

public safety communications. While we encourage the further development and implementation of wireless priority service for public safety, we will not require implementation before appropriate standards are developed and appropriate hardware and software is available. As discussed elsewhere, we propose to require the Public Safety Broadband Licensee to establish access priority and service levels, and authenticate and authorize public safety users. The Public Safety Broadband Licensee may accomplish this under the Network Sharing Agreement by establishing its own system that would accomplish these functions or defining parameters that are compatible with commercial technology and can be easily implemented by the D Block licensee(s). This function must be capable of rapid updates to meet public safety's needs. We ask for commenters' views on these proposals.

124. We note that US Cellular proposed a number of amendments to the PSST's proposed technical requirements whereby the Public Safety Broadband Licensee would establish a system that would be integrated with the shared wireless broadband network to provide a nationwide set of public safety applications, automatically authenticate public safety users, and assign the required priority or quality of service to public safety communications.²⁴⁹ The implication of this proposal is that it would serve to ensure overall quality of service. It is not clear precisely how this proposal might be implemented. We invite comment on US Cellular's proposal and whether it is viable for both public safety and the prospective D Block licensee(s). We also invite comment on potential costs of this approach and how it might be funded.

125. *Security and Encryption.* We tentatively conclude that we should require the shared broadband network to maintain security and encryption features consistent with commercial best practices and with capabilities described in the Technical Appendix and the *Second Report and Order*.²⁵⁰ We recognize that a number of commenters propose more specific requirements. The Wireless Rehabilitation Engineering Research Center for Wireless Technologies, for example, recommends the use of open access networks with built-in default encryption, to reduce potential security risks.²⁵¹ Cook Consulting recommends using "whitelisting" protocol or encryption to protect the network.²⁵² Region 33 states that the network should have the same stringent security and encryption requirements as existing and future state and Federal databases.²⁵³ The PSST and NPSTC propose a set of detailed security requirements.²⁵⁴ Other parties, however, argue that the Commission should maintain a more flexible approach. Leap Wireless states there should be no security requirements beyond what's required for nationwide commercial CMRS networks.²⁵⁵ Ericsson suggests that security measures beyond those already provided by commercial networks should be negotiated between the D Block licensee and the PSBL and detailed in the NSA.²⁵⁶ Sprint Nextel states that network security and encryption should be "consistent with state-of-the-art technologies."²⁵⁷ In view of the divergence of opinions regarding the need for more specific security and encryption requirements, and on the appropriate requirements to adopt, we tentatively

²⁴⁹ US Cellular *ex parte* of August 29, 2008 proposing various amendments to the PSST proposed technical requirements.

²⁵⁰ See *Second Further Notice*, 23 FCC Rcd at 8131; *Second Report and Order*, 22 FCC Rcd at 15434 ¶ 405.

²⁵¹ Wireless RERC Comments at 15.

²⁵² Peter G. Cook Consultancy, Inc. Comments at 7.

²⁵³ Region 33 Comments at 10.

²⁵⁴ PSST Comments Attachment C, at 8; NPSTC Comments at 55.

²⁵⁵ Leap Wireless Comments at 12.

²⁵⁶ Ericsson Comments at 22-23.

²⁵⁷ Comments of Sprint Nextel Corporation at 11.

conclude that the public interest would be better served by maintaining flexibility similar to what we adopted in the *Second Report and Order*. Specifically we propose to require the D Block licensee(s) to provide security and encryption consistent with commercial best practices. Further, we propose to require that the D Block licensee(s) shall: (1) comply with U.S. Federal government standards, guidelines and models that are commercial best practices for wireless broadband networks; (2) implement controls to ensure that public safety priority and secure network access are limited to authorized public safety users and devices, and utilize an open standard protocol for authentication; and (3) allow for public safety network authentication, authorization, automatic logoff, transmission secrecy and integrity, audit control capabilities, and other unique attributes.

126. *Power Limits/Power Flux Density Limits/Related Notification and Coordination Requirements.* In the *Second Further Notice*, the Commission addressed the discrepancy between the text of the *Second Report and Order*, and the applicable rules of the *Second Report and Order*. The text indicated that we would not adopt any power flux density (PFD) limit requirement in the public safety broadband segment, based on the limited record received on this issue.²⁵⁸ However, the applicable rules require the Public Safety Broadband Licensee to meet a PFD limit when operating base stations at power levels above 1 kW ERP.²⁵⁹ In light of this discrepancy, we sought comment on whether to retain this PFD requirement for the public safety broadband spectrum.²⁶⁰ The Commission also noted that Verizon Wireless filed a petition for reconsideration of the *First Report and Order* with regard to certain of the notification and coordination obligations placed on commercial 700 MHz licensees.²⁶¹ In light of this petition, we sought comment on whether to apply any or all of Verizon's proposed rule changes to the public safety broadband spectrum.

127. NPSTC supports retaining the PFD requirement, stating that "the PFD requirement should be retained, as it is there to provide an environmental baseline for which systems can be designed in order to manage the coexistence of various types of systems... additionally, [a]ll of the notifications should also be retained without any redefinition (e.g. the 1 kW/MHz proposed by Verizon), as these notifications serve as a proactive means to coordinate operations such that interference can be avoided before it happens."²⁶² CEA suggests that the Commission impose the same out of band emission (OOBE) limit for the D Block that applies to the C Block."²⁶³

128. Under existing rules, Upper 700 MHz Band commercial licensees (*i.e.*, C and D Block licensees), if operating base stations at power levels greater than 1 kW ERP, must meet a PFD limit of 3 mW/m² on the ground within 1 km of each base station. They must also notify all public safety licensees authorized within 75 km of the base station and all 700 MHz public safety regional planning committees with jurisdiction within 75 km of the station of their intention to operate the base station at a power level greater than 1 kW ERP. Similarly under our rules, the Public Safety Broadband Licensee must satisfy this PFD requirement when operating a base station at a power level greater than 1 kW ERP.²⁶⁴ Verizon,

²⁵⁸ See *id.*, 22 FCC Rcd at 15417 ¶ 358.

²⁵⁹ See 47 C.F.R. § 90.542(a)(5), (b).

²⁶⁰ This requirement had initially been imposed on Upper 700 MHz C and D Block licensees to protect public safety narrowband licensees from interference.

²⁶¹ Petition for Reconsideration of Verizon Wireless, WT Docket No. 06-150 (filed June 14, 2007) (Verizon Petition).

²⁶² NPSTC Comments at 46-47.

²⁶³ Comments of Consumer Equipment Association at 6.

²⁶⁴ We do not, however, require the PSBB licensee to notify other 700 MHz licensees of its intention to operate at a power level greater than 1 kW ERP.

in its petition, seeks various changes to our PFD and notification requirements for commercial 700 MHz licensees, asking *inter alia*, that the trigger for such requirements be changed from 1 kW ERP to 1 kW/MHz ERP. NPSTC, which did not file comments in response to the Verizon petition, appears to request that we retain the current 1 kW ERP PFD/notification trigger for C, D, and Public Safety Broadband licensees.

129. The Upper 700 MHz band plan places the public safety narrowband channels (at 769-775 MHz) in between the Public Safety Broadband spectrum (at 763-768 MHz) and the upper C block (at 776-787 MHz). Thus, any decision to modify the PFD trigger for either the Public Safety Broadband spectrum or the upper C block could have a potential impact on public safety narrowband channel operations. Therefore, rather than deciding, in this proceeding, on the appropriate PFD/notification trigger for the Public Safety Broadband spectrum, we shall defer this decision to the upcoming proceeding addressing the Verizon petition, where we will take a comprehensive look at the potential consequences for the public safety narrowband channels of modifying the trigger for the Public Safety Broadband Licensee *and* the C block licensee. NPSTC's comments in the instant proceeding shall be incorporated into the proceeding addressing the Verizon petition. We also invite comments from other parties on this issue, and any such comments will be incorporated into that proceeding as well.

130. With regard to CEA's suggestion that the Commission impose the same out-of-band emission (OOBE) limit for both the C and D Blocks, currently the D Block licensee is required to provide enhanced OOBE protection²⁶⁵ to only the public safety narrowband channels, while the C block licensee is required to provide such protection to both the public safety narrowband channels *and* the Public Safety Broadband spectrum. We do not require the D Block licensee to provide this extra OOBE protection to the Public Safety Broadband spectrum due to the special relationship that exists between the D Block and Public Safety Broadband Licensee. If we decide to maintain that relationship, we tentatively conclude that we should continue to require the D Block licensee to provide extra OOBE protection only to the public safety narrowband channels. We tentatively conclude as well that if we do not maintain the existing relationship between the D Block and Public Safety Broadband Licensee, we should require the D Block licensee to provide extra OOBE protection to both the Public Safety Broadband spectrum and the public safety narrowband channels – and thus require C and D Block licensees to meet the same OOBE limits in protecting public safety operations, as CEA suggests.

131. *Satellite-capable Handset Requirement.* We propose to continue requiring that the D Block licensee make available to public safety users at least one handset that includes an integrated satellite solution, by which we mean that the handset must be capable of operating on both the 700 MHz public safety broadband network and on the satellite frequency bands and/or systems of satellite service providers with which the Public Safety Broadband Licensee has contracted for satellite service.²⁶⁶ In addition, as under existing rules, we propose not to establish a specific deadline, but to leave the terms and timeframe for the availability of the handset to be specified in the NSA. We propose to clarify, however, that in the event we license the D Block on a regional basis, we do not preclude the regional licensees from relying on the same handset model to meet this requirement. In addition, because it is not clear that current or developing technology can provide for handoffs between a terrestrial network and a satellite service, however, we propose to clarify that handsets need not provide for seamless operation between the terrestrial and satellite modes to meet our requirement. We also tentatively decline to adopt MSV's proposal that all public safety handsets be required to be satellite-enabled. As before, we find that

²⁶⁵ The standard OOBE limit, which applies to CMRS operations in various bands, requires licensees to attenuate their emissions by a factor not less than $43 + 10 \log P$ dB. The enhanced OOBE protection referred to herein requires Upper 700 MHz commercial licensees to attenuate their base station emissions by a factor not less than $76 + 10 \log (P)$ dB and to attenuate mobile and portable station emissions by a factor not less than $65 + 10 \log (P)$ dB.

