

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Second Periodic Review of the)	MB Docket No. 03-15
Commission's Rules and Policies)	
Affecting the Conversion)	RM 9832
to Digital Television)	

**REPLY COMMENTS OF
ZENITH ELECTRONICS CORPORATION**

Zenith Electronics Corporation ("Zenith") hereby submits these reply comments in the above-captioned proceeding concerning the nation's continued successful conversion from analog to digital television ("DTV") technology.¹

As a primary developer of the U.S. DTV transmission system and a leading provider of digital high-definition television ("HDTV") equipment, Zenith has long been at the vanguard in the effort to bring the benefits of digital television to all Americans. Zenith is enthusiastic about the significant progress made in the digital transition to date, and shares the Commission's strong resolve to ensure that the transition is completed not only swiftly, but in a manner that serves the best interests of all consumers. In this regard, Zenith commends the FCC for its leadership in moving the transition forward. Together with diligent efforts by the various industries involved, the Commission's leadership will continue to make DTV equipment more affordable, increase the

¹ See Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Notice of Proposed Rule Making, MB Docket No. 03-15, FCC 03-8 (rel. Jan. 27, 2003).

availability of compelling digital content, and provide consumer access to digital content both over terrestrial broadcast and cable systems.

Each of the various industries involved in the transition has a continuing responsibility to spur consumer interest in digital television. In that regard, we applaud Chairman Powell for his continued pressure on all interested parties to promote digital television to consumers. Zenith is committed to working with our retailers and with our colleagues in the consumer electronics industry to achieve this goal. At this critical juncture of the conversion, the broadcast and cable industries are also well positioned to lead the effort to raise consumer awareness. Zenith therefore urges broadcasters and cable operators to be more active in promoting their digital HDTV content and educating the public about the benefits of digital technology. In particular, broadcasters and cable operators should make greater use of their analog channels to inform viewers about the DTV transition and the digital content that is currently available. Such active promotion, coupled with the Commission's ongoing leadership and encouragement, will do much to hasten consumer acceptance of DTV and thus facilitate a rapid transition.

To further assist the Commission in its effort to ensure a swift and successful conversion, Zenith wishes to underscore certain comments filed in this proceeding addressing technical and marketplace issues that Zenith believes are vitally important to the transition's continued progress.

First, like all of the parties commenting on the issue, Zenith fully supports the Commission's proposal to update its rules to reflect improvements made to the ATSC DTV standard A/53B since the August 7, 2001, version incorporated into the agency's

rules in the First DTV Periodic Review proceeding.² As stated in the comments of the Advanced Television Systems Committee, Inc. (“ATSC”), “[o]ne of the many benefits of the flexible ATSC digital television standard is the ability to improve and enhance the technology and related standards over time.”³ By updating its rules to reflect improvements and enhancements to the ATSC standard, the Commission can ensure that DTV and DTV-related services provided by free over-the-air broadcasters are continually advanced, thereby benefiting the public and facilitating the expeditious return of a major portion of the spectrum currently allocated to broadcasting.

In addition to the benefits to the public, the flexibility of the ATSC standard also serves the needs of broadcasters. Indeed, in response to a request from broadcasters for more flexibility in their digital transmissions, Zenith and ATI Technologies, Inc. have developed an enhancement to the ATSC A/53 standard called Enhanced 8-VSB (“E-VSB”). E-VSB allows broadcasters, *at their option*, to create a robust digital channel that is fully backward-compatible with the current digital signals. Specifically, using the E-VSB system, a broadcaster can enhance indoor, portable and potentially even mobile reception capabilities. These enhancements, however, do not preclude a broadcaster’s capability to provide the highest resolution high-definition signal using the full 19.4 megabits-per-second bit stream. Broadcasters can decide dynamically how much data to transmit in the normal 8-VSB mode and how much to transmit in the E-VSB mode. It is

² See First Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, Second Report and Order and Second Memorandum Opinion and Order, 17 FCC Rcd 15978, 16001, ¶ 50 (2002); ATSC Comments at 3-5; Association for Maximum Service Television, Inc. and National Association of Broadcasters (“MSTV/NAB”) Comments at 32; Association of Public Television Stations, *et al.* (“PTV”) Comments at 43; Consumer Electronics Corporation (“CEA”) Comments at 24; The Walt Disney Company/ABC (“Disney”) Comments at 4-5.

