

700 MHz Narrowband Channel Relocation/Consolidation Notes from the National Public Safety Telecommunications Council (NPSTC)

1. D Block licensee to pay the costs associated with relocating public safety narrowband operations to the consolidated channels (Para 33, Pg 158)
2. PSBL responsible to administer the relocation process (Para 336, Pg 158 and Para 343, Pg 161))
3. Public Safety licensee must provide inventory to Commission. (Para 336, Pg 158)
Following information required (all as of 30 days after the adoption date of the R&O [\(August 30, 2007\)](#))
 - (1) total number of narrowband mobile and portable handsets in operation in channels 63 and 68, and the upper 1 megahertz of channels 64 and 69 [764-767, 794-797, 775-776, 775-776, 805-806] .
 - (2) total number of narrowband base stations serving these handsets in operation
 - (3) contact information for each identified set of handsets and base stations, as appropriate
 - (4) the areas of operation of the mobile and portable units (such as defined by the jurisdictional boundaries of the relevant public safety departments)
 - (5) the location, in latitude and longitude, of the base stations
4. Public Safety entities failing to timely and properly file inventory and certifications will forfeit all rights to be reimbursed. [Must be filed](#) on the effective date of the R&O - [60 days after publication in Federal Register](#) (Para 337, Pg 158-159)
5. Require funding of the costs of relocation of narrowband operation [only for equipment actually in operation as part of licensed narrowband operations](#) (in the shifted channels) as of 30 days following the adoption date of this R&O [\[August 30, 2007\]](#) (Para 337, Pg 158-159) *NOTE: Any public safety agency that has purchased equipment that is capable of 700 MHz and is not in operation on 700 MHz on August 30th will be ineligible for reimbursement for any costs associated with changes required in the radio to be capable of operating in the new consolidated channels.*
6. **We prohibit authorization**, whether pursuant to individual license or State License, of any new narrowband operations in channels 63 and 68, or in the upper 1 megahertz of channels 64 and 69 **as of 30 days following the date of adoption of this second R&O** [\[August 30, 2007\]](#). We caution that any equipment deployed in these frequencies subsequent to 30 days following the date of adoption of the R&O [\[August 30, 2007\]](#) will be ineligible for relocation funding (Para 339, Pg 159) *NOTE: New systems in the middle of deployment will have to stop deployment of new equipment on the old channels on August 30th. As a practical matter they will not be able to deploy equipment on the new consolidated channels until the CAPRAD database is completed and new channels are assigned.*
7. PS entities may continue to place into operation narrowband equipment in the consolidated narrowband blocks 769-775 and 799-805 MHz. (Para 339, Pg 159) *NOTE: CAPRAD database will need to be reprogrammed for entities to be able to be assigned and use the relocated narrowband channels at 769-772 and 799-802 MHz.*
8. Network Sharing Agreement: Winning bidder of D Block license required to commence negotiation of a Network Sharing Agreement (NSA) on the date it files its long form application or the date on which the Commission grants the public safety broadband license to the PSBL, whichever is later (the "NSA Negotiation Commencement Date"). Must complete negotiations within six months. (Para 340, Pg 159)
9. Relocation Plan: Winning bidder for D Block license and the PSBL [jointly to submit for Commission approval a relocation plan within 30 days following the NSA Negotiation Commencement Date](#). This plan must address the process and schedule for accomplishing the narrowband relocation, including identification of equipment vendors or other consultants that would perform the necessary technical changes to handsets and base stations, and a detailed schedule for completion of the relocation process for every radio and base station identified in the certifications we require above. Furthermore, this plan must specify the total costs to be incurred for the complete relocation process (Para 340, Pg 159)
10. Relocation process funding cap: As an additional means to ensure the integrity of the relocation process, [we also cap the total amount that the D Block licensee must pay](#) to cover relocation costs. Motorola's estimate is the only one in the record, and is not disputed. [Motorola's \\$10 million estimate is based upon the anticipated numbers of portables, mobiles, and transmit sites in operation by July 2008.](#) (Para 341, Pg 160)
11. PSBL expenses to administer the relocation process: We recognize that the Public Safety Broadband Licensee may incur administrative costs in carrying out its responsibilities to administer the relocation process. We find it

would be premature, however, in advance of having appointed a Public Safety Broadband Licensee, to consider requiring the D Block licensee to fund such administrative costs. Further, we have no basis in the record to consider including administrative costs in the funding obligation of the D Block licensee. While we do not foreclose the possibility that the Public Safety Broadband Licensee, once appointed, may be in a position to justify a specific funding request, we emphasize that the \$10 million cap we establish will remain in place and is not subject to upward adjustment for any purpose. (Para 342, Pg 160-161)

