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DA 11-846

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RE: Thales Communications, Inc., Request for Waiver of Commission Rules to Permit
Temporary Extension of Equipment Authorization to Include the 775-776/805-806 MHz
Bands and Related Relief

Dear Counsel:

This responds to the September 20, 2010, Request for Waiver submitted by Thales Communications, Inc. (Thales) seeking a waiver to: (a) “permit the temporary extension of the authorized Part 90 frequencies specified on the Thales Liberty Radio equipment authorization...to include 775-776 and 805-806 MHz”; (b) “permit the Thales Liberty Radio (with the extended and authorized 775-776 MHz and 805-806 MHz frequencies) to be marketed to and purchased by all eligible Public Safety licensees that have been or will be granted waivers to temporarily operate on such frequencies...for the duration of their waivers”; and (c) to “permit ... licensees to use the Thales Liberty Radio on 775-776 MHz/805-806 MHz for the limited duration of their waivers, after which operation of the Thales Liberty Radio would be limited to those frequencies currently authorized by the Commission.”¹ For the reasons set out below, we grant the waiver request subject to conditions.

BACKGROUND

The 775-776/805-806 MHz band segment (Guard Band) was originally part of the 700 MHz public safety narrowband spectrum. 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

¹ Request for Waiver filed by Thales Communications, Inc. (filed Sep. 20, 2010) at 1-2 (Thales Waiver Request).

² Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 06-169, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, *Second Report and Order*, 22 FCC Rcd 15289 (2007) (*700 MHz Second Report and Order*).

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 – including the Guard Band – pending their eventual relocation to the new consolidated narrowband segment.⁴ Thales requests a waiver to produce and market equipment that will, for a limited time, operate on the Guard Band frequencies in addition to other public safety narrowband frequencies. On November 12, 2010, the Bureau released a *Public Notice* seeking comment on Thales’s petition.⁵

DISCUSSION

To obtain a waiver, a petitioner must demonstrate either that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case and that a grant of the 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) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.⁶

In support of its waiver request, Thales argues that “the 700 MHz public safety rebanding effort has been beset by numerous unanticipated material delays and obstacles, all of which to date have been addressed through reasoned and flexible Commission action” and that grant of the waiver “would be entirely consistent with its prior actions taken in response to these unique and unusual circumstances.”⁷ Thales submits that certain unique circumstances have prevented the completion of narrowband relocation. Among these cited circumstances are:

- Auction 73 failed to yield a national D Block licensee; as a result, there is no agreement between a D Block licensee and the Public Safety Broadband Licensee to provide for relocation of narrowband incumbents.⁸

³ *Id.* at 15334-15335 ¶¶ 113-119. For purposes of this order, all references to the “Guard Band” refer to the 775-776/805-806 MHz block, *i.e.*, the reconfigured “Guard Band B Block” that was created by the *700 MHz Second Report and Order*. *See id.* at ¶¶ 122-125. Under the reconfigured 700 MHz band plan, the Guard Band is commercially allocated spectrum, which is distinct from the internal public safety guard band that the Commission established within the 700 MHz public safety spectrum at 768-769/798-799 MHz to separate the public safety broadband and public safety narrowband blocks. *See id.* at ¶¶ 347-348. The 768-769/798-799 MHz guard band, which is licensed to the Public Safety Spectrum Trust, is not at issue or affected by this waiver.

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*).

⁵ Public Safety and Homeland Security Bureau Seeks Comment on Petition for Waiver Filed by Thales Communications, Inc., PS Docket No. 10-233, *Public Notice*, 25 FCC Rcd 15959 (PSHSB 2010).

⁶ 47 C.F.R. § 1.925(b)(3)(i)-(ii).

⁷ Thales Waiver Request at 10.

⁸ *Id.*

- The Commission indefinitely extended the prior February 17, 2009, narrowband relocation deadline and has not specified a revised deadline.⁹
- No funding source has yet been identified for relocating narrowband incumbents into the consolidated public safety narrowband channels.¹⁰
- The Commission's issuance of waivers allowing incumbent 700 MHz narrowband licensees to continue operating in the Guard Band suggests that there is no need to completely prohibit temporary operations there.¹¹
- The reimbursement issues associated with interim use of the Guard Band for narrowband operations have not been settled.¹²
- The Commission's current restrictions on the marketing and manufacturing of equipment for use in the Guard Band may prevent licensees from obtaining Department of Homeland Security funding for multi-band radios.¹³
- The restriction that limits licensees to using radios on order or on hand as of August 30, 2007, prevents licensees from obtaining radios that enhance interoperability and offer cost advantages.¹⁴

Finally, Thales argues that denying relief would be unduly burdensome to licensees that have interim authority to operate in the Guard Band but that do not have access to "the best available equipment for operation on those frequencies during their waiver periods, and thereafter on currently authorized frequencies."¹⁵

Commenting parties support Thales's waiver request, and most submit that the waiver, if granted, should extend to all equipment manufacturers.¹⁶ Certain parties, however, believe that we should impose conditions on any waiver grant. The American Association of State Highway and Transportation Officials (AASHTO), the Public Safety Spectrum Trust (PSST), and the National Public Safety Telecommunications Council (NPSTC) urge that the waiver be limited to licensees currently authorized for Guard Band operation.¹⁷ Both Thales and the Illinois Terrorism Task Force, however, disagree with the imposition of this condition¹⁸ and argue that we should allow "all authorized users" of the 700 MHz public safety band to acquire and operate the equipment to enhance interoperability.¹⁹

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.* at 11.

