



Part 15 Test procedure and Rulemaking Updates

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Equipment Authorization Branch

**Federal Communications Commission
Office of Engineering and Technology
Laboratory Division**



UPCS Update

➤ UPCS Rule changes

- 1910-1920 MHz and 2390-2400MHz removed
- Section 15.323(b) removed
 - Removed Specific algorithm for searching for an open channel. A.k.a. packing rule
- Additional flexibility added in 1920-1930 MHz
 - Operation must comply with ISO rules.
 - Specific channels removed.
 - Expand 1.25 MHz bandwidths to 2.5 MHz.
- New emission masks based on 2.5 Mhz Bandwidth



UPCS Update

- TCB approval possible
 - Follow TCB exclusion list
 - TCB must be approved for Scope A3
- Equipment Class
 - PUB - Part 15 Unlicensed PCS Base Station
 - PUE - Part 15 Unlicensed PCS Portable Tx held to ear
 - PUF - Part 15 Unlicensed PCS Portable Tx held to face
 - PUT – Part 15 Unlicensed PCS Portable Tx worn on body



UPCS Update

- Section 15.307 UTAM affidavit.
 - Applicant certifies UTAM membership
 - WWW.UTAM.org
 - Phone no. 1-800-429-8826
 - Submit copy of Affidavit. Example on Next page
 - Expected changes to UTAM requirements on April 5
 - Nomadic devices allowed
 - Description of Automatic disabling mechanism for relocation not needed
 - UTAM labeling not required.



UPCS Update

➤ SECTION 15.307(b) AFFIDAVIT

UTAM, Inc.

I, Michael Stima, Managing Director of UTAM, Inc., hereby swear and affirm that:

_____ is a participating member of UTAM, Inc. in good standing for purposes of Section 15.307(b) of the FCC rules.

Subscribed to and sworn this
___ day of _____, 200__

Michael Stima, Managing Director
UTAM, Inc.
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UPCS Update

- Update of ANSI C63.17 test procedure is pending.
 - Until final version, submit proposal to FCC.
 - Use current version, take into account new rule changes and follow test methods for Isochronous devices.
- Summary of Rule changes
 - Frequency bands deleted
 - Section 15.323(b) removed
 - Additional flexibility added.
 - New emission masks



Smart Antennas

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- Use Note Code SA: Smart antenna system that uses beam steering or beam forming capabilities to form multiple beams.
 - This Note Code was developed to track smart antenna systems operating under the new spread spectrum rules in Section 15.247 and complying with Sections 15.249(c)(2)(i) to (iv). However, the Note Code can also be used for any device that operates in any other rule part as long as the device uses beam forming/steering or can form multiple beams.
- Smart antenna test guidelines in development.
 - Do not use combiner for output power measurements.
 - Make measurements at each antenna port and add up power from all ports



UNII devices

- Transition dates for UNII devices operating in the 5.25-5.35 GHz band have been extended by 1 year.
 - http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-43A1.doc
 - January 20, 2006; Initial Certifications must comply with DFS and TPC requirements
 - Permissive change filings on grandfathered equipment (devices filed prior to January 20, 2006) can be filed until January 20, 2007.
 - January 20, 2007; All devices imported and marketed must comply.
- DFS test procedure still pending.



UWB

- Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems
 - FCC 04-285 ET Docket No. 98-153
 - Adopted 12-15-2004, Published 2/9/05, effective 3/11/05
 - http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-285A1.doc
 - Improve automotive safety and tracking systems that could be employed for personnel location, such as hospital patients and emergency rescue crew, as well as for such functions as inventory control.
 - Certain Non-UWB devices permitted use of peak emission levels, similar to the levels applied to UWB devices, for wideband emissions in the 5925-7250 MHz, 16.2-17.7 GHz and 23.12-29.0 GHz bands.
 - Allows certain measurements for vehicular radar systems employing gating to be measured with gating active. Normally continuous transmission required.



Antenna Changes

- Filing includes antenna list.
 - Antenna type, gain, model no.& manufacturer
- Additional Equivalent antennas can be substituted then marketed and used by anyone without a filing.*
 - *Must comply with 2.1043
 - E.g. Emissions from UWB devices highly dependent on specific antenna.
- Any new antenna type or higher gain antenna must be filed by the grantee with a Class II permissive change.
- Additional Equivalent antennas must be of the same type (e.g. yagi, dish) and are of equal or less gain than an antenna in the filing.
- Equivalent antennas have similar in band and out of band characteristics.
 - Treat like filter. Consult specification sheet for cutoff frequencies.



Questions and Answers

Thanks!