the D Block licensee to meet its performance requirements by providing the licensee with additional means for ensuring that broadband public safety services are available in remote and rural areas. If the D Block licensee is able to make use of Mobile Satellite Service coverage, we seek comment on whether satellite coverage would make it easier to cover gaps in rural areas in the terrestrial 700 MHz public safety network. We seek comment on whether this additional flexibility in infrastructure deployment would serve to bolster the availability, robustness, and survivability of the public safety communications network. If we permit the D Block licensee to use Mobile Satellite Services to help it meet the build-out benchmarks, we seek comment on whether we should limit the extent to which it can rely upon such services and, if so, how its reliance on Mobile Satellite Services should be limited.

101. We also seek comment on whether the D Block licensee's obligation to meet its build-out requirements should be delayed or relaxed if the licensee ensures that handsets with terrestrial and mobile satellite components are available in areas that have not been built out with a terrestrial network, but are covered by a Mobile Satellite Service footprint. Alternatively, we seek comment on whether we should retain the terrestrial build-out requirement, but provide the D Block licensee with more flexibility if it makes terrestrial/mobile satellite handsets available for public safety use. We seek comment, for example, on whether the D Block licensee should be provided scaled flexibility based on the substitutability of the satellite offering for terrestrial services to be used by public safety users. Factors that we could consider in assessing such an offering might include: (1) the capabilities of the satellite component (*e.g.*, voice, data, video, interoperability, priority/preemption); (2) the availability of terrestrial/mobile satellite data devices, in addition to handheld voice devices; and (3) geographic coverage. To the extent we determine to lower the population coverage level for the end-of-term benchmark from 99.3 percent to 98 percent or 95 percent, is there some other way than Mobile Satellite Service to provide service to 99.3 percent of the population?

102. What would be the marginal cost to public safety entities of using Mobile Satellite Service-based communications services? To what extent would these marginal costs be

[121] *Second Report and Order* at 15452 ¶ 463.

[122] *Id.* at 15452 ¶ 464.

[123] *Id.* at 15453 ¶ 467.

comparable to the marginal cost of using the terrestrial component of the public safety broadband network? Is it reasonable to require the D Block licensee to ensure some degree of comparability of costs for public safety end users if the D Block licensee relies upon Mobile Satellite Service to fulfill a network buildout requirement? How could such comparability be defined and enforced?

103. We also seek comment on whether there are other terrestrial or non-terrestrial technologies or services that the D Block licensee may utilize to satisfy its performance requirements.[124] We reiterate the questions asked of Mobile Satellite Services above with regard to other such non-terrestrial technologies, and we seek comment on the costs and benefits of such technologies, particularly in comparison to Mobile Satellite Service, and whether permitting the use of such technologies to satisfy in part the D Block licensee's performance requirements would raise any other issues that should be addressed by the Commission.

104. We further seek comment on whether, to reduce the cost of meeting our build-out requirements, we should adopt rules to promote or facilitate access by the D Block licensee to public safety towers and/or rights of way, and if so, what measures would be appropriate? We might, for example, obligate the licensees in the 700 MHz Public/Private Partnership to make "reasonable, good-faith efforts to obtain access" to both public safety towers and public safety rights of way, as earlier proposed by one party in this proceeding.[125] We seek comment on this option, and on whether measures should be adopted to provide public safety entities with some degree of obligation or incentive to provide such access. Commenters proposing such a measure should also discuss the Commission's authority to adopt it. Alternatively, should we clarify that the D Block licensee has flexibility to provide this type of incentive, such as by agreeing to reduced rates for services to public safety entities that provide access to their towers, and otherwise leave the issue to be negotiated between the two licensees and the relevant public safety entities? Are there impediments that might limit the ability of public safety entities to enter into such arrangements? If so, what steps can the Commission take to address such impediments that are within its authority and consistent with the public interest?

105. Finally, as an alternative approach for establishing construction requirements, we seek comment on whether we should employ a "two tiered" build out obligation, such that the D Block licensee would be allowed to incrementally enhance its network. Under this approach, the D Block licensee could satisfy its "first tier" build out requirement by meeting a subset, or some lower-cost aspects, of the technical requirements we adopt for the public-private partnership, and later enhance the network to meet public safety needs. The D Block licensee would then be required to satisfy a "second tier" requirement and fully upgrade portions of the

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[124] *See*, *e.g.*, Letter from Gerald Knoblach, CEO, Space Data Corporation, to Marlene H. Dortch, Secretary, FCC, AU Docket No. 07-157, ET Docket No. 04-186, *Ex Parte* (filed April 29, 2008) (arguing that wide area technologies such as Space Data's SkySite Platforms, which "create a wireless network consisting of transceivers on weather balloons that operate in near space from 60,000 to 100,000 feet," can "address issues associated with build-out and landmass coverage for the 700 MHz D Block . . . ."); Interoperable Communications: Hearing Before the H. Subcomm. on Telecommunications and the Internet, 110th Congress (2008) (statement of Robert F. Duncan, Rear Admiral, United States Coast Guard (ret.), Senior Vice President, Rivada Networks). *See also* Letter from Cheryl A. Tritt, Counsel to Space Data Corp., to Marlene H. Dortch, Secretary, FCC, WT Docket Nos. 96-86, 05-211, and 06-150, PS Docket No. 06-229, AU Docket No. 07-157, *Ex Parte Notice* (filed Oct. 24, 2007).

[125] *See* Notice by Frontline Wireless, LLC, WT Docket No. 06-150 and 06-169, PS Docket No. 06-229 (filed Mar. 27, 2007), Draft Rules at 5.

network to meet all technical requirements adopted for the shared wireless broadband network based on certain temporal and/or public safety take-rate-based triggering mechanisms. Would adopting this two tiered performance requirement serve our goals to ensure a commercially viable opportunity for the D Block licensee to construct a shared wireless broadband network suitable for public safety use? If so, what "first tier" requirements or capabilities should the D Block be required to meet? When should the D Block licensee be required to fully upgrade to the entire set of technical requirements? Should we specify a certain amount of time following each construction benchmark, or after a certain take-rate is achieved by public safety entities?

b. Respective Roles and Responsibilities of the D Block Licensee and Public Safety Broadband Licensee with regard to Construction, Management, Operations, and Use of the Network

106. In adopting the 700 MHz Public/Private Partnership in the *Second Report and Order*, we sought to delineate the respective roles and responsibilities of the D Block licensee and the Public Safety Broadband Licensee in a manner that would ensure that the construction and operation of a shared, interoperable broadband network infrastructure that operated on the 20 megahertz of spectrum associated with the D Block license and the Public Safety Broadband License and that served both the needs of commercial and public safety users.[126] Under this plan, the D Block licensee and its related entities would finance, construct, and operate the shared network,[127] while the Public Safety Broadband Licensee would represent the interests of public safety community and ensure that the shared network meets their needs.[128]

107. In establishing the 700 MHz Public/Private Partnership, we determined that promoting commercial investment in the build-out of a shared network addressed the most significant obstacle to constructing a public safety network – the limited availability of public funding.[129] We concluded that providing for a shared infrastructure would help achieve significant cost efficiencies, provide the public safety community with priority access to commercial spectrum during emergencies, and speed deployment of a nationwide interoperable broadband network for public safety. At the same time, by providing the D Block licensee with rights to operate commercial services in the 10 megahertz of public safety broadband spectrum on a secondary, preemptible basis, this partnership would help defray the costs of build-out and ensure that the spectrum is used efficiently.[130]

108. We stated that the D Block licensee would have the "exclusive right and obligation to build out the shared network," using both the spectrum associated with the D Block

[126] *See, e.g.,* 22 FCC Rcd at 15426 ¶ 383 , 15431 ¶ 396.

[127] *See, e.g., id.* at 15428 ¶ 386, 15431 ¶ 395-96, 15432 ¶ 399, 15437 ¶ 415, 15441 ¶ 425, 15445-46 ¶¶ 437-43, 15450 ¶ 457, 15449 ¶ 452, 15467 ¶ 517.

[128] *See, e.g., id.* at 15421-25 ¶¶ 373-75, 15426-27 ¶ 383, 15433-34 ¶ 405, 15437-38 ¶ 416.

[129] *Id.* at 15431 ¶ 396.

[130] *Id*.

license as well as the public safety broadband spectrum leased from the Public Safety Broadband Licensee.[131] We determined that providing for "commercial operations" on the public safety broadband spectrum, on a secondary and preemptible basis, was "an integral part of a viable framework for enabling the 700 MHz Public/Private Partnership to finance construction of a nationwide, interoperable public safety broadband network."[132] We also afforded the D Block licensee "operational flexibility" in using the leased spectrum to provide "an appropriate balance between the commercial and public safety operations in the public safety broadband spectrum."[133] We stated that the spectrum leasing component of the partnership "permits the D Block licensee to construct a network to serve its business needs, yet preserves the network infrastructure required for primary public safety use in the Public Safety Broadband Licensee's band."[134] We considered the D Block licensee's commercial operations throughout the 20 megahertz band of spectrum, including operations on a secondary basis with regard to public safety spectrum, as a necessary condition in order to "harness private sector resources to facilitate construction of a nationwide interoperable public safety broadband network."[135]

109. Meanwhile, in the *Second Report and Order* we provided that the Public Safety Broadband Licensee's responsibilities would center around directly representing the public safety interests with respect to the 700 MHz Public/Private Partnership, negotiating on their behalf with the winning bidder of D Block license and ensuring that their interests are met in the NSA.[136] Among other things, as discussed above, we provided that no commercial interest may be held in the Public Safety Broadband Licensee, that no commercial interest may participate in the management of the licensee, and that the licensee must be a non-profit organization.[137] We assigned various general responsibilities that we considered in keeping with the Public Safety Broadband Licensee's responsibilities, as discussed more fully below. We afforded the Public Safety Broadband Licensee "significant flexibility and control in connection with the construction and use of the nationwide broadband public safety network," while at the same time we sought "to balance that discretion with the concurrent and separate responsibilities" of the D Block licensee.[138]

110. Finally, we provided some guidance on the service fees that the D Block licensee could charge public safety users for their access to the shared network, both for "normal network service" using the public safety broadband spectrum and for priority access to the D Block

[131] *Id*. at 15432 ¶ 399. *See also, e.g.*, *id*. at 15450 ¶ 457; 47 C.F.R**.** § 27.1303.

[132] *Id*. at 15437 ¶ 416.

[133] *Id*. at 15438 ¶ 417.

[134] *Id*.

[135] *Id*. at 15438 ¶ 419.

[136] *Id*. at 15437 ¶ 416 (role of the Public Safety Broadband Licensee "in ensuring that the public/private network established pursuant to the 700 MHz Public/Private Partnership serves the interests of public safety"), 15438 ¶ 417 (Public Safety Broadband Licensee, through its spectrum leasing arrangement with the D Block licensee, "has the regulatory means (and obligation) to preserve the fundamental public safety function of the band").

[137] *Id*. at 15421-22 ¶¶ 373-374.

[138] *Id*. at 15426 ¶ 383.

spectrum.[139] We required that these fees, to be negotiated by the winning bidder of the D Block license and the Public Safety Broadband Licensee, be specified in the Network Sharing Agreement.[140] In addition, we indicated that the Public Safety Broadband Licensee, as part of its administration of public safety access to the shared wireless broadband network, might assess "usage fees to recoup its expenses and related frequency coordination duties."[141]

111. Below, we seek comment on whether we should clarify or revise the roles and responsibilities relating to the D Block licensee and the Public Safety Broadband Licensee. We also seek comment on whether we should clarify or revise the guidance or requirements relating to fees, including both service fees and spectrum usage fees. Finally, we seek comment generally on whether additional revisions or clarifications regarding the construction, operation, management, or use of the shared network would help ensure that the goals of the 700 MHz Public/Private Partnership are achieved.

(i) Role and Responsibilities of the D Block Licensee

112. Background. As discussed above, the D Block licensee is generally responsible for financing, construction, and operation of the shared network, which will serve both commercial users and public safety users. Also as noted above, we considered the D Block licensee's "commercial operations" throughout the 20 megahertz band of spectrum as a necessary condition in order to "harness private sector resources to facilitate construction" of the network.[142]

113. Discussion. We invite comment on whether additional clarity with regard to the role and responsibilities of the D Block licensee would be helpful to ensure that the 700 MHz Public/Private Partnership achieves its goal in creating a shared, interoperable broadband network. We further seek comment on the appropriate extent of the relationship between the D Block licensee and individual public safety entities with regard to either the establishment of service with those entities or ongoing customer care and billing, bearing in mind the role and responsibilities of the Public Safety Broadband Licensee, which we discuss below.

114. As we have indicated, the ability of the D Block licensee to finance construction of the shared network is critical. Have we established sufficient and appropriate incentives in the 700 MHz Public/Private Partnership that ultimately will enable the D Block licensee to finance and construct the shared network as contemplated? Are there additional steps we can take, or further clarifications, that would improve the likelihood of the success for this partnership?

115. With respect to management and operations of the network, we expect that the D Block licensee will establish a network operations system to support the network infrastructure that it deploys and uses to serve its commercial customers. Such network operations functions typically include a network operations/monitoring center, billing functions, customer care, and similar functions. Should these network operations functions be viewed, much like the build-out

[139] *Id*. at 15448-49 ¶¶ 450-52.

[140] *Id*. at 15448 ¶ 450.

[141] Id. at 15426 ¶ 383.

[142] *Id*. at 15439 ¶ 419.

of a common network infrastructure, as responsibilities to be assumed solely by the D Block licensee for the benefit of both its commercial customers and the public safety users represented by the Public Safety Broadband Licensee? If the D Block licensee were to assume all traditional network service provider operations, would this better enable the Public Safety Broadband Licensee to administer access to the national public safety broadband network by individual public safety entities, coordinate frequency usage, assess usage fees, and exercise its sole authority to approve equipment and applications for use by public safety entities?

116. We also seek comment on the factors that will affect and determine the D Block licensee's commercial operations and anticipated profitability. Commenters are encouraged to be as specific as possible and to provide detailed projections and figures where possible. What types of commercial customers can the licensee be expected to serve (e.g., critical infrastructure industries, commercial wireless carriers seeking additional spectrum or roaming capacity, commercial wireless customers, automotive companies and service providers, large enterprise customers)? How might current trends and recent developments in the commercial wireless market and the general financial markets affect the D Block licensee's financial model?

(ii) Role and Responsibilities of the Public Safety Broadband Licensee

117. Background. As discussed above, the Public Safety Broadband Licensee generally is charged with representing the interests of the public safety community to ensure that the shared interoperable broadband network meets their needs. In the *Second Report and Order*, we assigned the following responsibilities to the Public Safety Broadband Licensee concerning its partnership with the D Block licensee:

- General administration of access to the national public safety broadband network by individual public safety entities, including assessment of usage fees to recoup its expenses and related frequency coordination duties.
- Regular interaction with and promotion of the needs of the public safety entities that would utilize the national public safety broadband network, within the technical and operational confines of the NSA.
- Use of its national level of representation of the public safety community to interface with equipment vendors on its own or in partnership with the D Block licensee, as appropriate, to achieve and pass on the benefits of economies of scale concerning network and subscriber equipment and applications.
- Sole authority, which cannot be waived in the NSA, to approve, in consultation with the D Block licensee, equipment and applications for use by public safety entities on the public safety broadband network.
- Responsibility to facilitate negotiations between the winning bidder of the D Block license and local and state entities to build out local and state-owned lands.[143]

118. We also identified several other of the Public Safety Broadband Licensee's responsibilities, which included:

[143] *Id*. at 15427 ¶ 383.

- Coordination of stations operating on public safety broadband spectrum with public safety narrowband stations, including management of the internal public safety guard band.
- Oversight and implementation of the relocation of narrowband public safety operations in channels 63 and 68, and the upper 1 megahertz of channels 64 and 69.
- Exercise of sole discretion, pursuant to Section 2.103 of the Commission's rules, whether to permit Federal public safety agency use of the public safety broadband spectrum, with any such use subject to the terms and conditions of the NSA.
- Responsibility for reviewing requests for wideband waivers and including necessary conditions or limitations consistent with the deployment and construction of the national public safety broadband network.[144]

119. As noted above, we also provided that no commercial interest may be held in the Public Safety Broadband Licensee, that no commercial interest may participate in the management of the licensee, and that the licensee must be a non-profit organization.[145] We indicated, however, that, as part of its administration of public safety access to the shared wireless broadband network, the Public Safety Broadband Licensee might assess usage fees to recoup its expenses and related frequency coordination duties.[146]

120. We afforded the Public Safety Broadband Licensee flexibility in overseeing the construction and use of the nationwide broadband public safety network, while seeking "to balance that discretion with the concurrent and separate responsibilities" of the D Block licensee.[147] In order to fulfill these obligations, we indicated that the Public Safety Broadband Licensee should have "operational control of the network to the extent necessary to ensure public safety requirements are met."[148]

121. Discussion. As an initial matter, we seek comment on whether we should clarify that the Public Safety Broadband Licensee may not assume any additional responsibilities other than those specified by the Commission in this proceeding. We also seek comment generally on whether we should clarify, revise, or eliminate any of the specific responsibilities listed above that the Public Safety Broadband Licensee must assume. We seek comment in particular on whether to clarify or revise the division of responsibility between the Public Safety Broadband Licensee and the D Block licensee regarding direct interaction with individual public safety entities in the establishment of service to such entities, the provision of service, customer care, service billing, or other matters. What division will best serve the interests of public safety and the goals of this proceeding?

[144] *Id*.

[145] *Id*. at 15421-22 ¶¶ 373-374.

[146] *Id.* at 15426 ¶ 383.

[147] *Id*. at 15426 ¶ 383.

[148] *Id.* at 15434 ¶ 405.

122. In addressing these questions, we ask commenters to consider the unique role served by the Public Safety Broadband Licensee by virtue of holding the single nationwide public safety license, while not being an actual user of the network. As evidenced by many of the responsibilities given to the Public Safety Broadband Licensee, at a fundamental level, the Public Safety Broadband Licensee would in many respects function much like the way regional planning committees presently do in the 700 MHz and 800 MHz bands, yet with a nationwide scope. For example, like regional planning committees, the Public Safety Broadband Licensee would administer access to the spectrum, coordinate spectrum use, interact with and promote the needs of individual public safety agencies, and ensure conformance with applicable technical and operational rules. One important difference, however, is that unlike regional planning committees, the Public Safety Broadband Licensee is the licensee of the spectrum that it administers. Further, the Public Safety Broadband Licensee has distinct abilities, in that it may assess usage fees to recoup its costs, can use its national level of representation to pass on the benefits of economies of scale for subscriber equipment and applications, and holds sole authority to approve, in consultation with the D Block licensee, equipment and applications for public safety users, and to permit Federal public safety agency use.

