



RF Exposure

Handsets, and Fixed and
Mobile Devices

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Outline



- **Internal RF exposure policy review and associated changes related to handsets**
- **Reminders for specific TCB RF exposure review issues**



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- ***Denotes supplemental information given in the note pages**
 - **** Denotes supplemental information given in the supplemental file. Contents are excerpts from previous training (October 2003). Please review previous training files for full context.**

New OET RF Exposure Policies



- **Internal policy review is ongoing too:**
 - ✓ Harmonize FCC and TCB procedures
 - ✓ Provide consistency

- **Immediate changes**
 - ✓ limited to certain usage questions for TCB.*

- **More changes to come with the NPRM and resulting final order.**

- **Change to the TCB exclusion list may follow based on results from proposed developmental projects.**

New OET RF Exposure Policies– SAR for PTTs



Previous – SAR is requested for PTTs (non SMR) devices over 1.5 W for FCC filings. TCB use exclusion list thresholds.

Updated – SAR is requested only for GMRS PTTs device over 1.0 W for FCC filings. No change for TCB filings

- **New thresholds for all devices are being considered. FCC and TCB thresholds are expected to be harmonized.**

New OET RF Exposure Policies– Gen. Pop. vs Occupational



Previous– Part 15, GMRS, FRS and public network devices must meet general population exposure limits. GMRS exception if marketing plan prevents access by the public. Other Part 90 devices are implied to operate in occupational conditions only. *

Updated– No change.

- TCBs should apply the above guidance
- User instructions/warnings consistent with current practices should be provided for exhibit.
- The ongoing NPRM addresses user instruction issues.

New OET RF Exposure Policies– Mobile PTTs



Previous– RF exposure training and labeling info is requested in filings for occupational devices, and basic RF exposure instructions for general population devices [2.1033(c)(3)]. Includes MPE safe distance.*

Updated– no change

- The ongoing NPRM addresses user instruction issues.

Reviews– Specific Issues



Accessories--BT Add-on to Handsets

- **Separate FCC ID is necessary.* Use Module Approval procedure (Limited) when appropriate.**
- **Device must comply with EMC and SAR limits in all final configurations.**



Reviews– Specific Issues

Accessories-BT Add-on to Handsets

- **Like modules, OEM coordination/control or specific “hosts” are best strategies.**
 - ✓ Limit undefined host devices to a family of manufacturer X devices. Manufacturer accepts compliance responsibility.
 - ✓ Provide means to prevent use with other phones. Ideally use unique connector or software controls.
 - ✓ SAR collocation evaluation with all intended hosts is not requested for most standard configurations* but can be provided.
 - ✓ proposed grant comment *

Reviews– Specific Issues



Smart phone collocated transmitters

- **TCB should perform SAR review only in cases where current TCB exclusion list allows.**
- **Section II e applies for Parts 22/24 and SMR devices.***
- **Rulemaking outcome may apply.**

Reviews– Specific Issues



Handset usage positions

- **When held-to-ear is worst case configuration head-to-face results do not need to be reported for TNE/PCEs.**
- **Evaluate PTTs for held-to-ear mode if applicable.**
- **Grant notes list SAR as “head” not “face”. Add the following if desired, “SAR was evaluated for held-to-ear and held-to-face operating modes”**



Reviews– Specific Issues

Other reminders—Review previous training for refresher. Excerpts in supplemental information following.

➤ **Device power**

- ✓ GSM vs GPRS**
- ✓ Power droop**



Reviews- Specific Issues

➤ Other Reminders-- Fixed/mobile RF exposure

- ✓ Follow the generalized procedure given.**
- ✓ TCB should not review SAR for MPE compliance except for where 2.1091d(4) applies. *
- ✓ Careful with grant comments
- ✓ Careful evaluation for collocation*