

**PITTSYLVANIA COUNTY**  
VIRGINIA

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Federal Communications Commission  
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Washington, D.C. 20554  
[narrowbanding@fcc.gov](mailto:narrowbanding@fcc.gov)

**Request for Extension**

Pittsylvania County, Virginia (The County), hereby requests an extension for the narrowband operation of license WPKG892 from the current deadline of January 1, 2013, to August 30, 2013. The facts of the case follow.

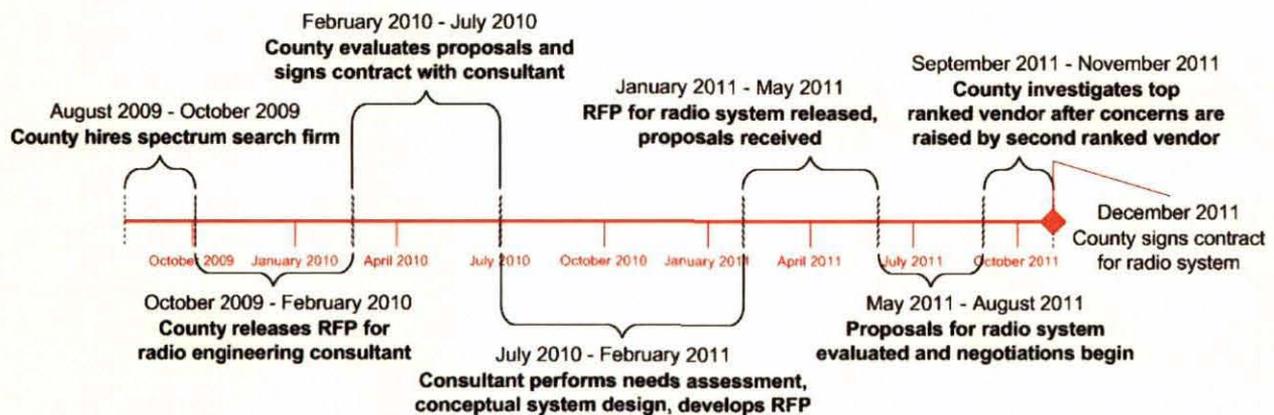
**Steps taken**

Beginning in 2009, the County anticipated expanding its current VHF conventional radio system to a VHF trunked network. The anticipated trunking system required additional frequencies to provide an acceptable Grade of Service. The County was unable to locate the additional spectrum and obtained the services of a spectrum search firm. The search firm was also unable to locate any VHF spectrum that was relatively free of incumbents. The County realized that they required the assistance of a consulting firm to determine which system and spectrum would be most beneficial. In late 2009 the County released a Request for Proposals (RFP) to obtain a radio engineering consultant. Proposals were received and evaluated by the County and a consulting firm was selected.

Throughout 2010 the consulting firm performed a needs assessment on the existing system, delivered a *Needs Assessment Report* and developed a conceptual system design. The system design included the use of the 700 MHz band and consisted of six talk paths utilizing APCO Project 25 standards. The consulting firm then developed two Requests for Proposals, one for a 700 MHz Project 25 radio system and another for towers, equipment shelters and generators, which were released in February 2011. In May 2011 the County received 17 proposals from 13 different vendors. Together the County and the consulting firm evaluated the proposals and entered into negotiations with two vendors, one for towers, shelters and generators and the other for the radio

system. Upon entering into negotiations with the top ranked vendor for the radio system, the second ranked vendor raised several concerns over the scoring and evaluation criteria of the proposals. Also questioned was the experience and craftsmanship of the top ranked vendor's systems and experience. The County performed further due diligence pertaining to the top vendor's systems by visiting several existing systems as well as the customer integration and depot repair facility.

The County anticipates signing the contract with the top ranked vendor in December 2011. Figure 1 contains a timeline of events and steps taken to become narrowband compliant.



**Figure 1: Timeline of Steps Taken**

Once the County and the selected vendors execute the required contracts, construction of six new communications sites and improvements to the existing sites will commence. The tower vendors estimate completion of the tower work within nine months from the start date, provided there are no National Environmental Policy Act (NEPA) or State Historical Preservation Office (SHPO) issues. All candidate transmission sites have been examined for potential environmental or historic preservation issues and while none can be identified, the possibility exists that issues could arise during system construction.

Simultaneously during this period the communications system vendors will be finalizing the design of the system, manufacturing the equipment and staging the equipment just prior to the shipment of the system. The system vendor estimates that the time required for these tasks is ten months. At this point in the project the tower sites will have been completed and equipment should be shipping from the system manufacturer. Upon arrival in the County, the system will be installed, optimized, tested and placed into service. The estimated total time to complete these tasks is 19 months.

Following cutover to the new system the old system will immediately be disabled. The estimated date for completion of the system implementation is July 30, 2013. While this anticipated completion date is after the January 1, 2013, deadline for narrowband operations, once completed the new system will be in compliance with the FCC's 2017 mandate for 700 MHz channels to be 6.25 kHz, or equivalent.

### **System Size, Complexity and Narrowband Capabilities**

The County's existing communications system comprises four simulcast sites containing three VHF channels at each site. The existing system's infrastructure is capable of narrowband operation; however, manufacturer support of the existing infrastructure will soon end. In addition, approximately 80% of the estimated 800 subscribers are not capable of narrowband operation. The combined issues of support cancellation and the required replacement of subscriber devices due to narrowbanding make replacement of the entire system the optimal solution.

