

January 17<sup>th</sup>, 2013

Office of Engineering and Technology  
Laboratory Division  
Equipment Authorization Branch  
7435 Oakland Mills Road  
Columbia, MD 21046

Att: Tim Harrington

Subject: Response to Tracking Number 139141 for Certification of Transmitter with  
FCC ID: AZ489FT5850, TC431252, January 9, 2013

Dear Mr. Harrington,

Please see below for our responses:

NOTE: the following uses a convention of Latin prefixes for continuations.

2nd cont = bis

3rd cont = ter

4th ... = quater

5th ... = quinque

1) a) bis) Nov28 response letter includes the following:

"A1 a) Form 731, Ex12, and Ex13 have been updated, removing non-licensable freq for internal guard band of 768-769 MHz and 798-799 MHz."

However it is unclear whether TCB reviewed the response letter before submitting and/or has yet to make the associated necessary f-731 adjustments; please explain and/or revise.

Also TCB please adjust internal processing procedures where appropriate to preclude similar discrepancies for ALL future filings.

**Response Jan 16, 2013: Jeff, please revise Grant to exclude non-licensable freq for internal guard band of 768-769 MHz and 798-799 MHz.**

1) a) ter) As indicated by the Nov20 FCC corresp., f-731 listing and/or filing contents must identify the Public Safety broadband allocations 763-768 MHz and 793-798 MHz as not available for licensed operation of this device, or filing must provide appropriate qualifications and/or FCC PSHSB allowance for specific exception or waiver from docket 06-150 provisions that only equipment at hand could be used for incumbent narrowband operations in the broadband spectrum.

**Response Jan 16, 2013: Corrected in the attached Form 731 to TCB.**

fyi other background:

Due to the 2007 rebanding order and related ongoing proceedings (i.e., FCC-07-132; DA-08-1108; DA-11-846; DA-12-555; etc.), narrowband station operations in the 763-768 MHz and 793-798 MHz bands (licensed to FirstNet) are limited to using legacy equipment or where otherwise allowed by waiver.

i) FCC-07-132, para. 339

... 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. ...

ii) DA-08-1108, page 26

The Commission prohibited authorization, whether pursuant to individual license or State License, of any new narrowband operations in channels 63 {764-770 MHz} and 68, or in the upper one megahertz of channels 64 and 69, as of August 30, 2007.

iii) DA-11-846, pages 1-2

... In the 700 MHz Second Report and Order, however, the Commission reconfigured the 700 MHz public safety spectrum, creating a broadband segment at 763-768/793-798 MHz and consolidating 700 MHz narrowband channels at 769-775/799-805 MHz.[2] As part of the reconfiguration, the Commission redesignated the 775-776/805-806 MHz band segment as commercial guard band spectrum.[3] The Commission, however, allowed certain incumbent 700 MHz narrowband licensees to continue operating legacy equipment on the pre-consolidation narrowband frequencies ... pending their eventual relocation to the new consolidated narrowband segment.[4]

...

[4] The Commission limited continued narrowband operations on the pre-consolidation frequencies to equipment in operation as of August 30, 2007. Id. at 15411 ¶¶ 336-339.

The Commission has subsequently granted waivers to some licensees to allow limited deployment of additional narrowband equipment on pre-consolidation frequencies after August 30, 2007.

See, e.g., Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Order, 22 FCC Rcd 20290 (2007) (granting waiver to the Commonwealth of Virginia) (Virginia Waiver Order); Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Order, 23 FCC Rcd 16669 (2008) (granting waiver to Phoenix, Arizona) (Phoenix Waiver Order).

iv) DA-12-555, pages 1-2

The spectrum to be assigned to FirstNet under the Spectrum Act is occupied by four classes of incumbents:

(1) jurisdictions operating narrowband systems that predate the Commission's 2007 Second Report and Order,[7] some of which received waivers for continued deployment;[8] ...

...

