

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)

UltraVision Security Systems, Inc.,)
Request for Interpretation and Waiver of)
Section 15.511(a) & (b) of the)
Commission's Rules)
for Ultra-Wideband Devices)

ET Docket No. 06-195

FILED/ACCEPTED

DEC 18 2008

Federal Communications Commission
Office of the Secretary

**PETITION FOR RECONSIDERATION OF THE
ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.**

The Association for Maximum Service Television, Inc. ("MSTV")¹ respectfully petitions for reconsideration of the Commission's decision to waive its rules and requirements to permit the marketing, sale and operation of the UltraSensor ultra-wideband (UWB) surveillance system by UltraVision Security Systems.² MSTV believes that the Commission's action in granting this waiver is unfounded, technically flawed, and will cause interference to television viewers. MSTV requests that the grant of the *UltraVision Waiver* be reconsidered or, at the very least, amended to include a stringent requirement for coordination.

¹ MSTV is the national technical trade association of the television broadcast industry and has been a leader in the development of over the air digital television.

² *In the matter of UltraVision Security Systems Request for Interpretation and Waiver of Section 15.511(a) & (b) of the Commissions rules for Ultra-Wideband Devices*, ET Docket No. 06-195, FCC 08-263, released November 20, 2008. (herein after *UltraVision Waiver*)

No. of Copies rec'd 019
List ABCDE

I. COMMISSION ERRED IN GRANTING ULTRAVISION'S WAIVER RATHER THAN TREATING THE REQUEST IN A NOTICE AND COMMENT RULE MAKING AS SUGGESTED IN THE ORIGINAL UWB PROCEEDING

A. Granting the Waiver Contradicts the FCC's Decision that Future Ultra-Wideband Devices Would Proceed Through the Rule Making, Not the Waiver Process.

In its original decision establishing rules for UWB devices, the Commission indicated that it would consider additional UWB technologies and frequency bands in future rule making actions not as a matter of waiver of the rules.³ The Commission stated that as the UWB technology develops and experience is gained with the potential interference of UWB devices, it is appropriate to reexamine these rules. Accordingly, the Commission stated that:

"We intend to review the standards for UWB devices and issue a further rule making to explore more flexible technical standards and to address the operation of additional types of UWB operations and technology. In the meantime, we plan to expedite enforcement action for any UWB products found to be in violation of the rules we are adopting and will act promptly to eliminate any reported harmful interference from UWB devices."⁴

UltraVision asserts that while the original Commission UWB rules authorize specific applications and emerging technologies operating in particular frequency bands,

³ *First Report and Order* in ET Docket No. 98-153, Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems, 17 FCC Rcd 7435 (2002); *Erratum* in ET Docket No. 98-153, 17 FCC Rcd 10505 (2002); (hereinafter *First Report and Order*); *Memorandum Opinion and Order and Further Notice of Proposed Rule Making* in ET Docket No. 98-153, 18 FCC Rcd 3857 (2003), (hereinafter *Memorandum Opinion and Order*); *Second Report and Order and Second Memorandum Opinion and Order* in ET Docket No. 98-153, 19 FCC Rcd 24558 (2004) (hereinafter *Second Report and Order*)

⁴ *First Report and Order* at para 267, p. 91.

the Commission did not address and prohibit future UWB operation in other frequency bands, especially below 2 GHz, as long as they meet the UWB technical rules. This was not the case. In developing the UWB rules, the Commission specifically addressed and rejected the use of frequencies below 2 GHz for UWB operations. For example, in paragraphs 18 and 32 of the UWB *First Report and Order*, the Commission noted that it had a number of concerns about generally permitting the operation of UWB devices in the region of the spectrum below approximately 2 GHz and stated the following:

“As discussed below, we are, *inter alia*, adopting emission limits for UWB that are generally more stringent than those imposed on other Part 15 devices and limiting the frequency range below which certain UWB products will be permitted to operate. We believe that this combination of technical standards and operational restrictions will enable UWB devices to coexist with the authorized radio services without the risk of harmful interference.”⁵

“This is perhaps the most heavily occupied region of the spectrum and is used for public safety, aeronautical and maritime navigation and communications, AM, FM and TV broadcasting, private and commercial mobile communications, medical telemetry, amateur communications, and GPS operations. Further, 41 of the 64 restricted frequency bands are at or below 2 GHz, not counting the TV broadcast bands.”⁶

Further, as noted above, the Commission indicated that it would consider additional UWB technologies and frequency bands in future rule makings, and not circumvent the FCC allocations process by using the waiver approach.

⁵ *First Report and Order* at para. 18.

⁶ *Id.* at para 32.

