



INSTRUCTION MANUAL

This instruction manual is provided for helping applicants in completing Land Mobile Radio application form (FB application form).

Instruction to complete FB application form for land mobile.

| FORM 4 | | | |
|--|--|---|-----------|
| II. SITE INFORMATION | | | |
| These Items must be completed | | | |
| 1. Fixed/Base Station Information | | | |
| Item no. 1.1 | Name of Site | Name of the location of radio base station | Applicant |
| Item no. 1.2 | Site Address | Address of the location of radio base station | |
| Item no. 1.3 | Co-ordinations (Longitude and Latitude) | The geographical coordinates of transmitting antenna in degrees/minutes/seconds. Please take note that none of the boxes in this item shall be left blank. | |
| Item no. 1.4 | Site Elevation (AMSL) | Give the altitude of the ground where the base of transmitting antenna or antenna tower placed in such a way that summation of this value and value in Item no. 4.3 include the actual height of antenna above sea level in meter. Include the height of building in this value, if it is rooftop. | |
| Item no. 1.5 | Call Sign | Call sign or Station Identification if provided by ANC. | ANC |
| Item no. 1.6 | Radius of Coverage | The radius of receiving circular area in km. | Applicant |
| 2. Equipment Information | | | |
| Item no. 2.1 | Equipment Name | Insert the radio communication transmitter installed in Land mobile station. | Applicant |
| Item no. 2.2 | Power to the antenna | Put the Signed value (positive or negative) of transmitting power to the antenna in dB for each sector. Therefore, any loss between transmitter output and antenna terminal such, as the cable loss and mismatch loss, shall be considered in the provision of this value. | |
| Item no. 2.3 | Power type | <p>One of the X/Y/Z according to the following explanation:</p> <p>X Peak envelope power: the average power supplied to the Antenna by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions (RR 1.157).</p> <p>Y Mean power: the average power supplied to the Antenna by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions.</p> <p>Z Carrier power: the average power supplied to the Antenna by a transmitter during one radio frequency cycle taken under the condition of no modulation.</p> <p>Applicants who have difficulty in selecting one of X/Y/Z invited to negotiate with manufacturer or ANC experts.</p> | |
| Item no. 2.4 | Radiated Power | Put the signed (positive or negative) Maximum Radiated Power of the transmitting antenna. Actually, this value is equal to the product of the maximum power (including the full range of power control for adaptive systems) supplied to the antenna and the transmitting antenna's maximum gain. Gain reference antenna code in front of value could be selected 'E' in case of gain relative to dipole antenna or 'I' in case of gain respect to isotropic antenna or 'V' in case of gain respect to monopole antenna. | |
| 3. Frequency Information | | | |
| Item no. 3.1 | Frequency or Band | Provide the frequency band or channel frequency of communicated signals. | ANC |
| Item no. 3.2 | Bandwidth | Provide the necessary bandwidth of emission on frequency mentioned in the Item no. 3.1. | |
| Item no. 3.3 | Emission designator | ANC will provide this information in accordance with the used modulation type (Item no. 3.2) necessary bandwidth | |
| Item no. 3.3 | Channel separation | This is a measure of separation between the channel. | |
| 4. Antenna Information | | | |
| Item no. 4.1 | Azimuth | The angle of the direction of the Transmitting Antenna's Maximum Gain | |



| | | | |
|--------------|------------------------|--|-----------|
| Item no. 4.2 | Elevation | The signed (positive or negative) angle measured in the vertical plane between the direction of the Transmitting Antenna Maximum Gain and the horizontal plane | Applicant |
| Item no. 4.3 | Antenna Height AGL (m) | Provide the height of the center of the antenna in each sector above its base in meter | |
| Item no. 4.4 | Antenna Name | Provide the manufacturer common or specific name of the antenna, e.g. Log Periodic, Parabolic reflector, Micro strip Array and etc. | |
| Item no. 4.5 | Class of antenna | Means an omnidirectional or dipole | |
| Item no. 4.6 | Polarization | <p>Select only one of the following eight options in accordance with the antenna radiation characteristics in each sector</p> <p>V Vertical linear: the electric field vector is in the vertical plane.</p> <p>H Horizontal linear: the electric field vector is in the horizontal plane.</p> <p>D Dual: when substantially equal – amplitude vertically and horizontally polarized components are radiated without particular control of the phase relation between them. Typically, the vertically and horizontally polarized sources may be displaced one from the other so that the resultant polarization varies between circular and slant according to azimuth angle.</p> <p>CR Right hand circular or direct: the electric field vector rotates clockwise.</p> <p>CL Left hand circular or indirect: the electric field vector rotates anti-clockwise.</p> <p>SL Left hand slant: the electric field vector is in the plane rotated 45 degrees anti clockwise from the vertical plane.</p> <p>SR Right and slant: the electric field vector is in the plane rotated 45 degrees clockwise from the vertical plane.</p> <p>M Mixed: the collective term applied when both vertical and horizontal components are radiated embracing slant, circular and dual polarization.</p> | |
| Item no. 4.7 | Antenna Gain | Give the maximum gain of the antenna in the direction of main lobe in dBi or dBd | |
| Item no. 4.8 | Antenna Directivity | Directional transmitting antennas may be pointing towards the ground | |
| Item no. 4.9 | Horizontal Beam Width | The Horizontal Beam width always be 360^0 | |