²⁶⁶ See *Second Report and Order*, 22 FCC Rcd at 15452 ¶ 464.

the Public Safety Broadband Licensee, in consultation with the D Block licensee(s), will be in the best position to determine the extent to which public safety equipment should have integrated satellite capability. We invite further comment, however, on whether we should require more than one handset with an integrated satellite solution and if so, what number or percentage of devices should have that feature.

3. Performance Requirements, License Term, and Renewal

132. Background. In the *Second Report and Order*, we decided that the D Block license would be issued for a period of ten 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.²⁶⁷ 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.”²⁶⁸

133. 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 3,000.²⁶⁹ We concluded that these build-out requirements “will ensure that public safety needs are met.”²⁷⁰ 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.”²⁷¹

134. In addition to establishing performance requirements and a ten-year license term, we also determined that the performance requirements and license period would start on February 17, 2009. We determined that this would be the initial authorization start date because it is the DTV transition date.²⁷² We also established that at the end of the ten-year term the D Block licensee would be allowed to apply for license renewal and that renewal would be subject to the licensee’s success in meeting the material requirements set forth in the NSA as well as all other license conditions, including meeting the performance benchmark requirements.²⁷³ Because the initial NSA term expired at the same time, we decided that the D Block licensee must also file a renewed or modified NSA for Commission approval at the time of its license renewal application.²⁷⁴ Given these detailed license renewal requirements, we declined to impose a separate substantial service showing in the *Second Report and Order*.

135. In the *Second Further Notice*, we sought 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.²⁷⁵ Specifically, we sought comment on whether we should retain the existing end-of-term population

²⁶⁷ *Second Report and Order*, 22 FCC Rcd at 15445 ¶ 437.

²⁶⁸ *Id.* at 15446 ¶ 440.

²⁶⁹ *See id.* at 15445 ¶ 438 – 15446 ¶ 440.

²⁷⁰ *Id.* at 15445 ¶ 437.

²⁷¹ *Id.* at 15446 ¶ 440.

²⁷² *Id.* at 15450 ¶ 457.

²⁷³ *Id.* at 15450 ¶ 458.

²⁷⁴ *Id.*

²⁷⁵ *Second Further Notice*, 23 FCC Rcd at 8075 ¶ 74, 8080-86 ¶¶ 88-105.

benchmark of 99.3 percent or whether we should adopt a lower population benchmark that is equal to or more aggressive than the 75 percent benchmark that is applicable to the 22 megahertz C Block that is licensed on REAG basis.²⁷⁶ We noted that each of the top four nationwide carriers is currently providing coverage to approximately 90 percent or more of the U.S. population.²⁷⁷ Given that existing commercial wireless infrastructure already covers approximately 90 percent of the population, we sought 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.

136. We observed 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 REAG license area within four years and to at least 75 percent of the population in each EA of the REAG license area by the end of the ten-year license term.²⁷⁸ 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 assumed that the D Block licensee should, at the very minimum, be able to meet these benchmarks with respect to its nationwide license. We sought comment on that assumption.

137. In addition, we invited comment on whether we should extend the license term for the D Block license, and possibly the Public Safety Broadband License, if we determined to provide for construction benchmarks that extended past the initial license term that we established for the D Block license.²⁷⁹ We asked whether doing so would make it easier for the D Block licensee to meet the performance requirements that the Commission adopts. Specifically, if we were to adopt a 15-year license term, we sought comment on whether this would increase the commercial viability of the required network while still meeting public safety needs. If we were to adopt such a modification, we asked whether the interim build-out benchmarks should be modified. For example, we stated that we could 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. We also noted 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, and we asked whether we should extend the term of the NSA to be co-extensive with any extended term we may adopt for the D Block.²⁸⁰

138. We sought further 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.²⁸¹ We noted that satellite services can enable public safety users to communicate in rural and remote areas that terrestrial services do not reach or in areas where terrestrial communications networks have been damaged or destroyed by wide-scale natural or man-made disasters. In light of these observations, we asked if we should permit the D Block licensee to utilize Mobile Satellite Service as a way to meet, in part, its build-out obligations.²⁸²

139. Parties who filed comments in response to these issues that we raised in the Second

²⁷⁶ *Id.* at 8081 ¶ 91.

²⁷⁷ *Id.* (citing USB Warburg Investment Research, US Wireless 411, at 17 (Mar. 18, 2008)).

²⁷⁸ *Id.* at 8082 ¶ 94.

²⁷⁹ *Id.* at 8081 ¶ 90, 8083 ¶¶ 96, 98.

²⁸⁰ *Id.* at 8083 ¶ 98.

²⁸¹ *Id.* at 8083-84 ¶ 99.

²⁸² *Id.* at 8084 ¶ 100.

Further Notice, include nationwide service providers,²⁸³ regional service providers,²⁸⁴ small service providers,²⁸⁵ consumer electronics manufacturers,²⁸⁶ commercial entities,²⁸⁷ entities representing rural interests,²⁸⁸ entities representing public safety organizations,²⁸⁹ and citizens.²⁹⁰ In addition, several local governments filed comments.²⁹¹ Most contend that the current final benchmark requirement -- that the network cover at least 99.3 percent of the population nationwide within 10 years -- is unrealistic. For instance, AT&T states that the requirement "to build out the public/private network to cover 99.3 percent of the population nationwide within ten years" "may have been overly aggressive."²⁹² Likewise, Interisle believes that the "99.3% benchmark for year 10 coverage of the population is unrealistically high."²⁹³

140. A range of final benchmarks to levels less than 99.3 percent are proposed in the comments of many commercial commenters. For example, some of these commenters propose a final benchmark of 95 percent population coverage.²⁹⁴ Northrop Grumman asks "the Commission to adopt a coverage benchmark of 95%,"²⁹⁵ which it considers to be "a much more reasonable level for an especially cost-intensive build-out of new network service."²⁹⁶ Televate believes that the D Block licensee should "serve at least 95 [percent] of the population."²⁹⁷ Space Data, however, argues that there is no need to relax the performance requirements that apply to the 700 MHz D Block spectrum.²⁹⁸

141. Leap recommends that the "performance requirements relating to the construction of the network should be set at the same level as was set for the C Block in Auction 73."²⁹⁹ In its reply

²⁸³ AT&T Comments at 14; Sprint Nextel Comments at 2, 14-15; US Cellular Comments 21.

²⁸⁴ Leap Comments at 13; NTCH Comments at 9; SouthernLINC Reply Comments at 7.

²⁸⁵ ACT Comments at 2; Big Bend Comments at 2; CTC Comments at 2; Kennebec Comments at 2; PVTC Comments at 2; Ponderosa Comments at 2; Smithville Comments at 2; Spring Grove Comments at 2; Van Buren Comments at 2; Wiggins Comments at 2.

²⁸⁶ CEA Comments at 3; Ericsson Comments at 26; Motorola Comments at 13; Qualcomm Comments at 11; Motorola Reply Comments at 4.

²⁸⁷ ComCentric Comments at 4; Coverage Co. Comments at 6; GEOCommand Comments at 9; Google Comments at 12; Interisle Comments at 6; Rivada Comments at 2; Space Data Reply Comments at 2; Televate Comments at 4; Tyco Comments at 5; Wirefree Comments at 15.

²⁸⁸ Council Tree Comments at 14.

²⁸⁹ AASHTO Comments at 11; APCO Comments at 14; NATOA Comments at 8; NENA Comments at 2; NPSTC Comments at 12; Region 6 Comments at 2; Region 20 Reply Comments at 14; Region 33 Comments at 18; PSST Comments at 34.

²⁹⁰ Bazelon Comments at 14; Newman Comments at 4; Peha Comments at 5.

²⁹¹ ADA County Sheriff's Office Comments at 2; Philadelphia Comments at 2.

²⁹² AT&T Comments at 14.

²⁹³ Interisle Comments at 6.

²⁹⁴ See Sprint Nextel Comments (advocating 95 percent with a bidding credit if the bidder commits to greater); Northrop Grumman Comments at 5. See also ACT Comments at 2.

²⁹⁵ Northrop Grumman Comments at 5; Northrop Grumman Reply Comments at 1.

²⁹⁶ Northrop Grumman Comments at 5.

²⁹⁷ Televate Comments at 9.

²⁹⁸ Space Data Reply Comments at 2.

²⁹⁹ Leap Comments at 13.

comments, Council Tree “endorses” Leap’s proposal that the “network construction requirements for the D Block license be modified to match those that applied to the Upper 700 MHz Band C Block licenses awarded in Auction 73.”³⁰⁰ SouthernLINC encourages the Commission to reject those arguments that call for network construction based on “commercial-level best practices for reliability” or C Block-type coverage requirements of only 75% of the population.³⁰¹ If public safety agencies only need commercial-grade wireless coverage, SouthernLINC states that they should simply subscribe to existing commercial offerings. A number of other parties simply recommend that the Commission propose more realistic benchmarks without offering a specific percent coverage of the population.

