

**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;	)	WT Docket No. 99-87
Promotion of Spectrum Efficient Technologies	)	
On Certain Part 90 Frequencies.	)	

**REQUEST FOR WAIVER OF COMMISSION RULES REGARDING THE  
SPECTRAL EFFICIENCY OF PRIVATE LAND MOBILE RADIO SERVICES IN  
THE 150-174 AND 450-470 MHZ BANDS, REQUIRING 12.5 KHZ CHANNEL  
BANDWIDTH OR EQUIVALENT TECHNOLOGY BY JANUARY 1, 2013**

**WAIVER—EXPEDITED ACTION REQUESTED**

**I. Introduction**

The County of Dallas, Texas (Dallas or County), respectfully requests a waiver of the January 1, 2013 narrowband deadline pursuant to the *Public Notice* released by the Federal Communications Commission (FCC or Commission)<sup>1</sup> for a period of 6 months, until July 1, 2013.

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<sup>1</sup> Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and Office of Engineering and Technology Provide Reminders of the January 1, 2013 Deadline for Transition to Narrowband Operations in the

The County has been committed to completing narrow banding by the deadline and continues to be committed to the deadline, however between now and the deadline uncontrolled events and manpower issues with vendors will have an impact on our timely completion. In addition, as detailed in this WAIVER PETITION, certain unique construction delays, and interoperability requirements will impact the Dallas's ability to meet the compliance date of January 1, 2013, established by 47 CFR §90.209(b).

## **II. Background**

Dallas County encompasses 880 square miles. There are 800 users with 8 main mobile relay fixed stations, 8 back up mobile relay fixed stations, 800 mobiles, 600 portables, and 30 fixed control stations. The County operates and interoperates with multiple agencies also on VHF 150-174 MHz radio spectrum

Pursuant to Section 1.925 of the Commission's rules, the Commission may waive a rule if the petitioning party establishes either that:

"(i) the underlying purpose of the rules would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) In view of unique or unusual factual circumstances of the instant case, application of the rule(s)

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150-174 MHz and 421-512 MHz Bands and Guidance for Submission of Requests for Waiver and Other Matters, *Public Notice*, DA 11-1189 (2011) and Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and Office of Engineering and Technology Provide Reminders of the January 1, 2013 Deadline for Transition to Narrowband Operations in the 150-174 MHz and 421-512 MHz Bands and Guidance for Submission of Requests for Waiver and Other Matters, *Public Notice*, DA 12-246, rel. Feb. 21, 2012.

would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative."<sup>2</sup>

In addition, in its *Public Notice*, the Commission provided various criteria that would be relevant to its analysis of whether to grant a waiver of the narrowbanding deadline under Section 1.925.

Consistent with the *Public Notice*, the instant Petition describes the efforts made by Dallas County to meet the narrowbanding mandate and provides timeframes for completing the process, shows that funding is provided, details system size and complexity, interoperability concerns, and explains why the narrowband process is behind schedule.

Dallas County will show that enforcement of the January 1, 2013 deadline with respect to the spectrum described in this petition would be contrary to the public interest of ensuring the safety and well-being of County residents, businesses, and visitors; and in addition compromise the safety and efficiency of the public safety emergency responders. Thus, the County seeks this waiver for a *de minimis* extension of the narrowbanding deadline in the manner described.

The County is not proposing system changes as part of the narrowband process, but is expending full resources and funding toward meeting the narrowband mandate at the earliest possible time. In an abundance of caution, the County is requesting a six month delay, expecting in actuality to complete conversion to narrowband in advance of the July 1, 2013 date.

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<sup>2</sup> 47 CFR § 1.925(b)(3)

Funding for narrow banding has been provided by annual operating funds approved each fiscal year. Sufficient funding is in place to complete the narrow band initiative.

The County is pleased to report that:

- 100% of our portables are narrowband capable. Countywide narrowband programming of portable radios is ongoing.
- 100% of our fixed stations are narrowband capable and all have been narrow banded.
- 100% of our mobile relay fixed stations are narrowband capable and all have been narrow banded.
- 100% of our voting receivers are narrowband capable. Will be narrowbanded at the end of the process by the City of Dallas.
- 80% of our mobiles are narrowband capable. Equipment to replace the remaining 20% is on hand however programming and removal and installation process is ongoing.
- Programming of mobile and portable equipment countywide is still underway

Dallas County seeks a waiver for specific call signs (see Appendix A) for operations that will continue wideband operation on lower spectrum bands and will be taken to full compliance by the end of the WAIVER period.