12. Funding total will be based upon amount set forth in the relocation plan, submitted jointly by the D Block licensee and the PSBL, and approved by the Chief of PSHSB and the Commission will not entertain any requests to exceed the approved total. Furthermore, as an additional precondition to grant of the D Block license, we will require, no later than the date on which the executed NSA is submitted to the Commission, that the D Block auction winner deposit the capped amount as approved by the Chief of the Public Safety and Homeland Security Bureau into a trust account established by the Public Safety Broadband Licensee, to finance the narrowband relocation costs. Thus, the winning bidder of the D Block license and the Public Safety Broadband Licensee must take great care in deciding upon the costs necessary for accomplishing the narrowband relocation. The trust account established by the Public Safety Broadband Licensee must be for the benefit of public safety licensees being relocated, and have the Public Safety Broadband Licensee acting as trustee of such account. The Public Safety Broadband Licensee may not draw on this account until the D Block license is granted to the D Block auction winner, and then may use the funds solely for relocating eligible narrowband operations consistent with the requirements and limitations set forth herein. The Public Safety Broadband Licensee will then be responsible for implementing the relocation plan, including administering payment of relocation funds to equipment vendors, and ensuring that all affected licensees are relocated in accordance with the relocation schedule contained in the relocation plan as approved by the Chief of the Public Safety and Homeland Security Bureau. (Para 343, Page 161)
13. We recognize that our decisions to prohibit wideband operations (outside of the waiver process described elsewhere in this Second Report and Order) and to consolidate the narrowband channels will impact existing and pending RPC plans. Nevertheless, as a result, RPC plans already approved or on file with the Commission will require amendment. We find that the substantial benefits resulting from accommodating broadband communications and consolidating the narrowband channels outweigh the near-term concerns of RPCs. Indeed, the fact that the narrowband consolidation will optimize the 700 MHz public safety band plan as a whole, and promote the deployment of new technologies and broadband services, will be to the advantage of the very RPCs whose current plans will be impacted. Accordingly, we require all RPCs with approved plans or plans on file to submit amended plans consistent with the decisions herein within 30 days of the effective date of this Second Report and Order. (Para 346, Pg 162)

700 MHz Narrowband Voice Channel Relocation/Consolidation Excerpts from FCC Report and Order

Paragraph 12, Page 8

We also revise the licensing scheme for public safety users within the band. To effectuate the consolidation of the narrowband channels to the top of the public safety band, we establish a timeframe for transitioning existing narrowband operations. **Transition of these operations must be completed no later than the DTV transition date.** We also require the Upper 700 MHz Band D Block licensee to pay the costs of reconfiguring the public safety spectrum. Concerning the broadband segment, we address certain technical criteria related to power levels and the establishment of a broadband standard with a nationwide level of interoperability. As noted above, we also create a single nationwide license for the public safety broadband spectrum and specify the criteria, selection process, and responsibilities of the Public Safety Broadband Licensee.