142. A few public safety commenters support 95 percent or lower population coverage, including the National Regional Planning Council (NRPC).³⁰² NRPC reasons that “[w]ith commercial wireless operations today already covering approximately 90% of the US population base, this would be a good starting point with a goal of adequate broadband coverage over 95% of the US population within the 10 year license term.”³⁰³ Region 6, 700 MHz Planning Committee (Region 6), asserts that a more “realistic” performance requirement “would be 95% of the United States population within all Urban Areas as defined by the Federal Department of Homeland Security, while allowing the successful bidder to expand that coverage upon execution of Memorandum of Understandings with any remaining governmental agencies.”³⁰⁴ In addition, Region 33 considers 99.3 percent “unrealistic” and supports a reduction down to 90 percent, asserting this would be “more attainable and feasible.”³⁰⁵

143. Other national public safety commenters, however, have not advocated for a reduction in performance requirements, or for a more modest reduction. NATOA does not appear to support any reductions in performance requirements. APCO argues for an extension of the deadlines of five years, but does not discuss reductions in the final benchmark level. PSST and NPSTC argue for a reduction to 98 percent.³⁰⁶ NENA supports a “reasonable” reduction of the 99.3 percent requirement, but does not specify to what level.

144. In its en banc testimony, US Cellular states that the standards “for population coverage and reliability should be achieved over the license term, and the rules should allow reasonable differences in build-out and performance based on the population density of the license areas.”³⁰⁷ US Cellular proposes that the rules “specify a range for population coverage, permitting the PSST, in consultation with public safety entities and potential bidders, to specify the requirements for specific areas as part of the NSA put forward pre-auction.”³⁰⁸ US Cellular’s example of such a tiered structure reflects four tiers of coverage requirements of 86, 90, 94, and 98 percent, from lowest to highest population densities, for

³⁰⁰ Council Tree Reply Comments at 14.

³⁰¹ SouthernLINC Reply Comments at 7.

³⁰² NRPC Comments at 4; RPC 6 Comments at 2; RPC 33 Comments at 18.

³⁰³ NRPC Comments at 4.

³⁰⁴ RPC 6 Comments at 2.

³⁰⁵ RPC 33 Comments at 18.

³⁰⁶ PSST Comments at 5; NENA Comments at 2; NPSTC Comments at 12.

³⁰⁷ Testimony of LeRoy T. Carlson, Jr., Chairman, US Cellular, FCC En Banc Hearing, Brooklyn, New York, Federal Communications Commission, July 30, 2008, <http://www.fcc.gov/realaudio/presentations/2008/073008/carlson.pdf> (Carlson Testimony) at 3.

³⁰⁸ *Id.* at 3-4.

license areas based on NPSPAC regions.³⁰⁹

145. Some commenters argue that keeping the existing 99.3 percentage population benchmark is acceptable as long as the Commission extends the time period to meet this objective. Ericsson does not believe that the Commission needs to lower the end-of-license term coverage requirement to less than 99.3% of population, if the Commission lengthens the D Block license term. Ericsson states that extending the D Block license term from “10 years to 15, 20, or even 25 years would allow the schedule of build-out milestones to be spread across a longer time period.”³¹⁰ Likewise, Council Tree contends that, “[g]iven the uncertainties inherent in the 700 MHz Public/Private Partnership,” the D Block license term “should be extended from ten years to twenty years in duration regardless of the determinations the Commission makes with respect to its performance requirements.”³¹¹ Wirefree also “supports extending the license term from 10 to 15 years as a fair trade off for building a shared use network for public safety.”³¹²

146. Some public safety organizations also support extending the D Block license term. PSST suggests that if the Commission keeps the existing 99.3 percentage of population benchmark, then the Commission should “extend the D Block license term (and the PSBL license term) by five years with a corresponding extension of the current construction requirements.”³¹³ AASHTO believes that “reaching 99.3% of the population within ten years from the issuance of a license is admirable and perhaps can remain as an ultimate goal, but with an increased time span to achieve the goal.”³¹⁴ APCO contends that it is reasonable “to extend the timelines of some of these benchmarks by five years (with a corresponding extension of the license term).”³¹⁵ NENA supports a reasonable reduction in build-out requirements, “e.g., reducing the 99.3% geographic build-out requirement to a 15-year license term” rather than the current 10 year license term.³¹⁶

147. Comcentric, Leap, and Ericsson support the notion that the Commission should allow the D Block licensee to meet, at least in part, its build-out obligation through the use of Mobile Satellite Service. For areas without terrestrial network coverage, Leap indicates that the Commission could ensure that public safety officials have adequate service by permitting the carrier to use other alternatives for satisfying coverage requirements (e.g., satellite).³¹⁷ Ericsson states that the Commission should allow the D Block licensee to meet the interim benchmarks through satellite service, but that the licensee should be required to meet the final benchmark only through the use of terrestrial broadband facilities.³¹⁸

³⁰⁹ *Id.* at 8. In its comments and reply comments, US Cellular suggests that the Commission should 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.” US Cellular Comments at 21 & n.43, citing *Second Further Notice*, at ¶ 95; US Cellular Reply Comments at 12.

³¹⁰ Ericsson Comments at 26.

³¹¹ Council Tree Comments at 19.

³¹² Wirefree Comments at 15.

³¹³ PSST Comments at 34.

³¹⁴ AASHTO Comments at 11.

³¹⁵ APCO Comments at 30.

³¹⁶ NENA Comments at 2.

³¹⁷ Leap Comments at 13; Leap Reply Comments at 9.

³¹⁸ Ericsson Comments at 28.

Comcentric argues that the public broadband network should cover “a minimum of 98% of the population with terrestrial links and 100% of the geographic area with ‘in motion’ satellite connectivity for rural public safety officers.”³¹⁹

148. Discussion. We tentatively conclude that we should modify the population-based performance requirements and the length of the license term that we adopted in the *Second Report and Order* for the D Block spectrum in order to make this spectrum more commercially viable while at the same time ensuring that public safety needs are met. As discussed below, we propose to require the D Block licensee(s) to meet performance requirements based on PSRs, regardless of whether the D Block license is regional or nationwide. We propose that a D Block licensee must meet specified population coverage benchmarks at the end of the fourth, tenth, and fifteenth years of its license term, and that it must meet these benchmarks in each PSR over which it is licensed, regardless of whether the D Block spectrum is licensed on a regional or nationwide basis.

149. Specifically, we tentatively conclude that the licensee(s) of D Block spectrum be required to provide signal coverage and offer service to at least 40 percent of the population in each PSR by the end of the fourth year, and 75 percent by the end of the tenth year. We propose to adopt a “tiered” approach after 15 years for the final benchmark, applying one of three benchmarks depending on the population density of the PSR: (1) for PSRs with a population density less than 100 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 90 percent of the population by the end of the fifteenth year; (2) for PSRs with a population density equal to or greater than 100 people per square mile and less than 500 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 94 percent of the population by the end of the fifteenth year; and (3) for PSRs with a population density equal to or greater than 500 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 98 percent of the population by the end of the fifteenth year.³²⁰ These revised population coverage requirements will have to be met on a PSR basis, and the licensee(s) will have to use the most recently available decennial U.S. Census data at the time of measurement to meet the requirements. We also tentatively conclude to revise the length of the D Block license term from 10 to 15 years so that it coincides with our proposed end-of-term performance requirements. We also tentatively conclude that we will not impose a separate substantial service showing for license renewal apart from requiring that a D Block licensee meet the requirements set forth in the NSA and our proposed performance requirements, with the possible exception of the Gulf of Mexico PSR, as discussed below. We seek comment on these tentative conclusions.

150. Our proposal would thus modify both the final and interim D Block performance requirements under the existing rules. Most significantly, we propose to reduce the final performance benchmark from 99.3 percent to the three tiers discussed above and extend the period for achieving the appropriate benchmark from 10 to 15 years. We tentatively conclude that adoption of the interim and end-of-term performance requirements will increase opportunities for participation by a larger pool of bidders,³²¹ and local and regional build-out will ensure that deployment is responsive to the needs of local public safety groups.³²² We also tentatively conclude that a final benchmark of 99.3 percent of population would likely not be commercially feasible, but that the benchmarks under our tiered proposal are

³¹⁹ Comcentric Comments at 4.

³²⁰ See Appendix B (listing the minimum coverage requirements at the end of fifteen years for each of the regions).

³²¹ See Carlson Testimony at 2-3.

³²² See AT&T Comments at 25.

achievable. For example, the record indicates that 95 percent coverage is achievable,³²³ and that reducing the final benchmark from 99.3 percent for a nationwide license will result in significant savings in capital and operational expenses. Space Data estimates that reducing the 10 year coverage requirement from 99.3 percent to 95 percent population nationwide will result in a capital expense savings of \$1.0565 billion and an operating expense savings of \$2.280 billion.³²⁴ MSV estimates that reducing the 10-year coverage requirement from 99.3 percent to 95 percent population nationwide would result in a capital expense savings of \$4.44 billion and an operating expense savings of \$7.056 billion.³²⁵ Thus, based on the record, we tentatively conclude that our proposed new benchmarks along with extending the final benchmark to fifteen years, will make building out a network more viable economically than under the current benchmarks while also ensuring that public safety needs are met. We note that while most of the licensees will meet a population benchmark of either 90 or 94 percent in year fifteen, our proposal for the third tier will require at least 98 percent coverage with a population density equal to or greater than 500 people per square mile. However, according to US Cellular's proposal, this 98 percent requirement would apply to only six percent of the total number of NPSPAC regions, and licensees that would have to meet this requirement may be able to build on existing infrastructure thus making commercial opportunities more attractive.³²⁶ We seek comment on these conclusions.

151. We tentatively conclude that the three tiers of population benchmarks remain an aggressive requirement, given that existing commercial infrastructure currently covers only approximately 90 percent of the nation's population,³²⁷ and that the highest level of population coverage required of any other commercial 700 MHz licensee is 75 percent.³²⁸ Therefore, we also tentatively conclude that we should extend the time provided to the D Block licensee to meet its end-of-term build-out requirement from ten to fifteen years.³²⁹ Giving the D Block licensee five additional years to meet the final benchmark will provide the licensee with additional time to raise capital and construct its wireless network. It will also give the D Block licensee more flexibility and the ability to lower its construction costs.³³⁰ As a result, our proposal to give the D Block licensee five additional years to build out its network should help to stimulate commercial interest in the D Block spectrum. We also note that a fifteen year period to accomplish the final performance requirement also receives support from public

³²³ See, e.g., ACT Comments at 2; NNRPC Comments at 4; Northrop Grumman Comments at 5; Region 6 Comments at 2; Region 33 Comments at 18; Sprint Nextel Comments at 2; US Cellular Comments at 5.

