

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

In the Matter of:)	
)	
Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended)	
)	
Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies)	WT Docket No. 99-87
)	
Narrowbanding Memorandum Opinion and Order)	
)	
47 C.F.R. § 90.209(b))	

**REQUEST FOR WAIVER OF COMMISSION RULES
EXPEDITED ACTION REQUESTED**

Nelson County, Virginia (“the County”), pursuant to Section 1.925 of the Commission’s rules and the guidelines issued in the Public Notice, DA 11-1189, hereby submits this Request for Waiver of the January 1, 2013 deadline for transitioning to narrowband operations in the 150-174 MHz VHF Band.¹ The County respectfully requests that the Commission expeditiously grant this waiver request to continue operating on existing 25 kHz channels through November 30, 2013, in order to allow the County to complete the implementation of a new countywide 12.5 kHz VHF public safety communications network. As required by Section 1.925, the County believes and will demonstrate in this petition that “(i) [t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the waiver would be in the public interest; or (ii) [i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.” The County further believes that this petition follows the recommended content guidelines defined in the Public Notice, DA-11-1189, and addresses the facts applicable to the specific narrowbanding migration path defined by the County.

¹ Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and Office of Engineering and Technology Provide Reminder of January 1, 2013 Deadline for Transition to Narrowbanding Operations in the 150-174 MHz and 421-512 MHz Bands and Guidance for Submission of Requests for Waiver and Other Matters, DA 11-189, released July 13, 2011.

I. BACKGROUND

Nelson County is located in the Piedmont region of the Commonwealth of Virginia, covering 475 square miles and bordering six of the Commonwealth's 95 counties. In addition, the County supports the ski resort community of Wintergreen. Approximately 25 Sheriff's Deputies, 150 fire fighters, 70 emergency medical services personnel and 10 emergency services associates protect the lives and property of the 20,000 residents and visitors of the County. These County first responders are supported in mutual aid incidents by first responders in neighboring Counties and the Virginia State Police (VSP).

Currently, the County Sheriff's Office, fire and rescue organizations and public safety personnel operate on an analog conventional 25 kHz LMR communications system, using three Part 90 VHF channels. The current number of mobile and portable subscriber radios, of various age, on the system is approximately 50 for Sheriff's Department, 250 for fire, 150 for EMS and 125 for public safety and local government operating on two transmit and receive sites utilizing PL steered technology. Based on the radio equipment survey that has been completed, about 3% of the existing subscriber radios are capable of operating in 12.5 kHz mode. The remaining 97% of the subscriber radios must be replaced because they will not operate in 12.5 kHz mode. The base radios and system infrastructure are also of various age dating back to the early 1990's and are almost universally not capable of being converted to operate in 12.5 kHz mode.

Nelson County has been aware of the Commission's narrowbanding requirements for our VHF communications system and as detailed below is well into the planning and implementation process. The County is committed to meeting these narrowbanding requirements. Because of the age of our existing communications equipment and our need for improved interoperability, coverage, features and capability offered by new state of the art mission critical communications networks, the County has executed a contract with Motorola Solutions, Inc. to implement a narrowband VHF, P25, three site, conventional simulcast system. The County's goal is to upgrade and enhance our two-way mission critical communications throughout the County for the benefit and safety of life and property of all public safety and government users, and the citizens they serve. This migration to a new P25 system will be accomplished Countywide. The implementation of a new P25/12.5 kHz system allows the County to migrate to more efficient spectrum use in the VHF band and thereby meet the Commission's underlying goals of its narrowband order.

In DA 11-1189, the Commission provided guidance to licensees for submission of Requests for Waiver of the narrowband deadline. It emphasized that Requests for Waiver of the deadline will be subject to a high level of scrutiny under the waiver standard set forth in Section 1.925 of the Commission's rules, which requires the waiver petitioner to demonstrate either that "(i) [t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the waiver would be in the public interest; or (ii) [i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative."²

Relevant to the Commission's assessment of the Waiver Request, it recommended that petitioners provide facts addressing the following to show that the waiver Request has met the Commission's waiver standard under Section 1.925:³

- Steps already taken to plan for, initiate, and complete the transition to narrowband operations
- System size and complexity
- Whether system equipment is narrowband-capable or must be replaced or upgraded
- Whether the licensee plans additional system upgrades or improvements in addition to converting to narrowband operation
- Funding sources, including whether the licensee's budget requires government approval or a multi-year budget process
- Whether the licensee's narrowbanding schedule is affected by neighboring systems due to interoperability relationships or other interdependencies
- Plans to minimize the negative impact of extended wideband operations on co-channel and adjacent channel operations, including a description of the spectrum environment in the affected area
- If the licensee plans to migrate to a non-VHF/UHF band (*e.g.*, 700 MHz or 800 MHz), whether it will relinquish VHF/UHF spectrum once it has migrated and the amount of spectrum to be relinquished

² 47.C.F.R. §§ 1.925(b)(3)

³ DA 11-189, released July 13, 2011, page 3.

The Commission further requested that licensees should provide a proposed timetable for completion of narrowbanding that includes the following elements:

- What steps in the process have been or will be taken prior to January 1, 2013
- Anticipated dates of commencement and completion of:
 - Replacement or retuning of mobiles/portables
 - Infrastructure replacement or retuning

When addressing the above factors, the Commission recommend that licensees explain how (i) they have worked diligently and in good faith to narrowband their systems expeditiously; (ii) their specific circumstances warrant a temporary extension of the deadline; and (iii) the amount of time for which a waiver is requested is no more than is reasonably necessary to complete the narrowbanding process.