123. In light of these similarities and differences, we ask whether it would add clarity to the Public Safety Broadband Licensee's role to specify how it is to carry out these responsibilities. For example, are there certain elements of the existing regional planning committee functions that we should adopt for the Public Safety Broadband Licensee? For those functions distinct from regional planning committees, should we adopt specific rules to govern how the Public Safety Broadband Licensee is to carry out such functions? Other responsibilities listed above are more specific to the Public Safety Broadband Licensee's status as a partner with the D Block licensee. These include its role to facilitate negotiations between the D Block licensee and state and local agencies for local build-outs, oversight and implementation of narrowband relocation, and review of wideband waiver requests. Thus, while a number of the Public Safety Broadband Licensee responsibilities are in a frequency planning and coordination role, the Public Safety Broadband Licensee is at the same time an equal partner with the D Block licensee with respect to the overall partnership we envision. Accordingly, we seek comment on how the Public Safety Broadband Licensee's role as one half of the 700 MHz Public/Private Partnership should impact how we modify or clarify the respective responsibilities of the D Block licensee and the Public Safety Broadband Licensee.

124. While the Public Safety Broadband Licensee may need some discretion to carry out its partner-related responsibilities, there may need to be more specific limits on the nature of this role. For example, related to the Public Safety Broadband Licensee responsibilities discussed herein, we previously noted that among the shared wireless broadband network requirements we adopted in the *Second Report and Order* was that the network infrastructure incorporate operational control of the network by the Public Safety Broadband Licensee "to the extent necessary" to ensure public safety requirements are met.[149] As we have reiterated throughout this item, the underlying premise of the 700 MHz Public/Private Partnership is the responsibility of the D Block licensee for construction of a broadband network for shared commercial and public safety use. Thus, primary operational control of the network is inherently

[149] *Id*.

the responsibility of the D Block licensee (and its related entities), which would in turn generally provide the operations and services that enable the Public Safety Broadband Licensee to ensure public safety requirements are met. Conversely, allowing duplication of some or all of these operational functions may result in a structure more akin to a reseller of services, which could inject an inappropriate "business" or "profit" motive into the Public Safety Broadband Licensee structure, detracting from the intended primary focus of the Public Safety Broadband Licensee. Accordingly, we seek comment on whether to clarify that none of the responsibilities and obligations of the Public Safety Broadband Licensee, either as previously adopted or as possibly revised pursuant to this Second Further Notice, would permit the Public Safety Broadband Licensee to assume or duplicate any of the network monitoring, operations, customer care, or related functions that are inherent in the D Block licensee's responsibilities to construct and operate the shared network infrastructure.

125. We further seek comment on whether to expressly provide that neither the Public Safety Broadband Licensee nor any of its advisors, agents, or service providers may assume responsibilities akin to a "mobile virtual network operator,"[150] because such a role would be contrary to the respective roles and responsibilities of the D Block licensee and Public Safety Broadband Licensee regarding construction, management, operations, and use of the shared wireless broadband network, may unnecessarily add to the costs of the 700 MHz Public/Private Partnership, and may otherwise permit "for profit" incentives to influence the operations of the Public Safety Broadband Licensee.

126. In addition, we seek comment on whether we should modify Section 2.103 of the Commission's rules to limit Federal public safety agency use of the public safety broadband spectrum to situations where such use is necessary for coordination of Federal and non-Federal activities. If so, should Commission approval be required? That would ensure that Federal public safety agencies will be able to interoperate with state and local public agencies in the use of 700 MHz public safety broadband services during incidents of mutual interest. In other situations, Federal public safety agencies would, of course, be able to purchase 700 MHz wireless broadband services from commercial service providers using the D Block, just as they purchase satellite service from commercial service providers. How does the proposed public safety broadband network for state and local users compare (on a technical level or in terms of functionality) with the planned Integrated Wireless Network ("IWN") for Federal users?[151] What lessons can the Commission learn from the IWN program? To what extent should development

[150] A mobile virtual network operator is a non-facility-based mobile service provider that resells service to the public for profit. *See* Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, WT Docket No. 05-71, *Tenth Report*, 20 FCC Rcd 15908, 15920 ¶ 27 (2005).

[151] The IWN is a collaborative effort by the U.S. Departments of Justice, Homeland Security, and the Treasury to provide a consolidated nationwide Federal wireless communications service that replaces stovepipe stand-alone component systems, and supports law enforcement, first responder, and homeland security requirements with integrated communications services (voice, data, and multimedia) in a wireless environment. The IWN will implement solutions to provide Federal agency interoperability with appropriate links to state, local, and tribal public safety, and homeland security entities. *See* http://www.usdoj.gov/jmd/iwn. On April 17, 2007, the Department of Justice announced that it has selected General Dynamics C4 Systems to implement wireless communications services to department field agents as part of the IWN program. *See* http://www.usdoj.gov/opa/pr/2007/April/07_jmd_256.html.

of the public safety broadband network be coordinated with the agencies responsible for construction and planning of the IWN program?

(iii) Fees

127. Background. In the *Second Report and Order*, we provided guidance concerning the service fees that the D Block licensee could charge public safety users for their access to and use of the public safety broadband network and, in times of emergency, to the D Block spectrum.[152] We also discussed the importance of the D Block licensee's ability to offer commercial services using the public safety broadband spectrum leased from the Public Safety Broadband Licensee.[153]

128. We required that all service fees – including service fees that the D Block licensee would charge public safety users for normal network service using the public safety broadband spectrum and for their priority access to the D Block spectrum – be specified in the Network Sharing Agreement.[154] We stated our expectation, however, that the winning bidder of the D Block license and the Public Safety Broadband Licensee will negotiate a fee structure for priority access to the D Block in an emergency that will protect public safety users from incurring unforeseen (and unbudgeted) payment obligations in the event that a serious emergency necessitates preemption for a sustained period.[155] We also encouraged the parties to negotiate a fee agreement that incorporates financial incentives for the D Block licensee based on the number of public safety entities and localities that subscribe to the service.[156] We noted that, for the negotiation of reasonable rates, typical commercial rates for analogous services may be useful as a guide, but that the negotiated rates may in fact be lower than typical commercial rates for analogous services.[157]

129. In addition, we considered the D Block licensee's opportunity to provide commercial services using the public safety broadband spectrum (on a secondary, preemptible basis) to be "an integral part of a viable framework for enabling the 700 MHz Public/Private Partnership to finance construction of a nationwide, interoperable public safety broadband network."[158] We also noted that permitting such access to this spectrum "will harness private sector resources to facilitate the construction" of the network.[159]

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[152] *Second Report and Order*, 22 FCC Rcd at 15448-49 ¶¶ 450-52.

[153] *Id*. at 15437-39 ¶¶ 414-19, 15441 ¶ 425.

[154] *Id*. at 15448 ¶ 450.

[155] *Id.* Elsewhere, we stated that this "[p]riority service, although provided to public safety, will still be commercial, and will not appreciably impair the D Block licensee's ability to provide commercial services to other parties." *Id*. at 15437 ¶ 413.

[156] *Id.* at 15448 ¶ 450.

[157] *Id.* at 15449 ¶ 451.

[158] *Id.* at 15437 ¶ 416.

[159] *Id.* at 15439 ¶ 419. *See also id.* at 15438 ¶ 417 (stating that the requirement that the Public Safety Broadband Licensee lease the public safety broadband spectrum to the D Block licensee spectrum "permits the D Block licensee to construct a network to serve its business needs . . . .").

130. We did not discuss the commercial fees that the D Block licensee might charge subscribers to the commercial services that it offers using the shared network. We left that to the marketplace. As discussed above, however, we seek comment in this Second Further Notice on whether all non-public safety users of the shared spectrum – including critical infrastructure users – should be treated as commercial users that gain access to the shared network through the commercial services provided by the D Block licensee.[160]

131. Discussion. We seek comment on whether we should further clarify, revise, or specify the service fees that the D Block licensee may charge public safety users for access to the shared network. We also seek comment on whether we should provide any guidance on whether the Public Safety Broadband Licensee may assess spectrum usage fees for the leasing of the public safety broadband spectrum to the D Block licensee or the amount of any fee permitted. Is there any additional guidance that we could provide with regard to fees that the D Block licensee or Public Safety Broadband Licensee might assess that would be helpful in ensuring that the goals of the 700 MHz Public/Private Partnership are achieved?

132. *Network service fees*. We invite comment on whether we should reconsider any aspect of the rules regarding service fees to be paid by public safety users, including any applicable fees for normal network service and fees for priority access to the D Block in an emergency. Specifically, we seek comment on whether we should clarify any aspect of these service fees that was left to negotiations. Did we provide adequate guidance in the *Second Report and Order* to enable the parties to negotiate reasonable rates for all fees? Or should the Commission adopt a more detailed fee structure or formula to facilitate negotiations on this issue?[161] For example, should we specify that the D Block licensee is entitled to charge rate-of-return or cost-plus rates, taking the incremental costs of public safety network specifications and other costs attributable uniquely to public safety users into account? Alternatively, would requiring public safety users to pay the same rates as commercial users be sufficient? Should we mandate that public safety users be entitled to receive the lowest rate that the D Block licensee offers to its commercial users for analogous service? Commenters suggesting that the Commission adopt a detailed fee structure should provide detailed information on their proposals and discuss how adopting such proposals would result in just and reasonable rates and strike the best balance among competing interests in determining fees. Would more clearly defining the circumstances that would constitute an "emergency," as addressed elsewhere, impact how fees should be structured for priority access?

133. We also seek comment on whether particular uses of the public safety broadband network by public safety users should be free and others fee-based. On what bases can this distinction be made? Is it practical to use service- and context-based distinctions such as between voice and advanced data services, mission-critical and non-mission-critical communications, emergency and non-emergency events, priority and non-priority access, or

[160] *See supra* discussion in section III.A.1.

[161] *See*, *e.g.*, Frontline September 20, 2007 Request at 3 (proposing a formula that would limit the amount public safety users could be charged to that necessary to recover (1) the amortized, incremental fixed costs of building the network to public safety standards, plus (2) ongoing operating expenses for maintaining the network to public safety standards, minus (3) the amortized value of secondary use of the Public Safety Broadband Licensee spectrum by commercial customers).

similar metrics? Would it instead be preferable to rely on technical distinctions, such as a specified number of minutes or bits, a percentage of network capacity, or similar metrics? Would either approach give sufficient certainty to public safety users and/or the commercial D Block licensee?

134. *Spectrum leasing fees associated with the public safety broadband spectrum leasing arrangement.* In the *Second Report and Order*, we did not specifically address whether the Public Safety Broadband Licensee, when leasing access to the public safety broadband spectrum to the D Block licensee, may impose any spectrum usage fees for use of this spectrum. We seek comment on whether any aspect of the spectrum leasing arrangement should be clarified by the Commission, or whether spectrum usage fees might be considered reasonable or unreasonable given the role of the spectrum leasing arrangement in the 700 MHz Public/Private Partnership. When we provided guidance in the *Second Report and Order* on determining reasonable network service fees, we assumed that the network service and priority access fees may in fact be lower than typical commercial rates in part to reflect the value of the D Block licensee's access to the public safety spectrum through leasing. We seek comment on whether and how any spectrum usage fees might affect the reasonableness of service and emergency access fees discussed above? Should we prohibit any spectrum usage fees associated with the spectrum leasing arrangement? Is the D Block's responsibility for building the public safety broadband network sufficient in-kind contribution for use of the public safety spectrum? If we allow spectrum usage fees, should we require public safety users to pay commercial rates for their access to the shared network?

2. Negotiation of the Network Sharing Agreement

135. Background. To ensure the timely establishment and execution of an NSA that adequately safeguards the public interest, we provided rules to govern the process by which the winning bidder of the D Block license and the Public Safety Broadband Licensee would negotiate and establish the agreement.[162] Under these rules, the parties were required to begin negotiations on the date that the D Block winning bidder filed its long form application and to conclude negotiations within six months.[163] Both the D Block winning bidder and the Public Safety Broadband Licensee were required to negotiate in good faith, and were obligated to submit status reports during the negotiations period.[164] To ensure that the D Block winning bidder would not stall negotiations to avoid its obligations to public safety, we provided that the D Block license would not be issued until the parties filed an NSA that had been approved by the Commission and was subsequently executed by the parties.[165]

136. If the parties successfully negotiated an agreement on all terms within the six month period, they were required to submit the NSA to the Commission for review and approval. In the event the parties did not reach agreement on all terms at the end of the six month negotiation period, or if they were found to have reached an impasse at any time, we delegated

[162] *See Second Report and Order,* 22 FCC Rcd at 15463 ¶ 501, 15466 ¶ 512.

[163] *See id.* at 15464 ¶ 504.

[164] *See id.* at 15464-65 ¶¶ 505-506.

[165] *See id.* at 15463 ¶ 502.

authority jointly to the Chiefs of PSHSB and WTB (the Bureaus) to take a variety of actions to resolve the disputes, including but not limited to: (1) granting additional time for negotiation; (2) issuing a decision on the disputed issues and requiring the submission of a draft agreement consistent with their decision; (3) directing the parties to further brief the remaining issues in full for immediate Commission decision; and/or (4) immediate denial of the long-form application filed by the winning bidder for the D Block license, to be followed by either re-auction of the license or some other means of re-assignment.[166]

137. After the release of the *Second Report and Order*, the Chiefs of PSHSB and WTB issued a Public Notice that, among other things, clarified how the Bureaus would exercise their authority to resolve disputes that arise in the NSA negotiations.[167] They stated: "we will not exercise our authority for immediate denial of the long-form application filed by the winning bidder for the D Block license, as a result of any dispute over the negotiation of the terms of the NSA, until we take one of two steps: (1) issuing a decision on the disputed issues and requiring the submission of a draft agreement consistent with our decision; or (2) referring the issues to the Commission for an immediate decision and the Commission issues such a decision."[168] The Bureaus also noted that "failure to comply with a decision by the Commission or the Bureaus on the disputed issues . . . will be deemed a default."[169]

138. Discussion. We seek comment on whether and how to modify the rules governing the negotiation of the NSA, including dispute resolution, to provide bidders with greater certainty regarding their obligations while still protecting the interests and needs of public safety, and to ensure that both the D Block license winner and the Public Safety Broadband Licensee have incentives to engage in good faith negotiation and to reach terms that will reasonably protect the interests of both sides. In particular, we seek to provide a process that will give bidders confidence that the network the D Block licensee will be required to construct will be commercially viable, and provide assurance to state and local public safety entities that the resulting network will meet their needs for broadband wireless service.

139. To achieve these goals, we seek a process that provides incentives to both sides to make a maximum good faith effort to reach an agreement consistent with the important commercial and public safety interests at stake. As discussed elsewhere in this Second Further Notice, one way for the Commission to provide greater certainty regarding the terms of the NSA would be to further specify the requirements of the 700 MHz Public/Private Partnership in our rules. In this section, we seek comment on whether we should modify the NSA negotiation process itself.

140. Any party's incentives to make a maximum good faith effort in any negotiation process are framed by the consequences of failing to reach agreement. Below, we seek comment on whether we should maximize the incentives for a bidder winning the D Block license to reach

[166] *See id.* at 15465 ¶ 508.

[167] *See* "Revised Procedure for Auctions 73 and 76: Additional Default Payment for D Block Set at Ten Percent of Winning Bid Amount; Disputed Issues in the Negotiation of Network Sharing Agreement," *Public Notice*, 22 FCC Rcd 19320 (2007) (*D Block Default Payments PN*).

[168] *Id.* at 19322 ¶ 7.

[169] *See id.* at 19322 n.11.

agreement on an NSA with the Public Safety Broadband Licensee by providing that, if the parties do not reach agreement, we promptly will offer the license to the next highest bidder, in descending order. Alternatively, we seek comment on whether we should maximize the incentives for both parties to reach agreement on an NSA by providing that, if the parties do not reach agreement, we promptly will offer in a subsequent auction the license(s) for the D Block spectrum without the 700 MHz Public/Private Partnership conditions and subject to service rules more typical of commercial wireless services licenses. Would either of these alternatives offer an appropriate balance of incentives for the negotiating parties to reach an agreement?

141. We also seek comment in this section on other related issues. First, we seek comment on whether, if the NSA process fails to produce an agreement between the parties, there are any circumstances in which we should relieve a defaulting D Block license winning bidder of its obligation to make default payments. We discuss later the distinct question of what amounts a defaulting D Block license winning bidder should be required to pay, if any, under these or other circumstances. Second, in the following subsections, we seek further comment on whether to modify the mechanisms for resolving any disputes that may arise during the negotiations or otherwise modify the negotiation process.

142. *Action subsequent to failure to negotiate an NSA*. Pursuant to the Commission's competitive bidding rules, in the event of a default by a winning bidder, the Commission, at its discretion, may either offer the licenses to the next highest bidders (in descending order) at their final bids or auction new licenses for the spectrum.[170] If the winning bidder does not execute an NSA with the Public Safety Broadband Licensee, that winning bidder will be in default and its license application will be dismissed. We seek comment on whether, following such a default, we should offer the license to the party with the next highest bid, in descending order. The next highest bidder would then have the option of paying the amount of its final bid, filing a long-form application, and entering into a negotiation process with the Public Safety Broadband Licensee. If that next highest bidder declined to exercise that option, the Commission could offer the license to the party with the next highest bid, in descending order, and so on. Under such circumstances, should the Commission provide for a shorter time period for a second attempt to negotiate an NSA, in light of the first effort? Or should each D Block bidder be entitled to the same amount of time to attempt to negotiate the terms of the NSA?

143. In the event of a failure to negotiate the NSA, we also seek comment on whether, in lieu of offering the license to the next highest bidder, we promptly should auction alternative license(s) for the D Block spectrum without the 700 MHz Public/Private Partnership conditions and subject to different service rules. This option limits not only the winning bidder for the D Block license to one opportunity to negotiate an NSA but also limits the Public Safety Broadband Licensee to one opportunity. Does this limit create a better or worse set of incentives for the negotiators, given the public interest in producing a broadband network to serve the public safety users?

144. Under each of the foregoing alternatives, how should the Commission define a "failure" of the negotiation process? For instance, should we require adjudication of any dispute

[170] *See* 47 C.F.R. § 1.2109(b), (c); *see Second Report and Order*, 22 FCC Rcd at 15465 ¶ 508 (noting that, after failure of the parties to negotiate an NSA, the Commission may reassign the license to the next highest bidder, citing 47 C.F.R. § 1.2109).

before deeming the negotiations a failure and the D Block winning bidder in default? Should such adjudication be binding? Or should we deem the negotiations a failure and the D Block winning bidder in default simply if negotiations are at an impasse after six months, or even sooner if the parties certify that an impasse exists? If the consequence of a failure of negotiations is the auction of the alternative D Block license(s), should we make additional provisions for resolving any impasse between the parties?