Paragraph 322, Page 152

In this section, we adopt a regulatory framework for the 700 MHz Public Safety Band to facilitate the establishment of a nationwide, interoperable broadband communications network for the benefit of state and local public safety users. In accordance with our decision relating to the Guard Band spectrum, and the corresponding shift by 1 megahertz downward of the 700 MHz Public Safety Band, we designate the lower half of the 700 MHz Public Safety Band (763-768/793-798 MHz) for broadband communications. We also consolidate existing narrowband allocations to the upper half of the 700 MHz Public Safety block (769-775/799-805 MHz). **To effectuate the consolidation of the narrowband channels, we require the Upper 700 MHz D Block licensee to pay the costs of relocating narrowband radios, require every 700 MHz public safety licensee to certify to the Commission specific information regarding their operating narrowband handsets and base stations or forfeit reimbursement for associated relocation costs, and establish a deadline for completion of the narrowband transition of no later than the DTV transition date.** In order to minimize interference between broadband and narrowband operations, we adopt a 1-megahertz guard band (768-769/798-799 MHz) between the public safety broadband and narrowband segments. Concerning the broadband segment, we address certain technical criteria related to power levels and the establishment of a broadband standard with a nationwide level of interoperability. Finally, we establish a single nationwide license (hereafter, the “Public Safety Broadband License”) for the 700 MHz public safety broadband spectrum. We will assign this to a single licensee, the Public Safety Broadband Licensee, and we specify the criteria, selection process, and responsibilities for this licensee. In establishing this broadband license, and in assigning the license to the Public Safety Broadband Licensee, we also are providing the necessary ingredients for enabling the 700 MHz Public/Private Partnership with the commercial Upper 700 MHz Band D Block licensee, as discussed in more detail elsewhere in this Second Report and Order.

Paragraph 332, Page 156-157

Discussion. We conclude that in order to maximize the benefits of the 700 MHz Public/Private Partnership to deploy a nationwide, interoperable broadband communications network, **narrowband operations presently in channels 63 and 68 (and the upper 1 megahertz of channels 64 and 69) must be cleared no later than the DTV transition date.** It is important that the commercial Upper 700 MHz Band D Block licensee and the Public Safety Broadband Licensee not be constrained by the presence of narrowband operations in the public safety broadband allocation with regard to implementing a build-out plan for the nationwide broadband network. Furthermore, we find that focusing the resources necessary to implement the relocation of narrowband operations during the time leading up to when the TV channels are fully cleared will enable the public safety community, as of the February 17, 2009 deadline, to devote its full attention to the important matter of deploying broadband communications capabilities with a nationwide level of interoperability.

Paragraph 336, Page 158

Discussion. As we state elsewhere, we require the Upper 700 MHz Band D Block licensee to pay the costs associated with relocating public safety narrowband operations to the consolidated channels, in recognition of the significant benefits that will accrue to the D Block licensee. **We also assign responsibility to the Public Safety Broadband Licensee to administer the relocation process consistent with the requirements and deadlines set forth herein.** To facilitate such relocation, we seek to identify the actual numbers of radios and base stations that the D Block licensee would be responsible for paying the costs of relocating. To that end, **we require every 700 MHz Band public safety licensee,** whether holding individual narrowband authorizations or operating pursuant to a State License, **to provide the following information:** (1) the total number of narrowband mobile and portable handsets in operation in channels 63 and 68, and the upper 1 megahertz of channels 64 and 69, (2) the total number of narrowband base stations serving these handsets in operation, (3) contact information for each identified set of handsets and base stations, as appropriate, (4) the areas of operation of the mobile and portable units (such as defined by the jurisdictional boundaries of the relevant public safety departments), and (5) the location, in latitude and longitude, of the base stations, **all as of 30 days after the adoption date of this Second Report and Order.** We require that all of this information be accurate as of 30 days after the adoption date to account for pre-programmed narrowband radios that public safety agencies may have already taken delivery as of the adoption date of this order and intend to immediately place into operation.

Paragraph 337, Page 158-159

This information must be filed with the Commission **on the effective date of this Second Report and Order** and must include a certification, signed by an authorized party, stating that the information provided therein is true, complete, correct, and made in good faith. The Public Safety and Homeland Security Bureau will issue a public notice in advance of the effective date announcing the deadline for this certification requirement. Because obtaining this data is so integral to the success of the relocation process, we strongly caution that public safety entities failing to timely and properly file these certifications will forfeit all rights to be reimbursed for associated relocation costs. We will require the funding of the costs of relocation of narrowband operation only for handsets and base stations that are actually in operation as part of licensed narrowband operations in channels 63 and 68, and the upper 1 megahertz of channels 64 and 69, as of 30 days following the adoption date of this Second Report and Order.

