

September 6, 2010

VIA E-Mail

Julius Knapp
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Rashmi Doshi
Chief, FCC Laboratory Division
Federal Communications Commission
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Re: Unlicensed TV Band Devices, ET Docket No. 04-186

Dear Mr. Knapp and Dr. Doshi:

During the teleconference on August 6, 2010, between Dr. Doshi and members of the Wireless Innovation Forum's Test & Measurement (T&M) Work Group, it was requested that the T&M Work Group formalize some requested clarifications and suggest specific changes to the Commission's rules for unlicensed devices in the TV Band.¹ In order to fulfill this request and assist the OET, the Wireless Innovation Forum has developed a list of proposed revisions to the current rules. This list of items for clarification and proposed remedies are contained in Appendix A of this letter.

The proposed clarifications are targeted at better defining some ambiguities and omissions that appear in the Part 15 subpart H rules for TV Band Devices. The changes sought reflect a test and measurement practitioner's perspective in order to test conformance to the existing rules. Our goal is to ensure that the final rules are clear and implemented correctly so that manufacturers and stakeholders have confidence in the testing and certification of new TVBDs. We understand that these rules are undergoing some changes but believe that the suggested changes will still apply to a revised set of rules.

The T&M Work Group's desire is that the suggestions made here are useful to the OET and would be pleased to discuss these suggestions in further detail with you and others on the OET's staff as necessary.

¹ See ECFS filing posted August 10, 2010, Notice of Ex Parte, Wireless Innovation Forum

Sincerely,

/S/ Neal Mellen

Neal Mellen

Vice President

TDK R&D Corporation

Co-Chairs, Test and Measurement Work Group

Wireless Innovation Forum

/S/ Bob Cutler

Bob Cutler

Lead Technologist Wireless Business Unit

Agilent Technologies

cc (via ECFS): Marlene H. Dortch

APPENDIX A. CLARIFICATIONS TO TVBD RULES

REF.	QUESTION	CONTEXT / USE CASE	RECOMMENDATION
15.709	Can fixed devices also be used as a personal/portable devices (and vice-versa)? Is it permissible for Mode II devices to also be Fixed TVBDs (with different antenna and power)?	It is conceivable that home networking systems that are part of a larger TVBD BB system may periodically change roles. For example a home gateway that is a Mode II device may be moved and be used as a Mode I device.	Add new paragraph: "15.709(e) Declaration of device type. The application for registration must state the device type(s) approval(s) being requested; fixed, personal/portable Mode I and/or personal portable mode II."
15.711(b)	Is it permissible to utilize geo-location simulators during conformance testing?	Fixed and Mode II devices need to be tested to ensure the incorporated geo-location capability is accurate to within 50 meters. Since much of the device testing will likely occur in an anechoic chamber, or at least indoors, the location capability of the device needs to be simulated (GPS, TV signals, etc.).	An OET Measurement Procedure outlining how the geo-location function is to be tested and what simulators are permissible.
15.713 (b) 15.713 (h)	"(b) <i>Information in the TV bands database.</i> " - paragraphs following refer to facilities / stations that must be listed in the database. "(h) The TV bands database shall contain the listed information for each of the following:" - the paragraphs that follow refer to the specific physical / RF information by station type that is required.	Editorial comment - The physical separation between these paragraphs makes it very difficult to understand and interpret what should be in the database as opposed to how the database and TVBD should behave and interact (paragraphs (e),(f),(g)).	Reordering the paragraphs in 15.713 so that they are grouped by database content and then by TVBD interaction would make the topic easier to follow.
15.715	For radio-to-database interoperability, will database administrators be required to supply test labs with test mode and/or database simulators, minimum data arrays for compliance testing, communication protocol of the minimum data set?	Database inputs to any device type are required to test compliance to the rules, hence a representative variety of database outputs are required by testing facilities. Most likely these representative outputs will also be utilized by product developers to ensure devices comply prior to submitting for test. Either a specific set of database outputs needs to be established OR the test labs require either a database "test mode" or database "simulator".	Recommendations from the FCC / OET on how a database simulator or database test mode interface should be implemented.