

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Second Periodic Review of the Commission's
Rules and Policies Affecting the Conversion
To Digital Television

MB Docket No. 03-15
RM 9832

Public Interest Obligations of TV Broadcast
Licensees

MM Docket No. 99-360

Children's Television Obligations of Digital
Television Broadcasters

MM Docket No. 00-167

Standardized and Enhanced Disclosure
Requirements for Television Broadcast Licensee
Public Interest Obligations

MM Docket No. 00-168

COMMENTS OF MOTOROLA, INC.

Motorola, Inc. ("Motorola") hereby submits these comments in response to the FCC's Notice of Proposed Rule Making in the above-captioned proceeding.¹ As further described below, Motorola urges the FCC to pursue policies that expedite the transition to digital television ("DTV") service with high consideration given to the need for recovering the analog broadcast spectrum as early as possible.

¹ Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion To Digital Television, 18 FCC Rcd 1279, (rel. Jan. 27, 2003) [*hereinafter Notice or NPRM*].

I. INTRODUCTION

The purpose of this proceeding is to gauge the industry's progress in transitioning to the delivery of digital television via over-the-air transmission methods as well as through cable and other multichannel video delivery systems. In addition, the FCC is seeking comment on the implementation and interpretation of several FCC rules and policies to expedite the provision of DTV services and better define the end of the DTV transition. These policies and rules are derived from the provisions of the *1997 Balanced Budget Act* that launched this country's transition to digital television service and initiated the recapture of analog broadcast spectrum for public safety communications networks and other commercial applications.²

One of the prime benefits of transitioning the broadcast television service to digital technology is that it provides for the recovery of significant quantities of spectrum well suited for mobile applications. As the leading equipment supplier for public safety communications systems, Motorola has spent nearly the last 10 years helping public safety agencies to identify and acquire new spectrum allocations to support the ever-increasing need for mission critical communications. These efforts resulted in the 1998 reallocation of 24 MHz from the 746-806 MHz band for public safety users. Since then, Motorola has worked with the FCC and public safety agencies to ensure that this spectrum becomes usable across the country in the foreseeable future. These comments are part of that continuing effort.

² Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251 (1997).

Motorola is also a leading manufacturer of digital consumer and commercial equipment designed to deliver broadband communications, including DTV, to multichannel video subscribers, over advanced digital cable, satellite, and terrestrial broadcast systems. Motorola's broad business interests provide it with a unique perspective on issues affecting the DTV transition.

Motorola urges the Commission to take all steps necessary to expedite the DTV transition in order to accomplish the near-term recovery of the analog broadcast spectrum for public safety and other advanced wireless services. In so doing, the Commission should consider as one of its highest priorities the clearing of the 746-806 MHz band of broadcast incumbents so that public safety entities, as well as private wireless users accessing band manager spectrum, can begin utilizing this valuable resource on a nationwide basis.

II. IN PROMOTING THE DTV TRANSITION, THE FCC MUST GIVE HIGH PRIORITY TO CLEARING THE 700 MHZ BANDS.

In making decisions to encourage further progress on the DTV transition, the FCC must place a high priority on clearing broadcast incumbents from the 700 MHz allocations, especially the 24 MHz allocated for public safety services. Seven years have passed since the Public Safety Wireless Advisory Committee (“PSWAC”) warned Congress and the FCC that “unless immediate measures are taken to alleviate spectrum shortfalls and promote interoperability, Public Safety agencies will not be able to adequately discharge their obligation to protect life and property in a safe, efficient, and cost effective manner.”³ Yet still, the 700 MHz spectrum allocated in 1998 to respond to that need remains unusable in most major metropolitan areas due to the continued operation of co-channel and adjacent channel analog broadcast stations as well

³ See Final Report Of The Public Safety Wireless Advisory Committee, September 11, 1996, at 2.

as the existence of several digital television allotments. Of course, the attacks of September 11th have made PSWAC's concern even more urgent, as public safety agencies and critical infrastructure industries have assumed additional Homeland Security obligations that further strain existing resources. The 700 MHz public safety and guard band allocations are needed now more than ever.⁴