³²⁴ See Space Data Comments at Exhibit A.

³²⁵ See MSV Comments at 44. See also Testimony of Lawrence R. Krevor, Sprint-Nextel Corp., Public Hearing on Public Safety Interoperable Communications – The 700 MHz Band Proceeding, Federal Communications Commission, July 30, 2008, <http://www.fcc.gov/realaudio/presentations/2008/073008/krevor.pdf>, at 2 (increasing coverage from 95 percent to 99.3 percent would increase costs by more than \$6 billion).

³²⁶ See Carlson Testimony at 2, 8 & n.5.

³²⁷ See NPRC Comments at 4; Sprint Nextel Comments at 2; see also *Second Further Notice*, 23 FCC Rcd at 8084 ¶ 91 (citing USB Warburg Investment Research, US Wireless 411, at 17 (Mar. 18, 2008); MSV Comments at 8 (noting that “[t]he top four national wireless carriers cover on average only 92.7% of the United States population”).

³²⁸ *Second Report and Order*, 22 FCC Rcd at 15351 ¶ 162 (discussing performance requirements for REAG licenses, i.e., C Block).

³²⁹ Both public safety and commercial entities support expanding the time period that the D Block licensee has to meet the final performance requirement. See, e.g., AASHTO Comments at 11; APCO Comments at 30; Council Tree Comments at 19; Ericsson Comments at 26; NENA Comments at 2; PSST Comments at 34; Wirefree Comments at 15.

³³⁰ Ericsson Comments at 26.

safety commenters.³³¹ For these reasons, we tentatively conclude that the proposed final benchmark which uses a three tiered requirement at 15 years, as discussed above, provides the most aggressive coverage requirement that will still provide an adequate level of commercial feasibility, and we seek comment on this tentative conclusion.

152. Our proposal also imposes new interim coverage requirements. Specifically, instead of the current interim requirements of 75 percent at four years and 95 percent at seven years, we propose to require 40 percent at four years and 75 percent at ten years. These interim requirements are identical to the population coverage levels required of 700 MHz C Block REAG licensees at the 4 year and 10 year periods. The fact that all of the C Block licenses were successfully auctioned supports the conclusion that these interim requirements are commercially viable.³³² Thus, we tentatively conclude that the interim coverage benchmarks for the D Block of 40 percent of the population in four years and 75 percent in ten years are commercially viable and will lead to a successful auction of the D Block spectrum. Setting the first benchmark at four years should also provide an adequate period for the development of new advanced technologies so that these technologies can be incorporated into the network implemented by the D Block licensee. At the same time, our proposed interim benchmarks will still help to ensure that the D Block licensee will begin providing service to a significant portion of the nation's public safety community well in advance of the end of its license term. Thus, these proposed benchmarks for the D Block licensee are designed to balance the need to expedite the deployment of an interoperable, broadband public safety network with an appropriate consideration of commercial viability and the need to allow sufficient time for new and innovative wireless broadband technologies to develop. By proposing our three tiered benchmark with coverage levels at 90 percent or higher, we address the special coverage needs of public safety yet ensure this is commercially achievable by affording the D Block Licensee an additional five years to achieve this requirement. Accordingly, we tentatively conclude that our proposed interim benchmarks are consistent with our goal of establishing a national interoperable public safety network that will provide state-of-the-art service to the Public Safety Broadband Licensee. We seek comment on our tentative conclusion to establish the interim coverage requirements for the D Block as 40 percent of the population in four years and 75 percent in ten years, for each of the 58 PSRs.

153. We tentatively conclude that the D Block licensee should not be permitted to satisfy its performance benchmarks through the provision of non-terrestrial services such as MSS. We find that MSS and other non-terrestrial technologies cannot currently provide broadband capabilities comparable to those of a broadband terrestrial network. Further, given the significant reduction in geographic area that will need to be covered under our proposed population based benchmarks and the additional time we are proposing to provide the D Block licensee to build out, we tentatively conclude that it is reasonable to expect the D Block licensee to meet our proposed benchmarks by building out a terrestrial wireless network. Under our proposal, the D Block licensee will have fifteen years to build out a terrestrial wireless network to meet the final performance benchmarks. Therefore, requiring the D Block licensee to build out a terrestrial wireless network rather than relying on Mobile Satellite Service or other such technologies should not undercut our goal of making this spectrum more attractive to commercial development and should help ensure the development of a robust public safety network. We seek comment of these tentative conclusions.

154. To meet our proposed performance requirements, we tentatively conclude that we will require the D Block licensee to use the most recently available U.S. Census Data and that the licensee

³³¹ See, e.g., PSST Comments at 34.

³³² See Leap Comments at 13; Council Tree Reply Comments at 14.

meet our performance requirements on a PSR basis.³³³ We recognize that commercial providers typically focus exclusively on building out high population areas and that first responders have needs in smaller towns and rural areas. However, by proposing to require that the performance benchmarks be calculated on a PSR basis even in case of a nationwide license, we will ensure that areas with smaller populations and rural areas receive coverage. Accordingly, to meet the benchmarks, we tentatively conclude that the D Block licensee will be required to provide signal coverage and offer service to at least 40 percent of the population in each PSR license area within four years, 75 percent of the population in each PSR license area within ten years, and an appropriate percent of the population in each PSR license area within 15 years.³³⁴ We also propose to clarify that, to count toward the satisfaction of our performance requirements, any build-out must provide service that meets the signal levels and other technical requirements that we propose in this Third Further Notice. Further, to the extent that the D Block licensee chooses to provide terrestrial commercial services to population levels in excess of the relevant benchmarks, we propose that the D Block licensee be required to make the same level of coverage and service available to public safety entities. We seek comment on these proposals.

155. In order to promote an additional degree of coverage in rural areas, we propose to continue, with some modifications, requiring that the D Block licensee extend coverage to major highways and interstates. We further propose to clarify, however, that any coverage necessary to provide complete service to major highways, interstates, and incorporated communities with populations greater than 3,000 beyond the network coverage required by our population benchmarks must be established no later than the end of the D Block license term. In addition, we propose that to the extent that coverage of major highways, interstates and incorporated communities with populations in excess of 3,000 requires the D Block licensee to extend coverage beyond what is required to meet its population benchmarks, we would permit that coverage to be met through non-terrestrial means, such as MSS or other such technologies. As discussed above, we tentatively conclude that the proposed population coverage benchmarks provide the best balance between maximizing coverage and ensuring commercial viability of the network and therefore, that reliance on non-terrestrial technologies is justified to the extent that the proposed requirements regarding major highways, interstates, and small communities would impose a more onerous build-out obligation. In order to provide the D Block licensee with the flexibility to use a myriad of innovative solutions, including non-terrestrial technologies, we seek comment on whether any of our existing rules for this band regarding terrestrial base stations or land stations may need to be clarified or modified to be applicable to non-terrestrial technologies that perform the same functions of terrestrial base stations and that comply with service rules applicable to the D Block and the Public Safety Broadband spectrum, including rules regarding interference protection and network specifications.³³⁵

156. To further facilitate public safety access to the network in low or zero-population areas where the network has not yet been constructed and to satellite services more broadly, we propose to maintain the current requirement that the D Block licensee make available to the Public Safety Broadband Licensee at least one handset suitable for public safety use that includes an integrated satellite solution under terms, conditions, and timeframes set forth in the NSA. We seek comment on these tentative

³³³ We note that, by the "most recently available U.S. Census data," we mean only the most recent decennial update to the U.S. Census, currently the 2000 U.S. Census Data, and not any estimates or revisions that have occurred between the official decennial updates.

³³⁴ See Appendix B.

³³⁵ See Space Data *Ex Parte* September 17, 2008 letter to Marlene H. Dortch at 4-5 (requesting, among other things, that the Commission: (1) amend the definition of "base station" in Section 27.4 of the rules to include "technologies that perform the same functions as land stations," and/or (2) provide that any technical requirements in Sections 27.50-27.70 that apply to base stations or fixed towers similarly apply to non-traditional technologies that perform the same functions as base stations or towers.).

conclusions.³³⁶

157. We tentatively conclude to revise the D Block license term and performance requirements start date from February 17, 2009, to the date that the D Block licensees receive their licenses. We previously anticipated that the D Block licensee would receive its license prior to February 17, 2009. Given that we no longer expect to license the D Block before February 17, 2009, we tentatively conclude that the D Block license term and performance requirements start date should be the license grant date as is consistent with other wireless services.³³⁷ We seek comment on our tentative conclusion that we should use the license grant date as the start date for the D Block license term and performance requirements.

158. We propose to continue to allow the D Block licensee to modify its population-based construction benchmarks where the D Block licensee and the Public Safety Broadband Licensee reach agreement and the Commission gives its prior approval for a modification. This approach would allow a certain limited degree of flexibility to meet commercial and public safety needs where those needs may deviate from our adopted construction benchmarks. As with other commercial 700 MHz Band licensees, the D Block licensee will be required under our proposal to demonstrate compliance with our adopted benchmarks by filing with the Commission within 15 days of passage of the relevant benchmarks a construction notification comprised of maps and other supporting documents certifying that it has met our performance requirements.³³⁸ The construction notification, including the coverage maps and supporting documents, must be truthful and accurate and not omit material information that is necessary for the Commission to make a determination of compliance with our performance requirements.³³⁹ However, unlike some other commercial licenses and because of the nature of the partnership established herein, the D Block licensee will not be subject to a "keep-what-you-use" rule. Rather, the Commission will strictly enforce these build-out requirements and, if the D Block licensee fails to meet a construction benchmark, the Commission may cancel its license, depending on the circumstances, or take any other appropriate measure within its authority. We seek comment on these proposals.