145. We further seek comment on whether there are any circumstances in connection with the failure to negotiate an NSA under which a winning bidder for the D Block license should be relieved from making default payments based on its winning bid. Commenters also should address the possibility that relieving the winning bidder from default obligations while offering the D Block license to the next highest bidder might create an incentive for the winning bidder to bargain with the next highest bidder and offer to default. Generally, if we do not adjudicate any impasse that arises in negotiation, should we automatically subject the D Block winning bidder to default payments when its license application is dismissed? Or should some finding of fault on the part of the winning bidder be a prerequisite of imposing a default payment? If so, how should such fault be determined? Should any other consequences, separate and apart from a default payment, be imposed on the defaulting D Block winning bidder under any of these circumstances?

146. Alternatively, if we provide for binding adjudication with respect to any negotiation impasse, should we subject the D Block license winning bidder to default payments if either party rejects the binding decision or only if it the D Block license winning bidder fails to comply? Should any other consequences, separate and apart from a default payment, be imposed on the defaulting D Block winning bidder under any of these circumstances?

147. Elsewhere in this Second Further Notice, we seek comment on the rules we should adopt for the D Block, as well as the Public Safety Broadband License, if we offer the license(s) for the D Block without the 700 MHz Public/Private Partnership conditions. If we decide that such licenses should be offered after a failure to negotiate an NSA, should that affect the rules we otherwise might adopt for such license(s)? We likewise seek comment on whether any of our Part 1 competitive bidding rules or other auction procedures would be inappropriate or should be modified for an auction of D Block license(s) without the 700 MHz Public/Private Partnership conditions that is held subsequent to negotiations between a winning bidder and the Public Safety Broadband Licensee that do not produce an NSA.

148. If we provide that a failure of negotiations to produce an NSA will result in a subsequent auction of D Block license(s) without the 700 MHz Public/Private Partnership conditions, a winning bidder might have an incentive for those negotiations to fail so that it can bid on license(s) without the 700 MHz Public/Private Partnership conditions in the subsequent auction. We seek comment on whether this theoretical incentive is a practical concern and, if so, whether we should adopt either of two potential auction eligibility rules to mitigate any such concern.

149. First, we could prohibit a D Block license winning bidder and related parties from participating in any subsequent auction in which any licenses for the D Block are offered without the 700 MHz Public/Private Partnership conditions. We seek comment on this alternative, and on whether any such eligibility restriction should depend on whether the D Block license winning bidder is at fault for the failure of the 700 MHz Public/Private Partnership, *e.g.*, if the D

Block license winning bidder refused to comply with a Commission adjudication of a negotiation dispute. Further, should any such eligibility restriction extend to the winning bidder's controlling interests or other related parties? If so, how should such parties be defined?

150. Alternatively, we might lift any auction eligibility restrictions that made other parties ineligible for the prior auction of the D Block license with the 700 MHz Public/Private Partnership conditions. We seek comment in a later section of this Second Further Notice regarding whether to restrict parties already possessing significant access to 700 MHz spectrum from participating in auctions of license(s) for the D Block. If such a restriction applied to an auction of the D Block license with the 700 MHz Public/Private Partnership conditions, we could lift the restriction in a subsequent auction of licenses without those conditions. Would doing so significantly alter the likelihood that the winning bidder in an initial auction could win the license again, and would this offset any potential incentive such a winning bidder might have for NSA negotiations to fail following the first auction?

151. *Potential modifications to dispute resolution mechanisms*. We also seek comment on whether we should eliminate the option of binding adjudication of disputed issues and provide that, in the event of an intractable dispute, so long as a D Block bidder has negotiated in good faith, the Commission will relieve the D Block winning bidder of its financial obligations in connection with the license. Although this option has been advanced by parties on reconsideration,[171] we are concerned that it would be difficult for the Commission to determine when a disagreement was the product of "bad faith" negotiations and that this option may not provide sufficient incentive to the D Block winning bidder to meet the needs of public safety. We therefore invite commenters that advocate this option to discuss these concerns and how they might be addressed. For example, should we establish a specific standard for what will constitute an act of bad faith, similar to the standard incorporated at Section 76.65(b) of our rules?[172]

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[171] *See, e.g.*, AT&T Petition for Reconsideration at 8; Cyren Call Petition for Reconsideration at 6, 7; Frontline Petition for Reconsideration at 23.

[172] *See* 47 C.F.R. § 76.65(b). Implementing the requirements of 47 U.S.C. § 325(b)(3)(C), this section provides that television broadcast stations and multi-channel video programming distributors must negotiate the terms and conditions of retransmission consent agreements in good faith. It establishes the following standard for determining whether a party has violated its duty to negotiate in good faith:

> (1) Standards. The following actions or practices violate a broadcast television station's or multichannel video programming distributor's (the "Negotiating Entity") duty to negotiate retransmission consent agreements in good faith:
> (i) Refusal by a Negotiating Entity to negotiate retransmission consent;
> (ii) Refusal by a Negotiating Entity to designate a representative with authority to make binding representations on retransmission consent;
> (iii) Refusal by a Negotiating Entity to meet and negotiate retransmission consent at reasonable times and locations, or acting in a manner that unreasonably delays retransmission consent negotiations;
> (iv) Refusal by a Negotiating Entity to put forth more than a single, unilateral proposal;
> (v) Failure of a Negotiating Entity to respond to a retransmission consent proposal of the other party, including the reasons for the rejection of any such proposal;
> (vi) Execution by a Negotiating Entity of an agreement with any party, a term or condition of which, requires that such Negotiating Entity not enter into a retransmission consent agreement with any other television broadcast station or multichannel video programming distributor; and

(continued….)

152. We further seek comment on whether, instead of eliminating binding adjudication, we should modify its application or scope. For example, should we limit the issues of adjudication to the requirements specified in our rules? If so, what rules should apply to disputes regarding other terms? Alternatively, should we adopt a specific measure, such as a presumption that a D Block bidder proposal that otherwise satisfies the Commission's stated requirements should be upheld in adjudication? If so, what demonstration should we require of the Public Safety Broadband Licensee to rebut the presumption? Should we provide that we will require the parties to the adjudication to each submit their best offer and that we will then choose one submission or the other? Would this encourage the parties to make proposals that address each other's needs?

153. *Other modifications to the process for establishing the NSA*. We also seek comment on whether to adopt other measures relating to the process for establishing the NSA. We seek comment on whether there are any concerns inherent in the adjudication of NSA disputes by the Commission. If so, we seek comment on how such concerns could be addressed, and whether there are alternatives to Commission adjudication that will still achieve a final agreement in the event of a dispute.

154. This Second Further Notice generally seeks comment on whether we should further clarify or revise requirements relating to the network as well as the D Block licensee's and Public Safety Broadband Licensee's respective responsibilities with regard to the 700 MHz Public/Private Partnership. One likely effect of such additional clarity would be to reduce the scope of and uncertainty relating to issues that need to be negotiated between the parties to the NSA. Accordingly, we seek comment on whether, if we adopt such clarifications, it would be appropriate to also reduce the length of the NSA negotiation process, and if so, what length would be reasonable. We also invite commenters to suggest other measures that we might adopt that would help to give potential bidders additional certainty regarding the outcome of the process, or otherwise reduce the risks of the process for the D Block winning bidder, or that would otherwise improve the process. In considering this issue, commenters should take into account the availability of the spectrum as of the DTV transition date, and the needs of both parties to access and utilize this spectrum in a timely manner.

3. Auction-Related Issues

a. Eligibility to Participate in the D Block Auction

155. Background. In the *Second Report and Order,* after considering whether open eligibility would pose a significant likelihood of substantial competitive harm in a specific market, we declined to restrict eligibility for 700 MHz Band licenses.[173] We determined that the appropriate market to assess when considering restrictions on eligibility to hold 700 MHz

(Continued from previous page)

(vii) Refusal by a Negotiating Entity to execute a written retransmission consent agreement that sets forth the full understanding of the television broadcast station and the multichannel video programming distributor.

(2) Totality of the circumstances. In addition to the standards set forth in § 76.65(b)(1), a Negotiating Entity may demonstrate, based on the totality of the circumstances of a particular retransmission consent negotiation, that a television broadcast station or multichannel video programming distributor breached its duty to negotiate in good faith as set forth in § 76.65(a).

[173] *Second Report and Order*, 22 FCC Rcd at 15383-84 ¶ 256.

licenses is the broadband services market.[174] Recognizing the numerous actual and potential broadband service providers that exist, we concluded that the record did not demonstrate that open eligibility to hold 700 MHz band licenses was likely to result in substantial competitive harm in the provision of broadband services.[175] Since our prior determination, Auction 73 has only increased the number of potential providers of broadband service.

156. Discussion. Although there is no significant likelihood of substantial competitive harm in the broadband services market that we need to address by restricting otherwise eligible parties from holding the D Block license, the D Block is intended for uses that extend beyond commercial broadband services. Indeed, the requirements of the D Block create a unique opportunity for a new type of nationwide network. Such an opportunity is unlikely to present itself again in the foreseeable future. It therefore may serve the public interest to limit eligibility for participation in the D Block auction in order to maximize the possibility that a party otherwise without significant access to spectrum potentially suitable for the provision of mobile wireless broadband services will have an opportunity to create a nationwide 700 MHz network using the D Block. [176]

157. The Commission has adopted auction eligibility restrictions in other circumstances, where limited opportunities in existing or emerging services presented potential competitive concerns but did not warrant restricting license ownership or spectrum access beyond the initial auction of the license.[177] Accordingly, we now seek comment on whether the public interest would be served by adopting an auction eligibility restriction with respect to the license(s) made available for the D Block.[178] More specifically, now that various parties have already obtained spectrum access as a result of Auction 73, we seek comment on whether the public interest would be served by limiting eligibility to bid on the license(s) for the D Block to parties that do not already have significant access to 700 MHz Band spectrum or other spectrum potentially suitable for the provision of mobile wireless broadband services. A restriction limited to eligibility to bid on the license(s) in a Commission auction would not restrict any parties' ability to acquire the license(s) or to access D Block spectrum in the secondary market - through

[174] *Id.*

[175] *Id.*

[176] As we determined in the *Second Report and Order*, we are not proposing to change our decision to prohibit geographic partitioning and spectrum disaggregation for the D Block licensee. The D Block licensee would continue to be permitted to assign or transfer its license subject to Commission review and prior approval. *See Second Report and Order*, 22 FCC Rcd at 15475 ¶ 542.

[177] *See* Service Rules for the 746-764 and 776-794 MHz Bands and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Second Report and Order*, 15 FCC Rcd 5299, 5326 ¶ 62 (2000) (*700 MHz Guard Bands Second Report and Order*) (adopting auction eligibility restriction in new service by precluding one party from winning both licenses in a given area); Revision of Rules and Policies for the Direct Broadcast Satellite Service, IB Docket No. 95-168, *Report and Order*, 11 FCC Rcd 9712, 9736-37, ¶¶ 61-66 (1995) (imposing an auction eligibility restriction in Direct Broadcast Satellite ("DBS") service by prohibiting any party with an attributable interest in DBS channels at a full-CONUS orbital location from acquiring at auction an attributable interest in the full-CONUS channels offered at the 110° orbital location without divesting its prior interest in full-CONUS channels).

[178] As discussed elsewhere, we seek comment on whether the D Block should be comprised of regional licenses instead of one nationwide license.

leasing or wholesaling arrangements, which are otherwise permissible within our rules.[179] We also seek comment on whether any restriction that limits the ability of otherwise qualified parties to bid on the license(s) for D Block spectrum should apply only to the next auction of any license(s) for D Block spectrum, or to all future auctions of such license(s). Should whether the restriction applies depend in whole or in part on whether the license(s) are subject to the 700 MHz Public/Private Partnership conditions?

158. Generally, restrictions on the ability of parties to bid for new licenses based on their existing access to spectrum may favor new entrants. Should the auction rules favor new entrants? If so, how? We seek comment on how to structure an auction eligibility restriction to assure that a party not already able to offer nationwide or near-nationwide service using 700 MHz Band spectrum or other spectrum potentially suitable for the provision of mobile wireless broadband services will have the opportunity to win a D Block license. Should we preclude from applying for D Block license(s) parties in which any party holding a present or future interest already has sufficient spectrum access, however that access is defined? Should we preclude from applying for D Block license(s) any party with an agreement to provide future access to D Block spectrum, *e.g.*, a spectrum lease agreement, to any party that already has sufficient spectrum access, however that access is defined? Given that the restriction is intended solely to apply to auction eligibility, and not subsequent eligibility to hold the license, parties already having sufficient spectrum access might obtain an interest in winning bidders or access to their spectrum, but only after licensing.

159. With respect to the spectrum access parties already have, should the potential restriction be concerned with only particular spectrum blocks or bands, or should we consider any spectrum potentially suitable for the provision of mobile wireless broadband services? One party previously proposed a restriction that would have precluded the same party from winning in initial Commission auctions both licenses in the C Block and the D Block license.[180] Should we be concerned only with parties' access to the adjacent C Block or to all 700 MHz spectrum, including spectrum held in the C and D Blocks of the Lower 700 MHz Band? What extent of spectrum access should trigger any restriction? Should we restrict the auction eligibility only of those parties that have nationwide or near-nationwide 700 MHz spectrum access or include parties that have nationwide or near-nationwide access in other bands? Should the extent of access be measured by geographic or population coverage, or some combination of the two? Should bandwidth be a factor? What is the appropriate threshold at which to apply the restriction?

160. We also seek comment on the appropriate method of measuring a party's spectrum access for this purpose. Should it be measured solely by the party's control of current 700 MHz license holders and winning bidders? Or by the party's equity interest in current 700 MHz Band license holders and winning bidders? By existing leased access to 700 MHz Band spectrum capacity, i.e., leases with respect to already granted licenses? By existing leased rights to 700 MHz Band spectrum capacity, i.e., leases with parties that are winning bidders but not yet

[179] We would not, however, propose that such access would be permitted through partitioning or disaggregation of the D Block spectrum in light of the unique relationship contemplated and the D Block licensee's responsibilities under the 700 MHz Public/Private Partnership.

[180] *See* PISC Petition for Reconsideration at 3.

licensees? Should we include other bands potentially suitable to the provision of mobile wireless broadband services? If so, what method should we use to measure a party's access to such bands?

161. While we seek comment on the appropriate scope of an auction eligibility restriction, at the same time, we recognize that restricting eligibility may adversely impact the ability of public safety to gain access to an advanced broadband network as quickly as possible. In this respect, it may be desirable to have the broadest pool of bidders possible in order to maximize the likelihood of a successful partnership that will benefit both public safety and consumers. We seek comment on how this consideration should impact our decision on auction eligibility rules. We also seek comment on whether the Commission should apply its spectrum aggregation screen used for wireless transactions to the D Block.

b. Reserve Price

162. Background. In the *Second Report and Order,* we directed WTB to adopt and publicly disclose block-specific aggregate reserve prices, pursuant to its delegated authority and its regular pre-auction process, consistent with our conclusions in the *Second Report and Order*.[181] Those conclusions in part directed WTB to establish the particular amounts of the block-specific aggregate reserves by taking into account a conservative estimate of market value based on auction results for AWS-1 spectrum licenses.[182] With respect to the specific circumstances of the D Block, we directed WTB to give substantial weight to the detailed rules regarding the D Block license, the D Block licensee's required construction of a network to be shared by public safety service users, and the resulting limitations on the flexibility of the D Block licensee, which together, we noted, might make it appropriate to expect a D Block licensee to pay only 75 to 80 percent of an amount based on AWS-1 auction results, or roughly $1.33 billion.[183] Pursuant to our direction, WTB issued the *700 MHz Auction Comment Public Notice*, in which, among other things, WTB proposed and sought comment on reserve prices for all blocks of 700 MHz licenses offered in Auction 73, including a $1.33 billion reserve price for the D Block.[184] After reviewing the record of comments submitted in response, WTB issued the *700 MHz Auction Procedures Public Notice*, which adopted and set forth procedures for Auction 73, including a $1.33 billion D Block reserve price.[185] In Auction 73 bidding, applicants placed bids for licenses in the A, B, C, and E Blocks that met, and in some cases significantly exceeded, the applicable reserve price adopted pursuant to the Commission's direction.[186] The single bid for the D Block did not meet its reserve price.[187]

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[181] *Second Report and Order*, 22 FCC Rcd at 15400-01 ¶ 304.

[182] *Id.*

[183] *Id.* at 15401 ¶ 305.

[184] *Auction 73/76 Procedures Public Notice*, 22 FCC Rcd at 18195 ¶ 199.

[185] *Id.*

[186] *See* "Auction of 700 MHz Band Licenses Closes," *Public Notice*, DA 08-595 (rel. Mar. 20, 2008) (*700 MHz Auction Closing Public Notice*).

[187] *Id.*

163. Discussion. We now seek comment on whether we should direct WTB to adopt a different approach to establishing a reserve price in a new auction for the D Block license, pursuant to its delegated authority and its regular pre-auction process. This Second Further Notice generally considers revisions to the rules governing the D Block license in order to further the public interest by facilitating the creation of an interoperable broadband network that can meet public safety needs. In light of that public interest, as well as Auction 73's success in raising the revenue anticipated by Congress, we now seek comment on an appropriate reserve price, or whether we need a reserve price, other than a minimum opening bid, at all, for a new auction for the D Block license. We seek comment on the purpose that a reserve price should serve in the current context, and what level of reserve price would best serve that purpose. We seek comment later in this Second Further Notice regarding whether to offer regional licenses for the D Block in place of a single nationwide license. In an auction offering multiple licenses, the Commission could set either aggregate reserve price(s), as it did for licenses in the A, B, C, and E Blocks in the 700 MHz auction, or a license-specific reserve price. Commenters should address whether aggregate or license-specific reserve prices would best serve the purpose of any proposed reserve price. In the event that there is some uncertainty regarding the relative value of multiple licenses, an aggregate reserve price applicable to a set of licenses may allow some flexibility in relative license prices. With respect to aggregate reserve prices, commenters should address whether all the licenses offered should be subject to a single aggregate reserve price or whether subsets of the licenses offered should be subject to various aggregate reserve prices. We ask that commenters provide detailed support for any suggested reserve prices provided. Furthermore, would any of the rule revisions presently contemplated be likely to increase or decrease the appropriate reserve price?