Motorola believes that the existing law limits, to a large degree, the FCC's ability to effectuate real change in the timing of the DTV transition. While some of the policies and rules under consideration in this proceeding may have some impact on the transition in isolated circumstances, the recovery of the analog broadcast spectrum – including the 700 MHz spectrum already reallocated for public safety use – will be delayed beyond 2006 due to the lack of a firm deadline in the existing statute. Motorola believes that the time is now ripe for all industry parties including public safety officials, broadcasters, equipment manufacturers, and others to work with Congress to develop a more precise and definitive end to the DTV transition and to specify a near-term “date-certain” for the recovery of the analog broadcast spectrum. Such clarity is urgently needed so that public safety agencies can commence with the design, planning and implementation of 700 MHz systems on a nationwide basis.

In the meantime, it remains appropriate for the FCC to take all actions within its authority to accelerate the DTV transition and clear the 700 MHz spectrum. As recognized in the *Notice*,⁵ this may require more stringent deadlines – and more rigorous enforcement of those deadlines – for broadcast stations operating on channels 51-69. Such consideration is appropriate given that

⁴ While not specifically allocated for this purpose, the 700 MHz Guard Band Service is ideal for meeting the needs of a wide range of private wireless users that need to interoperate with public safety organizations.

⁵ See *Notice* at ¶ 40.

the Commission and Congress have already found that the public interest is well served by the reallocation of that spectrum for public safety and commercial applications.

To this end, the Commission should consider and implement differing transition policies for broadcasters with either analog or digital allotments on channels 60-69 than those for in-core broadcast operations. For example, the FCC should encourage every analog broadcaster operating on any channel between 60-69 to temporarily relocate its analog facility to a digital allotment located below channel 52, even if this means allowing the broadcaster to operate on the digital allotment in the analog mode at reduced power.⁶ Similarly, if a broadcaster has both an analog and a digital allotment within channels 60-69, the FCC should consider whether the public interest is better served by allowing such broadcasters to defer construction of their digital facilities until *after* the transition is completed in that market if the use of the digital allotment would impact public safety use of the 700 MHz spectrum. In sum, the FCC must remain flexible, creative and focused in finding solutions to clear the 700 MHz bands so that public safety may access the allocation nationwide.

Motorola offers the following specific comments on the proposals contained in the *Notice*. While Motorola's recommendations may be applicable to core television channel operations as well as those operating on channels 52-59, our primary focus remains on the upper 700 MHz band and how these policies can advance the availability and usability of public safety and guard band spectrum.

⁶ In this circumstance, the broadcaster's relocated analog station should continue to be eligible for must-carry on any cable system on which it was previously eligible for must-carry when operating its analog facility within channels 60-69, so long as the broadcaster continues to meet the Commission's signal quality and other analog must-carry requirements with respect to such cable systems. Since about seventy percent of Americans actually receive their television programming by cable, this approach would minimize any change in television service to consumers, and at the same time, would help clear spectrum for public safety.

Channel Election: The Commission has proposed to require commercial and non-commercial broadcast licensees with two in-core assigned channels to make their final channel election by May 1, 2005.⁷ Motorola believes that this timeframe should be accelerated. Broadcasters with digital allotments outside the core channel allotment need to begin the necessary engineering studies as soon as possible to find core channels for post-transition operation. The basic DTV allotment plan has been known now for about 4 years. Accelerating the final channel election deadline proposal by as much as one year – to May 1, 2004 – would continue to provide broadcasters with adequate time for planning while also expediting the development of relocation solutions for the DTV allotments now in the 700 MHz bands.

Replication And Maximization: The Commission should require stations to maximize DTV service as early as practical to ensure a competitive service that reaches as many consumers as possible. Motorola believes, however, that the dates proposed in the *Notice* – July 1, 2005, for top-four network affiliates and July 1, 2006, for all others -- are not sufficiently aggressive. The Commission should require that all stations have a maximization deadline that is the same as the channel election deadline, which, as noted above, Motorola urges the Commission to accelerate from its proposed date of May 1, 2005 to as early as May 1, 2004. Tying these dates together will provide for a stable core channel environment and thus aid non-core licensees to find suitable replacement channels within the core.

⁷ *Notice* at ¶ 25.

