Tune Up Procedure - 2G

TX Calibration

- Auto Frequency Control (AFC) Calibration.
- External calibration (AMAM/AMPM non linearity calibration) for GMSK and 8PSK Calibration.
- Polar path delay calibration

RX Calibration

- Radio Signal Strength Indicator (RSSI) Calibration

Initiation

- Switch phone to Factory test mode.

AFC Calibration

- Setup the mobile to transmit on the Channel 62 Power level 12
- Measure the Frequency Error
- Adjust AFC to make the Frequency Error approach zero
- Write down AFC value
- Store AFC value

AMAM/AMPM non linearity calibration for GMSK and 8PSK Calibration.

- 1. Configure the phone for bands, channels, and set Track LO Adjust PDM.
- 2. Configure the test equipment for frequency, number of steps, step timing, and reference level.
- 3. Command phone to generate Tx waveform.
- 4. Take measurement with test equipment.
- 5. Process measured data.

RSSI Calibration

- 1. Set phone mode to bands and channels.
- 2. Set the phone in gain range 1.
- 3. Set signal generator to inject a level of –65 dBm GMSK 3GPP specification waveform.
- 4. Set channel to the first of eight ARFCN channel.
- 5. Record RSSI Let this value be RSSI[i], where i = 0 to 7.
- 6. Repeat steps 4 and 5 for all remaining ARFCN channels.