164. In addition, we seek comment on whether we should direct WTB to set minimum opening bid(s) at the amount of any separate license specific reserve price(s), whether for a single nationwide license or for regional licenses. For Auction 73, WTB established a minimum opening bid for the D Block license below the D Block license reserve price to facilitate substitution among licenses in different blocks. If we conduct an auction with multiple licenses and aggregate reserve price(s), should we set the minimum opening bids of individual licenses such that the aggregate total of the minimum opening bids is less than the aggregate reserve price, to reduce the risk that a mistaken minimum opening bid will keep bidders from bidding on a particular license? However, in the event we set license-specific reserve prices, whether for a single nationwide license or regional licenses, there would be no apparent benefit from accepting bids below the license-specific reserve[188] For the next auction of license(s) for the D Block spectrum, WTB will establish the minimum opening bid and any reserve price for the D Block pursuant to its delegated authority and its regular pre-auction process. We ask commenters addressing the reserve price issues raised herein to address whether there is any reason to permit bids below any reserve price and, if so, the extent to which their comments on reserve price issues presume a particular relationship between a minimum opening bid and any reserve price.

c. Designated Entity Eligibility for the D Block Licensee

165. Background. Under our designated entity eligibility rules, as modified in 2006 in the *Designated Entity Second Report and Order*, a business model that involves a designated

[188] *Auction 73/76 Procedures Public Notice*, 22 FCC Rcd at 18199-200 ¶ 212.

entity licensee entering into arrangements with other entities for the lease or resale (including wholesaling arrangements) that involve more than 50 percent of the spectrum capacity of a license constitutes an impermissible material relationship and renders the licensee ineligible for otherwise available size-based bidding credits.[189] On November 15, 2007, however, we waived, on our own motion, the application of our impermissible material relationship rule[190] for purposes of determining an applicant's or licensee's designated entity eligibility solely with respect to arrangements for lease or resale (including wholesale) of the spectrum capacity of the D Block license.[191] In so doing, we determined that the unique regulations then governing the D Block license, which required the establishment of the 700 MHz Band Public/Private Partnership subject to a Commission-approved Network Sharing Agreement[192] – together with the application of the Commission's other designated entity eligibility requirements[193] – eliminated for the D Block license the risks that led the Commission to adopt the impermissible material relationship rule. We found that the D Block rules subjected the licensee to significant obligations and substantial Commission oversight, which when combined with the continued application of other designated entity rules led us to conclude that waiver of the impermissible material relationship rule served the public interest.

166. Discussion. Now that we are revisiting the service and auction rules for the D Block license, we seek comment regarding whether we should adopt a service specific exception to our impermissible material relationship rule for purposes of determining designated entity eligibility solely with respect to arrangements for lease or resale (including wholesale) of the spectrum capacity of the D Block license. Could revised service and auction rules that we might adopt for the D Block license continue to present unique circumstances and regulatory obligations that warrant an exception to our impermissible material relationship rule?

167. If we establish such a service specific exception to our general designated entity impermissible material relationship rule, will our other designated entity rules sufficiently ensure that only bona fide small businesses, exercising control over the D Block license in accordance with our rules, will benefit from bidding credits applicable to that license?[194] For instance,

[189] *See generally* Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, WT Docket No. 05-211, *Second Report and Order and Second Further Notice of Proposed Rule Making*, 21 FCC Rcd 4753 (2006) (*Designated Entity Second Report and Order*) *recon. pending*; Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, WT Docket No. 05-211, *Order on Reconsideration of the Second Report and Order*, 21 FCC Rcd 6703 (2006) (*Order on Reconsideration of Designated Entity Second Report and Order*); 47 C.F.R. § 1.2110(b)(3)(iv)(A).

[190] 47 C.F.R. § 1.2110(b)(3)(iv)(A).

[191] *See generally D Block Waiver Order.*

[192] *See Second Report and Order*, 22 FCC Rcd at 15428-79 ¶¶ 386-553.

[193] *See Designated Entity Second Report and Order*; *Order on Reconsideration of the Designated Entity Second Report and Order*; 47 C.F.R. §§ 1.2110, 1.2111, 1.2112, 1.2114.

[194] This attribution requirement based on D Block arrangements will affect the designated entity's ongoing eligibility for designated entity benefits. *See*, *e.g.*, *Designated Entity Second Report and Order*, 21 FCC Rcd at 4759-60 ¶ 15, 4763-65 ¶¶ 25-30, 4765-68 ¶¶ 31-41; *Order on Reconsideration of Designated Entity Second Report and Order*, 21 FCC Rcd at 6712-13 ¶¶ 24-26; 47 C.F.R. §§ 1.2110(b)(3)(iv)(B), 1.2111(d). *See also* 47 C.F.R. § 1.2110(b)(1)(i), (m), (n).

consistent with the scope of the *D Block Waiver Order*, will the continued application of the controlling interest rule, attributable material relationship rule, and the unjust enrichment rule, as well as all other designated entity eligibility rules together with the unique requirements that will apply to the D Block license prevent the abuses the impermissible material relationship rule was designed to address? Do the terms and conditions pertaining to the D Block license, both previously set forth and as discussed in this Second Further Notice, provide sufficient assurance that the D Block commercial licensee's provision of service for the benefit of the public will not be significantly influenced by any party leasing (or accessing through wholesale arrangements) fifty percent or more of the spectrum capacity of the D Block license? Does the unique relationship between the D Block licensee and the Public Safety Broadband Licensee, and their regulatory obligations to ensure the ongoing integrity and consistency of service to the public safety users of the network, mitigate any potential for such influence? If, however, the Commission chooses to license the D Block without the 700 MHz Public/Private Partnership, are there any circumstances in which we should consider an exception to the impermissible material relationship rule?

d. Default Payment

168. Background. The Commission's competitive bidding rules provide that if a winning bidder defaults for any reason, the bidder is liable for a default payment.[195] In the *Second Report and Order*, the Commission provided that the D Block winning bidder would be deemed to have defaulted under Section 1.2109(c) of the Commission's rules and would be liable for the default payments set forth in Section 1.2104(g) if it failed to comply with the procedures established for negotiation or dispute resolution in the NSA, including a failure to comply with a Commission or Bureau decision in binding adjudication, as well as under other circumstances, *e.g.*, if it failed to pay its winning bid.[196] Pursuant to Section 1.2104(g) of those rules, a default payment is comprised of (1) a "deficiency payment," based on the amount, if any, by which a subsequent winning bid is lower than the defaulted bid; and (2) an "additional payment," based on a percentage of the lesser of the defaulted bid or the subsequent winning bid.[197]

169. The Commission's implementation of its competitive bidding authority enables the assignment of licenses to parties that value them more highly than others and are more likely to put the licenses to efficient and effective use. The failure to pay a winning bid undermines this entire process. At a minimum, defaults delay the assignment of licenses and the deployment of service. In addition, a default may impair the ability of the auction process to assign licenses to those parties best able to serve the public. Accordingly, the Commission requires defaulting bidders (or withdrawing bidders, in auctions in which withdrawals are permitted) to pay the deficiency portion of the default payment so that bidders are more likely to submit bids

[195] 47 C.F.R. § 1.2109(b), (c).

[196] *See Second Report and Order*, 22 FCC Rcd at 15466 ¶ 511.

[197] *See* 47 C.F.R. § 1.2104(g)(2).

accurately reflecting their ability to pay, enhancing the efficiency of the competitive bidding process in assigning licenses.[198]

170. The Commission further requires an additional payment when a winning bidder defaults to both discourage unsupportable bidding and provide an incentive to bidders wishing to withdraw previously placed bids to do so prior to the close of an auction (when permitted), because, among other things, a default or disqualification after an auction prevents other bidders from winning the license in the initial auction, thereby delaying the use of the spectrum to provide service to the public.[199] Originally, the additional default payment was set at three percent.[200] In 2006, we concluded that having the discretion to set the additional payment percentage between three and 20 percent would help the Commission "persuade bidders to be more realistic in their advance assessment of how much they can afford to pay for licenses."[201] For Auction 73, the additional default payment percentage for any default on a bid for the D Block license was set at ten percent. In auctions where the Commission accepts single bids on combinations, or packages, of licenses, the Commission has fixed the additional default payment percentage at twenty-five percent.[202] The Commission adopted the higher additional default percentage in response to the greater potential significance of such a default. In auctions with combinatorial bidding, a bidder's winning bid may affect not only the licenses subject to that winning bid, but the set of bids that wins other licenses as well.

171. Over the history of the Commission's 69 auctions before Auction 73, the net winning bids placed by bidders totaled nearly $59 billion, yet the Commission's collection of those bids has totaled far less. The shortfall in the applicants' promised payments has stemmed, in large part, from bidders' failure to bid consistently with a careful and realistic assessment of their ability to pay. This failure has been evidenced by bidders subsequently filing for bankruptcy or seeking debt compromise in lieu of fulfilling their auction obligations. Historically, the Commission has found that a bidder's inability to render full and timely payment for its winning bid impairs the Commission's assignment of licenses by competitive bidding by impeding the deployment of service to the public and interfering with the efficiency of the assignment. To counter the negative effect of bidders' failure to honor their payment obligations, such as in the case of a post-auction default, we have sought to assure that the additional payment portion of the default payment calculation is sufficient to discourage defaults resulting from insincere bidding and to help ensure that licenses are assigned to financially and

[198] *See* Implementation of Section 309(J) of the Communications Act-Competitive Bidding, *Second Report and Order*, 9 FCC Rcd 2348, 2373 ¶ 147 (1994) (*Competitive Bidding Second Report and Order*).

[199] *Id.* at 2374 ¶ 154, 2382-83 ¶ 197.

[200] *Id.* at 2374 ¶ 154, 2382-83 ¶ 197.

[201] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, WT Docket No. 05-211, *Report and Order,* 21 FCC Rcd 891, 903-04 ¶ 31 (2006) (*CSEA/Part 1 Report and Order*).

[202] 47 C.F.R. § 1.2104(g)(2)(ii).

otherwise qualified parties that are able to use them effectively and efficiently to provide service.[203]

172. Discussion. In the present context, the need to deter default is substantially increased. The Commission seeks to license the D Block spectrum to promote the creation of a ubiquitous nationwide wireless network providing interoperable broadband service to the nation's public safety service providers. Delay in assignment of the license could result in substantial harm to the public. Much of this Second Further Notice seeks to reduce the risk of default, and consequent delay, by seeking comment on where greater specificity in the requirements of the 700 MHz Public/Private Partnership might increase the likelihood of success in creating the hoped-for public safety network. At the same time, we seek comment on whether we should modify the default payment rules with respect to a D Block winning bidder. We recognize that a D Block winning bidder faces risks of default that are different in nature, and potentially greater, than those facing the typical winning bidder in a Commission auction. We seek comment on whether a D Block winning bidder's consequent exposure to a potential default payment is excessive and, if so, on ways to reduce it to an acceptable level by modifying either the rules regarding the imposition of a default payment or the default payment amount. In particular, we seek comment regarding the obligation of a D Block winning bidder to make default payments in the event that the Bureaus or the Commission adjudicate a dispute with respect to the NSA and a D Block winning bidder will not comply with the decision on the disputed issues. In this context, the default payments provide a strong inducement to a D Block winning bidder to accept the adjudicated terms. It is possible, however, that public safety representatives aware of a D Block winning bidder's incentives may have greater incentives to make additional demands in pre-adjudication negotiations than if the D Block winning bidder were not facing the threat of default payments.

173. More specifically, we seek comment on whether we should modify the applicable default payment based on the particular circumstances that lead to the default, such as after negotiations fail to produce an NSA. Under such circumstances, should we cap the deficiency portion of the default payment, or direct WTB to apply a different percentage when calculating the additional payment portion of the default payment then it would after a winning bidder defaults on a post-auction payment, or eliminate one of these components of the default payment, while retaining the other? We note that in the event that we conduct a subsequent auction after negotiations fail to produce an NSA and offer license(s) for the D Block that are not subject to any 700 MHz Public/Private Partnership conditions, the deficiency portion of any default payment may well be zero, given that, if all other factors are equal, the winning bid(s) in such a subsequent auction should be higher. How should we take this possibility into account?

174. We seek comment on what specific amount or percentage limits, if any, would provide the best balance between maintaining the incentives for a D Block winning bidder to commit to its bid amount and the required negotiating process while limiting the risk that it may face a choice between default and accepting NSA terms that jeopardize the success of its business plan. Commenters should consider the possibility that the Commission might offer

[203] *See* BDPCS, Inc., *Memorandum Opinion and Order*, 15 FCC Rcd 17590, 17598-99 ¶ 15 (2000) (citing *Second Report and Order*, 9 FCC Rcd at 2381 ¶ 190); *see also Competitive Bidding Second Report and Order*, 9 FCC Rcd 2348.

multiple regional D Block licenses subject to combinatorial bidding. Under such circumstances, should the Commission continue to retain the higher additional default payment percentage for combinatorial auctions, given the potentially greater effects of a default by one of multiple winners? We note generally with respect to the percentage for the additional payment portion of the default payment, applying the ten percent additional payment previously adopted to a bid equal to the previous $1.33 billion reserve price would have resulted in additional payment portion of the default payment of $133 million. The Commission has assessed a total default payment pursuant to Section 1.2109 that exceeded $200 million on one prior occasion. The license in that case was for Basic Trading Area 347, covering Phoenix, Arizona and approximately one-one hundredth the population covered by the D Block nationwide license. However, the largest additional payment previously assessed as part of a default payment was less than $6 million.

175. We also seek comment on whether, in the event that the Public Safety Broadband Licensee is required to negotiate multiple times after separate auctions of the D Block license, to require a defaulting D Block winning bidder, either as a substitute for or in conjunction with any default payments, to pay the Public Safety Broadband Licensee's negotiation costs for unsuccessful negotiations. If we establish such an obligation, how should we define the covered negotiation costs? Such a payment might provide some additional incentive to reach successful negotiations, and would also ensure that, in the event the parties did not reach an agreement, the Public Safety Broadband Licensee would not be left financially unable to proceed with alternatives or to negotiate with a future licensee.

4. Narrowband Relocation

176. Background. Among other things, in designating the lower half of the 700 MHz Public Safety Band (763-768/793-798 MHz) for broadband communications, the *Second Report and Order* consolidated existing narrowband allocations to the upper half of the 700 MHz Public Safety block (769-775/799-805 MHz).[204] To effectuate the consolidation of the narrowband channels, we required the D Block licensee to pay the costs of relocating narrowband radios from channels 63 and 68, and the upper one megahertz of channels 64 and 69, and capped the disbursement amount for relocation costs at $10 million.[205] We also cautioned that any narrowband equipment deployed in channels 63 and 68, or in the upper one megahertz of channels 64 and 69, more than 30 days following the adoption date of the *Second Report and Order* would be ineligible for relocation funding.[206] In addition, we prohibited authorization of any new narrowband operations in that spectrum, as of 30 days following the adoption date of the *Second Report and Order*.[207]

177. We found that, in order to maximize the benefits of the 700 MHz Public/Private Partnership to deploy a nationwide, interoperable broadband communications network, the current 700 MHz narrowband public safety operations must be consolidated and cleared no later

[204] *Second Report and Order*, 22 FCC Rcd at 15406 ¶ 322.

[205] *Id.* at 15412 ¶ 341.

[206] *Id.* at 15412 ¶ 339.

[207] *Id.*

than the DTV transition date.[208] We required every public safety licensee impacted by the consolidation to file a certification with the Commission no later than 30 days from the effective date of the *Second Report and Order*, including certain information to account for "pre-programmed narrowband radios that public safety agencies may have already taken delivery as of the adoption date of [the *Second Report and Order*] and intend to immediately place into operation."[209] We emphasized that such information was "integral to the success of the relocation process," and cautioned public safety entities that failing to file this information in a timely manner would result in forfeiture of reimbursement.[210] As "an additional measure to define and contain the costs that would be entitled to reimbursement," we prohibited any new authorizations outside of the consolidated narrowband segment, stating that such a prohibition would "ensure that the relocation proceeds in an orderly manner and without complications stemming from additional operations being deployed in spectrum being reallocated."[211] Moreover, as "an additional means to ensure the integrity of the relocation process," we imposed a $10 million cap based on the best evidence available in the record at the time of the *Second Report and Order*.[212]

178. Two parties filed petitions seeking reconsideration of some or all of the foregoing requirements in the *Second Report and Order*.[213] Among other things, these parties challenged the adequacy of the $10 million cap on relocation expenses.[214] A number of other parties also supported revising or eliminating the relocation cap.[215]

179. One petitioner also asked that the Commission make clear that parties who purchased and began to deploy systems before the August 30 cut-off date can continue to deploy those systems after August 30, and allow full reimbursement for the relocation of all such systems.[216] Another party asks the Commission to modify the *Second Report and Order* to permit continued authorization and deployment of statewide radio public safety systems in Channels 63 and 68 and the upper one megahertz of Channels 64 and 69 through January 31, 2009, allow the owner of a statewide radio public safety system to obtain reimbursement for all its costs incurred in the installation of such a system which was in the process of construction and implementation as of the date of the *Second Report and Order*, and reconsider the $10 million cap on rebanding costs.[217]

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[208] *Id.* at 15406 ¶ 322.

[209] *Id.* at 15411 ¶ 336.

[210] *Id.* at 15411 ¶ 337.

[211] *Id.* at 15412 ¶ 339.

[212] *Id.* at 15412 ¶ 341.

[213] *See* Virginia Petition for Reconsideration; Pierce Transit Petition for Reconsideration.

[214] *See* Virginia Petition for Reconsideration; Pierce Transit Petition for Reconsideration.

[215] *See* National Association of Telecommunications Officers and Advisors (NATOA) Comments at 9-11; State of Nebraska (Nebraska) Opposition at 2; Motorola Comments at 1-7.

[216] *See generally* Pierce Transit Petition for Reconsideration.

[217] *See generally* Virginia Petition for Reconsideration.

180. Discussion. Being mindful of the desire to provide certainty to potential bidders as to the relocation obligation that would attach to the winner of this spectrum, we seek comment on whether we should revise or eliminate the $10 million cap on relocation expenses. In commenting, we ask parties to provide specific data and cost estimates regarding relocation expenses, particularly taking into account the certifications filed in the docket pursuant to the *Second Report and Order.*

181. Given the proposed re-auction of the D Block and associated timing, we also seek comment on the date by which such relocation must be completed. Should we continue to require relocation be completed by the DTV transition date? If not, should we set an alternative date, and if so, what would that date be? Should we allow relocation to occur on a rolling basis, such that the D Block licensee would be required to relocate narrowband operations only as the broadband network is built out in a particular market? If so, how much notice should the D Block licensee be required to give to a narrowband licensee in advance of relocation? We also seek comment on any other viable mechanism for facilitating relocation, and the appropriate timing of such an approach. Should we retain the requirement that capped costs be deposited in a trust account to be administered by the Public Safety Broadband Licensee? If we eliminate the cap, how would the trust mechanism function? Should we continue to require that the Public Safety Broadband Licensee manage the reimbursement process for these licensees? If so, should we require that public safety entities seeking reimbursement provide detailed cost information to the Public Safety Broadband Licensee? What should such cost information entail? Should the Public Safety Broadband Licensee be afforded discretion in assessing the soundness of the cost estimates? Can the Public Safety Broadband Licensee leverage its status as the nationwide public safety broadband license holder to negotiate terms with equipment and technology vendors to relocate multiple narrowband operations, and thus achieve economies of scale? Should the Public Safety Broadband Licensee have recourse to the Commission if it is determines that cost estimates provided by individual public safety entities, including those passed through by technology or equipment vendors, to be unreasonable?