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.* at 13.

¹⁶ AASHTO Comments at 1; PSST Comments at 4; NPSTC Comments at 1; Motorola Comments at 1; Harris Corporation Reply Comments at 3; Illinois Terrorism Task Force Comments at 2. Thales indicates in its Reply Comments that it does not object to extending the waiver to all manufacturers. Thales Reply Comments at 2.

¹⁷ AASHTO Comments at 1; PSST comments at 3; NPSTC Comments at 4.

¹⁸ Thales Reply Comments at 4; Illinois Terrorism Task Force Comments at 2.

¹⁹ Illinois Terrorism Task Force Comments at 2.

AASHTO and PSST submit that the relief afforded by the requested waiver should terminate coincidentally with the termination of the last waiver authorizing narrowband operation in the Guard Band.²⁰ AASHTO also requests a condition specifying that the radios that are the subject of the waiver request must be field-programmable to remove the Guard Band channels once the waiver expires.²¹ The Illinois Terrorism Task Force supports such a condition, provided it is not interpreted to mean that the radio must be rendered “permanently incapable of operating on the Guard Band frequencies.”²² Thales supports the Illinois Terrorism Task Force’s proposed interpretation.²³

AASHTO and PSST further recommend that we add a condition that public safety licensees that deploy equipment purchased pursuant to the waiver not be eligible for reimbursement of reprogramming or other relocation costs when a licensee relocates from the Guard Band.²⁴ In addition, PSST and NPSTC submit that we should require the radios authorized by the waiver to conform to the Commission’s technical rules for radios authorized to operate in the current consolidated narrowband 700 MHz spectrum.²⁵

DECISION

We find that Thales’s waiver request meets the Commission’s waiver criteria and that it is consistent with Commission policy instituted following the *700 MHz Second Report and Order*. In furtherance of that policy, we have granted waiver relief to 700 MHz public safety narrowband incumbents that have demonstrated that continued temporary use of Guard Band channels is necessary to avoid delaying completion of systems needed by public safety agencies.²⁶ The underlying purpose of the restriction against use of new 700 MHz narrowband radios in the Guard Band – avoiding permanent proliferation of narrowband radios in the band – will not be frustrated by grant of the requested waiver, because as set forth below, the waiver is temporary in nature and we are requiring Guard Band capability to be removed from the radios when the waiver expires. Grant of the waiver is also in the public interest because it will provide 700 MHz narrowband incumbents with access to multi-band radio technology that provides them with more flexibility to meet operational needs until they can be relocated to the consolidated narrowband portion of the 700 MHz public safety band. Consequently, subject to the conditions specified below, we grant public safety licensees a waiver of the provisions of paragraph 339 of the Commission’s *700 MHz Second Report and Order* that prohibit new narrowband operations outside of the 769-775/799-805 MHz band.²⁷ We also grant equipment manufacturers a conditional waiver of the Commission’s equipment authorization rules to the extent that those rules preclude them from obtaining authorizations to manufacture or sell equipment (or to modify already-approved equipment) for use by public safety licensees in the Guard Bands as specified herein.

²⁰ AASHTO Comments at 3; PSST Comments at 3. *See also* NPSTC Comments at 4.

²¹ AASHTO Comments at 3-4. *See also* PSST Comments at 3; NPSTC Comments at 4.

²² Illinois Terrorism Task Force Reply Comments at 3.

²³ Thales Reply Comments at 6.

²⁴ AASHTO Comments at 4; PSST Comments at 4.

²⁵ PSST Comments at 4; NPSTC Comments at 5.

²⁶ *See, e.g., Virginia Waiver Order, Phoenix Waiver Order, supra* note 4.

²⁷ *700 MHz Second Report and Order*, 22 FCC Rcd at 15142, ¶ 339. However, as discussed *infra*, licensees are not entitled to cost reimbursement for equipment purchased or operated pursuant to this waiver.

As proposed by commenting parties, we extend the waiver not only to Thales, but also to all equipment manufacturers. Thus, any manufacturer may market and sell Guard Band-capable radios under the conditions set forth in this waiver.²⁸ We also allow any 700 MHz public safety licensee to operate such radios, consistent with its authorization and the terms of this waiver. We do not find it necessary to adopt the proposal of AASHTO, PSST, and NPSTC that the waiver extend only to licensees currently authorized for Guard Band operation.²⁹ As Thales and the Illinois Terrorism Task Force point out, this could preclude other 700 MHz public safety band licensees from using Guard Band-capable radios to support interoperability or roaming. However, we emphasize that this waiver does not authorize any 700 MHz public safety licensee to operate outside the scope of its existing license.