[8] See, e.g., Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz Band, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements through the Year 2010, Commonwealth of Virginia Request for Waiver, Order, 22 FCC Rcd 20290 at ¶ 7 (2007); Request for Waiver of Pierce Transit, Order, 23 FCC Rcd 443 (PSHSB 2008); State of New York Request for Waiver, Order, 23 FCC Rcd 9610 (PSHSB 2008); State of Arkansas Request for Waiver, Order, 23 FCC Rcd 11068 (PSHSB 2008);

State of Illinois, Illinois State Police Request for Waiver, Order, 23 FCC Rcd 11064 (PSHSB 2008);  
State of Hawaii Request for Waiver, Order, 23 FCC Rcd 11264 (PSHSB 2008);  
State of Mississippi Request for Waiver, Order, 23 FCC Rcd 11620(PSHSB 2008);  
City of Phoenix, Arizona Request for Waiver, Order, 23 FCC Rcd 16669 (PSBSB 2008);  
County of Ada, Idaho Request for Waiver, Order, 23 FCC Rcd 16665(PSHSB 2008);  
Harris County, Texas Request for Waiver, Order, 23 FCC Rcd 16661 (PSHSB 2008).- - -

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2) a) bis) Nov28 response letter includes the following:

"A2 a) Added 90.542 (a) (7) rules compliance in Ex06A"

However it is unclear whether TCB reviewed as appropriate the response letter AND emc/radio test report before submitting, i.e. the test report does NOT appear to address compliance for the said ERP (effective radiated power) rule; TCB please coordinate for revise and review before submitting. TCB please adjust internal processing procedures where appropriate to preclude similar discrepancies for ALL future filings.

NOTE also fyi the 90.542(a)(7) three (3) watt ERP limit applies for portable station equipment in 763-768 MHz and 793-798 MHz bands; alternatively please omit f-731 listing of these bands.

#### **Response Jan 17, 2013:**

**The ERP requirement is dropped due to the adjustment in the Frequency band to 769-775/799-805 MHz because the radio does not have 3GPP.**

**Please note that the radio does operate in the frequency band 768-776/798/806 MHz in Canada.**

**Also, the previous Test Report Exhibit 06 is still applicable.**

2) b) bis) FYI note there is a typo in 2) b) sent in the Nov20 FCC corresp., i.e. it listed the wrong bands; here is replacement text:

REPLACEMENT

' 2) b) Unless it is in the filing already (if yes please say where), please amend to address compliance for the 90.541 first paragraph and 90.545(b)(4) requirement of 3 W ERP for 769-775 MHz and 799-805 MHz.'

Regardless, the Nov28 response letter includes the following:

"A2 b) Added 90.541 and 90.545 (b) (4) rules compliance in Ex06A"

However it is unclear whether TCB reviewed as appropriate the response letter AND emc/radio test report before submitting, i.e. the test report does NOT appear to address compliance for the three (3) watt ERP (effective radiated power) rule; TCB please coordinate for revise and review before submitting. TCB please adjust internal processing procedures where appropriate to preclude similar discrepancies for ALL future filings.

2) c) bis) Nov28 response letter includes the following:



FCC ID: AZ489FT5860

"A2 c) The transmitter is not supporting 3GPP."

The letter of 90.203(p) in and of itself REQUIRES transmitting equipment granted for 763-769 MHz and 793-799 MHz bands to support 3GPP; alternatively, those bands must be omitted from the f-731 listing.

**Response Jan 16, 2013: No 3GPP, therefore the Grant will list the following frequencies: 769-775/799-805 MHz and 806-824/851-869 MHz for FCC and 768-776/798-806 MHz for Canada. See the attached Frequency Justification Letter.**

If you require any additional information, please contact me at (954) 723-5793 (Phone).

Sincerely,

A handwritten signature in black ink that reads 'Mike Ramnath'.

Mike Ramnath (signed above)

Manager, Regulatory Compliance

Email: [Mike.Ramnath@motorolasolutions.com](mailto:Mike.Ramnath@motorolasolutions.com)