182. With respect to the August 30, 2007, cut off date for narrowband deployments outside of the consolidated narrowband spectrum, we sought to balance the needs of individual public safety entities with the necessity of carrying out a swift and thorough narrowband relocation process in order to quickly and efficiently establish the nationwide, interoperable public safety broadband network. While we understand the concerns expressed by certain parties, we continue to believe that the cut off date was appropriate and struck the right balance. Rather, addressing each such situation on a case-by-case basis through the waiver process is a more appropriate mechanism. Accordingly, we seek comment on whether extension of the August 30, 2007, deadline established in the *Second Report and Order* would be inappropriate, and any other issue related to the reconsideration petitions filed by Virginia and Pierce Transit.

5. Size of Geographic Areas and Other Rules and Conditions

183. *Size of geographic areas*. In the *700 MHz Second Report and Order*, the Commission determined that the D Block license would be auctioned as a single, nationwide license to provide for commercial service in the D Block to build and operate a joint broadband public safety and commercial network for public safety use.[218] We seek comment on the

[218] *700 MHz Second Report and Order*, 22 FCC Rcd at 15315-16 ¶ 62.

appropriate geographic service area for the D Block. Our goal has been to make a nationwide, interoperable broadband network available to state and local public safety users. We found that creating a partnership between a single, national public safety entity and a single D Block licensee with a nationwide license was the most practical means of speeding deployment of the shared network. We seek comments about whether there is any reason to change the approach taken in the *Second Report and Order*. Would it best serve the public interest to continue to license the D Block on a nationwide basis, or should we choose regional geographic service areas such as REAGs?

184. If the D Block were split into regional licenses, to what extent, if any, should we modify any of the policies or rules previously adopted or proposed herein with respect to a D Block 700 MHz Public/Private Partnership? How would the Commission ensure that the primary goal of a national, interoperable, communications network for public safety agencies is not jeopardized? In particular, how would we ensure interoperability of communications between public safety users of different regional networks? How would we ensure that interoperable communications capabilities are extended to first responders in every region in an equitable fashion? What obligations should we adopt to facilitate coordination between D Block licensees or to otherwise promote the ability of the regional networks to function as a seamless, nationwide network for public safety users? For example, should we mandate that each D Block licensee provide roaming to the public safety users of all other D Block regional networks? What rules should apply in the event that some regional licenses are successfully auctioned while other regional licenses are not successfully auctioned?

185. We also seek comment on whether the D Block should be split into one license (or several licenses) covering high-population density areas and a second license (or set of licenses) covering low-population density areas. Would such an arrangement allow a commercial licensee that specializes in rural coverage (or has some comparative economic advantage in covering such areas) to better serve public safety users in rural areas? Do public safety users in rural areas have different or unique technical requirements as compared to public safety users in more densely-populated areas? If so, to what extent are commercial entities that specialize in rural coverage suited to serving public safety users in such areas?[219]

186. We also seek comment on whether any of our other standard rules, such as our Part 1 competitive bidding rules, should be modified to take into account the possibility of offering multiple licenses to use D Block spectrum subject to the 700 MHz Public/Private Partnership conditions. What rules should we adopt regarding the establishment of an NSA? Are the needs of public safety served if the Public Safety Broadband Licensee must negotiate separate NSAs with several commercial entities, rather than a single, nationwide commercial partner? Under a regional approach, how would we ensure that interoperable communications capabilities are extended to first responders in every region in an equitable fashion? Should we mandate a "master" NSA that would include minimum network specifications, which could then be modified on a regional basis with more detailed schedules? If we were to adopt regional license areas for the D Block, should we also adopt corresponding regional public safety

[219] *See* Letter from Andrew D. Beard, counsel for Vanu, Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket Nos. 06-150; 06-169, 96-86; PS Docket No. 06-229; AU Docket No. 07-157, filed May 8, 2008.

broadband licenses for the public safety broadband spectrum to facilitate the establishment of regional 700 MHz Public/Private Partnerships?

187. *Other rules and conditions.* Lastly, we seek comment on whether there are any other aspects of the rules or conditions for the 700 MHz Public/Private Partnership that we should modify. For example, should we require the D Block licensee to operate on an exclusively wholesale and/or open access basis?[220] Would it serve the goals of this partnership to impose such requirements? Or, would maintaining a more flexible approach improve the viability of the 700 MHz Public/Private Partnership? How would an open access environment affect public safety? If we adopt a wholesale only approach, do we need to revise or clarify any aspect of the operational responsibilities of the D Block and the Public Safety Broadband Licensee? Should we permit the D Block licensee in certain circumstances to obtain access to public safety narrowband spectrum on a secondary, non-interference basis? If so, under what circumstances should this be permitted, and what safeguards should be adopted? Are there any other changes that the Commission should consider making to the rules or conditions for the 700 MHz Public/Private Partnership to ensure its success?

188. We seek comment on other means by which the Commission could effectively match the needs of public safety users with the capabilities of potential service providers while still meeting our obligation under the Act to assign the D Block by competitive bidding.[221] In particular, we observe that Federal, State and local government agencies regularly use requests for proposals ("RFPs") to contract for services provided by private parties. Such RFPs can be weighted to reflect the priorities and needs of the contracting governments. We seek comment on the feasibility of such an approach in this instance.

189. We note that RFPs could be combined with an auction in at least two ways. Under one approach, the Commission or Public Safety Broadband Licensee could request proposals from potential providers of the broadband network for public safety, then select its preferred specification from the proposals offered, making these specifications part of the rules for the D Block license to be auctioned. Under another approach, the Commission or Public Safety Broadband Licensee could auction the D Block with a minimum set of requirements, then allow the three or four highest bidders to submit proposals that meet or exceed the minimum requirements, with the Commission ultimately selecting the winning bidder. We seek comment on these approaches. In particular, regarding the first approach, we ask commenters to address how we can incorporate the generally applicable information that RFP responses would provide while avoiding adopting entity-specific requirements that would limit the flexibility of other entities to meet our outcome objectives in a way that is best suited to their particular business plans, technologies, and resources. With respect to the second idea, we ask what specific criteria the Commission should use in selecting among proposals.

190. Similarly, we seek comment on whether the Commission could approximate the benefits of an RFP through a more expeditious process. In particular, as noted above, the

[220] In the *Second Report and Order*, the Commission declined to impose wholesale or open access obligations on the D Block licensee. *Second Report and Order*, 22 FCC Rcd at 15476-77 ¶ 545.

[221] *See* 47 U.S.C. § 337(a)(2) (Commission must assign 36 megahertz of 700 MHz spectrum for commercial use "by competitive bidding pursuant to section 309(j).").

Commission seeks comment in this Second Further Notice on the possibility of establishing a public/private partnership and, if such a partnership is established, what requirements should apply. As discussed in the Technical Appendix, these requirements would include specifications for the system architecture, reliability, and capacity. In requesting comment on these issues, we especially seek input from both the public safety users of such a network and the potential providers of such a service, including existing wireless service providers and/or potential new entrants that may be interested in participating in a public/private partnership. Following the issues raised in the Technical Appendix, what specifications are needed by public safety users? What specifications are economically feasible for potential providers, and at what cost?

C. Other Options for the D Block License and the Public Safety Broadband License

191. In this section, we consider the Commission's options in the event that we determine not to proceed with the 700 MHz Public/Private Partnership approach requiring a mandatory partnership between the D Block licensee and the Public Safety Broadband Licensee with regard to a shared network using both the D Block and public safety broadband spectrum. For example, as discussed previously, we might decide that we should not retain the 700 MHz Public/Private Partnership obligations if, in the next auction of the D Block license, we offer the D Block license with the 700 MHz Public/Private Partnership obligations and the license again fails to attract a winning bidder, or the winning bidder defaults or fails to negotiate a successful NSA with the Public Safety Broadband Licensee. Alternatively, we may decide not to retain the 700 MHz Public/Private Partnership condition, and instead immediately conduct an auction to license the D Block without a 700 MHz Public/Private Partnership obligation. There may also be other circumstances whereby the 700 MHz Public/Private Partnership obligation on the D Block would not serve its purpose and our objective to facilitate the creation of a nationwide, interoperable, broadband network for public safety users. We therefore seek comment generally on rules the Commission should adopt, both for the D Block licensee and the Public Safety Broadband Licensee, in those circumstances where the D Block license would be auctioned without a 700 MHz Public/Private Partnership condition. If the D Block were auctioned for unrestricted commercial services, how much money would the auction raise? Assuming that the auction would yield less than the cost of building a dedicated, nationwide, interoperable broadband network for public safety, how should the shortfall be addressed? If estimated network construction costs exceed the estimated receipts from the auction of license(s) for the D Block with no commercial service restrictions, to what extent might this shortfall be addressed from the auction receipts of spectrum bands that will be, or might be, auctioned in the near future?[222] For example, what are reasonable estimates of the value of the AWS-3 spectrum with no commercial service restrictions? Similarly, what are reasonable estimates of the value of the "white spaces" spectrum (for unused portions of television channels 2-51) licensed with no commercial restrictions?" In addition, if the D Block were auctioned for unrestricted commercial services, to what extent would the remaining spectrum available to public safety

[222] We note that using auction revenues for such construction would require additional Congressional action.

providers be insufficient to meet their communications needs, including the need for an interoperable broadband network?[223]

1. D Block License Service Rules without the 700 MHz Public/Private Partnership

192. We seek comment below on the particular service rules that we should adopt for the D Block in the event that we determine that the D Block should be licensed without any 700 MHz Public/Private Partnership obligation.

a. Size of the Geographic Areas

193. Background. In the *First Report and Order*, the Commission determined that a balanced mix of geographic service area licenses – CMAs, EAs, and REAGs – would be appropriate for the commercial 700 MHz Band licenses.[224] In the *Second Report and Order*, we reaffirmed the determination to use CMAs, EAs, and REAGs for all of the 700 MHz commercial spectrum blocks except for the D Block. We concluded that the D Block should be licensed on a nationwide basis for use as part of the 700 MHz Public/Private Partnership with the Public Safety Broadband Licensee.[225] We adopted CMA, EA, and REAG areas for the other commercial licenses "to promote dissemination of licenses among a wide variety of applications, accommodate the competing need for both large and small licensing areas, [and] meet the needs expressed by potential entrants seeking access to spectrum and incumbents seeking additional spectrum."[226]

194. Discussion. We now seek comment on the appropriate geographic service area for the D Block in the event that the D Block license is re-auctioned without a 700 MHz Public/Private Partnership obligation. Would it best serve the public interest to continue to license the D Block on a nationwide basis, or should we choose a smaller geographic service area, such as the CMA, EA, and REAG sizes used to license the other 700 MHz blocks? We note that, in evaluating the appropriate balance of license areas, we will continue to consider the 700 MHz Band as a whole, including the commercial spectrum that has been previously auctioned. As we stated in the *Second Report and Order*, recent statutory and regulatory

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[223] The Commission has allocated more than 97 MHz of spectrum for use in support of public safety services, including approximately 13.7 MHz in frequencies below 470 MHz, varying amounts in the 470-512 MHz band, 24 MHz in the 700 MHz band, an average of 4.5 MHz in the 800 MHz band, and 50 MHz in the 4.9 GHz band.

[224] *See* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission'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, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 8064, 8082-86 ¶¶ 42-45 (2007) (*First Report and Order*).

[225] *See Second Report and Order*, 22 FCC Rcd at 15431 ¶ 395.

[226] *Id*. at 15316 ¶ 64.

changes have served to harmonize this spectrum band and warrant our consideration of the 700 MHz Band spectrum as a whole.[227] We request that commenters provide information that would corroborate the benefits of their proposed geographic area and the costs and benefits of adopting an alternative license area. Commenters should also discuss how a particular license area for the D Block would best serve the public interest, considering the commercial 700 MHz Band spectrum as a whole. Finally, commenters should address whether the availability of package bidding, which may mitigate the exposure risk for bidders seeking certain aggregations of licenses, should influence our choice of geographic license service area for the D Block.

b. Performance Requirements

195. Background. In the *Second Report and Order*, we adopted different performance requirements for the commercial 700 MHz Band licenses depending on the geographic size of their license areas. CMA and EA licensees in the 700 MHz Band are required to provide service sufficient to cover 35 percent of the geographic area of their licenses within four years, and 70 percent of this area within ten years (the license term), and REAG licensees must provide service sufficient to cover 40 percent of the population of their license areas within four years and 75 percent of the population within ten years.[228] Licensees with CMA, EA, or REAG areas that fail to meet the applicable interim benchmark, the license term is reduced by two years, and the end-of-term benchmark must be met within eight years.[229] At the end of the license term, licensees with CMA, EA, or REAG areas that fail to meet the end-of-term benchmark will be subject to a "keep what you use" rule, which will make unused spectrum available to other potential users.[230] We adopted these stringent performance requirements to "better promote access to spectrum and the provision of service, especially in rural areas."[231]

196. Discussion. We seek comment on the appropriate performance requirements for the D Block license or licenses if the D Block license is re-auctioned without a 700 MHz Public/Private Partnership obligation. We further seek comment on whether, if we decide to license the D Block on a CMA, EA, or REAG basis, we should impose the same performance requirements applicable to other 700 MHz commercial licenses with the same geographic service area. We seek comment on whether these performance requirements are appropriate for the D Block. In the event that we continue to license the D Block on a nationwide basis, we seek comment on whether performance benchmarks similar to those required of REAG licensees would be appropriate.[232] To the extent commenters believe the performance benchmarks should be higher or lower than the proposals above, we request that they provide information that would corroborate the benefits of their proposed benchmarks and the costs and benefits of alternative approaches. Comments should address whether these specific geographic benchmarks would promote access to spectrum and the provision of service.

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[227] *Id*. at 15316 ¶ 63.

[228] *See id*. at 15439 ¶ 157, 15351 ¶162.

[229] *Id.* at 15439 ¶ 157, 15351 ¶ 163.

[230] *Id.* at 15349 ¶ 157, 15351 ¶ 163.

[231] *Id.* at 15348 ¶¶ 153, 154.

[232] We note that only the C Block, located adjacent to the D Block, is licensed on a REAG basis. *Id.* at 15293 ¶ 4.

c. License Block Size and Term

197. Background. In the *Second Report and Order*, we determined that the D Block should be auctioned as a 10-megahertz spectrum block made up of paired 5-megahertz blocks.[233] We also determined that it be given an initial license term of 10 years, consistent with the term given to other commercial licensees.[234] We found that a 10-year term would "provide regulatory parity by establishing the same license term for [] all 700 MHz licensees."[235]

198. Discussion. We intend not to revisit these determinations if the D Block license is re-auctioned without a 700 MHz Public/Private Partnership obligation. Indeed, in the *Second Report and Order,* we determined the band plan for all commercial bands as a whole.[236] Any changes to the block sizes that would affect other bands would not serve the public interest given the fact that the adjacent commercial spectrum licenses have already been auctioned. Dividing the current D Block into smaller block sizes may also not be in the public interest considering that a 10-megahertz spectrum block made up of paired 5-megahertz blocks can facilitate more innovative and efficient broadband deployment than any smaller block sizes in this band. With regard to the license term, we note that all other commercial licenses in the band have a 10-year term similar to the D Block license, and we see no reason to treat the D Block differently if it does not include the 700 MHz Public/Private Partnership. We seek comment on our intention not to revisit these determinations.

d. Power Limits and Out-of-Band Emission Limits

199. Background. In the *Second Report and Order*, we adopted rules to protect 700 MHz Band commercial and public safety licensees from interference from the out-of-band emissions (OOBE).[237] In accordance with those rules, the D Block licensee was required to satisfy an OOBE limit of 43 + 10log P dB in protecting commercial 700 MHz Band licensees[238] and 76/65 + 10log P dB OOBE limits in protecting the 700 MHz public safety narrowband channels.[239]

200. Discussion. Because of the anticipated relationship between the D Block licensee and the Public Safety Broadband Licensee, it was not necessary to impose any OOBE limits on the D Block licensee in order to protect the Public Safety Broadband Licensee. However, if that relationship is no longer in effect, we seek comment on what measures we should adopt to adequately protect public safety broadband communications from interference from D Block operations, and whether measures to protect against such interference reduce the amount of

[233] *See id.* at 15315-16 ¶ 62.

[234] *See id.* at 15450 ¶ 457.

[235] *Id.*

[236] *See id*. at 15316 ¶ 63.

[237] *See* 47 C.F.R. § 27.53(d).

[238] *See* 47 C.F.R. § 27.53(d)(3), (5).

[239] D Block base stations must meet a 76 + 10log P dB limit in a 6.25 kHz band segment and D Block mobile and portable stations must meet a 65 + 10log P dB limit in a 6.25 kHz band segment. *See* 47 C.F.R. § 27.53(d)(1), (2), (4).

usable, broadband spectrum available to the Public Safety Broadband Licensee and the D Block licensee. We would propose to require that D Block licensees provide appropriate OOBE protection to the public safety broadband spectrum. As to the appropriate level of protection, we see no reason to protect the public safety broadband block to any lesser degree than we currently protect the public safety narrowband channels. We therefore propose that D Block licensees be required to protect the public safety broadband block by satisfying the same 76/65 + 10log P dB OOBE limits currently applicable to the D Block licensee in protecting the public safety narrowband channels. We seek comment on this proposal.

201. In the *Second Report and Order*, we did not adopt any changes to the then-existing power limits for base, fixed, mobile, and portable D Block stations,[240] nor did we modify the notification and coordination requirements we had imposed on D Block licensees choosing to operate base stations at high power levels.[241] The change in the anticipated relationship between the D Block and the public safety broadband block should not necessitate any modifications to these requirements, and we therefore seek comment on whether the power, notification, and coordination requirements currently applicable to D Block licensees should remain unchanged.[242]

e. License Partitioning, Disaggregation, Assignment, and Transfer

202. Background. In the *Second Report and Order*, the Commission prohibited geographic partitioning and spectrum disaggregation for the D Block licensee. The Commission found that adopting such a restriction would serve the public interest by assuring a reliable partnership between the D Block licensee and Public Safety Broadband Licensee.[243]

203. Discussion. If we auction the D Block without the 700 MHz Public/Private Partnership, we seek comment on whether we should allow geographic partitioning and spectrum disaggregation similar to other 700 MHz commercial bands.

f. Other Service and Auction Rules and Conditions

204. Background. Aside from the subjects addressed above, the *Second Report and Order* addressed a number of other service and auction related issues regarding the commercial use of the D Block and the rules regarding other 700 MHz band commercial licenses, such as open platform, wholesale, license eligibility, and small business bidding credits.[244]

205. Discussion. We seek comment on whether we should revisit and adopt any other rules or conditions for the D Block in the event that we auction it without a mandatory

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[240] *See* 47 C.F.R. § 27.50(b)(2), (3), (4), (5), (9), (10).