The Commission has also asked whether licensees with non-core digital allotments should have more aggressive replication and maximization deadlines than licensees with in-core digital allotments.⁸ In general, Motorola agrees with the Commission's view but, consistent with the above discussion, urges the Commission to adopt the same aggressive deadline for all stations. In other words, the FCC's accelerated proposal for licensees with out-of-core allotments would coincide with Motorola's accelerated proposal for all licensees. Also, as noted earlier in these comments, the FCC should also consider waiving the maximization requirement for DTV allotments in the upper 700 MHz band that have a direct impact on the ability of public safety stations to deploy. The public interest may be better served by not requiring DTV stations on Channels 60-69 that would interfere with public safety use of the spectrum to build to their maximum permitted facilities. Any Channel 60-69 broadcaster that chooses not to maximize its DTV service area should be permitted to do so under the condition that it will not claim interference protection over public safety and guard band operations to its theoretical maximization service contour during the DTV transition period.

Section 309(j)(14): The FCC seeks comment on how it should interpret and define the provisions of this section that allow broadcast stations to petition to extend the DTV transition period beyond December 31, 2006. As an overarching position, Motorola urges the Commission to be rigorous in its review of extension requests, especially for those coming from channel 60-69 stations. Because of the unique circumstances surrounding the use of those channels, Motorola is concerned that a marketwide or a nationwide extension request would dilute the analysis given to public safety spectrum needs. Therefore, Motorola prefers, and believes that

⁸ Notice at ¶¶ 52, 54.

the plain language of the statute demands, that the FCC consider individual station requests and extensions.

In that regard, Motorola believes that, as a general rule, the relevant TV market should be defined by the individual station's Grade B contour rather than the designated market area ("DMA"). Motorola's concern is that the DMA may bring into consideration distant rural areas that have little opportunity to receive the over-the-air broadcast station and have little relationship with the market intending to be served by the public safety organizations. Motorola recognizes, however, that some DMAs may provide a more accurate representation of the intended broadcast service area than Grade B households, and the FCC should therefore maintain some flexibility on this issue by allowing broadcasters to demonstrate in unique circumstances that a DMA market definition is preferable. In all cases, however, the broadcaster must have the burden to make a full and detailed showing justifying its extension request. Furthermore, in reviewing such showings from Channel 60-69 stations, the FCC must provide an even higher level of scrutiny than normal and fully consider the impact that any extension would have on public safety 700 MHz deployment opportunities.

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Finally, Motorola notes that it is doing its part to help facilitate the digital transition. For example, the Commission asks for information on devices that provide digital-to-analog conversion technology, so that digital broadcast signals may be viewable on consumers' analog TV sets. Motorola currently markets various digital cable set-top equipment that can provide analog downconversion functionality for digital programming services. For example, the DCT5100 and DCT5200 digital set-top equipment can downconvert both high-definition ("HDTV," e.g., 1080i or 720p) and standard definition ("SDTV," e.g., 480i and 480p) digital

signals (including digital broadcast signals) for display on analog TV sets. Cable operators have just recently begun to deploy these units in their systems (to date, Motorola has shipped approximately 140,000 DCT5100/DCT5200 units to cable MSOs, and estimates that approximately 100,000 are currently in customers' homes). Motorola also is promoting the DCT5100/DCT5200 family of equipment to retailers, urging them to purchase these units and resell them directly to consumers.

In addition, Motorola's DCT2000 family of digital set-top equipment can downconvert the 480i digital format to analog. Over 25 million DCT2000 series units are now deployed in the United States.

Motorola does not take a position here on what level of downconversion functionality is necessary for a device to be considered a "digital-to-analog converter" for purposes of Section 309(j)(14)(B)(ii). However, regardless of how the Commission defines this phrase, the important point is that the cable industry and their suppliers have already developed and deployed, and are increasingly promoting (both for lease and for retail purchase), customer set-top equipment that will qualify under any possible definition.

III. CONCLUSION

The ultimate transition to digital television service will represent a tremendous achievement in the provision of new and improved video services. In addition, the transition will provide a significant amount of new spectrum capacity for public safety operations. Motorola supports the Commission's desire to move this transition forward so that the public can soon benefit from the realization of these important goals.

Respectfully submitted,

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