II. NARROWBANDING STEPS TAKEN TO DATE OR PRIOR TO JANUARY 1, 2013

The County implemented and completed a number of specific steps to date and is committed to completing additional steps by year end toward meeting the Commission's narrowband requirements, including but not limited to the following:

1. Completed the construction of two radio communications towers essential to the implementation of the radio communications system.
2. Completed the installation and implementation of a microwave radio network to provide required site connectivity for the simulcast radio communications system.
3. Filed applications with the FCC to narrowband all frequencies held by the County. Nelson County resides in the National Radio Astronomy (NRAO) Quiet Zone and therefore County FCC licensing is subject to review and coordination by NRAO which impacts the time required for licensing.
4. Completed a survey of existing mobile and portable subscriber radios and base station radio equipment to determine the capability of current radio equipment to operate in 12.5 kHz mode via a software update. Results are defined above.

5. Completed a countywide coverage and capacity analysis and developed the corresponding proposed site plan. The system being implemented will be expanded to a three site simulcast system, using the existing site locations, operating on four channels in the VHF band. The system is designed to provide a guaranteed 95% portable coverage throughout the County.
6. Obtained approval of the project funding request by the Nelson County Board of Supervisors.
7. Developed a detailed plan and project completion schedule to migrate to a countywide interoperable Project 25 network, and contracted for the design, implementation and installation of the system, including new subscriber equipment and ongoing maintenance services. See the project timetable below.

Milestone	Completion Date
Contract Award - completed	August 23, 2012
Contract Design Review - completed	September 25 & 26, 2012
All Site/Infrastructure Equipment Ordered	November 11, 2012
Fixed Equipment Installation	April 9, 2013
Order New Subscribers	May 10, 2013
System Optimization	June 7, 2013
Subscriber Installation and First Touch Programming	June 30, 2013
System Testing and Cutover	August 4, 2013
Subscriber Second Programming to Delete 25kHz	August 20, 2013
Final Acceptance and System Cutover Completed	September 15, 2013

8. System design will be completed by vendor and approved by the County, and all site and infrastructure equipment will be ordered.

Pursuant to the Section 1.925 of the FCC rules, the County has no other viable alternative than to proceed with the plans currently in place. Insufficient time exists to properly plan and execute an alternative approach which would satisfy the January 1, 2013 deadline. Because the aging base radios and system infrastructure are not capable of being converted to operate in 12.5 kHz mode, the system needs to be replaced. Our plan is to implement the new subscriber radio equipment at the 25kHz mode to our users throughout the County and then reprogram the subscribers to the 12.5kHz mode only once the system is optimized and cutover.

Such mandatory replacement of the infrastructure provides the County the opportunity to migrate to a new state of the art countywide network that will provide our first responders with an effective and reliable communications network that will promote safety of life and property, and would be in the public interest. Failure to provide the system in lieu of another narrowbanding alternative will be inequitable, unduly burdensome and contrary to public interest.

III. REQUEST FOR WAIVER

Nelson County has planned for the replacement of its aging communications system and is committed to meeting the FCC's narrowbanding requirements as defined in this Request for Waiver. The County fully expects to meet this mandatory narrowbanding requirement as quickly as possible, in line with the above project completion schedule. Because most of our system infrastructure equipment is not capable of conversion to 12.5 kHz operation, we are in the process of replacing our system with a VHF P25/12.5kHz conventional simulcast system. All existing infrastructure, including (but not limited to) base stations, antennas, and coax systems, will be replaced by new state of the art 12.5 kHz equipment.

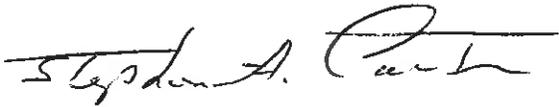
The County requests that the Commission expeditiously grant this waiver request to continue operating on existing 25 kHz channels through November 30, 2013, in order to allow the County to complete the implementation of a new countywide Project 25/12.5 kHz public safety communications network. This requested eleven month extension allows the County time to complete the system per the optimum milestone schedule shown above plus a reasonable time for schedule slippage and unforeseen setbacks, such as severe weather conditions, delay in availability of parts and equipment, and public safety emergencies. The underlying purpose of the Commission's narrowbanding rule would not be frustrated by the Commission's grant of this Waiver. The Waiver Request does not extend the date for narrowbanding the County's 25 kHz operation to a lengthy or indefinite date, but instead petitions for a finite time extension to permit the implementation of a new interoperable countywide network.

IV. CONCLUSION

As detailed above, Nelson County believes we have shown that a grant of this Waiver Request for an eleven month period would be in the public interest, could actually promote extended interoperability with neighboring Counties, not harm any other licensee, and not frustrate the Commission's underlying goals of its narrowbanding order. The County urges the Commission to recognize that we are in process of implementing a new narrowband Project 25/12.5 kHz VHF digital conventional simulcast system and that we have no other viable alternative than to proceed with the plans currently in place.

The County respectfully requests that the Commission expeditiously grant this Waiver Request to continue operating on existing 25 kHz channels through November 30, 2013, to allow the County to complete the implementation of a new countywide 12.5 kHz VHF public safety communications network.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stephen A. Carter". The signature is written in a cursive style with a prominent horizontal line across the top.

Mr. Stephen A. Carter
County Administrator
Nelson County
P. O. Box 336
Lovington, VA 22949