[241] *See* 47 C.F.R. § 27.50(b)(7), (8), which impose coordination and notification requirements on D Block licensees operating base stations at power levels greater than 1000 watts ERP.

[242] We note, however, that Verizon has sought reconsideration of certain rules adopted in the *First Report and Order* regarding power limits for the 700 MHz Band commercial licensees and related notification and coordination obligations, and this petition remains pending. *See* Petition for Reconsideration of Verizon Wireless, WT Docket No. 06-150 (filed June 14, 2007).

[243] *Second Report and Order*, 22 FCC Rcd at 15475 ¶542.

[244] *See id*. at 15289.

public/private partnership condition. For example, would it serve the public interest to impose any eligibility restrictions, or open platform conditions similar to those imposed on the adjacent C Block? Should the Commission consider imposing a mandatory wholesale obligation? We also seek comment on whether the Commission should apply its spectrum aggregation screen used for wireless transactions to the D Block. We also seek comment on whether any of our Part 1 competitive bidding, designated entity eligibility, and/or other auction rules or procedures would be inappropriate or should be modified for licensing the D Block without the 700 MHz Public/Private Partnership.

2. Alternate Public Safety Broadband Opportunities

206. In the event that that we determine not to proceed with the 700 MHz Public/Private Partnership approach requiring a partnership between the D Block licensee and the Public Safety Broadband Licensee, we seek comment broadly on how we may still achieve the public interest goal of ensuring a nationwide, interoperable broadband network is available for the use of public safety, and whether there are further revisions or obligations we should impose on the Public Safety Broadband License to achieve these goals.

207. Background. In the *700 MHz Public Safety Ninth NPRM*,[245] we previously considered one option in the absence of a public/private partnership with the D Block auction winner, that would permit the nationwide Public Safety Broadband Licensee to provide unconditionally preemptible access to the public safety broadband spectrum to commercial service providers, on a secondary basis, through spectrum leases or in the form of public/private partnerships established by contract with the Public Safety Broadband Licensee. In this respect, the Public Safety Broadband Licensee would enter into arrangements with one or more commercial service providers for accessing or sharing their communications systems infrastructure in order to create the nationwide, interoperable, broadband public safety communications network. This could be accomplished, for example, through the use of a request for proposal (RFP) process by which commercial partners would be solicited to provide access to their network infrastructure. The Public Safety Broadband Licensee would then select one or more entities to provide access to or build out all or a portion of the network, and/or provide certain services to the public safety community on the public safety broadband spectrum, in exchange for secondary, preemptible access to the Public Safety Broadband Licensee spectrum.

208. Discussion. We seek comment on this option as an alternative to the particular public/private partnership model that we earlier endorsed as our preferred approach in the *Second Report and Order*. This option would preserve the concepts of a unified broadband standard and nationwide level of interoperability, as managed by the Public Safety Broadband Licensee on behalf of the public safety community. We recognize, however, that such a proposal might not be ideal given that there would be no guarantee of securing a commercial partner(s) that could provide the network infrastructure, including features beneficial to the public safety community. Further, the Public Safety Broadband Licensee may be limited in the service providers with which it could partner in order to ensure deployment of a unified broadband

[245] *See* Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, PS Docket No. 06-229, WT Docket No. 96-86, *Ninth Notice of Proposed Rulemaking*, 21 FCC Rcd 14837 (2006) (*700 MHz Public Safety Ninth NPRM*).

technology with a nationwide level of interoperability, and take advantage of economies of scale in terms of handsets and network equipment. Accordingly, we seek comment on whether we should adopt this approach should the D Block fail to attract a successful bidder. What alternatives or variations on this approach may be more appropriate? Are there other sources or mechanisms of funding that could be used to build out or support a nationwide, interoperable broadband network for public safety? Will the 10 megahertz of public safety spectrum allocated for broadband be sufficient to support a nationwide, interoperable broadband network for public safety?

209. If we do adopt an approach whereby the Public Safety Broadband Licensee could enter into multiple contracts with commercial providers, would it be necessary for the Commission to establish certain baseline performance requirements, including those for broadband system architecture, interoperability, build-out of national coverage, unconditional preemption of commercial use, and disaster restoration capability? If the Commission establishes such requirements, what should they be? Alternatively, should we require or allow any or all of these issues to be addressed by the Public Safety Broadband Licensee rather than the Commission? What limits, if any, should be placed on the Public Safety Broadband Licensee's ability to enter into leasing arrangements with commercial entities? What Commission oversight should be retained with respect to the Public Safety Broadband Licensee's activities under these circumstances? Is there additional review that the Commission should undertake with respect to approval of the leasing arrangements, or other reporting with respect to the Public Safety Broadband Licensee's activities that should be required?

210. We note that many of these considerations were initially raised in the *700 MHz Public Safety Ninth NPRM*, and we thus incorporate by reference the questions posed in that document, and seek further comment here in light of the revisions to the 700 MHz band and the possible additional changes contemplated in this Second Further Notice. Are there other issues raised by the *700 MHz Public Safety Ninth NPRM* or associated comments that we should consider here?

211. Another alternative may be to permit build out on a regional, state, or local basis of the broadband spectrum. This could be done either through a spectrum lease with the nationwide Public Safety Broadband Licensee, or by rescinding the nationwide license and allowing regional, state, or local licensing of this spectrum. We seek comment on both approaches. In either instance, we continue to believe parameters must still be established that would ensure that systems operating on this spectrum would be interoperable with one another on a nationwide basis. Accordingly, we seek comment on the role of the Public Safety Broadband Licensee in establishing such standards, and if we adopt a local licensing scheme, whether we should retain a national body such as the Public Safety Broadband Licensee to manage the use of this spectrum by establishing baseline performance requirements, determining a common broadband standard, and/or serving in a frequency coordinator or planning role.

212. Finally, we seek comment on whether, in the absence of a public/private partnership, we should continue to obligate the D Block auction winner to fund the relocation of those public safety narrowband systems operating in the lower portion of the public safety spectrum. As noted in the Second Report and Order, it would be to the benefit of the D Block auction winner to ensure that narrowband operations adjacent to the D Block under the former band plan be relocated to the upper portion of the public safety 700 MHz band and thus

minimize interference concerns. As another option, should we grandfather existing operations until such time as relocation funding is secure, and require the Public Safety Broadband Licensee to include relocation funding in its RFP process? What alternative sources of funding may be available to facilitate this transition?

IV. PROCEDURAL MATTERS

A. Initial Regulatory Flexibility Analysis

213. Section 213 of the Consolidated Appropriations Act 2000 provides that the Regulatory Flexibility Act (RFA), 5 U.S.C. § 603, shall not apply to the rules and competitive bidding procedures for frequencies in the 746-806 MHz Band,[246] which includes the frequencies of both the D Block license and the 700 MHz public safety broadband and narrowband spectrum. Accordingly, we have not prepared an Initial Regulatory Flexibility Analysis in connection with the Second Further Notice.

B. Initial Paperwork Reduction Act Analysis of 1995 Analysis

214. This document contains proposed new or modified information collection requirements. We note, however, that Section 213 of the Consolidated Appropriations Act 2000 provides that rules governing frequencies in the 746-806 MHz Band, which encompass the spectrum associated with both the D Block license and the 700 MHz public safety broadband and narrowband spectrum, become effective immediately upon publication in the Federal Register without regard to certain sections of the Paperwork Reduction Act.[247] We are therefore not inviting comment pursuant to the Paperwork Reduction Act on any information collections proposed in this document.

C. Other Procedural Matters

1. Ex Parte Presentations

215. The rulemaking shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[248] Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented generally is required.[249] Other requirements pertaining to oral and written presentations are set forth in Section 1.1206(b) of the Commission's rules.[250]

2. Comment Filing Procedures

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[246] In particular, this exemption extends to the requirements imposed by Chapter 6 of Title 5, United States Code, Section 3 of the Small Business Act (15 U.S.C. 632) and Sections 3507 and 3512 of Title 44, United States Code. Consolidated Appropriations Act 2000, Pub. L. No. 106-113, 113 Stat. 2502, Appendix E, Sec. 213(a)(4)(A)-(B); *see* 145 Cong. Rec. H12493-94 (Nov. 17, 1999); 47 U.S.C.A. 337 note at Sec. 213(a)(4)(A)-(B).

[247] *Id*.

[248] 47 C.F.R. §§ 1.200 *et. seq.*

[249] *See* 47 C.F.R. § 1.1206(b)(2).

[250] 47 C.F.R. § 1.1206(b).

216. Pursuant to Sections 1.415 and 1.419 of the Commission's rules,[251] interested parties may file comments on or before the dates indicated on the first page of this document. All filings related to this Second Further Notice should refer to WT Docket No. 06-150, PS Docket No. 06-229, and WT Docket No. 96-86. Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies.[252]

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://www.fcc.gov/cgb/ecfs/ or the Federal eRulemaking Portal: http://www.regulations.gov. Filers should follow the instructions provided on the website for submitting comments.

    - ECFS filers must transmit one electronic copy of the comments for WT Docket No. 06-150, PS Docket No. 06-229, and WT Docket No. 96-86. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and WT Docket No. 06-150, WT Docket No. 06-169, and WT Docket No. 96-86. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov and include the following words in the body of the message, "get form." A sample form and directions will be sent in response.

- Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, DC, 20554.

    - The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, DC 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

    - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

    - U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, S.W., Washington DC 20554.

[251] 47 C.F.R. §§ 1.415, 1.419.

[252] *See* Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

217. Parties should send a copy of their filings to: Neşe Guendelsberger, Wireless Telecommunications Bureau, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to nese.guendelsberger@fcc.gov; and Jeff Cohen, Public Safety and Homeland Security Bureau, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to jeff.cohen@fcc.gov. Parties shall also serve one copy with the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI), Portals II, Room CY-B402, 445 12th Street, S.W., Washington, D.C. 20554, (202) 488-5300, or via e-mail to fcc@bcpiweb.com.

218. Documents in WT Docket No. 06-150, PS Docket No. 06-229, and WT Docket No. 96-86 will be available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, Room CY-A257, 445 12th Street, S.W., Washington, D.C. 20554. The documents may also be purchased from BCPI, telephone (202) 488-5300, facsimile (202) 488-5563, TTY (202) 488-5562, e-mail fcc@bcpiweb.com.

3. Accessible Formats

219. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to FCC504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY). Contact the FCC to request reasonable accommodations for filing comments (accessible format documents, sign language interpreters, CARTS, *etc*.) by e-mail: FCC504@fcc.gov; phone: 202-418-0530 (voice), 202-418-0432 (TTY).

V. ORDERING CLAUSES

220. Accordingly, IT IS ORDERED pursuant to sections 1, 2, 4(i), 5(c), 7, 10, 201, 202, 208, 214, 301, 302, 303, 307, 308, 309, 310, 311, 314, 316, 319, 324, 332, 333, 336, 337, 614, 615, and 710 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 155(c), 157, 160, 201, 202, 208, 214, 301, 302, 303, 307, 308, 309, 310, 311, 314, 316, 319, 324, 332, 333, 336, and 337, that this SECOND FURTHER NOTICE OF PROPOSED RULEMAKING in WT Docket No. 06-150, WT Docket No. 96-86 and PS Docket No. 06-229 IS ADOPTED. The SECOND FURTHER NOTICE OF PROPOSED RULEMAKING shall become effective upon publication in the Federal Register.

221. IT IS FURTHER ORDERED that pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on the SECOND FURTHER NOTICE OF PROPOSED RULEMAKING on or before 30 days after publication in the Federal Register and reply comments on or before 45 days after publication in the Federal Register.

222. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this SECOND FURTHER NOTICE OF PROPOSED RULEMAKING in a report to be sent to Congress and the General Accounting Office pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX

Possible Technical Framework for a 700 MHz Public/Private Partnership Shared Wireless Broadband Network

I. Overview

This appendix serves as a possible framework for establishing the technical requirements for the 700 MHz public/private partnership shared wireless broadband network (SWBN). It is intended to solicit detailed comment and result in a final set of technical requirements that will provide greater certainty for bidders for the D Block license while ensuring that the network meets public safety's needs. This appendix is not intended to prejudge any of the issues identified for comment in the accompanying Second Further Notice. Further, we recognize that certain aspects of the public/private partnership, if adopted, may be impacted by determinations made through the questions posed in the Second Further Notice, and that to some extent the technical considerations here are dependent on one another.

Each of the technical requirements discussed in the Second Further Notice is covered below. In many cases we have included more specific technical specifications or obligations in order to solicit more meaningful comment. We ask commenters to recommend any specifications they believe should be modified, deleted, added or retained. The final requirements will take into account the comments filed in response to the Second Further Notice, as well as this appendix.

II. Specifications for Public/Private System Architecture

Sections 27.1305(a) and 90.1405(a) state that the network must be "[designed] for operation over a broadband technology platform that provides mobile voice, video, and data capability that is seamlessly interoperable across public safety local and state agencies, jurisdictions, and geographic areas, and which includes current and evolving state-of-the-art technologies reasonably made available in the commercial marketplace with features beneficial to the public safety community."

The architecture of the SWBN likely would consist of two general elements: (a) a Radio Access Network (RAN) and (b) a Core Broadband Network (CBN). Both the RAN and CBN would be expected to be packet switched networks using Internet Protocol (IP).

An overall view of a generic functional architecture for the SWBN is shown in Figure 1. The SWBN depicted has the following characteristics:

1. The broadband IP network would be based on advanced next generation mobile network standards and commercial technologies, with performance characteristics supporting voice, data, and multimedia applications.[253]
2. The SWBN would support end to end multiple quality of service classes associated with public safety.
3. During normal operating conditions, the RAN would support assured access for public safety users over commercial users to a limit of 50% of engineered capacity.[254]
4. The RAN would support emergency priority access for public safety users over commercial users.
5. Commercial service capabilities deployed by the D Block licensee (*e.g*. voice calling, Internet access, etc.) would be available to public safety users at a quality of service (QoS) level as identified by the Public Safety Broadband Licensee ("PSBL") as part of its responsibilities to administer access to the SWBN and interact with individual public safety entities.
6. The CBN would support interconnection with public safety regional and local networks. This interconnection would facilitate interoperability with existing public safety networks operating in other frequency bands. It can be accomplished through a standard or proprietary interface at an appropriate point or points in an existing public safety communications system. Consideration should be given to implement this interconnection in a way that will not have a detrimental impact on the wireless broadband network. It is noted that IP broadband networks are already being used in some areas to facilitate such interoperability.
7. The D Block licensee would provide the PSBL with sufficient real-time information and network transparency to:
    a. Ensure that the service obligations of the D Block licensee to the PSBL are fully met.
    b. Provide reports on public safety network usage, user patterns, etc.
    c. Forecast future service needs.
    d. Administer access by end users.
    e. Assemble data for assessing usage fees.

[253] Examples of such standards and technologies are the 802.16e IEEE standard, coupled with the WiMAX Mobile profile developed by the WiMAX Forum, and the Long Term Evolution (LTE) proposal advanced by the 3GPP.

[254] In other words, public safety would be ensured to have primary access to the 10 megahertz allocated for public safety broadband operations. Further, commenters should consider the potential that advanced next generation technology may be employed to combine the public safety broadband spectrum with the D Block spectrum and then randomly allocate the spectrum to users in incremental amounts. Accordingly, with such technology this requirement could be characterized as ensuring that public safety has assured access to 50 percent of the engineered RAN capacity.

f. Activate a service alert declaring an emergency condition exists for purposes of enabling priority access in excess of the 10 megahertz of public safety broadband spectrum.

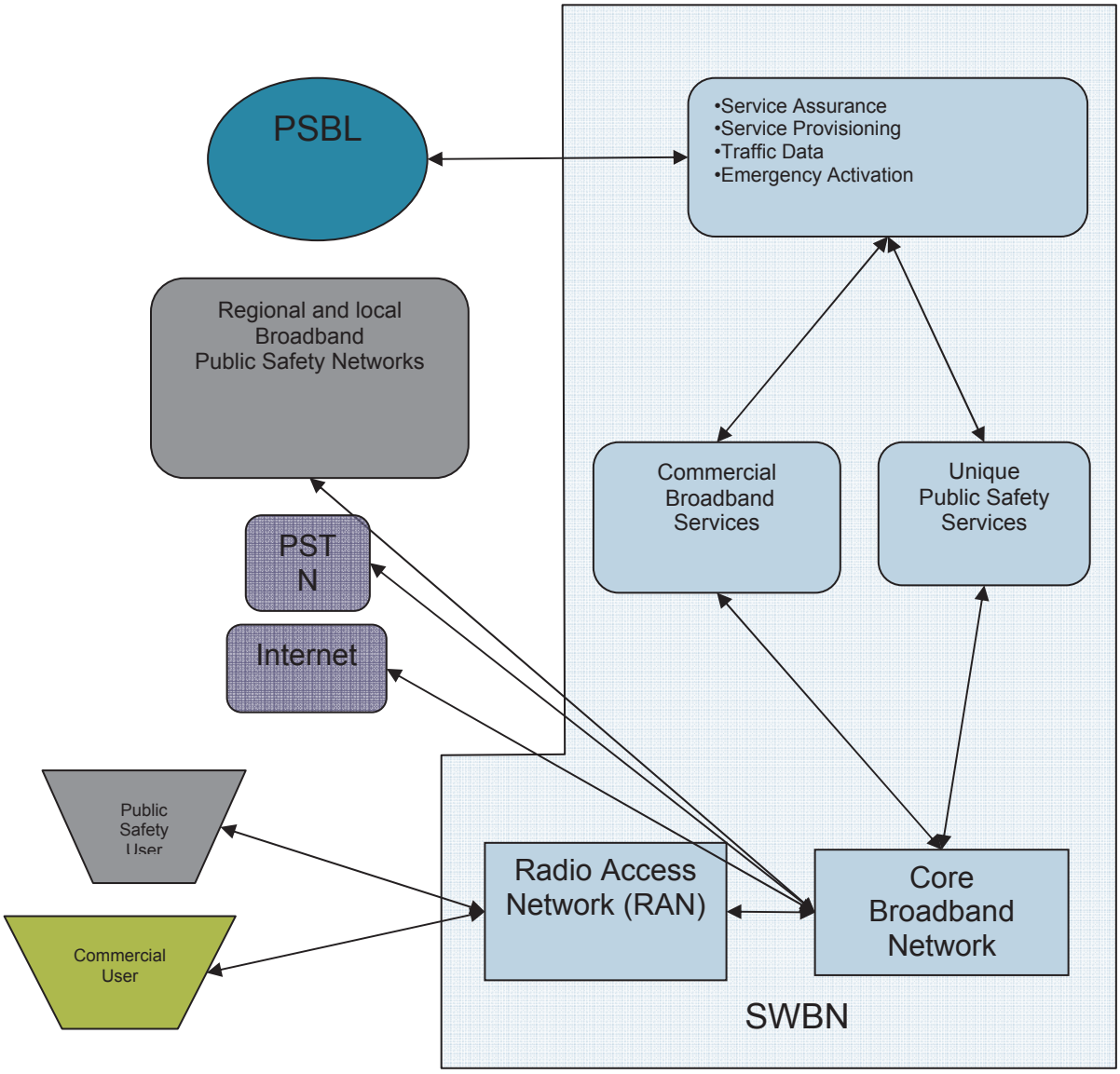

Figure 1: Generic functional architecture for the Shared Wireless Broadband Network (SWBN)

III. Reliability, Robustness and Hardening

Sections 27.1305(c) and 90.1405(c) require that the network must incorporate "[s]ufficient robustness to meet the reliability and performance expectations of public safety."