We remind potential users of radios authorized pursuant to this waiver that FCC out of band emission (OOBE) limits imposed on commercial operations in the 700 MHz band provide a lower level of protection to operations in the Guard Band than in the 769-775/799-805 MHz public safety narrowband spectrum.³⁰ This specifically affects mobile receivers operating at 775-776 MHz, where OOBE limits from commercial operations are 10 dB less stringent than at 769-775 MHz. In addition, mobile devices receiving at 775-776 MHz may be more susceptible to “blocking” caused by nearby commercial mobile transmitters operating at 776-787 MHz. Therefore, there is a potentially greater risk of interference from commercial operations to public safety operations in the 775-776/805-806 MHz Guard Band than at 769-775/799-805 MHz, and the probability of interference will increase as the number of devices operating at 775-776/805-806 MHz increases. Therefore, to the extent possible, equipment manufacturers providing radios under this waiver should design their equipment accordingly.³¹

This waiver will expire automatically when the last 700 MHz public safety narrowband licensee vacates the Guard Band or when the Commission issues a Guard Band license, whichever occurs first. Upon the occurrence of either event, the Commission will issue a Public Notice requiring use of the Guard Band channels pursuant to this waiver to cease within sixty days of the date of the Public Notice. Additionally, within sixty days of the date of the Public Notice, user-selectable Guard Band channels must be removed from all radios authorized pursuant to this waiver. We clarify, as Thales and the Illinois Terrorism Task Force request, that removal of the Guard Band channels does not require that the radio be rendered permanently incapable of operating on those channels, only that the radio be reprogrammed so that the radio’s user cannot select the Guard Band channels.³² In addition, radios authorized by this waiver must be reprogrammable so that they are capable of operating on the narrowband channels in the 769-775/799-805 MHz band. We advise radio users that such re-programming normally requires the services of a suitably qualified technician and the use of manufacturer-supplied software. As a condition of this waiver, manufacturers must make available to users, at reasonable cost, the software or firmware required to delete the Guard Band channels from the radio when this waiver expires.

²⁸ Manufacturers filing for a grant of an application for new radios or a request to modify grants for radios already authorized must include a copy of this waiver with the application to include these channels.

²⁹ See AASHTO Comments at 1; PSST Comments at 3; NPSTC Comments at 4.

³⁰ 47 C.F.R. § 27.53(c)(2) and (c)(4).

³¹ Because channels in the frequency range 775-776/805-806 MHz must be removed from radios upon expiration of this waiver, the described added potential for interference will not occur once the channels are removed.

³² We note that rendering the radio permanently incapable of operating on the Guard Band channels would require costly modifications that could not readily be performed in the field.

Manufacturers wishing to implement Guard Band capability on radios already certified for use on the 700 MHz public safety band may do so as a permissive change but must provide the Commission with a reasonable description of the software or firmware necessary to effect the change and must attest that, with the software or firmware installed, the user cannot modify the radio to operate on any frequencies other than its authorized frequencies. Each manufacturer shall also describe the measures it will take to ensure control over the software such that it is accessible only to qualified parties. Each manufacturer must ensure that after the waiver expiration date, all new radios it sells or submits for certification must be incapable of accessing the Guard Band channels. As requested by PSST and NPSTC, we clarify that all radios operating in the Guard Band must comply with the technical rules applicable to other narrowband 700 MHz band radios.³³

Finally, as requested by PSST and AASHTO, we specify that public safety licensees that purchase or operate radios pursuant to this waiver are not eligible for reimbursement of the purchase price, reprogramming costs, or any other costs associated with modifying the equipment when a licensee migrates from the Guard Band.³⁴

ORDERING CLAUSE

Accordingly, IT IS ORDERED that, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925 of the Commission's rules, 47 C.F.R. § 1.925, the waiver request filed by Thales Communications, Inc. on September 20, 2010, IS GRANTED to the extent discussed herein SUBJECT TO THE FOLLOWING CONDITIONS:

1. Equipment produced and marketed pursuant to this waiver shall be field-programmable, such that channels in the frequency range 775-776/805-806 MHz are removed from the radio at the expiration of the waiver. Manufacturers shall have available to users, at reasonable cost, the software or firmware necessary to delete the Guard Band channels from the radio.
2. This waiver shall terminate on the date specified in a future Public Notice. After said date, radio users may not operate on channels in the frequency range 775-776/805-806 MHz.
3. Within sixty calendar days of the date specified in the Public Notice, *supra*, users of public safety equipment capable of operating on channels in the frequency range 775-776/805-806 MHz shall remove those channels from their equipment, such that those channels are no longer user-selectable.
4. Equipment deployed pursuant to the waiver must meet Commission technical rules applicable to equipment certified for use in the consolidated narrowband spectrum at 769-775/799-805 MHz.
5. Equipment purchased or operated pursuant to the waiver is not eligible for cost reimbursement.

³³ PSST Comments at 4; NPSTC Comments at 4.

³⁴ PSST Comments at 4; AASHTO Comments at 4.

Thales Communications, Inc.

This action is taken under delegated authority pursuant to Sections 0.191 and 0.392 of the Commission's rules, 47 C.F.R. §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

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