The communications system replacing the existing VHF system will be a 700 MHz Project 25 Phase 2 (TDMA) compliant system. This ensures that the new system will meet the FCC's 2017 mandate to narrowband the 700 MHz spectrum to a 6.25 kHz equivalent bandwidth. The new system will require eight communications tower sites to deliver adequate public safety grade coverage. Of these eight sites, six will be newly constructed communications sites, complete with towers, shelters and generators.

### **VHF Spectrum to be Relinquished**

The existing license (WPKG892) has four repeater frequencies (FB2) and four mobile frequencies (MO). The County plans to relinquish three FB2 frequencies and three MO frequencies no longer required for the new 700 MHz system being implemented. The remaining frequency pair (FB2 and MO) will be utilized in a narrowband paging and interoperability VHF simulcast channel. This channel will provide fire station alerting as well as communication with surrounding jurisdictions that operate in the VHF frequency band but do not have 700 MHz capable subscribers.

### **Funding Sources**

The Radio vendor provided the County with a Lease Purchase Agreement which will extend the payments over a fifteen year term. However, in order to implement the most cost effective financing solution, the County also anticipates obtaining firm bids for financing from local, regional and national banking institutions. The County's multi-year budget process will budget for the repayment of the lease. It is anticipated that the lease terms will postpone the first payment of the lease until one year after system acceptance.

## Neighboring Systems

Pittsylvania County's current wideband operations do not affect systems owned and operated by the adjacent Virginia counties of Halifax, Campbell, Bedford, Henry and Franklin, or the adjacent North Carolina counties of Rockingham and Caswell, and would not negatively affect these systems by extending wideband operations to August 1, 2013.

## Narrowbanding Completion Timetable

Figure 1 above provides a timeline of narrowbanding efforts completed to date. Figure 2 provides a future timeline for the acquisition, implementation, optimization and commissioning of the planned replacement system that not only represents the most timely transition to narrowband operations for Pittsylvania County, but supports the Department of Homeland Security efforts toward standards-based public safety communications and interoperability.

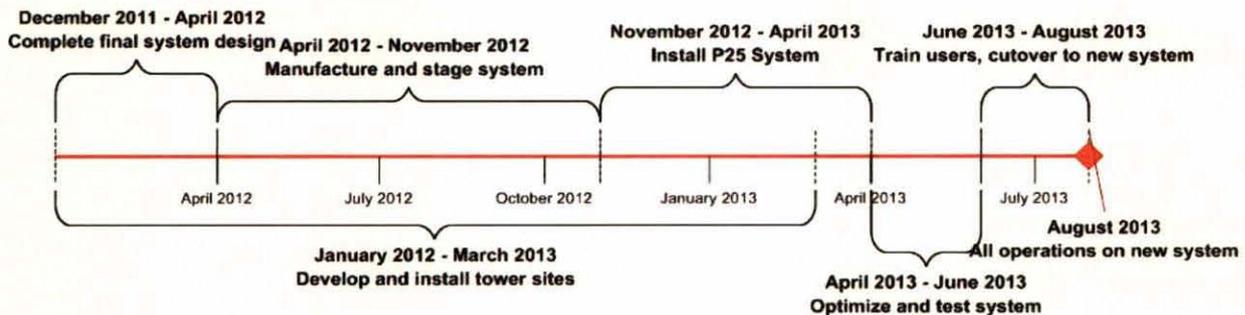


Figure 2: Timeline of Implementation Plan

## Waiver Standards Compliance

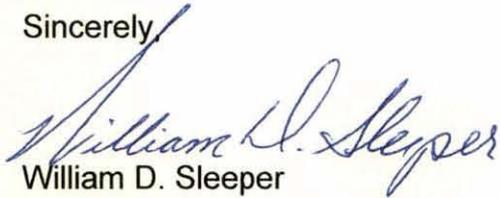
Pittsylvania County has made and continues to make every effort to transition to narrowband operations in a timely manner and has demonstrated here that FCC rules Section 1.925 standards for waiver have been met.

- Equipment obsolescence coupled with the unavailability of frequencies prevent the County from simply narrowbanding its existing system.
- The County has performed reasonable due diligence to evaluate available options and is left with no viable alternative but to replace the existing system with a 700 MHz system that will:
  - Provide public safety Grade of Service to first responders and those who rely on them to protect life and property

- Not only comply with the FCC mandate for narrowband operations, but also comply with the FCC's mandate for 700 MHz channels to be 6.25 kHz, or equivalent compliant far in advance of the 2017 deadline
- The County has the means to fund the new compliant communication system

Therefore, the County respectfully requests an extension for the narrowband operation of license WPKG892 from the current deadline of January 1, 2013 to August 30, 2013.

Sincerely,



William D. Sleeper  
County Administrator

WSD/rf

Cc: Honorable Members of the Pittsylvania County Board of Supervisors  
Honorable Mike Taylor, Sheriff  
J. Vaden Hunt, County Attorney  
Jim Davis, Director of Emergency Services  
Steve Finkner, Fire & Rescue Association