

Caroline County Virginia

Charles Culley
County Administrator
P.O. Box 447
Bowling Green, VA 22427
cculley@co.caroline.va.us



Phone (804) 633-5380
Fax (804) 633-4970

October 7, 2013

Federal Communications Commission
445 12th ST., S.W.
Washington, D.C. 20554
narrowbanding@fcc.gov

Provisional Extension

On June 28, 2013, Caroline County received an email from Mr. Roberto Mussenden, Attorney-Advisory with the Federal Communications Commission (FCC) granting a "provisional" extension until the end of October. Mr. Mussenden indicated that this would give the FCC time to evaluate the County's original request for a waiver until November 30, 2014.

Request for Extension

Caroline County, Virginia (the County), hereby requests an extension for the narrowband operation of licenses WNJP249 (Sheriff's system), KSO881 (Fire system), KVB826 (Local government system), and WPSS227 (County schools) from the current deadline of June 30, 2013, to November 30, 2014. The facts of the case follow.

Steps taken

On January 9, 2013, the Federal Communications Commission (FCC) granted the County a waiver of the FCC Narrowbanding Mandate deadline of January 1, 2013, until June 30, 2013. The FCC provided several stipulations that must be met in order to

request a waiver extension. Since the granting of this waiver, the County has fulfilled the following FCC requirements for consideration of the requested extension:

1. Executed a contract with Motorola Solutions, Inc.—June 12, 2013
2. Secured funding for the project with Bank of America—June 11, 2013
3. Developed a construction timeline—shown within this document
4. Established a completion date of November 19, 2014
5. As further justification for the extension requested, Caroline County will realize significant regional interoperability enhancements with the following agencies:
 - a. Hanover County, Virginia
 - b. Spotsylvania County, Virginia
 - c. Stafford County, Virginia
 - d. King William County, Virginia
 - e. Henrico County, Virginia
 - f. City of Richmond, Virginia
 - g. Chesterfield County, Virginia
 - h. Richmond Airport
 - i. City of Colonial Heights
 - j. Virginia Commonwealth University
 - k. City of Hopewell
 - l. City of Petersburg

Motorola estimates completion of the tower work within twelve 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 construction.

Site Acquisition

All identified antenna site leases have been completed and submitted. There are still ongoing negotiations with the tower owners, but all sites should be secured by the end of December, 2013. Final Microwave path surveys should be completed the week of October 21st.

Schedule Highlights

Milestones	Completion Dates
Contract Signing	June 12, 2013
Contract Design	November 15, 2013*
Order Process Complete	November 30, 2013
Equipment Shipped	January 30, 2013
Console and Dispatch Center Installation	February 6, 2014
FNE Installation	April 30, 2014
Microwave System Installation	April 30, 2014
Optimization of System	May 5, 2014
System Acceptance Test Plans Complete	June 11, 2014
Subscriber Installation and Programming	August 14, 2014
Cutover to New System	August 21, 2014
30-Day Operational Test complete	September 24, 2014
Removal of Old Subscribers	November 18 2014
Final System Acceptance	November 19, 2014

*Delay from original timeline submitted in June due to site acquisition issues

Simultaneously during this period Motorola will finalize the design of the system, manufacture the equipment, and stage the equipment just prior to the shipment of the system. Motorola 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 Motorola plants. 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 17 months.

Following cutover to the new system the old system will immediately be disabled. The estimated date for completion of the system implementation is November 19, 2014. 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.

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 to a 6.25 kHz equivalent bandwidth. The new system will require six communications tower sites to deliver adequate public safety grade coverage. Of these six sites, four will be newly constructed communications sites, complete with towers, shelters and generators.

VHF Spectrum to be Relinquished

The County plans to relinquish all but one VHF frequency pair which will no longer be required for operations upon cutover to the new 700 MHz system being implemented. The remaining VHF 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, such as Essex County and the City of Fredericksburg.

Sheriff's Department license (WNJP249)

Fire Department license (KSO881)

Local government license (KVB826)

County Schools license (WPSS227)

Neighboring Systems

The following counties surrounding Caroline County currently utilize 700/800MHz communications systems are as follows:

- Spotsylvania County, VA (800 MHz Enhanced Digital Access Communications System (EDACS) commencing 800 MHz P25 deployment)
- Hanover County, VA (800 MHz P25)
- King William County, VA (800MHz P25)
- Stafford County, VA (700 MHz P25)

The following counties and systems that operate in the VHF spectrum

- Essex County, VA
- King George County, VA
- Virginia Statewide Agencies Radio System (STARS) P25

The following counties and systems operate in the UHF spectrum:

- King and Queen County, VA
- Fort AP Hill, VA
- Boy Scouts of America (Logical Trunked Radio (LTR))

The new communication system will incorporate interoperability gateways with all surrounding agencies' frequency bands. In addition, the new system will eliminate coverage gaps along the County borders with King George, Essex, King and Queen, King William, Hanover, and Spotsylvania counties.

Caroline County's current wideband operations do not affect systems owned and operated by the adjacent counties of Stafford, King George, Hanover, King William, King and Queen, Essex and Spotsylvania counties, and would not negatively affect these systems by extending wideband operations to November 30, 2014.

Narrowbanding Completion Timetable

The attached detailed project schedule provides a detailed 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 Caroline County, but supports the Department of Homeland Security efforts toward standards-based public safety communications and interoperability.

Region 42 700MHz Planning Committee

The County has begun the application process for five (5) 700MHz frequency pair to utilize in its P25 trunking system. We will attend the Region 42 regional meeting in Roanoke on October 28th. Our detailed application should be complete and submitted to the Committee by the end of December.

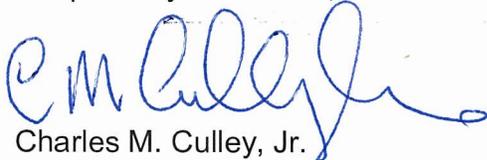
Waiver Standards Compliance

Caroline 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 trunked, simulcast 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 that the FCC formally approve an extension for the narrowband operation of licenses WNJP249, KSO881, KVB826, and WPSS227 from the current provisional extension of the end of October, 2013 to November 30, 2014.

Respectfully Submitted,



Charles M. Culley, Jr.
County Administrator
PO Box 447
Bowling Green, VA 22427
P (804) 633-5380
F (804) 633-4970
E cculley@co.caroline.va.us