

## 7. Unwanted emissions in carrier-off state

### 7.1 Purpose

Protection of other radio services and systems from unwanted emissions caused by MES in the carrier-off state.

### 7.2 Conformance requirements

The maximum EIRP of the unwanted emissions from the MES in the carrier-off state shall not exceed the limits in table 6.

In table 6, whenever a change of limit between adjacent frequency bands occurs, the lower of the two limits shall apply at the transition frequency.

**Table 6: Maximum EIRP of the unwanted emissions in the carrier-off state**

Frequency (MHz)	EIRP (dBW)	Measurement bandwidth	Measurement method
0.1 - 30	-87	10KHz	Peak-hold
30 - 1000	-87	100KHz	Peak-hold
1000 - 12750	-77	100KHz	Peak-hold

The conformance requirements apply for the full range of environmental conditions corresponding to the type of equipment as described in I.2, Attachment IX.

### 7.3 Method of test

The MES shall be switched-on and set in a non-transmitting (carrier-off) mode.

If there is a periodic automatic transmission of bursts (e.g. for location updating), the STE shall provide a means to inhibit it, or to trigger the measurement in order to analyse only the non-transmitting periods.

The environmental test conditions are given in I.3, Attachment IX.

In the test equipment, the spectrum analyzer noise floor shall be at least 6 dB below the appropriate limits given in table 6.

The measurements are performed with the radiated or with the conducted method according to the cases defined in H.4, Attachment VIII.

For measurements of radiated unwanted emissions, Attachment X applies.

For measurements of conducted unwanted emissions, Attachment X I applies.

#### 7.3.1 Measurement method

The spectrum analyzer shall be set in sweep mode and shall be operated under the following conditions:

frequency sweep: as required for frequency range to be assessed;  
resolution bandwidth: measurement bandwidth specified in table 6;  
display bandwidth: at least 3 tiMES the measurement bandwidth;  
averaging: no;  
peak hold: yes.

The sweep time shall be the shortest possible time consistent with proper calibration and ease of operation.

The spectrum analyzer shall be stepped over the frequency ranges specified.

#### **7.4 Test requirements**

For measurements of radiated unwanted emissions of the MES, the measured values shall in no case exceed the limits given in table 6.

For measurements of conducted unwanted emissions of the MES, the measured values plus the maximum antenna gain shall in no case exceed the limits given in table 6.