B. Granting the Waiver Violates the Spirit of the Administrative Procedure Act by failing to Proceed with Notice and Comment Rulemaking

Not only does the grant of the UltraVision waiver violate the FCC's own stated policy with respect to new ultra-wideband devices, it also violates the spirit if not the letter of the Administrative Procedure Act. (APA)⁷ Granting the waiver effectively amends the FCC's Table of Allotments outside of a notice-and-comment rulemaking, in contravention of the APA. As the US Court of Appeals for the DC Circuit has noted in determining whether APA legislative rulemaking requirements are triggered, "The critical question is whether the agency action jeopardized the rights and interest of parties, for if it does, it must be subject to public comment prior to taking effect."⁸ Granting Ultra Vision's waiver in the instant case did just that – jeopardizing the interests of licensed broadcast services and viewers relying on over-the-air television.

The same court has explained: "The notice and comment requirements were included in the APA for two main reasons. First, to reintroduce public participation and fairness to all affected parties after governmental authority has been delegated to unrepresentative agencies. Second, to assure that the agency will have before it the facts and information relevant to a particular administrative problem, as well as suggestions for

⁷ 5 U.S.C. sec 551 *et seq.*

⁸ *Batterton v. Marshall*, 648 F.2d 694, 708 (DC cir 1980). *See e.g. Nat'l Family Planning and Reproductive Health Ass'n v. Sullivan*, 979 F.2d 227, 235 (DC Cir 1992); *see also id.* at 234. (where a change cannot "legitimately be characterized as merely a permissible interpretation of the regulation, consistent with its language and original purpose," notice-and-comment rulemaking was required. A "nonobvious and unanticipated reading" of the rules amounts to a substantive amendment. *Id* at 235.

alternative solutions.⁹ These interests are particularly salient here, given the scope and nationwide scope of the UltraVision waiver. Accordingly, grant of the waiver violated the notice and comment requirements of the APA.

III. COMMISSION ERRED IN FINDING THAT SUCH A WAIVER CAN BE GRANTED WITHOUT INCREASING THE POTENTIAL FOR HARMFUL INTERFERENCE TO TV VIEWERS

Applicants face a high hurdle even at the starting gate to justify a waiver of the Commission's rules.¹⁰ Importantly, when granting a waiver the FCC must make a determination that the waiver does not undermine the purpose of the rule, and there must be a stronger public interest benefit in granting the waiver than in applying the rule.¹¹ In this regard, the agency must explain why deviation from the general rule better serves the public interest than would strict adherence to the rule.¹² In the instant case, the FCC's waiver of Sections 15.511(a) (b) are premised on the ability of the UltraVision system to operation without causing harmful interference to authorized licensed services. As noted below however, UltraVision has failed to meet its burden. Moreover, the Commission has no factual basis on which to conclude that this waiver will not undermine the purpose of the rules which are designed to avoid interference in the TV band.

In its decision, the Commission states that "if appropriate operational and technical conditions are imposed on the waiver, a waiver of the frequency band and user

⁹ *Nat'l Ass'n of Home Health Agencies v. Schwiker*, 690 F.2d 932,949 (D.C. Cir. 1982) (quotations omitted); see also *id* at 949 ("where agency action trenches on substantive rights and interests" the APA's "procedurals" exception cannot apply).

¹⁰ *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir 1969)

¹¹ *Id.*

¹² *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir 1090)

requirements in 15.511 (a) and (b) can be granted without increasing the potential for interference. Hence, granting this waiver will not undermine the purpose of these rules.”¹³ However, the Commission has not done any studies or technical analysis or tests of the UltraSensor system that would suggest that it has appropriate knowledge to determine what “appropriate operational and technical conditions” should be imposed on UltraVision that would not increase the potential for interference. This is in stark contrast to the Commission’s efforts in establishing the original UWB technical requirements. In this case, the Commission worked closely with NTIA to ensure that the public interest is best served by the implementation of UWB technology and that both Government and non-government operations were adequately safeguarded.¹⁴

Specifically, in that instance, the two agencies worked together to conduct testing and extensive analysis to ensure that adequate protections were in place to prevent harmful interference to incumbent operations. For example, as noted in the *First Report and Order* adopting the UWB rules, the Commission stated that NTIA conducted measurements and analysis of potential interference to a range of Federal systems including, for example, the Global Positioning System, Search and Rescue Satellite System, Air Traffic Control System, and Meteorological Radar System.¹⁵

While the Commission argues that its waiver decision would not increase the potential for interference, the “innovative application” factors cited by the Commission in its grant are all factors that *increase* rather than decrease the probability of interference. First, emissions are directed upward where they are more likely to cause interference to

¹³ *UltraVision Waiver* at 6.

¹⁴ See *First Report and Order* at para. 9.

¹⁵ *Id.*

TV antennas rather than downward towards the ground where they are less likely to cause interference. Second, the UltraSensor device would be on 100% of the time and would operate continuously. Third, the market for surveillance systems is significantly different from GPRs leading to higher proliferation of the UltraSensor system than was envisioned for GPR use of the band below 960 MHz. All of these factors would increase not lessen the potential for harmful interference.