### **III. Steps Taken by DALLAS COUNTY to Comply with the Narrowbanding Mandate**

The County has moved with all due dispatch to meet the narrowband deadline of January 1, 2013. Issues of interoperability with surrounding agencies and conformance to the State of Texas Interoperability Plan have caused unanticipated delays to the physical narrowband

process. This delay is exasperated by the scheduling of technical resources due to the “crunch” of all licensees attempting to meet the deadline a few short months away.

As of this time the County has take the following actions to effectuate narrowbanding:

- The County’s licenses have been updated to add the narrowband 11K2F3E emission. All have been processed and approved by the FCC.
- Equipment to replace non narrowband capable radios has been purchased.
- A contractor has been secured to complete non compliant mobile radio removal and compliant mobile radio installations.
- A separate contractor has been secured to perform reprogramming of mobile, portable and fixed equipment.
- Plans for the narrowbanding of City of Dallas supplied mobile relay fixed stations and receivers were coordinated with the City of Dallas.
- 30% of the County’s mobile and portable radios have been narrowbanded and are currently operating mixed interoperable mode with others that remain to be narrow banded.
- All fixed stations transmitters are currently operating in narrowband mode.

The entire County fixed infrastructure is converted to narrowband. To date, all of the County fixed mobile relay stations, which makes up 8 separate systems (main and back up), have been converted to narrowband.

A significant number of mobile and portable radio units remain to be replaced and/or reprogrammed to meet the narrowband requirement. Once all subscriber units are transmitting in

a narrowband mode, receivers are reconfigured to narrowband, resulting in reduced emission bandwidth acceptance and improved system interference rejection.

*In summary*, Dallas County has already made extensive progress to bring its communications systems into compliance with the January 1, 2013 narrowbanding mandate. The current radio system utilized by the County is a mix of narrowband and wideband analog. Dallas County has authorized funds and made plans to re-program or replace subscriber units to implement a narrowband (11.25 kHz) analog operation. DALLAS COUNTY has obtained modified FCC authorizations to permit the conversion to narrowband.

Sufficient funding was set aside to transition compatible hardware from wideband to narrowband through reprogramming of the transmitters and receivers. Funding was also anticipated and secured to replace subscriber units where the age of the unit did not allow for narrowband analog operation.

#### **IV. Specificity of Transition Delay**

Dallas County underestimated the impact to the narrowband schedule that would result from external influences beyond County control. In late March of 2012, the State of Texas changed its VHF interoperability channel plan (Texas State Interoperability Channel Plan) which the entire state follows. This change has required that all County mobile and portable radio programming personalities be updated and retested. Due to this very late change by the State, radios that had been previously programmed will now have to be reprogrammed with the new channel plan frequencies to insure interoperability with neighboring jurisdictions and public safety agencies

that respond to or with Dallas County on various emergencies, such as fires, weather events, and pursuits. Interoperability is a vital requirement of the County to provide for the safety of the public and of the first responder community.

Additionally, the County is experiencing vendor delays due to the vast number of agencies seeking narrowband compliance and the limited number of radio technicians available to perform system upgrades. The County is converting to narrowband at a fast pace, but considers the need to maintain a viable working public safety infrastructure to protect the lives and property of the citizens. The safety and wellbeing of first responders also tempers the pace that narrowband can proceed. DALLAS COUNTY operations will continue on frequencies in the 150-174 MHz range. These lower frequency systems will be taken into compliance with narrowband in accordance with the Schedule B attachment. A short extension of the narrowband compliance date will ensure that the transition to narrowband is accomplished while maintaining public safety, first responder safety, and continued interoperability with other first responders.

## **V. Projected Impact to Other Licensees by Grant of the Waiver**

### **A. Impact to existing licensees.**

Dallas County anticipates that there will be no negative impact to any other licensees that are currently licensed and operating on a co-channel or adjacent channel today. The County is currently operating all fixed transmitters in a narrowband mode (11.25 kHz maximum occupied bandwidth). Mobile and handheld transmitters are operating in wideband (20 kHz maximum occupied bandwidth) and will continue to operate in wideband while conversion to narrowband continues and is completed at or before the end date of the waiver. There will be no change to any existing licensee's interference

level. Quite to the contrary, as *other existing* licensees on adjacent channels comply with the FCC's narrowband mandate; the possibility of receiving interference from Dallas County will be significantly reduced.