60 days
after
publication
in Federal
Register

Paragraph 338, Page 159 *(Note: CAPRAD funding must come from NIJ)*

In order to be clear regarding the costs that would be entitled to reimbursement, the obligation of the D Block licensee to fund the costs of relocation will be limited to the minimum costs directly associated with modifications necessary to implement the relocation of base stations, mobiles and portables, and not for any unrelated improvements. **We do not impose a funding obligation to cover costs associated with any modifications that may be necessary to the CAPRAD system and other programs used by Regional Planning Committees (RPCs) to assign channels, or to any costs associated with amendments to regional plans or narrowband licenses.**

Paragraph 339, Page 159

As an additional measure to clearly define and contain the costs that would be entitled to reimbursement, **we prohibit authorization, whether pursuant to individual license or State License, of any new narrowband operations in channels 63 and 68, or in the upper 1 megahertz of channels 64 and 69, as of 30 days following the adoption date of this Second Report and Order. We caution that any equipment deployed in these frequencies subsequent to 30 days following the date of adoption of this Second Report and Order will be ineligible for relocation funding.** We take these steps in prohibiting new narrowband operations outside of the consolidated narrowband blocks to ensure that the relocation proceeds in an orderly manner and without complications stemming from additional operations being deployed in spectrum being reallocated. **To be clear, however, public safety entities may continue to place into operation narrowband equipment in the consolidated narrowband blocks 769-775 and 799-805 MHz.**

August 30

Note: Will need new channel assignments. Impossible without new CAPRAD database

Paragraph 340, Page, 159

As stated herein, the winning bidder of the D Block license is required to commence negotiation of the NSA on the date it files its long form application or the date on which the Commission grants the public safety broadband license to the Public Safety Broadband Licensee, whichever is later (the “NSA Negotiation Commencement Date”). Further, elsewhere we require, as a pre-condition of grant of the D Block license, that the winning bidder for this license and the Public Safety Broadband Licensee complete negotiations within six months, and file a copy of the NSA that has been approved by the Commission and executed by the parties. **To implement the narrowband relocation process, we require the winning bidder for the D Block license and the Public Safety Broadband Licensee jointly to submit for Commission approval a relocation plan within 30 days following the NSA Negotiation Commencement Date.** We delegate authority to the Chief, Public Safety and Homeland Security Bureau, to review and approve this plan. This plan must address the process and schedule for accomplishing the narrowband relocation, including identification of equipment vendors or other consultants that would perform the necessary technical changes to handsets and base stations, and a detailed schedule for completion of the relocation process for every radio and base station identified in the certifications we require above. Furthermore, this plan must specify the total costs to be incurred for the complete relocation process

Will delay funding availability

Paragraph 341, Page 160

As an additional means to ensure the integrity of the relocation process, **we also cap the total amount that the D Block licensee must pay** to cover relocation costs. Motorola’s estimate is the only one in the record, and is not disputed. **Motorola’s \$10 million estimate is based upon the anticipated numbers of portables, mobiles, and transmit sites in operation by July 2008.** As we state above, however, we will limit the total relocation amount to those radios in operation as of 30 days after the adoption date of this Second Report and Order. Using the numbers of portables, mobiles, and transmit sites reported by Motorola as in operation as of the date of its June 2007 *ex parte* filing, the total cost would equal \$5.77 million. While the relocation costs when limited to radios in operation as of 30 days after the adoption date of this order could be closer to \$6 million, we conclude it is reasonable to set a cap of \$10 million. We reach this conclusion because even though Motorola’s estimate is the only one before us, it is a generous estimate in that, as the major provider of public safety 700 MHz equipment, Motorola asserts that this amount would be sufficient to cover the relocation cost of all narrowband operations through July 2008. Since we only authorize relocation reimbursement for operations as of 30 days after the adoption date of this Second Report and Order, we find that it is reasonable to expect Motorola’s estimate to be more than sufficient to cover these costs. Further, to the extent that a \$10 million cap exceeds the estimate of \$6 million, we find that the additional amount is not unreasonable in light of the uncertainty reflected by Motorola’s admission that its estimate is “necessarily an estimate based on the best information available” and that “information available about the extent of deployed equipment and the costs of

retuning is imperfect and subject to change.” Moreover, we find that in determining a cap, we must consider the costs associated with retuning radios manufactured by other vendors, and provide a layer of protection to the public safety community to ensure that eligible relocation costs are fully funded.