This requirement could be met in two ways. First, the Commission could develop reasonable technical specifications based on comments received in this proceeding and incorporate these specifications into the service rules for the D Block. One advantage of this approach would be to provide certainty to public safety users as well as commercial bidders in

advance of an auction. Second, the D Block licensee could prepare a draft network reliability plan and submit it to the PSBL. The PSBL would then provide comments to the D Block licensee on the plan within 30 days of receipt. The D Block licensee would incorporate any reasonable requests or suggestions.

In developing the network reliability plan, the D Block licensee may employ a variety of techniques to ensure that service is maintained and that service is promptly restored in the event of an outage. These techniques may include the pre-deployment of backup equipment and systems, provisions for rapid deployment of systems such as cells on wheels, flexible system design that provides for rapid reallocation of resources such as boosting power at certain cell sites, etc.

Public safety users would remain responsible for the reliability of the equipment that they purchase and use with the network, such as mobile and hand-held radios, video surveillance systems, broadband access devices, etc. Further, such equipment should meet the same standards as those specified by the D Block licensee for commercial equipment that may be connected to the broadband network.

The network reliability plan also should include the following features and capabilities:

1. The network should be designed based on industry best practices, specifically, the recommendations of the Network Reliability and Interoperability Council.[255]
2. Network outages must be reported to the FCC, consistent with the requirements for commercial wireless systems.[256] Plans should be put in place and implemented to resolve any pattern of repeated outages.
3. Critical network elements,[257] such as CBN facilities, base stations and antenna towers, should be built to withstand harsh weather and natural disasters that are reasonably foreseeable in any geographic area, such as hurricanes, floods, earthquakes, etc. Where appropriate, local building codes may be used as a guide, with an additional margin, as appropriate to ensure a reliable public safety system, taking into account cost and other factors. Switches, gateways, routers, radio and backhaul systems are typically self-redundant.[258]

[255] *See* Network Reliability and Interoperability Council Wireless Network Reliability Final Report, September 2005 at http://www.nric.org/meetings/docs/meeting_20051019/NRICVII_FG3A_FinalReport_September_2005.pdf.

[256] *See* 47 C.F.R. §§ 4.1-4.2, 4.3(f), 4.5, 4.7, 4.9(e), 4.11, 4.13. *See also* New Part 4 of the Commission's Rules Concerning Disruptions to Communications, *Report and Order and Further Notice of Proposed Rulemaking*, ET Docket No. 04-35, 19 FCC Rcd 16830, 16882-16890 ¶¶ 97-114 (2004).

[257] By "critical network elements," we mean to refer to those network elements that would require geographic redundancy and mesh connectivity in case of catastrophic events impacting large or heavily populated areas.

[258] Self-redundancy implies having a duplicate active element that will take over the function of the main element in case of the latter's malfunction or failure.

4. Critical sites should have generators available with fuel supplies sufficient to operate for as many as 5 to 7 days. By "critical sites," we mean those sites that are necessary for maintaining basic system availability and access to the core network.
5. Backup power should be available at least at critical sites sufficient to last as many as 8 hours.
6. Back-haul diversity should be provided at critical sites.
7. Public safety users are encouraged to obtain any additional backup equipment they may need for their own use, such as a reserve supply of mobile units and chargers for use in emergencies.

IV. Capacity, Throughput and Quality of Service

Capacity

Sections 27.1305(d) and 90.1405(d) require that the SWBN incorporate "[s]ufficient capacity to meet the needs of public safety." One method for complying with these rules is for the D Block licensee to anticipate public safety user needs during emergency and disaster situations, so that public safety applications are not degraded (*i.e.*, increase in blocked calls and/or transmission times or reduced data speeds) during periods of heavy usage.

The network capacity, in terms of the amount of traffic that can be carried throughout the system generally, or for each user at any given location, is determined by many variables, including the characteristics of the radio transmission technology, number of cell sites, spectrum reuse, use of efficient technologies such as smart antennas, various factors affecting propagation, core network resources, backhaul availability, etc. Similarly, the users' traffic demand that determines the capacity requirements depends on a great many variables, such as the number of users, the applications that will run on the network and the resources they consume, peak usage times, acceptable blocking rates, etc. In the case of a SWBN, the network capacity available for public safety users will also be affected by the priority that is given to public safety communications and the ease and degree to which public safety users can access the commercial spectrum. We recognize that capacity requirements are not static and we expect them to continue to grow for both commercial and public safety applications.

This requirement could be met in two ways. First, the Commission could develop reasonable technical specifications based on comments received in this proceeding and incorporate these specifications into the service rules for the D Block. One advantage of this approach would be to provide certainty to public safety users as well as commercial bidders in advance of an auction. Second, the D Block licensee could prepare a draft plan to meet the capacity requirements of public safety users, based on consultation with the PSBL and based on their experience with commercial broadband network performance. The plan should take into account both national and local public safety requirements. The PSBL would then provide comments to the D Block licensee on the plan within 30 days of receipt. The D-Block licensee would incorporate any reasonable requests or suggestions.

The D Block licensee should consult on an ongoing basis with the PSBL to address any shortcomings related to network capacity and to plan continued evolution of the network to meet growing needs. To assist with this endeavor, the PSBL should provide a rolling 12-month usage forecast on a quarterly basis. The network should incorporate a mechanism for adequate resource management so as to allow for continued improvements over time and best mitigate any detrimental impact on public safety operations.

Throughput

With regard to throughput, the SWBN should meet the following minimal specifications:

1. Data rates should be consistent with state-of-the-art commercial wireless systems, such as WiMAX Mobile, LTE, or other equivalent or advanced technologies.
2. Public safety applications should be provided sufficient resources to perform at least as well as similar applications on the commercial network (*i.e.*, voice, video, Internet access).
3. Blocking rates should be no greater than 2 % or other mutually agreeable criteria.[259]

Quality of Service

With regard to quality of service, Sections 27.1305(f) and 90.1405(f) require the SWBN to incorporate a "mechanism to automatically prioritize public safety communications over commercial uses on a real-time basis consistent with the requirements of [Sections 27.1307 and 90.1407(c)]." There are certain priorities at the air interface that relate to the ability of a user to access and connect to the network. Such priority, "access priority," is to be distinguished from traffic priority that arises after the connection admission. The notion of QoS is applied after the connection is established.

Concerning access priority, public safety users will have priority access to the 10 megahertz of public safety broadband spectrum (or, put another way, as discussed above, half of the engineered capacity of the total spectrum (2x10 MHz)) at all the times, and to a portion of the engineered capacity on the D Block in the event of emergency priority access. An example of such a scheme is the current Wireless Priority Service (WPS).[260]

As it relates to traffic priority and QoS, the following can be considered as specific requirements of the SWBN:

1. The networks should provide sufficient capacity, and augment capacity as needed, in order to meet the QoS requirements for public safety applications.

[259] The term blocking is meant to include instances in which a public safety user's request for service cannot be fulfilled with the defined QoS associated with that specific service.

[260] *See* http://www.fcc.gov/pshs/emergency/wps.html.

2. The SWBN is anticipated to provide a number of QoS classes and performance objectives such as those defined in ITU-T Y.1541 or those defined in the advanced next generation technology standards (*e.g.*, LTE and WiMAX Mobile). The network should support QoS classes for real time applications as well as low delay data transfer applications for public safety users, comparable to those in ITU-Y.1541.
3. Using QoS mechanisms as defined by the relevant standards (i.e. linked to the selected technology), public safety traffic should have higher priority of transmission and delivery over the commercial traffic consistent with the access priority circumstances discussed above. While the QoS classes and performance objectives are standard, the implementation of the priority schemes in achieving the QoS classes is vendor-specific. We anticipate different methods of traffic management by vendors (such as connection admission control, queuing management, congestion control, etc.) to achieve the desired QoS and priority requirements for public safety usage. It is possible that at times of network congestion, commercial traffic will be denied access to network resources, or be dropped in favor of public safety traffic, again consistent with the access priority circumstances discussed above.
4. Using QoS mechanisms as defined by standards, various public safety applications should have different levels of QoS, depending on the type of application. For instance, command-level applications may require QoS settings with relatively higher priority.

V. Security and Encryption

Sections 27.1305(e) and 90.1405(e) require the SWBN to incorporate "[s]ecurity and encryption consistent with state-of-the-art technologies."

Accordingly, the system should include the following capabilities:

1. The SWBN should implement controls to ensure that public safety priority and secure network access is limited to authorized public safety users and devices, using an open standard protocol for authentication.
2. The SWBN should allow for public safety network authentication, authorization, automatic logoff, transmission secrecy and integrity, and audit control capabilities as well as other unique attributes that may be mutually agreeable.
3. The SWBN technical and operational parameters should accommodate public safety administrative safeguards and controls for security management, oversight, incident management, and privacy that may be defined in the final negotiations.

VI. Coverage

Sections 27.1305(b) and 90.1405(b) require the SWBN to incorporate "[s]ufficient signal coverage to ensure reliable operation throughout the service area consistent with typical public safety communications systems."

The Second Further Notice invites comment on the coverage requirements for the SWBN. Coverage may be defined in terms of the signal levels that will be available at all locations based on accepted predictive methods (*i.e.*, 90% availability, 90% of the time) and taking into account appropriate factors to meet in-building coverage needs.

VII. Operational Capabilities – Network Services and Applications

Sections 27.1305(g) and 90.1405(g) require the SWBN to incorporate "[o]perational capabilities consistent with features and requirements that are typical of current and evolving state-of-the-art public safety systems." At a minimum, these capabilities should include seamless interoperability for fixed as well as mobile voice, video, and data communications on the SWBN across local, state, tribal, and Federal public safety users. To be more specific, the SWBN should support the reliable exchange of text, voice, secure voice, data, video, photographs, and detailed graphical information such as maps, drawings, engineering plans, fingerprints, graphical files, etc.

The SWBN should support and be compatible with standards used by public safety. For example, these may include the standards and practices established by the National Information Exchange Model (NIEM). NIEM is a partnership of the U.S. Department of Justice and the Department of Homeland Security (DHS). Its purpose is to develop, disseminate and support enterprise-wide information exchange standards and processes that enable jurisdictions to effectively share critical information in emergency situations, as well as support the day-to-day operations of agencies throughout the nation.[261]

In addition, DHS created the National Incident Management System (NIMS) to establish a framework for organizations to work together to prepare for, protect against, respond to, and recover from the entire spectrum of all-hazard events.[262] Other standards organizations that are important in the development of the transmission and information exchange standards that the network may employ include the Organization for the Advancement of Structured Information Standards (OASIS)[263] EDXL standards, and the Global Justice XML (GJXML) data model.[264]

Users of the network should have access to the full range and suites of evolving commercial voice, data, and video services and applications as well. The Table below from the

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[261] *See* http://www.niem.gov/. "NIEM enables information sharing, focusing on information exchanged among organizations as part of their current or intended business practices. The NIEM exchange development methodology results in a common semantic understanding among participating organizations and data formatted in a semantically consistent manner. NIEM will standardize content (actual data exchange standards), provide tools, and managed processes."

[262] *See* http://www.fema.gov/emergency/nims/standards.shtm. DHS created the National Incident Management System as required under Homeland Security Presidential Directive (HSPD)-5. NIMS is a framework that provides guidelines and principles to first responders in an effort to achieve a single nationwide system for managing incidents.

[263] *See* http://www.oasis-open.org/who/.

[264] *See* http://www.ncsconline.org/WC/CourTopics/ResourceGuide.asp?topic=GJXDM.

Public Safety Spectrum Trust Bidder Information Document (BID) Version 2.0 reflects example applications and services that may be supported. Actual data rates should exceed the minimum for acceptable quality of service measures and key performance indicators shown but also should be consistent with the performance indicators listed separately in this document. However, it may not be necessary to specify data rates or performance criteria for each individual application.

Table 2.9.2-A

Application/Service	Description	Data Rate
File transfer	Download of such items as high-resolution images, GIS data, etc.	Greater than 256 kb/s
Email		Less than 16 kb/s
Web browsing		Greater than 32kb/s
Cellular voice	Analogous to CMRS Voice	4-25 kb/s
Push to talk voice	Analogous to CMRS PoC	4-25 kb/s
Indoor video	Video that is transmitted from inside a building / tactical or surveillance	20-384 kb/s
Outdoor video	Video that is transmitted from the street / tactical or surveillance	32-384 kb/s
Location services	This includes location services for personnel, vehicles and other objects	Less than 16kb/s
Database transactions	This includes both remote and local jurisdictional databases	Less than 32kb/s
Messaging	Instant messaging and SMS type services, both one-way and two-way.	Less than 16kb/s
Operations data	This is a catch all for data that deals with the operations and maintenance of the network, i.e. over the air programming, remote client management, etc.	Less than 32kb/s
Dispatch data	This area primarily covers data as it relates to computer aided dispatching.	Less than 64kb/s
Generic traffic	This is a catch all for traffic that doesn't fall within any of the categories described above, and that generates less than 64kb of data per second.	Less than 64kb/s
Telemetry	Remote measurement and reporting of information for radio devices, vehicles, etc. Also includes sensors data such as passive chemical detection. Additionally, biometric sensors that require better network performance are also included in this application class.	70-120 kb/s
Virtual Private Networking		Less than 64kb/s

VIII. Operational Control and Use of the Network

Sections 27.1305(h) and 90.1405(h) require the SWBH to incorporate "[o]perational control of the network by the [PSBL] to the extent necessary to ensure that public safety requirements are met."

The D -Block licensee should provide control capabilities or a level of network transparency sufficient to permit the PSBL to exercise its role in general administration of access to the SWBN by individual public safety entities. These functions should include:

1. Real time or near real time messages detailing material violations of the technical requirements contained in the Commission's rules or the NSA, including the scale and scope of the violation. The timeframes, format and the scenarios in which this information is required should be addressed in the NSA. The PBSL should be notified immediately of any situations that impede vital public safety communications, with details to be made available as soon as practicable.
2. The ability of the PSBL to host services subject to negotiation requiring elements of IP multimedia subsystem (IMS) or Service Architecture Evolution.
3. Capabilities permitting the PSBL and/or authorized public safety entities the ability to set up and manage user/user group/application profiles, authenticate users and devices and provision services.
4. Over the air framework to allow the management of end user devices, either singly or in groups, permitting such functions as over the air programming of devices and the clearing of data and disabling of devices.
5. Notification to the PSBL of system downtime (or any work that may affect service or system performance over any given geographic area) due to planned maintenance, configuration changes, or upgrades. The PSBL should provide the D Block licensee with advance notice to address planned public safety events.

STATEMENT OF
CHAIRMAN KEVIN J. MARTIN

Re: *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229.*

The recent auction of the 700 MHz band commercial spectrum was a success. Auction 73 achieved a number of significant milestones, including: being the largest auction in FCC history, raising a record $19.6 billion in bids; advancing new open platform policies; affirming aggressive build-out obligations; creating what will be a new wireless broadband provider to compete with the incumbent telephone and cable companies in nearly every home in the U.S.; and providing small businesses, new entrants, rural providers and existing nationwide wireless providers with access to additional spectrum needed to deploy the next generation of wireless networks. In one area, however, we still have work to do.

In July 2007, this Commission, both Republicans and Democrats alike, made a unanimous commitment to fulfilling the needs of the public safety community for a nationwide, interoperable public safety broadband network. The Public/Private Partnership was designed to address this crucial issue, as the only tool reasonably available to the Commission. Auction 73, however, did not yield a successful bidder for the "D Block" of commercial spectrum, which would have fulfilled the commercial role in this partnership. While the results of the last auction will help inform our decision with respect to the D Block going forward, our decision must also be informed by the continuing need for a truly nationwide interoperable broadband network for public safety agencies to use during times of emergency. In the absence of the financial resources for public safety to build out their own network, however, I believe we should continue to try to explore ways in which we can help facilitate a tool to achieve a nationwide interoperable public safety network.

Today's *Second Further Notice of Proposed Rulemaking* is the first step in a renewed effort to provide our Nation's first responders with the broadband network they need and deserve. And while I continue to support the concept of a Public Safety/Private Partnership as a viable tool to achieve this goal, I am pleased that this *Further Notice* turns a critical eye on the specific parameters of the partnership, and ways to ensure the commercial viability of this endeavor by providing greater certainty to all parties involved. In this respect, the *Further Notice* appropriately looks at both sides of the ledger. For example, it examines ways to more clearly define the role of the Public Safety Broadband Licensee, asking questions about the scope of who would constitute a public safety user, the appropriate role of advisors, and whether increased oversight is necessary. With respect to the commercial side, it seeks input on how to clearly define expectations regarding build out, default penalties, and network parameters that will allow potential bidders to construct a positive business case for undertaking this unique opportunity.

Finally, while not required, we will seek additional comment through a Third Further Notice of Proposed Rulemaking, and I have also agreed to hold an en banc hearing on these issues. I also continue to recognize the need to make this spectrum available in the marketplace

in a timely fashion, and to provide the public safety community with a clear path forward to achieving a nationwide interoperable broadband network. In this respect, I am committed to moving with deliberate speed to address these issues both thoughtfully and quickly.

I thank my colleagues for their cooperation and commitment to these issues, and look forward to working with them in the coming months.

STATEMENT OF
COMMISSIONER MICHAEL J. COPPS

Re: *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229.*

In the seven years since 9/11, three years since Hurricane Katrina, and one year since we began the most recent auction of the 700 MHz spectrum band, we have learned two hard and disappointing lessons. First, that America desperately needs to improve the communications tools available to its heroic first responders. And, second, that achieving this task is not going to be easy.