**B. Impact to a future licensee at VHF (150-174 MHz).**

Dallas County is currently operating on VHF channels with fixed infrastructure already converted to narrowband operation. Mobile and handheld subscriber units continue at wideband (20 kHz maximum occupied bandwidth) emission until the entire fleet is provisioned to operated at narrowband. The FCC had previously authorized channels at VHF that are spaced at 15 kHz on center; and in consideration of narrowbanding has authorized interstitial channels at 7.5 kHz on center. Both of these channel centers are impacted by wideband emissions of 20 kHz bandwidth overlap of the mobile and handheld subscriber units. Many licensees currently exist operating both wide and narrowband systems on the 15 and 7.5 kHz spaced channels, respectively, and are using geographic spacing to attain about 30 dB and 60 dB of Adjacent Channel Protection respectively, which is the Adjacent Channel Coupled Power (ACCP). There will be no impact to these *currently licensed* stations due to the continued operation of Dallas County mobile and handheld units at wideband. These will be no impact to new licensees desiring to operate adjacent to the fixed station frequencies licensed by the County that are currently in narrowband compliance. There will be an undetermined impact on the ability for *new licensees* to license channels at both 15 and 7.5 kHz offset to Dallas County mobile channels, without considering geographic spacing to attain adjacent channel protection. Without knowing which potential licenses may apply for the

VHF spectrum, it is not possible to quantify the degree of impact. Since many of the 15 and 7.5 kHz VHF channels are already licensed, with geographic spacing from Dallas County, the only remaining area viable to new licensees would be within or immediately adjacent to each of the mobile facilities licensed by Dallas County. It is noted that channels spaced at 7.5 kHz from the current Dallas frequencies will still require geographic spacing due to bandwidth overlap, which is notably higher than the bandwidth overlap between 15 kHz spaced channels and wideband emission. Dallas knows of no licensees waiting to obtain licenses within the current coverage area that would be impacted by a delay in narrowbanding.

## **VI. CONCLUSION**

As shown above, Dallas County has worked diligently and in good faith to meet the Commission's narrowbanding mandate, without risking the safety of the public or the safety and efficiency of the emergency responders. All of the fixed infrastructure has been converted and is operating in narrowband mode. A portion of the mobile and handheld fleet has been converted to narrowband, however the mobile and handled fleet is operating in wideband until the entire fleet can be taken into compliance. Due to logistic and interoperable concerns, the mobile and handheld transmitters, and system receivers cannot be taken into compliance until July, 1, 2013. The County will work diligently to narrow that date to the earliest possible time. The impact to other licensees will only extend to new adjacent channel licensees proposing to operate adjacent to the existing mobile channels licensed to the County.

Dallas County has described its efforts to date, and proposes a schedule for meeting the narrowbanding mandate in Appendix B.

For the reasons stated and in consideration of the public safety issues involved the Commission is PETITIONED to grant the waiver of NARROWBAND compliance to July 1, 2013.

Respectfully submitted,

Chris Thompson, Director of Operations.

County of Dallas, Texas

600 Commerce Street, 7th Floor, Room 750

Dallas, Texas 75202

October 1, 2012

**APPENDIX A****LIST OF FCC RADIO AUTHORIZATIONS GRANTED TO DALLAS COUNTY FOR WHICH WAIVER OF THE JANUARY 1, 2013 NARROWBAND OPERATION DEADLINE IS REQUESTED**

<b>Call Signs</b>	<b>Frequency MHz</b>
WNDL345	154.2800
WNFG227	154.2350
WNVH537	156.0600
WNVH537	159.1350
KA3784	158.7300
KW6862	154.9950
KW6862	158.8350
KYG584	155.7450
KYG584	158.7300
KZ3891	158.8650
KA6729	154.9500
KA6729	155.2500
KA6729	155.9700
KA6729	158.8350
KA6729	158.9100
KA6729	159.0300
WPEY212	159.1200

**APPENDIX B                      Narrowbanding Time Schedule**

Now until January 1, 2013

The County will continue to replace its non narrowband capable mobile radios prior to January 1, 2013. New programming features will be developed to implement the interoperability requirements of the State of Texas Interoperable Plan.

January 1, 2013 through May 2013

The County will continue the removal and installation process and narrow band programming of its mobile and portable equipment. Fixed stations will continue transmitting in compliant narrowband mode.

May 2013 to July 1, 2013

The County will complete installation of new mobile subscriber units and re-programming of all subscriber units into the narrowband mode.

The City of Dallas will narrowband the County's voting receivers upon completion of mobile and portable programming