³ ATSC Comments at 2.

emphasized, however, that use of E-VSB is optional, and simply provides a choice for those broadcasters who want a choice. E-VSB holds tremendous potential for broadcasters and manufacturers to offer new services to the public, and Zenith strongly supports the eventual inclusion of E-VSB in the ATSC A/53 standard.

Second, Zenith strongly supports the unanimous view expressed by commenters from both the broadcast and consumer electronics industries urging the FCC (1) to adopt the current version of the ATSC Program and System Information Protocol (“PSIP”) standard (A/65B, March 18, 2003) in its entirety into its rules and (2) to require that broadcasters transmit PSIP information with their digital signals in complete accordance with the standard.⁴ PSIP is an important element of the DTV system and is essential to facilitating consumer adoption of DTV and speeding the transition. Use of PSIP allows for DTV broadcasters and DTV receivers to exchange vital information enabling the correct operation of multiple DTV-related functionalities and services in consumer DTV equipment, including proper channel tuning and numbering, closed captioning, V-chip parental choice and other critical, consumer-friendly features. Although some broadcasters are voluntarily transmitting PSIP information, it is often improperly implemented, thereby diminishing the value of PSIP and causing consumer confusion. Accordingly, Zenith joins with those commenters urging the Commission to promptly adopt the complete A/65B PSIP standard and mandate its uniform use by all broadcasters.

Finally, Zenith acknowledges and appreciates the substantial costs associated with broadcasters’ conversion to digital television, and we applaud the more than 900 local TV

⁴ See ATSC Comments at 5; MSTV/NAB Comments at 27; PTV Comments at 43; CEA Comments at 24-31; CPB/WGBH National Center for Accessible Media Comments at 4; Cox Broadcasting, Inc. Comments at 7; Harris Corporation Comments at 8-10; Sharp Electronics Corporation Comments at 6; Thomson, Inc. Comments at 11; Disney Comments at 2, 5-6.

stations that are broadcasting digitally. At the same time, Zenith is concerned that the large number of DTV stations operating at power levels substantially less than authorized are doing more harm to the transition than simply depriving digital service to those suburban viewers residing outside the low-power DTV stations' coverage areas. Under the Commission's "minimum facilities" policy, a DTV broadcaster may operate at reduced power and defer construction of its full-power DTV facilities, provided that its low-power DTV facilities simply cover the station's city of license.⁵ When a DTV station operates at low power, some viewers outside the station's low-power coverage area may not receive the station's signal, but because of the robustness of the ATSC/8-VSB transmission and the built-in system margin, many consumers even outside the city-grade will still have reception. However, such reduced power transmission adversely affects consumer reception *within* the station's low-power coverage area – *i.e.*, the station's core community where most people live. Strong adjacent-channel analog (NTSC) signals cannot be rejected by DTV receivers if the ratio of the desired digital signal to the strong adjacent analog signal is too small. This is now happening frequently as the direct result of the currently allowed low-power digital transmissions.

Accordingly, rather than hastening the public's acceptance of digital television and speeding the transition, in many cases DTV broadcasters' low-power operations may actually create a poor user experience. It is critical, therefore, that the Commission take whatever steps necessary to ensure that broadcasters build out their full DTV facilities and increase their power expeditiously so as to maximize consumers' ability to access digital programming.

⁵ See First Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Memorandum Opinion and Order on Reconsideration, 16 FCC Rcd 20594, 20607 ¶ 34 (2001).

CONCLUSION

Zenith, like all of the DTV stakeholders commenting in this proceeding (including consumers, broadcasters, manufacturers and others), shares the Commission's vision of a nation in which all Americans are able to enjoy the benefits of digital television. Zenith again commends the FCC for its diligent efforts to speed the transition and make this vision a reality as soon as possible. In this regard, Zenith urges the Commission to keep building upon the transition's growing momentum by (1) ensuring that the version of the ATSC DTV standard A/53B incorporated into the agency's rules reflects the latest improvements made to the standard; (2) mandating uniform use of the ATSC A/65B PSIP standard by all broadcasters; and (3) ensuring that broadcasters reach the maximum number of viewers possible as soon as is reasonably practicable.

Respectfully submitted,

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May 21, 2003