

TEST REDUCTION OPPORTUNITIES DRAFT LABORATORY DIVISION PRESENTATION

Title: Test Reduction Opportunities

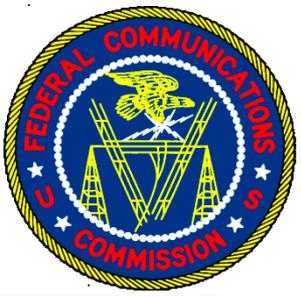
Presented: TCB Workshop, April 2016, Baltimore, MD

Purpose of Draft Presentation:

Recommended guidance for test reduction opportunities was given by FCC as part of the presentations at the April 2016 TCB Workshop. We invite comments on the attached presentation as a part of our review to gather information and aid in developing guidance for testing the radio parameters required in the FCC rules for radio frequency devices. Specifically we seek comments on:

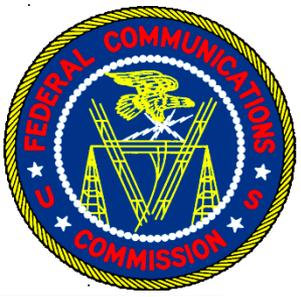
- ✓ The general guidance listed in the presentation
- ✓ Areas that need to be further addressed
- ✓ Additional questions or concerns
- ✓ Other comments related to this subject

Following our review of any comments we plan to issue a draft publication, which will also be open for comment prior to publication of any final guidance document.



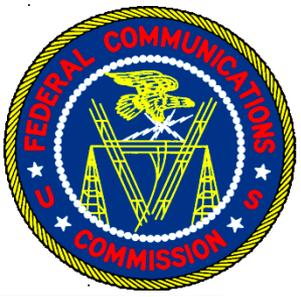
Test Reduction Opportunities

- It is recognized that dynamic variability among multiple RF-related parameters of contemporary radios (licensed and unlicensed) has significantly increased the testing and reporting efforts associated with performing compliance tests.
 - This has resulted in “test report overload” where EMC compliance test reports that provide complete data for all possible operational modes can easily exceed 1000 pages.
 - Often the practical differences observed between the operational modes are extremely subtle as related to the FCC-required compliance requirements.



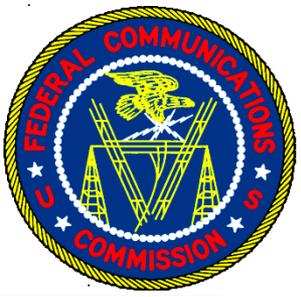
Test Reduction Opportunities (continued)

- FCC currently initiating a review to develop reasonable and practical means for reducing the reporting requirements in such cases.
- Initial considerations are based on the overarching requirement that the applicant has to demonstrate compliance under the “worst-case” operational modes.
 - This would suggest that only the data associated with the “worst case” operational modes needs to be reported, **if** the responsible party can provide **substantive** technical justification and certify that the data is indeed representative of the “worst-case” operational mode as it relates to the specific rule requirement.



Test Reduction Opportunities (continued)

- In this context, “worst-case” represents the operational mode or modes that demonstrate the least margin relative to the specified limit or requirement.
- Note that multiple “worst case” modes may exist relative to different applicable limits and/or requirements.
- Note also that such “worst-case” modes may also be product-specific in that they may be unique to specific design and implementation parameters.



Test Reduction Opportunities (continued)

- When such test reduction opportunities are exercised, the technical justification for doing so must be fully explained in the test report and supporting data (*i.e.*, pre-scan data) must be made available upon request.
 - The exercise of “good engineering judgement” must be supported with substantive technical justification based on measured data.
- We propose to publish these slides as part of a draft KDB publication to solicit input.
- We encourage TCB’s and other interested parties to provide either rule-, technology-, or device-specific proposals for consideration.
 - Please provide technical data and/or analysis to substantiate proposals submitted for consideration.