As I have stated before, I believe the nation's most prudent response in the terrifying days following 9/11 would have been to build a dedicated, federally-funded, interoperable national broadband network for first responders. However, as I explained last month in testimony before the Telecommunications and Internet Subcommittee of the House Energy and Commerce Committee, that option is no longer on the table. So I believe the FCC is left with the sobering conclusion that a public-private shared model represents the last, best chance we have at using the 700 MHz spectrum band to improve communications for state and local public safety users. I still believe that today.

Nevertheless, I think we need to begin the process of trying to create such a network with a healthy dose of realism. Even if we roll up our sleeves and dedicate ourselves this summer to coming up with realistic network specifications, the truth is that we still are not assured of coming up with a workable solution. What we are trying to do here is conduct the most difficult FCC auction ever in an extraordinarily difficult economic environment. At the same time, I ***do*** know with 100% certainty that if we give any less than the full measure of our efforts, the result will assuredly be that the needs of public safety will continue to go unmet. I, for one, am eager to begin this challenge—and will give the process nothing less than my best.

I approve today's item—kicking off the process of considering a new public-private sharing model—with great hope that we can improve public safety in the way that I believe all my colleagues seek. I hope that public safety will devote its best engineers and wisest minds to the task. We need the best thinking and the best experts they are capable of providing to this process. I hope that the wireless industry—which has profited handsomely from use of the public airwaves—will participate in this process with the full measure of its talent, ingenuity, and public spiritedness. And—most of all—I hope that the Commission will probe far and wide for the finest and most visionary engineers, technologists, economists, and financial experts to inform our decision-making. It is going to take all that—and then some—to get this done.

I understand that we need to move as quickly as possible here, because the need for improved communications grows more pressing with each day. I am not afraid to push hard, work long hours on this process and make difficult decisions. But at the same time, the ultimate acid test here has to be whether we are developing a set of rules that will create a network that meets public safety's broadband and interoperability needs. To me, this means that the time for

deferring uncertainty to a post-auction negotiation process is over. Now that we are not facing a hard-and-fast auction deadline, the right course is to work out the difficult questions in advance—thus providing much needed certainty and predictability to public safety, potential bidders, their investors, the public, the FCC and Congress. And make no mistake about it, if I do not think that we have developed workable and specific network specifications before a future auction, I will not hesitate to say that we need to go back to the drawing board and get it right before proceeding any further.

Judged against this set of aspirations, today's item has encouraging aspects as well as some causes for concern. On the happy side of the ledger, we have given interested parties 30 days for comments and 15 days for reply comments on this Second Notice—more than was initially contemplated when this item was circulated. We have also committed in today's item to an additional further notice of proposed rulemaking that will tee up very specific, proposed rules for the public-private sharing concept, which will allow the parties to aim at a specific proposal and help us assess whether it will actually produce the outcome we need. Given the uncertainties of the financial markets today, it is certainly essential that we take every precaution to make sure that there are no unnecessary specifications in our rules that would discourage investment.

My concern stems from the fact that our plans to bring the best engineering and economics talent to the Commission to aid it in its deliberations are still far from finalized, long after Congress in its oversight capacity and many leading experts have warned us that technical and financial sophistication is essential to making this process work. I am disappointed that we cannot make use of the Commission's Technical Advisory Council—a body of distinguished engineers that is supposed to provide the Commission with unbiased, expert technical guidance, but which, over a year and half after having its charter renewed, still has no members and no Chair. I also wish that the Commission had already finalized consulting or other arrangements for leading engineers to provide us with their best thoughts and guidance, but I am encouraged by the Chairman's willingness to bring this to a speedy resolution. I also appreciate that the Chairman and my colleagues have shown willingness to hold one en banc hearing this summer to inform the process—though I would have preferred more such hearings wherein the experts could come before us and put their thoughts to the test of expert public discussion. I also think it is good news that we are establishing a working group here at the FCC that will put our best experts on public safety directly on the task at hand.

I want to thank the Wireless and Public Safety and Homeland Security Bureaus for their hard work in drafting this lengthy item on a very tight timeframe, and our Office of Engineering and Technology for their work in developing a short technical appendix to today's item. I hope the item we release today will jumpstart a detailed and substantive discussion of the issues before us. I believe the item tees up the important questions, and I appreciate the willingness of my colleagues to allow certain additions from my office as well as to offer their own. I also urge interested parties to raise any important issues that they feel the item does not expressly address. We have written the item broadly, to solicit ***any*** useful comment—and I hope that the responses we receive will be thoughtful, detailed and cover the waterfront of issues.

In particular, I hope that parties will be extremely specific in discussing what functions they believe this public safety network needs to fulfill and what network specifications are

necessary to meet these needs. After all, the network that a highway patrol officer needs when cruising along at 100 mph with a high-gain antenna on the roof is quite different than the network required by a firefighter about to plunge into a 40-story glass and steel building. Similarly, a network that is used for everyday voice communications is quite different from one suitable for mission-critical functions, and different still than one which sends still pictures and even streaming video. Which of these different needs are we attempting to meet? We also need to understand how the network we build will be interoperable with existing public safety networks. A network that does not solve the broader problem of inter-agency and inter-service interoperability would, by any measure, be a tragic opportunity missed.

Even beyond the daunting technical issues, we also need to resolve difficult problems of governance and economic incentives. For example, how can we ensure that the public safety broadband licensee has adequate funding to engage in planning and support its ongoing operations? Is USF funding a possible answer? Or the Telecommunications Development Fund? And we need to look at how to ensure that public safety entities can actually afford to use this system. What pricing plans are consistent with the needs of local jurisdictions to meet fixed budgets? What rules for use of the network by public safety, either for free or at a discounted rate, will the economics of this arrangement permit? After all, the elephant in the room is that we need to make sure that our rules allow the commercial partner a reasonable opportunity to turn a profit in the long-term, or else we will never find a bidder and the network will go unbuilt. We also need to understand if innovative technologies—like multi-mode satellite handsets, or dividing the commercial block into two or more blocks with varying degrees of population density—can improve the ability of commercial licensees to serve their public safety partners.

These governance and economic questions go way beyond discrete issues like reserve price and default penalty (which are important in their own right). What the Commission needs to do is examine the full package of incentives we create, taken as a whole. Unless we are capable of this broad-ranging and complex inquiry, we simply cannot be assured of a better result than the last time around. This simply underscores to me the importance of issuing proposed rules and allowing for comment before issuing final rules. So I am pleased that we now have a commitment to proceed with a Third Notice which will be altogether specific in laying out what the proposed rules are. I would have liked more time for comment on those, but this is the best that could be achieved.

I also have to register some discomfort over the portions of the item that solicit comment on the possibility of stating, up-front, that if this auction does not yield a bidder it will be re-auctioned for commercial purposes. This proceeding is about establishing a viable public-private partnership to enhance public safety. It would be unfortunate if anyone was able to conclude that by simply torpedoing the partnership concept, they can move quickly to a purely commercial auction. This item could inadvertently send the message that a commercial outcome is the likely outcome of this process. The commercial scenario raises other and important questions for another day—one that hopefully doesn't ensue. While I accept that we need to consider different perspectives on this issue, I also believe that, speaking practically, our public safety mission is best served if commenters in this process and bidders in the auction are focused with laser-like precision on trying to make the public-private model work. As I stated earlier, it's going to take 100 percent focus and dedication to get this right. Any provisions that encourage gaming of the

system or distract from this key objective are highly counterproductive in my view. I also think we will need to look long and hard at some point in the process about how much time potential bidders need to develop business plans for this unique public-private proposition—as I've mentioned before, investors assure me that the financial markets are as bad as they have been in a long time right now, that their recovery is not imminent, and we certainly should not add to these problems by holding an auction too quickly.

Again, I thank everyone who helped develop today's item and who is willing to dedicate the next few months to contributing to the pressing and unbelievably important task we find before us. We're going to need all the help we can get.

STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN

Re: *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229.*

We need only tune in to any news channel, particularly in recent months, to find constant reminders of the important role communications plays during emergencies. Despite these alarm bells, we are still without a network that allows our first responders to communicate with each other across agencies and beyond state borders quickly and easily. The ability to respond to an emergency event directly correlates to the ability of a first responder to save a life, protect people from harm or mitigate property damage. Quite simply, the longer we delay the implementation of an interoperable broadband network for public safety, the more lives we put at risk.

One of the Commission's core directives under the Act is to promote the safety of life and property through communications. We can and we must play a key role in improving our nation's disaster preparedness, network reliability, and communications among first responders. Were we working on a blank canvas, I would have preferred direct federal funding for building a national public safety broadband network. Nevertheless, I am aware that the public-private partnership framework itself presents the only option available to us. Members of Congress on a bipartisan basis have endorsed such an approach.

I do believe that the public/private partnership framework can be a successful model for bringing about this desperately needed network, but only if appropriate checks and balances are in place. A true public-private partnership must meet the needs of both partners. If public safety's needs are not met, the basic objective is not met. If a private partner's need for a return on capital and regulatory certainty are not met, then that partner will not be in a position to attract the capital necessary to meet public safety's objectives. A partnership is just that, and both sides must win to make it work.

With these concerns in mind, I extend my support for this Second Further Notice of Proposed Rulemaking because it represents our collective efforts to remedy the interoperability problem that has long plagued our nation's public safety community. The open-ended nature of this inquiry reflects a good-faith effort to start from scratch after a disappointing failure. I certainly hope we will make every attempt to find a solution that works for public safety, and not simply throw up our hands in frustration and go the commercial auction route.

True interoperability has been an elusive goal for the public safety community. Despite our best efforts, the Commission's policies to date have not provided the results we had hoped. And while there have been some gains towards interoperability with the creation of certain state-wide and metropolitan area networks, most public safety communications systems remain localized, and interoperability between local, state, and federal agencies continues to be limited. This is unacceptable. As we become a country increasingly immersed in the digital broadband

world, it is critical that our first responders have access to the same first-rate communications systems that many consumers already have.

Our proposal today lays out a myriad of complex and critical elements that must be closely evaluated in order to address the end goal of bringing our public safety community an interoperable network that keeps pace with our digital advancements. I am pleased that we have put forth for comment a broad set of possible revisions to the public/private partnership structure as well as a framework for technical requirements. While we have carefully attempted to include as comprehensive a set of proposals and options as possible, we look to commenters to address many important details and specifics and to elucidate any stones we have left unturned.

One of our greatest failings last time was that the expectations were not made clear upfront as to how the network would look and what would be asked of a private sector partner. We have since learned that potential private partners did not have the certainty they needed to raise or commit capital to the project. Our hope this time, in the end, is to generate a set of rules that provide a real incentive for building the most advanced and interoperable nationwide network possible through a careful balance of flexibility and conditions that are laid out clearly and explicitly upfront.

Finally, while I wholeheartedly support the launch of this proceeding today, I do want to counsel for taking a cautious and deliberate approach to an ultimate resolution. I am pleased that my colleagues have agreed to put forth a Further Notice of Proposed Rulemaking that details a more specific and complete proposal. This allows commenters to "kick the tires" on any proposed rules, and I thank Commissioner Copps for his wise insistence on this approach. It is important that we get the specifics nailed down as clearly as possible this time around, since it may be our last shot. I look forward to a full and detailed record on these issues, and commend the Bureau staff and my colleagues for working diligently to draft a comprehensive and detailed proposal.

STATEMENT OF
COMMISSIONER DEBORAH TAYLOR TATE

Re: *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229.*

The Commission's July 31, 2007 Report and Order on the 700 MHz band was clear in its intent - to make available spectrum for new commercial uses and for the benefit of public safety, to include a nationwide, interoperable, broadband public safety communications capability. The recently completed 700 MHz auction was a grand success with regard to this first goal. It made available 52 megahertz of highly valued spectrum for new commercial uses, including advanced services such as broadband. So highly valued is this spectrum that this historic auction set the record for most receipts for any U.S. spectrum auction – $19 billion. Moreover, the auction was conducted flawlessly, despite including more than 1,000 licenses and incorporating anonymous bidding in addition to allowances for combinatorial bidding on certain licenses. We too often gloss over "good news" when something runs flawlessly, so I especially want to thank the many FCC staff who spent months in preparation and execution of this auction, and congratulate them on being part of history.

Nonetheless, as we all know, there was one very disappointing outcome of this auction. Congressman Pickering may have most eloquently described the situation as "a blessing in disguise." No party offered a bid sufficient to meet the reserve price for the D Block, which was designated for a public/private partnership that would establish an interoperable broadband network for the benefit of public safety users. Today, we have an opportunity to learn from our mistakes and set the course for a path forward. To that end, in this Second Further Notice, we seek comment on the policy that will best advance this goal.

From Silicon Valley to MIT to the Oak Ridge National Laboratory in my home state of Tennessee, to other centers of excellence across this country, I am firmly convinced that we have the intellect, ingenuity and collaborative skills to solve the problem of interoperability once and for all in this country. Some areas of the nation already are interoperable; others are well on their way. Some have initiatives that have been years in the planning and many have already expended State, local and private resources. We should not disrupt those who have begun and in some cases already created their own public/private partnerships, and we should keep in mind that the D Block will not even be available until some period after the DTV transition. As a former State official, I have worked hard to ensure that the Commission's rules work with, not against, the best efforts of State and local governments. I hope that the rules that we will adopt for this spectrum will be consistent with that goal.

For this reason, we should encourage States and localities to continue to make interoperability a top priority and a reality; not wait on the Federal government to go through another auction process. Those systems must assuredly be integrated into a national network, but I continue to hear that this is feasible given the intelligence of today's devices and architectures. At the same time, we should encourage them to share their successes and challenges as we attempt, again, to provide the only solution that we, the FCC, have at our fingertips – that is,

spectrum – so that our public safety entities can truly be part of a nationwide interoperable communications network.

With regard to the choices before us, in this item we seek comment on whether the Commission should auction the ten megahertz of spectrum comprising the D Block with a modified version of the public/private partnership that was previously adopted, or auction this spectrum with no such requirement. The choice between these two options is one of the key decisions we will make in this preceding.

It is important to clearly understand the strengths and weaknesses of both approaches. For example, auctioning the D Block with no public/private partnership and minimal service rules might maximize the funds raised at auction, funds that then would be available for Congress – if it so chooses – to appropriate for public safety communications. On the other hand, requiring the D Block winner to participate in a public/private partnership would ensure a dedicated provider that then may be well-positioned to coordinate interoperable services and take advantage of economies of scale. There are other potential costs and benefits that should be addressed. For this reason, I strongly encourage comments in this regard from the public safety community, from potential service providers, and from other experts and interested parties. I especially encourage the comments of parties that already have developed interoperable broadband communications capabilities for public safety operations, including State agencies, large and small municipal agencies, as well as the commercial entities that service those initiatives. We need and value your input.

Also, to the extent the Commission adopts a public/private partnership, we must be clear about the capabilities our public safety providers will need, and exactly what will be required of their commercial partner(s) in terms of coverage, reliability, functionality, network hardening, quality of service, and more. Establishing those specifications is a complicated process, one that frequently is handled elsewhere in government – by Federal agencies such as the Department of Defense and Department of Homeland Security, by State agencies, and by municipalities – often through the use of RFPs (requests for proposal). While the Commission does not have experience conducting RFPs, it could, through an additional round of comments or other process, seek input from the public safety community so as to ascertain their needs, as well as input from potential providers so as to ascertain what specifications can be provided, and at what cost.

Today, I call on this nation's best and brightest – engineers, members of the public safety community who are already engaged in establishing these networks, other federal agencies with similar needs, commercial enterprise, network operators, providers, new entrants and yes, even successful investors and entrepreneurs – to respond to this call from your country. I ask you to give of your brainpower, your time, your efforts and your money to ensure that every emergency situation – whether a natural disaster or a terrorist attack – will receive the immediate response it deserves from public safety providers with fully equipped, truly interoperable communications capabilities. All of America will truly be safer and more secure because of your efforts.

I thank the dedicated staff of the Public Safety and Homeland Security Bureau, the Wireless Telecommunications Bureau, the Office of Engineering and Technology, and the Office

of Strategic Plans and Policy for their long hours and valuable contributions to an extremely complex, yet extremely important, public policy item.

STATEMENT OF
COMMISSIONER ROBERT M. McDOWELL

RE: *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229.*

President Franklin D. Roosevelt once said, "It is common sense to take a method and try it. If it fails, admit it frankly and try another. But above all, try something." Today, all five of us are admitting that we tried something and failed at it. Now we're back to the drawing board and calling upon the public and interested parties for guidance on how to move forward and successfully auction the D Block.

To put today's *FNPRM* in context, let's review some recent history. Last summer's 700 MHz Order included a plan to spark the construction of a state-of-the-art, nationwide, interoperable network for America's public safety users through a public/private partnership. We allocated 10 megahertz of spectrum for public safety use, known as the "D Block," on top of the 24 megahertz Congress allocated to public safety in 1997. The Commission created this framework after working closely with the public safety community, and I supported it. Hopes were high that this additional spectrum would provide an incentive for a private entity to construct the nationwide, interoperable, broadband network all of us have been discussing since the attacks of 9-11.

Even though public safety already has at its disposal 97 megahertz of spectrum in total to serve America's approximately two million public safety users, roughly half of that spectrum lies fallow due to a lack of funds and coordination. The Commission allocated an additional 10 megahertz, above and beyond what Congress gave, to try to create an incentive for the private side of the public/private partnership to invest risk capital to build a nationwide public safety network suitable for 21st century challenges. In the absence of congressionally-appropriated funding for this network, the Commission concluded that this type of public/private partnership was the best way to jump-start funding and construction.

In the wake of the D Block's failure, I have met with a number of parties to analyze what went wrong. Apparently potential bidders were deterred by onerous build-out and service requirements that required the eventual licensee to incur massive costs in an atmosphere of extreme uncertainty regarding how many, if any, public safety entities might actually sign up as paying customers. Today's further notice offers an open-ended opportunity for all interested parties to tell us what we did wrong, what our new goals should be, and how we can accomplish those goals.

Even though the D Block auction was unsuccessful, I am fully committed to examining all options that may lead to the construction, and continued operations, of this vision. Yes, the comment periods we adopt today are fairly tight; however, it is important that we continue to move forward and increase our momentum. We are well-positioned to build upon our already robust record. I am confident that we can and will proceed in a thorough and thoughtful manner.

What we don't want is the type of situation Samuel Beckett was referring to when he wrote, "Go on failing. Go on. Only next time, try to fail better." In contrast, Thomas Edison once said about failure, "I am not discouraged because every wrong attempt discarded is another step forward." Today we are taking that next step forward. Accordingly, I support this further notice.