159. As stated above, we also tentatively conclude to revise the license term for the D Block license from 10 to 15 years. By making this change, we will provide for uniformity in the length of the performance requirement period and the length of the D Block license term. Further, allowing a significantly longer license term overall has the separate benefit of affording additional investment confidence and certainty. Public safety commenters and commercial entities support extending the D Block license term and the related period of time to meet our proposed performances requirements.³⁴⁰ By having the license term and performance requirement period end at the same time, it will be easier to assess whether the D Block license should be renewed. We seek comment on these tentative conclusions.

160. We also propose not to require the D Block licensee to make a separate substantial

³³⁶ As discussed elsewhere in this Third Further Notice, we also propose to continue requiring the NSA to include a detailed build-out schedule that is consistent with the performance benchmarks and requirements that we propose above.

³³⁷ See, e.g., 47 C.F.R. § 1.946.

³³⁸ See 47 C.F.R. § 1.946(d) ("The notification must be filed with Commission within 15 days of the expiration of the applicable construction or coverage period.").

³³⁹ See, e.g., 47 C.F.R. § 1.17 (Truthful and accurate statements to the Commission); 47 C.F.R. § 1.917 ("Willful false statements made therein, however, are punishable by fine and imprisonment, 18 U.S.C. 1001, and by appropriate administrative sanctions, including revocation of station license pursuant to 312(a)(1) of the Communications Act of 1934, as amended.").

³⁴⁰ See, e.g., AASHTO Comments at 11; APCO Comments at 30; Council Tree Comments at 19; Ericsson Comments at 26; NENA Comments at 2; PSST Comments at 34; Wirefree Comments at 15.

service showing for license renewal consistent with our findings in the *Second Report and Order*.³⁴¹ At the end of the 15 year license term, the D Block licensee will be permitted to apply for license renewal and that renewal will be subject to the licensee's success in meeting the material requirements set forth in the NSA as well as all other license conditions, including meeting our proposed performance requirements. Given these detailed license renewal requirements, we do not propose to impose a separate substantial service showing requirement, with the possible exception of the Gulf of Mexico, as discussed below. We seek comment on this tentative conclusion to not impose on the D Block licensee a separate substantial service showing apart from meeting the requirements set forth in the NSA and our proposed performance requirements.

161. With respect to the Gulf of Mexico PSR, we note that this PSR covers a body of water and, therefore, our proposed population-based benchmarks may not be appropriate for this PSR to meet public safety needs in that region. In addition, local and state public safety entities may have very limited operations in this region. Accordingly, we propose that we give the D Block licensee for the Gulf of Mexico PSR and the Public Safety Broadband Licensee flexibility to negotiate, as part of the NSA, a coverage and service plan for public safety use for that region as needed, subject to Commission resolution in the event of disputes. We also seek comment on whether it is sufficient to require the Gulf of Mexico D Block licensee to make a showing of substantial service as a condition of licensee renewal, as other 700 MHz licensees are currently required to do,³⁴² as well as a showing of the D Block licensee's success in meeting the material requirements set forth in the NSA and all other license conditions. We note that, as proposed above, any build-out would have to meet the signal levels and other technical requirements that we propose in this Third Further Notice.

162. As a result of our tentative conclusion to revise the license term for the D Block license from 10 to 15 years, we also tentatively conclude to extend the license term for the Public Safety Broadband Licensee. In adopting the ten-year licensee term for the Public Safety Broadband Licensee, we sought to harmonize the license terms to facilitate the contemplated leasing arrangement and build-out requirements.³⁴³ Extending the license term from 10 years to 15 years for the Public Safety Broadband Licensee will be consistent with this reasoning. Also, we tentatively conclude that the license term of the Public Safety Broadband Licensee should re-commence from the date that the D Block licensee receives its license, consistent with our determination to change the start date of the license term for the D Block licensee to that date. We seek comment on these tentative conclusions to extend the license term of the Public Safety Broadband Licensee.³⁴⁴ We propose that, if we extend these license terms to 15 years, we should also mandate a 15 year NSA term.

163. We propose to continue requiring the NSA to include a detailed build-out schedule that is consistent with the performance benchmarks that we have proposed in this section.³⁴⁵ Thus, we propose to continue to require the NSA to identify the specific areas of the country that will be built out and the extent to which major highways and interstates, as well as incorporated communities with a population in excess of 3,000, within the D Block licensee's service area will be covered by each of the performance deadlines.

164. Finally, we seek comment on an alternative approach to the one we have tentatively concluded to adopt for purposes of performance requirements, license term, and renewal in this Third

³⁴¹ See *Second Report and Order*, 22 FCC Rcd at 15450 ¶ 458.

³⁴² 47 C.F.R. § 27.14(e).

³⁴³ See *Second Further Notice*, 23 FCC Rcd at 8083 ¶ 98.

³⁴⁴ Elsewhere in this Third Further Notice, we similarly propose extending the initial term of the NSA to 15 years.

³⁴⁵ See *Second Report and Order*, 22 FCC Rcd at 15449 ¶ 453.

Further Notice. Specifically, under such an alternative approach, we could require the D Block licensee to provide signal coverage and offer service to at least 40 percent of the population of the license area by the end of the fourth year, 75 percent of the population by the end of the tenth year, and 95 percent of the population by the end of the fifteenth year. The requirements under this alternative approach will have to be met on a PSR basis, and licensees will have to use the most recently available decennial U.S. Census data at the time of measurement to meet the requirements. As a part of this alternative approach, we also propose to revise the length of the D Block license term from 10 to 15 years so that it coincides with our proposed end-of-term performance requirements. We seek comment on this alternative approach, and specifically on the adoption of a 95 percent coverage requirement by the end of the fifteenth year of the license term instead of the three tiered approach which we propose elsewhere in this Third Further Notice.

4. Role and Responsibilities of the D Block Licensee in the Management, Operations, and Use of the Network

165. Background. 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 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.³⁴⁶ Under this plan, the D Block licensee and its related entities would finance, construct, and operate the shared network,³⁴⁷ but the full extent of the D Block licensee's operational role was not specified. In particular, the Commission indicated that the Public Safety Broadband Licensee, which would be required to lease its spectrum on a secondary basis to the D Block licensee pursuant to a spectrum manager leasing arrangement,³⁴⁸ would also have operational control of the network "to the extent necessary to ensure public safety requirements are met."³⁴⁹ In the Second Further Notice, we sought 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.³⁵⁰ In particular, we indicated our expectation that the D Block licensee would establish a network operations system, including an operations/monitoring center, billing functions, and customer care services, among other elements, to support the network infrastructure that it deployed and the services that it provided over that infrastructure to public safety entities.³⁵¹ We sought comment on whether we should provide that all such traditional network service provider operations for the benefit of either commercial users or public safety users should be responsibilities exclusively assumed by the D Block licensee, and whether assigning such responsibilities exclusively to the D Block licensee would better enable the Public Safety Broadband Licensee to administer access to the national public safety broadband network by individual public safety entities and to perform its other related responsibilities.³⁵²

166. Comments. Several commenters—including both commercial and public safety entities—state that the D Block licensee should maintain control of the network, subject to some limited areas of operational authority by the Public Safety Broadband Licensee. For instance, AT&T argues that

³⁴⁶ See, e.g., 22 FCC Rcd at 15426 ¶ 383, 15431 ¶ 396.

³⁴⁷ See, e.g., *id.* at 15428 ¶ 386.

³⁴⁸ See *id.* at 15437-38 ¶¶ 414-17.

³⁴⁹ See *id.* at 15434 ¶ 405.

³⁵⁰ See *Second Further Notice*, 23 FCC Rcd at 8088 ¶ 113.

³⁵¹ See *Second Further Notice*, 23 FCC Rcd at 8088-89 ¶ 115.

³⁵² See *Second Further Notice*, 23 FCC Rcd at 8088-89 ¶ 115.

commercial partners should have “day-to-day” operational control over the entire network, “subject only to discrete PSBL operational authority defined by the Commission prior to the RFP process or a reauction.”³⁵³ Similarly, Ericsson contends that the D Block licensee should run a substantial part of the network on a “day-to-day” basis.³⁵⁴

167. The PSST argues against allowing the D Block licensee “sole control over all of the traditional network service provider operations, including those associated with the spectrum for which the PSST is the licensee.”³⁵⁵ It argues that providing the D Block licensee with “sole control” will impair the Public Safety Broadband Licensee’s abilities to administer access and carry out its other obligations, and that fulfilling its functions in the 700 MHz Public/Private Partnership, such as monitoring the D Block licensee’s compliance with the terms of the NSA, “requires that the PSST not be passive or entirely dependent on the activities and assurances of the D Block operator.”³⁵⁶ The PSST further asserts that the Public Safety Broadband Licensee must continue to have a “direct relationship” with public safety users.³⁵⁷

168. The PSST argues that allowing “the D Block licensee to assume sole control of all traditional network service provider operations on PSBL spectrum would be even more problematic should the FCC authorize a wholesale-only model for the D Block licensee.”³⁵⁸ Under a wholesale-only approach, it argues, “it is not at all clear who would deliver the necessary services to public safety agencies, including ensuring that the primary goal of interoperability is satisfied in an environment where different services might be made available by individual retail providers in different markets, or even in the same market.”³⁵⁹ Accordingly, it states, if the D Block winning bidder elects a wholesale model, “the PSST and FCC will need to be confident that the specific needs of public safety users nonetheless will be met. In addition, the PSST asserts that the D Block licensee’s responsibilities should include delivering “to the Public Safety Broadband Licensee capacity utilization reports that provide a comparative measure of public safety network services utilization against the documented, engineered, installed, and in-service Radio Access (RA) and terrestrial network capacity.”³⁶⁰

169. Discussion. We tentatively conclude, consistent with our tentative determinations elsewhere regarding the appropriate operational role and responsibilities of the Public Safety Broadband Licensee, that, the D Block licensee(s) should assume exclusive responsibility for all traditional network service provider operations, including network monitoring and management, operational support and billing systems, and customer care, in connection with services provided to public safety users.

