



# Module Update

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# Multiple Transmitters

## ( Multiple modules or module(s) and transmitters)

- Host manufactures have the same responsibility for compliance as if they certified a complete product :
  - §15.31 Measurement standards.
    - (h) Compliance are designed to emit at the same time, measurements of conducted and radiated emissions shall be performed with all radiating sources that are to be employed emitting.
    - (k) In no event may the measured emissions of the composite system exceed the highest level permitted for an individual component.
  
- Host manufactures for EMC consideration ( From TCB Workshop April 2013 Modular Transmitters) must ensure:
  - That §§ 15.31, 2.1041, 2.1091, 2.1093 requirements are satisfied
  - In cases where RF exposure guidelines do not require filling additional test, a host manufacture can use reasonable engineering judgment & testing following the requirements of §15.31 and procedures outlined for verification (§§ 2.953 and 2.948).



# Multiple Transmitters

## ( Multiple modules or module(s) and transmitters)

- Absence of no-collocation condition on grant does not mean simultaneous transmission multi-radio product end use is authorized without further evaluation.
- For situations that require filling additional test reports, the host manufacture can (question 1 of KDB 996369 ):
  - Request Grantee to make the Class II Change to address multiple modules.
  - File for new FCC ID for the entire product.
  - File for a change in ID and then file a Class II change to address multiple modules.
- The aggregate of all transmitters operating simultaneously in the host in the same rule/band can-not exceed the rule/band limits.



# Module Instructions & Exhibits

( Clear instructions and exhibits)

- The grantee must provide clear instructions to the host manufactures as to all the conditions of use. This includes use of additional modules will require further compliance testing and/or FCC filing. Exceptions would include additional specific modules as tested in specific host.
- Exhibits must clearly illustrate the boundaries of the modules.
  - Exhibits demonstrating the module mounted on a test board must clearly indicate that this is the test board used to demonstrate compliance.
  - Evaluation Kits under 2.803 (c) (B)(iv) as defined in §2.1 should not to be used as an exhibit as part of the module certification unless clearly explained as part of the OEM instruction manual. Evaluation Kits are not required to have an certification if sold to product developers.



# Questions and Answers

**Thanks!**