

Appendix F. Power reduction mechanism verification

According to the May 2017 TCBC Workshop, Demonstration of proper functioning of the detection and triggering mechanisms to support the corresponding RF exposure conditions. The verification is through a base station simulator is used to establish a conducted RF connection and monitor output power under different operating conditions related to the power reduction mechanisms. Detail of power reduction mechanisms referring to Operational Description

1. Power verification procedure

- Establish data connection monitor Head to hotspot power state for GSM
- This device incorporates the Smart Transmit algorithm feature and through under varying Tx power transmission scenarios in real-time to maintain the time-averaged Tx power compliant with RF exposure requirement.
- This device incorporates the Qualcomm Smart Transmit algorithm feature and through under varying Tx power transmission scenarios in real-time to maintain the time-averaged Tx power compliant with FCC RF exposure requirement.
- In this power validation purpose is to demonstrate of proper functioning of the detection and triggering mechanisms to support the corresponding RF exposure conditions. In order to avoid real-time TX power varying may affect monitor output power related to the power reduction mechanisms, therefore real-time TX power varying was disabled for power reduction mechanism validation.
- Verification performed for each technology to demonstrate that the power reduction applies for both technology and call origination.

2. Test setup for measuring power



3. Verification output Power Results

Exposure condition		Output Power for data connection			
Switch Power Status		Head (DSI 2)		Hotspot (DSI 1)	
Wireless Technology	Antenna	Measured (dBm)	Max. Tune-up (dBm)	Measured (dBm)	Max. Tune-up (dBm)
GSM850 (4TX)	Ant 0	32.19	32.50	28.69	29.00