170. As we noted in the Second Further Notice, “primary operational control of the network is inherently 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

³⁵³ AT&T Comments at 16.

³⁵⁴ Ericsson Comments at 30. *See also* APCO Comments at 35 (arguing that the D Block licensee should manage the network, and that the Public Safety Broadband Licensee needs to move towards a management structure that monitors D Block licensee contract performance and service relations, without duplicating the D Block licensee’s core function or neglecting the agencies and citizens the PSBL is charged to protect).

³⁵⁵ PSST Comments at 11-12.

³⁵⁶ PSST Comments at 13.

³⁵⁷ PSST Comments at 12.

³⁵⁸ PSST Comments at 12.

³⁵⁹ PSST Comments at 12.

³⁶⁰ PSST Reply Comments, Attach. A1 at 6.

public safety requirements are met.”³⁶¹ We agree with AT&T that the commercial partner will likely have the experience, resources, and personnel to best perform these functions, and that without assurance of day-to-day operational control, commercial partners might be deterred from seeking D Block licenses.³⁶² Providing that the D Block licensee(s) will assume exclusive responsibility for traditional operational should also avoid any duplication of efforts or responsibilities between the D Block licensee(s) and the Public Safety Broadband Licensee, improving the efficiency of network operation, and ensuring that the Public Safety Broadband Licensee will be focused on meeting its own exclusive functions and responsibilities.

171. In addition, while we provide that only the D Block licensee(s) may directly manage the network or provide network services, we observe that the Public Safety Broadband Licensee will nonetheless retain control over use of the Public Safety Broadband spectrum, pursuant to its license obligations and the spectrum manager leasing arrangement(s) for D Block secondary use lasting for the full term of the license(s),³⁶³ and will have significant input into the provision of such services through the establishment of priority access, service levels and related requirements within the NSA process, approving public safety applications and end user devices, and ongoing monitoring of system performance made possible through the monthly reporting requirement we propose to mandate on the D Block licensee(s) showing network usage. As a consequence, reserving all traditional network provider functions to the D Block licensee(s) should not prevent the Public Safety Broadband Licensee from maintaining a direct relationship with public safety users or from carrying out its specific assigned responsibilities.

172. As noted above, we tentatively decide to impose specific obligations on the D Block licensee(s) to provide regular monthly reports on network usage to the Public Safety Broadband Licensee as proposed by the PSST. This network reporting requirement will be in addition to the existing requirement that, following the execution of the NSA, the D Block licensee(s) and Public Safety Broadband Licensee must jointly provide quarterly reports including detailed information on the areas where broadband service is deployed, how the specific requirements of public safety are being met, audited financial statements, and other aspects of public safety use of the network.³⁶⁴ We anticipate that such reporting will enable the Public Safety Broadband Licensee to carry out its responsibility to monitor system performance and provide adequate oversight of the D Block licensee’s operations.

173. *National Committee of D Block Licensees.* We note US Cellular’s proposal that, if the D Block is licensed on a regional basis to multiple entities, there should be a National Committee of Licensees, which would: (1) “serve as a single point of contact for FCC, PSST and public safety agencies with licensees on national issues;” (2) “develop licensees’ recommendations for any FCC rule changes;” (3) “negotiate changes in national NSA with PSST;” (4) “arrange support services for operations requiring inter-carrier coordination;” and (5) “work in conjunction with existing standards bodies and clearing houses.”³⁶⁵ The PSST also has similarly proposed that if the Commission adopts regional licensing, it should, among other things, “adopt a legally binding governance structure to facilitate interactions among multiple D Block licensees and PSST, and to ensure interoperability and nationwide

³⁶¹ *Second Further Notice*, 23 FCC Rcd at 8091-92 ¶ 124.

³⁶² AT&T Comments at 17.

³⁶³ *See Second Report and Order*, 22 FCC Rcd at 15437-38 ¶¶ 414-17. *See also* 47 C.F.R. § 90.1407.

³⁶⁴ *See Second Report and Order*, 22 FCC Rcd at 15471 ¶ 530.

³⁶⁵ Letter from Warren G. Lavey, on behalf of United States Cellular Corp., to Marlene H. Dortsch, Secretary, FCC, WT Docket No. 06-150, filed Sept. 2, 2008 (US Cellular Sept. 2, 2008 *Ex Parte*), Attach., “Making the Partnership Work: Solutions for the 700 MHz D Block”, at 7.

roaming.”³⁶⁶ We seek comment on these proposals, and more generally on whether, in the event we license the D Block on a regional basis, we should require the regional licensees to form a formal national governance structure, and if so, what role and responsibilities this national entity should have in the establishment of the NSA(s), the construction and operation of the regional networks, or any other matter.

174. *Wholesale Service.* With regard to the provision of wholesale service, we have proposed elsewhere in this Third Further Notice to continue to permit the D Block licensee(s) the flexibility to provide either retail or wholesale service commercially. With regard to services to public safety entities, however, we tentatively conclude that such flexibility must be limited to some extent. As the PSST notes, “[u]nder a wholesale-only approach, it is not at all clear who would deliver the necessary services to public safety agencies”³⁶⁷ To address this concern, we tentatively conclude that if the D Block licensee chooses to adopt a wholesale-only model with respect to the D Block spectrum, it must still ensure, through arrangements such as the creation of a subsidiary or by contracting with a third party, that retail service will be provided to public safety entities that complies with our regulatory requirements.³⁶⁸ We propose to require this arrangement to be included in the NSA, and that, whatever the arrangement, the D Block licensee should be responsible for ensuring that service to public safety meets applicable requirements. We note that the current rules require the D Block licensee to create separate entities to hold the license and network assets, respectively, and a third entity to construct and operate the network, and further require that these separate entities must be special purpose, bankruptcy remote entities, as defined in the rules, to provide the network with a certain degree of protection from being drawn into a bankruptcy proceeding. We seek comment on whether certain arrangements might enable a D Block licensee to place important assets outside the protection from bankruptcy that we intended through this structure.

5. Role and Responsibilities of the Public Safety Broadband Licensee in the Use of the Network

175. *Background.* In the *Second Report and Order* we charged the Public Safety Broadband Licensee with representing the interests of the public safety community to ensure that the shared interoperable broadband network meets their needs. Specifically, 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.

³⁶⁶ Letter from Chief Harlin R. McEwen, Chairman, Public Safety Spectrum Trust Corporation, to Marlene H. Dortsch, Secretary, FCC, WT Docket No. 06-150, filed Aug. 29, 2008 (PSST Aug. 29, 2008 *Ex Parte*), at 1.

³⁶⁷ PSST Comments at 12.

³⁶⁸ The relationship between a D Block auction winner and the retail-level operating company will be subject to all of the Commission’s rules, including, but not limited to, provisions regarding leasing in Subparts Q and X of Part 1 of the Commission’s rules.

- 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.³⁶⁹

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

- 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.³⁷⁰

177. In developing these responsibilities, 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.³⁷¹ To that end, we indicated elsewhere that the interoperable shared broadband network must incorporate, among other requirements, "[o]perational control of the network by the Public Safety Broadband Licensee to the extent necessary to ensure public safety requirements are met."³⁷²

178. In the *Second Further Notice*, we sought 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.³⁷³ We asked generally whether we should clarify, revise, or eliminate any of the specific responsibilities listed above that the Public Safety Broadband Licensee must assume.³⁷⁴ We also sought 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.³⁷⁵

179. In addressing these questions, we asked 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.³⁷⁶ We observed that the Public Safety Broadband Licensee

³⁶⁹ *Second Report and Order* at 15427 ¶ 383.

³⁷⁰ *Id.*

³⁷¹ *Id.* at 15426 ¶ 383.

³⁷² *Id.* at 15434 ¶ 405.

³⁷³ *Second Further Notice*, 23 FCC Rcd at 8090 ¶ 121.

³⁷⁴ *Id.*

³⁷⁵ *Second Further Notice*, 23 FCC Rcd at 8091 ¶ 122.

³⁷⁶ *Id.*

would in many respects function much as regional planning committees presently do in the 700 MHz and 800 MHz bands, yet with a nationwide scope.³⁷⁷ We noted, for example, that 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.³⁷⁸ We further observed that 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.³⁷⁹

180. In light of these similarities and differences, we asked whether there are certain elements of the existing regional planning committee functions that we should adopt for the Public Safety Broadband Licensee, and whether for those functions distinct from regional planning committees, we should adopt specific rules governing how the Public Safety Broadband Licensee would carry those out.³⁸⁰ To the extent the Public Safety Broadband Licensee also serves a role as a partner with the D Block licensee (such as facilitating negotiations between the D Block licensee and state and local agencies for local build-outs), we asked how, if at all, 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 moving forward.³⁸¹

181. We also observed in the *Second Further Notice* that more specific limits may be required regarding the Public Safety Broadband Licensee's discretion to carry out its partner-related responsibilities.³⁸² We noted, for example, that the shared wireless broadband network elements adopted in the *Second Report and Order* required 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.³⁸³ We reiterated that the underlying premise of the 700 MHz Public/Private Partnership was that the D Block licensee would be responsible for construction and operation of the broadband network.³⁸⁴ We observed that allowing duplication of some or all of these operational functions by the Public Safety Broadband Licensee could render it a reseller of services, thus injecting an inappropriate "business" or "profit" motive into the Public Safety Broadband Licensee structure, and detracting it from the intended primary focus of the Public Safety Broadband Licensee.³⁸⁵ Accordingly, we sought 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, would permit the Public Safety Broadband Licensee to assume or duplicate any of the network monitoring, operations, customer

³⁷⁷ *Id.*

³⁷⁸ *Id.*

³⁷⁹ *Second Further Notice*, 23 FCC Rcd at 8091 ¶ 123.