While the Commission adopted separation requirements cited in an MSTV sponsored study by the Canadian Research Centre (CRC), it conducted no studies to determine if those separation distances are sufficient to prevent harmful interference to TV viewers. In fact, the CRC studies cited by the Commission show interference from an *indoor* Part 15 device transmitting at the 15.209 level to a TV receiver using an *indoor* TV antenna with little or no gain. This study, as submitted by MSTV, was intended to show the potential harmful interference that could be caused by transmissions at the 15.209 level but clearly was not intended to detail all interference situations or to suggest that such separation distances alone are sufficient to avoid interference to TV viewers. For example, higher gain outdoor antennas may likely require larger separation distances to be specified, or from the aggregate interference effect from placing those ultra sensors close together.

The teachings of the Court of Appeals in the *American Radio Relay League vs. FCC* are instructive in that “among the information that must be revealed for public evaluation are the “technical studies and data” upon which the agency relies...”¹⁶ “[I]n order for useful criticism, it is especially important for the agency to identify and make available technical studies and data that it has employed in reaching the decisions to

¹⁶ *American Radio Relay League v. FCC*, 524 F.3d 227, 237 (D.F. Cir 2008).

propose particular rules.¹⁷ In the instant case the FCC has failed to conduct, much less publish, any technical study on which it can rely. Therefore, it is unclear how the FCC could reach a rational decision that granting the waiver will not cause "harmful" interference to incumbent licensees. A defect made even more egregious by the FCC's decision to ignore its stated policy for ultra-wideband services and proceed by waiver as opposed to a rulemaking process.

IV. AT A MINIMUM, COORDINATION OF ULTRAVISION OPERATIONS WITH LOCAL BROADCASTERS SHOULD BE REQUIRED AS PART OF ANY WAIVER CONDITION

The Commission argues that its approach is inconsistent with regulations that allow biomedical telemetry devices to operate in the TV bands. However, biomedical devices are restricted to health care facilities, such as hospitals, and operate indoors with narrowband emissions that can affect only a single TV channel.¹⁸ On the other hand, the waiver permits UltraVision UWB devices to be operated by almost any person, business, or state and local government agency and these devices are designed to be located and operated outdoors and with ultra-wide band emissions which can affect all the TV channels that are operating in the area. Given these facts and substantial differences, the Commission, at the very least, should require that these "waivered" facilities be coordinated so that any impact on local broadcasters and their viewers can be identified and remedied as quickly as possible. MSTV notes that this should impose no hardship

¹⁷ *Id.*

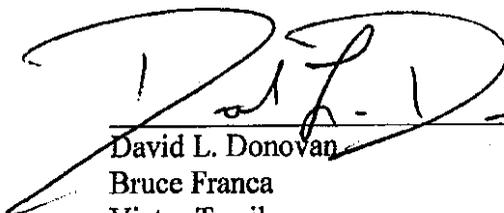
¹⁸ Biomedical telemetry devices were permitted to operate in the TV band when television was an analog service. With the transition to digital television, biomedical devices were removed from the TV band and provided new spectrum. No new biomedical devices are now permitted on TV channels.

on UltraVision since it suggested that it will keep a record of all installed locations and that it would coordinate in advance of operation as a proposed waiver condition in its ex parte presentation of December 11, 2007.¹⁹

V. CONCLUSION

MSTV believes that the Commission's action in granting this waiver is unfounded, technically flawed, and if not reconsidered, will cause interference to television viewers. Specifically, MSTV requests that the Commission grant this petition for reconsideration and deny UltraVision's request for a waiver. At the very least, the FCC should amend the waiver conditions to include a stringent requirement for coordination.

Respectfully submitted,



David L. Donovan
Bruce Franca
Victor Tawil
ASSOCIATION FOR MAXIMUM SERVICE
TELEVISION, INC.
4100 Wisconsin Avenue, NW
Washington, DC 20016
(202) 966-1956

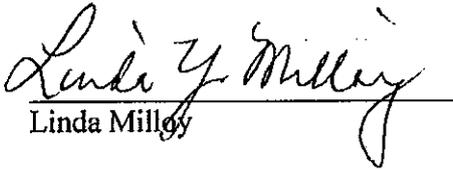
December 18, 2008

¹⁹ In its December 11, 2007 ex parte, UltraVision presented a power point slide presentation and in slide 15 it states that "precise coordination possible" and in slide 16, labeled "Proposed Waiver Conditions," waiver condition 2 is "Records kept of all locations; will coordinate in advance."

Certificate of Service

I hereby certify that a copy of the foregoing Petition for Reconsideration of the Association for Maximum Service Television, Inc, were served via postage prepaid first class mail to:

Mitchell Lazarus, Esq.
Counsel for UltraVision
Fletcher, Heald & Hildreth, PLC
1300 North 17th Street
11th Floor
Arlington VA, 22209


Linda Milloy