Paragraph 342, Page 160-161

We emphasize that by establishing this \$10 million cap, we do not expect the actual costs to reach this amount, especially because we limit reimbursement to equipment operating as of 30 days after the adoption date of this Second Report and Order. Further, we do not preclude the strong possibility that the actual costs will be lower, perhaps substantially, when based on the specific amounts for identified costs, on a per handset and per base station basis, as may be identified by the winning bidder of the D Block license in consultation with the Public Safety Broadband Licensee and equipment vendors. If the winning bidder of the D Block license and the Public Safety Broadband Licensee reach agreement on an amount less than \$10 million, they shall report this amount in the relocation plan they submit, with a certification attested to by the winning bidder of the D Block license, the Public Safety Broadband Licensee, and the relevant equipment vendors, verifying that all parties will be bound by the costs so identified. **We recognize that the Public Safety Broadband Licensee may incur administrative costs in carrying out its responsibilities to administer the relocation process. We find it would be premature, however, in advance of having appointed a Public Safety Broadband Licensee, to consider requiring the D Block licensee to fund such administrative costs.** Further, we have no basis in the record to consider including administrative costs in the funding obligation of the D Block license. **While we do not foreclose the possibility that the Public Safety Broadband Licensee, once appointed, may be in a position to justify a specific funding request, we emphasize that the \$10 million cap we establish will remain in place and is not subject to upward adjustment for any purpose.**

Paragraph 343, Page 161

Once the total costs are identified, whether at \$10 million or some lesser amount, such amount will be capped upon approval of the relocation plan by the Chief of the Public Safety and Homeland Security Bureau. By “capped” we mean that all affected parties will be bound by that amount to accomplish the complete relocation of all narrowband operations. To be clear, we will not entertain any requests to exceed the capped costs. Furthermore, as an additional precondition to grant of the D Block license, we will require, no later than the date on which the executed NSA is submitted to the Commission, that the D Block auction winner deposit the capped amount as approved by the Chief of the Public Safety and Homeland Security Bureau into a trust account established by the Public Safety Broadband Licensee, to finance the narrowband relocation costs. Thus, the winning bidder of the D Block license and the Public Safety Broadband Licensee must take great care in deciding upon the costs necessary for accomplishing the narrowband relocation. The trust account established by the Public Safety Broadband Licensee must be for the benefit of public safety licensees being relocated, and have the Public Safety Broadband Licensee acting as trustee of such account. **The Public Safety Broadband Licensee may not draw on this account until the D Block license is granted to the D Block auction winner, and then may use the funds solely for relocating eligible narrowband operations consistent with the requirements and limitations set forth herein.** The Public Safety Broadband Licensee will then be responsible for implementing the relocation plan, including administering payment of relocation funds to equipment vendors, and ensuring that all affected licensees are relocated in accordance with the relocation schedule contained in the relocation plan as approved by the Chief of the Public Safety and Homeland Security Bureau.

Paragraph 346, Page 162

Discussion. We recognize that our decisions to prohibit wideband operations (outside of the waiver process described elsewhere in this Second Report and Order) and to consolidate the narrowband channels will impact existing and pending RPC plans. Nevertheless, as a result, RPC plans already approved or on file with the Commission will require amendment. We find that the substantial benefits resulting from accommodating broadband communications and consolidating the narrowband channels outweigh the near-term concerns of RPCs. Indeed, the fact that the narrowband consolidation will optimize the 700 MHz public safety band plan as a whole, and promote the deployment of new technologies and broadband services, will be to the advantage of the very RPCs whose current plans will be impacted. Accordingly, we require all RPCs with approved plans or plans on file to submit amended plans consistent with the decisions herein within 30 days of the effective date of this Second Report and Order.