³⁸⁰ *Id.*

³⁸¹ *Second Further Notice*, 23 FCC Rcd at 8091-92 ¶ 124.

³⁸² *Id.*

³⁸³ *Id.*

³⁸⁴ *Id.*

³⁸⁵ *Id.*

care, or related functions that are inherent in the D Block licensee's responsibilities to construct and operate the shared network infrastructure.³⁸⁶

182. We further sought 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 ("MVNO")³⁸⁷ 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, might unnecessarily add to the costs of the 700 MHz Public/Private Partnership, and might otherwise permit "for profit" incentives to influence the operations of the Public Safety Broadband Licensee.³⁸⁸

183. Comments. The PSST generally argued that it must be an "equal partner" in the 700 MHz Public/Private Partnership, and that "[b]ecause the FCC has made the PSST responsible for the public safety user experience on the SWBN [shared wireless broadband network], it also must provide the PSST with a mechanism that permits the PSST to fulfill that responsibility on an ongoing basis after negotiating the NSA."³⁸⁹ The PSST explained that while it "accepts the FCC's view that the PSST should not have [] an active role in the 'business' of managing the public safety user experience on the SWBN," it "does not agree that the D Block licensee should have sole control over all of the traditional network service provider operations, including those associated with the spectrum for which the PSST is the licensee."³⁹⁰ The PSST further argued that "[c]eding sole control over these important functions to the D Block licensee would seriously impair, not 'better enable,' the PSBL's ability 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."³⁹¹ The PSST asserted that "[i]t is clear to the PSST that for the PSST to 'administer' network access it will need some form of direct relationship with public safety users on the network."³⁹²

184. The PSST argued that "it can fulfill its responsibilities if it is considered to operate in a manner comparable to a 'cooperative' licensee."³⁹³ According to the PSST, under this model, the "cooperative status permits a single entity to hold the authorization for spectrum that will be utilized by multiple users on a non-profit, cost-shared basis when each user is independently eligible to operate on the spectrum."³⁹⁴ Additionally, according to the PSST, "[t]he cooperative approach should provide the PSST with a direct enforcement right to obtain redress on behalf of public safety users as well as a direct right to ensure that the highest levels of SWBN priority access are only used for public safety authorized purposes."³⁹⁵

³⁸⁶ *Id.*

³⁸⁷ 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).

³⁸⁸ *Second Further Notice*, 23 FCC Rcd at 8092 ¶ 125.

³⁸⁹ PSST Comments at 10.

³⁹⁰ PSST Comments at 11-12 (citing 47 C.F.R. §§ 1.9010, 1.9020 and 90.1440).

³⁹¹ PSST Comments at 12 (citing *Second Further Notice* at ¶ 115; Appendix, Section II).

³⁹² PSST Comments at 12.

³⁹³ PSST Comments at 14 (citing 47 C.F.R. § 90.179).

³⁹⁴ PSST Comments at 14.

³⁹⁵ PSST Comments at 14.

185. The PSST asserted that “the FCC already has determined that the PSST must have operational control of the SWBN to the extent required to ensure that public safety requirements are met, a responsibility that is critical during incident management.”³⁹⁶ The PSST acknowledged that “this can be accomplished without the PSST establishing Network Operating Centers (“NOCs”) or other network elements that could be considered parallel to or duplicative of those maintained by the D Block licensee,”³⁹⁷ but added that “the PSST’s right to an appropriate level of control dictates that it must have the exclusive right to manage the assignment of the highest priority levels on the SWBN.”³⁹⁸

186. The PSST also argued that it “must have an independent ability to monitor the D Block licensee’s compliance with the FCC rules and with the terms of the NSA as they relate to public safety operations on the SWBN,” which it further argued would involve monitoring “the D Block operator’s performance on a real-time basis so that problems are identified and corrected, preferably before they impact public safety communications rather than after the fact.”³⁹⁹ The PSST clarified that “[a]lthough the D Block licensee will always have operational control of the SWBN, the PSST should have sufficient access to and certain rights regarding the D Block licensee’s NOC and data centers to carry out the PSST’s obligations, including implementing priority access for public safety users, if the PSST is not to have its own facilities.”⁴⁰⁰ According to the PSST, “[n]either the PSST nor the emergency responders who elect to join the network should have to rely entirely on self-policing and self-reporting by the D Block licensee to confirm that public safety needs are being met.”⁴⁰¹ The PSST further asserted that “[i]t also is important that the PSST, as well as the D Block licensee, play a direct role in promoting widespread public safety usage of the SWBN.”⁴⁰²

187. The PSST included proposed regulations with its Reply Comments that would implement many of its positions described above.⁴⁰³ For example, under its proposed regulations defining the “Shared Wireless Broadband Network,” the network would “[p]rovide for operational control of the network by the Public Safety Broadband Licensee, on terms and conditions agreed to by the Public Safety Broadband Licensee and the Upper 700 MHz D Block licensee, to the extent necessary to ensure that Priority Public Safety Users’ expectations are met.”⁴⁰⁴ Under the proposed regulations, these terms and conditions would include the ability of the Public Safety Broadband Licensee and public safety users to

³⁹⁶ PSST Comments at 15.

³⁹⁷ PSST Comments at 15.

³⁹⁸ PSST Comments at 16. The PSST further explained that while “overall control of these priority levels must reside with the PSST, [] individual priority assignments may be carried out, as they are today, at more local levels.” *Id.* The PSST also asserted that it would need to play an “active role” in “[e]stablishing standards for the construction of a SWBN with specific features and services for the benefit of public safety,” and “[n]egotiating arrangements for the purchase of equipment from vendors (under master agreements for the benefit of public safety users), and renegotiating these agreements on an ongoing basis to reflect the latest market developments.” *Id.* at 9-10

³⁹⁹ PSST Comments at 16. The PSST also contended that it “will need to be involved in and able to enforce the contracts between public safety users and the D Block licensee in order to ensure contract compliance and obtain redress on behalf of public safety users, without being reduced to an ineffectual committee preparing reports on NSA compliance.” *Id.* at 10.

⁴⁰⁰ PSST Comments at 16 n.30.

⁴⁰¹ PSST Comments at 16.

⁴⁰² PSST Comments at 17.

⁴⁰³ See PSST Reply Comments, Attachment A.

⁴⁰⁴ See PSST Reply Comments, Attachment A, at 9.

“[h]ave real-time monitoring and visibility into the network that is integrated with performance, SLA, and KPI reports as defined and specified in the NSA” as well as “real-time visibility into Shared Wireless Broadband Network service quality and network status relevant to the local agency or jurisdiction, including the ability for local Priority Public Safety Users to have real-time network status, site status, and alarm visibility for their geographic area.”⁴⁰⁵

188. APCO argued that it would be inappropriate for the PSBL to act as a MVNO because such action “would add duplication and costs that could become a burden for both the PSBL and, more importantly, end users.”⁴⁰⁶ APCO observed that the MVNO model “also imposes responsibilities on the PSBL for which it is likely to be ill-equipped,” and that “[t]o accept such a responsibility, the PSBL would need to rely heavily upon commercial contractors, and somehow provide sufficient oversight to ensure that the contractors are serving public safety’s interests.”⁴⁰⁷ APCO further observed that “[b]uilding the required internal management and operational capability would also involve very substantial capital expenditures,” for which the PSBL “would need to rely upon either debt extended by its contractors [] or substantial payment from the D Block licensee pursuant to the NSA (which would likely discourage bidders once again).”⁴⁰⁸

189. APCO argued, however, that the “PSBL does need to have an active role in the operation of the broadband network to ensure that it meets public safety’s requirements.”⁴⁰⁹ APCO stated that “there needs to be a mechanism to oversee priority access and proper incident command and control for the capacity represented by the 10 MHz licensed to the PSBL.”⁴¹⁰ More specifically, APCO argued that “the PSBL needs to move towards a management structure that monitors D Block licensee contract performance and service relations, without duplicating the D Block licensee’s core function or neglecting the agencies and citizens the PSBL is charged to protect.”⁴¹¹ To achieve this objective, APCO proposed a specific list of tasks and services that it contended the PSBL needs the ability to perform.⁴¹²

190. AT&T urged the Commission to “definitively declare that commercial partners will have operational control over the entire joint network, subject only to specific PSBL operational authority that the Commission clearly defines prior to the RFP process or a reauction.”⁴¹³ AT&T contended that “[c]ommercial partners require day-to-day operational control over the entire network to ensure that commercial and public safety service offerings meet the high standards expected by commercial and public safety end users on a daily basis,” adding that “commercial partners are likely also in the best position to perform this function, given their experience, expertise, and personnel and financial resources.”⁴¹⁴ AT&T further contended that “[w]ithout assurance of commercial control over the

⁴⁰⁵ *Id.* The proposed regulations further indicate that “[o]perational control, as agreed to between the Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee in the NSA, shall include . . . [t]he authorities and permissions for Public Safety Broadband Licensee-trained incident management personnel to have real-time access to the Upper 700 MHz D Block licensee’s primary and secondary Network Operations Centers (NOCs).” *Id.* at 10.

⁴⁰⁶ APCO Comments at 34.

⁴⁰⁷ APCO Comments at 34.

⁴⁰⁸ APCO Comments at 34-35.

⁴⁰⁹ APCO Comments at 35.

⁴¹⁰ APCO Comments at 35.

