## **Appendix J: MSS Tx Power Time-Averaging Verification**

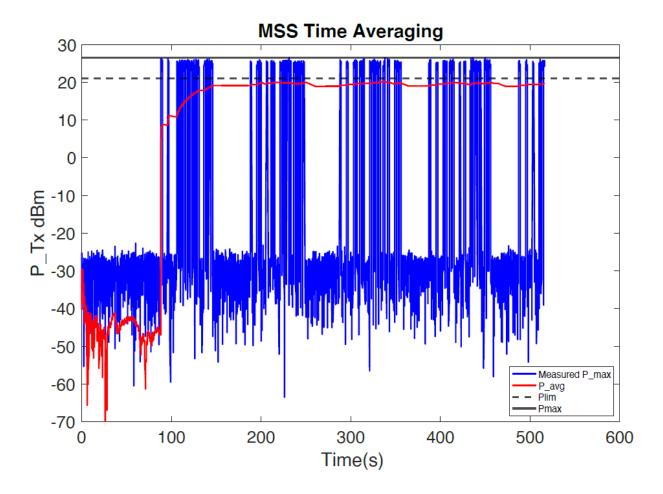
## 1. Introduction

The DUT supports time-averaged SAR (TAS) technology for the MSS transmitters. The TAS algorithm regulates MSS power transmission to ensure SAR compliance by calculating and tracking a rolling average power value.

Stored data for from past transmissions is referenced to forecast the average power value assuming transmission at  $P_{max}$  in the upcoming MSS transmission periods. Transmissions are moderated by the algorithm based on this forecast to always ensure the  $P_{avg}$  value remains compliant. More details can be found in the technical description.

Testing was performed by connecting the DUT to a callbox and configuring it to continuously attempt to send text messages. The instantaneous output power was monitored over time. A rolling average of the transmit power is calculated. The averaging period is 100s. This output is used to validate conformity with the average transmit power limit.

## **Test Result**



 $P_{lim} = 22.0 \text{ dBm}, P_{max} = 25.8 \text{ dBm}$ 

The 100s average power never exceeds Plim.