



Grant Certificate Notes and Conditions 551693 DR01 Draft Publication

Office of Engineering and Technology
Laboratory Division



551693 DR01 Draft Publication

- 551693 DR01 updates and replaces the preceding 821551 DR01 (Nov. 2011)
- 551693 DR01 review draft to be published by early May 2015
- Key features / scope:
 - Provide guidance for consistent use of grant notes
 - Grant notes purpose, background, concepts
 - Recap KDB 447498 standalone and simultaneous transmission device approvals framework and permissive changes
 - Distances for mobile and portable RF exposure
 - Update system note codes numbering and content



Basic Concepts

- Notes, conditions, and remarks on a grant of certification are only a summary of any special conditions that need specific notice
- The exhibits filed with an application for certification must provide a clear description of scope and allowed uses for a device as well as demonstrate compliance through representations including:
 - Test data
 - Installation/operating instructions
 - Detailed operational description



Basic Concepts

- Conditions and notes listed on grants do not replace proper conformity with TCB review and approval procedures and policies
- Compliance must be addressed for intended and reasonably expected operating configurations without relying on grant conditions and notes
 - Example: WLAN and WWAN modules intended for use in laptop computers should contain RF exposure measurements and/or test exclusion analyses and installation instructions to avoid collocation and mobile-device grant restrictions conditions



Single-, Multi-radio Background

- “No-collocation” grant condition (*syns*: collocation, co-location) has been used while technologies, policies, and procedures continue to evolve since start of TCB program
- No-collocation condition has been used for:
 - Single module devices
 - Stand-alone single-transmitter equipment
 - Specific-combination (composite system) multi-transmitter and multi-module end products
- No-collocation condition present on grants may be too restrictive in instances where test exclusions may have been applied (with supporting info. in filing)
- Absence of no-collocation condition on grant does not always mean device end use in simultaneous transmission multi-radio product configurations is authorized



Single-, Multi-radio Operations

- No-collocation condition indicates:
 - Additional compliance info may be needed to support device use in some multi-transmitter simultaneous transmission configurations within a single end product
 - Representations and test data for only stand-alone single transmitter operations are in the FCC ID record
- Real purpose of no-collocation condition
 - Not to restrict device usage options
 - Instead is to require compliance of multi-radio simultaneous transmission operations within a single end product
 - In cases where that is not already evaluated in the applications, or
 - For use outside parameters/scope for which the device was already evaluated



Single-, Multi-radio Framework

- For most or all mobile and portable devices[†] the application filing framework described in KDB 447498 should be used:
 - Stand-alone and simultaneous transmission use conditions for mobile and portable RF exposure conditions are established per intended host platform and product operating configuration requirements
 - Transmitters approved only for use in stand-alone operations cannot be used in some simultaneous transmission operations without further evaluation
 - Further evaluation using test exclusion provisions or specific configurations approval

[†] § 2.1091 mobile device; § 2.1093 portable device



Single-, Multi-radio Framework

- Transmitters and modules must be approved for host platform RF exposure conditions (per KDB 447498)
 - In terms of product configurations tested or evaluated for subsequent host product use
 - Mobile-device exposure host platform
 - Portable-device exposure host platform
 - Mixed mobile-device and portable-device exposure host platform
- Approved host platform exposure condition(s) must be identified on grants



Example Grant Condition

- Previous TCB conference notes showed:
 - The antenna(s) used for this transmitter must not transmit simultaneously with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures
 - Multi-transmitter product procedures include 662911, 447498
- The preceding must be used with:
 - ***Grantee must provide installation and operating instructions for complying with FCC multi-transmitter product procedures***
- The preceding grant condition pair applies when:
 - A device is intended and/or reasonably expected to operate with simultaneous transmission in a multi-radio end product
 - Grantee provides installation instructions on how to address compliance issues
 - As supported by test data and/or test exclusion provisions for host platform configurations



Distances for Mobile, Portable

- 20 cm mobile-device exposure grant condition
 - Introduced and used for first generation of TCB approval procedures
 - Before TCBs were doing SAR reviews
 - Simply identifies that device compliance is addressed for MPE limit not SAR limit
- As TCB review and approval policies and procedures have evolved
 - 20 cm condition no longer strictly necessary or appropriate
 - Use KDB 447498 grant listings framework
 - Similarly, distances not listed for portables
- KDB Pub. 690793 (SAR listings) will be reviewed and updated as appropriate



Looking Forward

- Modular approvals and overall multi-radio considerations are discussed in other FCC sessions of this TCB workshop
- Further details and approaches for permissive changes and new filings will be given in the upcoming 551693 DR01
- **TCBs are requested please to defer submitting KDBs concerning candidate grant condition changes until the 551693 DR01 review draft is published**