⁴¹¹ APCO Comments at 35.

⁴¹² APCO Comments at 35-37.

⁴¹³ AT&T Comments at 16. *See also* Reply Comments of AT&T at 17-18.

⁴¹⁴ AT&T Comments at 16-17.

network's operations, AT&T questions whether any interested commercial parties will participate in a RFP process or reauction."⁴¹⁵ To that end, AT&T requested clarification regarding our statement in the *Second Report and Order* that the Public Safety Broadband Licensee would have "operational control of the network to the extent necessary to ensure public safety requirements are met."⁴¹⁶ More specifically, AT&T argued that "[i]n order to assess the commercial viability of the Public/Private Partnership, potential commercial participants need the Commission to eliminate [any] ambiguity [on this issue] and to provide a concise definition of "operational control."⁴¹⁷

191. AT&T further requested that the Commission clarify that "the PSBL has a responsibility to set priority levels and provision priority users on the public safety network," for which AT&T recommends following the model established by [the Department of Homeland Security's National Communications System] in the provisioning of [Wireless Priority Service]."⁴¹⁸ In addition, AT&T asserted that "decisions whether a certain public safety device or application should be permitted on the public/private network should rest primarily with the PSBL."⁴¹⁹ AT&T indicated that it "generally agrees" with the list of potential PSBL responsibilities proposed by APCO.⁴²⁰ AT&T opposed the notion of allowing the Public Safety Broadband Licensee to act as an MVNO, arguing that allowing "the PSBL or its advisors operate as an MVNO or otherwise profiteer from the Public/Private Partnership will likely raise the costs of services for public safety users as well as discourage commercial participation in the Public/Private Partnership."⁴²¹

192. Big Bend Telephone Company argued that the Commission "should not permit the Public Safety Broadband Licensee, or any of its advisors, agents, or service providers to provide commercial services as a 'mobile virtual network operator.'"⁴²² Big Bend further argued that permitting such action "would permit 'for profit' incentives to influence the operations of the Public Safety Broadband Licensee," which Big Bend argued would "prove detrimental to the viability of smaller and rural wireless carriers."⁴²³ Big Bend also contended that smaller and rural wireless carriers "should have a reasonable expectation that the FCC's rules will not permit a heavily subsidized competitor - one that did not have to pay for its spectrum or network construction, and that enjoys preferred regulatory status - to compete in the market for commercial wireless services."⁴²⁴ A number of other rural telecommunications carriers filed essentially identical comments.⁴²⁵

193. Ericsson asserted that "[a] substantial portion of that network (at a minimum, the radio access network, and in all likelihood, other network components as well) will be run, day-to-day, by the D Block licensee." Ericsson envisioned that the "PSBL will need to interact regularly with the D Block

⁴¹⁵ AT&T Comments at 17.

⁴¹⁶ AT&T Comments at 17 (citing *Second Report and Order*, 22 FCC Rcd at ¶ 405).

⁴¹⁷ AT&T Comments at 17.

⁴¹⁸ AT&T Comments at 17-18.

⁴¹⁹ AT&T Comments at 18.

⁴²⁰ AT&T Reply Comments at 18.

⁴²¹ AT&T Comments at 21-22. See also AT&T Reply Comments at 16.

⁴²² Big Bend Comments at 3.

⁴²³ Big Bend Comments at 3.

⁴²⁴ Big Bend Comments at 3.

⁴²⁵ See ACT Comments at 2-3; Smithville Comments at 2-3; PVTC Comments at 3; Van Buren Comments at 2-3; Wiggins Comments at 4; CTC Comments at 3; Ponderosa Comments at 2-3.

licensee to ensure that the needs of the public safety organizations using the national public safety broadband network are satisfied, within the technical and operational confines of the NSA and FCC rules.⁴²⁶ To that end, Ericsson argued that “the D Block licensee would need to provide the PSBL with any reports needed to evaluate the effectiveness and proper operation of the priority access and preemption mechanisms.”⁴²⁷ Additionally, Ericsson argued that “the PSBL should be responsible for taking a leadership role in negotiations concerning the siting of facilities on lands owned or controlled by state and local governments, and regarding siting of facilities in cases where state and local government oppose the site.”⁴²⁸

194. Nextwave asserted that “the PSST should be tasked with organizing, prioritizing, and addressing accordingly the varying broadband needs of the diverse public safety community it serves.”⁴²⁹ In particular, Nextwave recommended that “the FCC leave to the local and regional jurisdictions decisions with respect to standards-based technologies to suit their specific needs, but direct the PSST to provide guidance on coordination of spectrum usage, minimum network performance requirements, permissible standards-based technologies with which the networks must be built to comply, and end-to-end interoperability.”⁴³⁰ Furthermore, Nextwave suggested that “the FCC require the PSST, as licensee of the public safety broadband spectrum, to create and provide an Interoperability Plan to public safety entities for their reference in building regional networks.”⁴³¹

195. Council Tree contended that “the Public Safety Broadband Licensee should be required to operate as an accountable MVNO with respect to public safety users.”⁴³² Council Tree argued that such action is necessary because “the MVNO will serve as the appropriate vehicle through which public safety users may commit to certain minimum volume purchase requirements,”⁴³³ and “the MVNO structure provides a substantial service to the D Block licensee by taking on the administrative responsibility associated with meeting the unique service needs of public safety users.”⁴³⁴ Additionally, Council Tree argued that “[s]hifting responsibilities to an MVNO directed by the Public Safety Broadband Licensee also simplifies key elements in the NSA and should facilitate negotiation of the agreement.”⁴³⁵

196. Discussion. As an initial matter, we do not propose any changes to the responsibilities of the Public Safety Broadband Licensee summarized above that were established by the *Second Report and Order*. Thus, the Public Safety Broadband Licensee will continue to be responsible for such activities as administration of access to the nationwide public safety broadband network by public safety entities, representation of the public safety community in negotiating the NSA with the D Block licensee(s), interaction with equipment vendors and approval of equipment and applications, and administration of the narrowband relocation process.

⁴²⁶ Ericsson Comments at 30.

⁴²⁷ Ericsson Comments at 30.

⁴²⁸ Ericsson Comments at 30.

⁴²⁹ Nextwave Reply Comments at 8.

⁴³⁰ Nextwave Reply Comments at 8-9.

⁴³¹ Nextwave Reply Comments at 9.

⁴³² Council Tree Comments at 21.

⁴³³ Council Tree Comments at 21.

⁴³⁴ Council Tree Comments at 22.

⁴³⁵ Council Tree Comments at 22.

197. However, we tentatively conclude that further clarification as to the responsibilities and obligations of the Public Safety Broadband Licensee would help define the overall 700 MHz Public/Private Partnership model and provide greater certainty to both the Public Safety Broadband Licensee and potential bidders for the D Block license(s) regarding their respective roles. We begin with the premise that the responsibilities and obligations of the Public Safety Broadband Licensee do not include the Public Safety Broadband Licensee assuming or duplicating any of the day-to-day 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.

198. In the context of the 700 MHz Public/Private Partnership model, we do not envision that the Public Safety Broadband Licensee would operate as an MVNO or that it would exercise actual day-to-day operational control over the shared broadband network. While the Public Safety Broadband Licensee is charged with administering access to the shared broadband network by public safety users, we view it as carrying out these functions through the establishment of priority access, service levels, and related requirements within the NSA process, as opposed to providing any form of ongoing day-to-day billing or customer care functions to public safety entities desiring to access the shared broadband network.

199. We agree with commenters who observed that allowing the Public Safety Broadband Licensee to duplicate some or all of the operational functions for which the D Block licensee, as the service provider, inherently is responsible, would effectively render the Public Safety Broadband Licensee a reseller of services, which could inject an inappropriate and impermissible "business" or "profit" motive into the Public Safety Broadband Licensee's structure.⁴³⁶ Such duplication of functions also would unnecessarily increase the Public Safety Broadband Licensee's costs.

200. At the same time, we agree with commenters who observed that the Public Safety Broadband Licensee should have the ability to monitor the services provided by the D Block licensee(s) to ensure that priority access and other operational requirements (including the establishment of service levels and the authentication and authorization of public safety users) are being provided in accordance with the NSA's terms, and should be empowered to work with the D Block licensee to promptly correct any deficiencies. We expect that the Public Safety Broadband Licensee will be able to perform this function through review of monthly usage reports supplied by the D Block licensee(s), and that such monitoring will enable the Public Safety Broadband Licensee to work with the D Block licensee(s) to develop improved ways to meet the evolving usage needs of the public safety community. We also believe that the Public Safety Broadband Licensee can effectively carry out its monitoring role without requiring the D Block licensee to support real-time monitoring by the PSBL or to provide the PSBL with access rights to the D Block licensee's NOC and/or data centers.

201. We believe that the role of the Public Safety Broadband Licensee, as discussed in the *Second Report and Order* and as further clarified above, is fully consistent with the requirement under Section 310(d) of the Communications Act that it exercise *de facto* control over use of the public safety broadband spectrum. Although the Public Safety Broadband Licensee will not exercise day-to-day operational control of the shared broadband network, the Commission has previously stated that operational control of facilities is not a statutory requirement to establish control, so long as the licensee retains ultimate control over use of the licensed spectrum.⁴³⁷ In this case, the Public Safety Broadband Licensee will exercise control over use of the public spectrum by defining and administering the terms of access and use of the spectrum, maintaining an active monitoring and oversight role based on the monthly

⁴³⁶ See, e.g., Big Bend Comments at 3.

⁴³⁷ See generally Promoting Efficient Use of Spectrum Through the Elimination of Barriers to the Development of Secondary Markets, WT Docket 00-230, *Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd 20604 (2003) (concluding that operational control of facilities was not a prerequisite for establishing that a licensee retained *de facto* control under Section 310(d) in the spectrum leasing context).