DEPARTMENT of TELECOMMUNICATIONS
ADVISORY GUIDELINES FOR STATE GOVERNMENTS FOR ISSUE OF CLEARANCE FOR INSTALLATION OF MOBILE TOWERS
(Effective from 01.08.2013)

1. The Indian telecom sector has witnessed phenomenal growth and mobile telephony in particular has revolutionized in the country over the past decade. Providing telephone coverage across the country has been one of DoT's top priority areas. Out of 921 million connections, 891 million are wireless, as on May 2013. The popularity of cell phone and wireless communication devices has resulted in a proliferation of cell towers across the country.

2. Fixation of standards for exposure limits of radio frequency field emissions from mobile base stations, monitoring their compliance, all radiation related technical issues, issues of Access Service Licence / Infrastructure Provider registration and SACFA clearance for frequency allocation at any location are dealt with by DoT.

3. India has adopted strict limit for radiation from Base Transceiver Station (BTS), as below, which is $1/10^{th}$ of the International norms (ICNIRP):

Frequency in MHz	Power density limit
900	0.45 watt/m^2
1800	0.9 watt/m^2
2100 and above	1 watt/m^2

4. Broad guidelines for issue of clearance for installation of mobile phone towers were issued on 23.08.2012 and later modified on 26.03.2013. Subsequently, on the basis of feedback received after deliberations made with the state government officials and various stake holders on 16.04.2013 and holding further consultations thereafter, the guidelines have been finalized for the state governments. These are detailed in A and B below. ***These guidelines are issued in supersession of all earlier guidelines on the subject.***

A. Documents to be submitted by Telecom Service Providers/ Infrastructure Providers for obtaining clearance from local bodies / state governments for installation of mobile towers:

I. Copy of relevant license / Infrastructure Provider Registration Certificate from Department of Telecommunications.

II. Data Sheet

a) Name of Service/Infrastructure Provider
b) Location
c) Tower Reference:
i) Height, ii) Weight iii) Ground/Roof Top iv) Pole/wall mounted v) Number of antennae

III. Copy of SACFA clearance / copy of SACFA application for the said location submitted to WPC wing of DoT with registration number as

WPC acknowledgement along with undertaking that in case of any objection/ rejection, TSPs/ IPs will take corrective actions / remove the tower.

IV. Copy of structural stability certificate for ground based tower. In case of roof top BTS towers, structural stability certificate for the building and tower based on written approvals of any authorized Structural Engineer of state/local bodies/Central Building Research Institute (CBRI), Roorkee/ IIT/NIT or any other agency authorized by local body.

V. Copy of the type test certificate issued by Automotive Research Association of India (ARAI) to the manufacturers of the Diesel Generator (DG) Sets.

VI. Copy of clearance from Fire Safety Department only in case for high rise buildings where Fire Clearance is mandatory.

VII. For forest protected areas, the copy of clearance from State Environment & Forest Department, if applicable.

VIII. The local bodies may also seek submission of the copy of No Objection Certificate (NOC) from Building Owner / entities having roof top rights or roof top tenants in case of roof based tower/ land owner in case of ground based tower, as the case may be. As per their rules in force, State Governments, at their discretion, may seek fresh NOC at the time of renewal of site (tenancy) contract for mobile tower.

IX. Acknowledgement receipt issued by TERM Cells (DoT) of the self-certificate submitted by Telecom Service Provider/ Infrastructure Provider in respect of mobile tower/ BTS (ground based/ roof top/ Pole/ wall mounted) in the format as prescribed by TEC, DoT, establishing / certifying that all General Public areas around the tower will be within safe EMR exposure limit as per peak traffic measurement after the antennae starts radiating.

B. Action by State government/Local body

I. Nominal one time Administrative Fee as may be decided by the State Government to recover its costs on the issue of permission for installation of Tower.

II. Single Window Clearance may be provided in a time bound manner to telecom service provider / infrastructure provider by the local body / State Government. This will ensure issuance of faster clearances.

III. Telecom towers have been given infrastructure status by Government of India vide gazette notification no 81 dated 28.03.2012. All benefits, as applicable to infrastructure industry, should be extended. **Electricity connection may be provided to BTS site on priority.**

IV. Telecom installations are lifeline installations and a critical infrastructure in mobile communication. In order to avoid disruption in mobile communication, an essential service, sealing of BTS

towers / disconnection of electricity may not be resorted to without the consent of the respective TERM Cell of DoT in respect of the EMF related issues.

V. State Governments along with DoT may organise public awareness programmes involving civil society members.

VI. In order to effectively address **Public Grievances** relating to installation of towers and issues related to telecom infrastructure, State Governments may setup:

- State Level Telecom Committee (STC) consisting of officers from TERM Cells, State Administration, representative(s) of concerned Telecom Service Provider(s) and eminent public persons etc.
- District Level Telecom Committee (DTC) consisting of officers from District Administration, representative(s) of concerned Telecom Service Provider(s) and eminent public persons etc.

C. Action by DoT/ TERM Cells

I. Public awareness programme (Through DoT web portal / Govt. Publication).

II. a) For all the existing as well as new BTSs / Towers, Telecom Service Providers are required to submit self-certificates periodically in the format as prescribed by TEC, DoT, in order to ensure that normally all general public areas around the site are within the safe EMR exposure limits. Any violation noticed attracts heavy penalties on Telecom Service Provider(s) and may also lead to shut down of BTS in case the violation persists.

b) The TERM Cells have been given clear instructions with regard to the technical audit of BTS, including for radiation from towers within safe limits. These include roof top/ ground based/ pole mounted/ wall mounted towers. They will also verify antenna orientation, safe distance from the tower (exclusion zone) etc. Installation and augmentation of BTS and antenna is a continuous process. DoT is organizing frequent workshops for these officers to ensure observance of the latest guidelines issued by DoT on the subject of EMF radiation and public safety. Additional Guidelines for TERM Cells as follows:

Additional Guidelines to TERM Cells for auditing BTS For EMF radiation

(Effective from 01.08.2013)

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1. Instructions/guidelines have been issued to the TERM Cells for auditing the RF radiations from BTS for compliance to the prescribed norms. Following are additional guidelines to TERM Cells in the matter.

2. With a view to strengthen monitoring and compliance of safety aspects / provisions in regard to radio frequency emissions from mobile towers, TERM Cells may take the following also into account while conducting their audits for the purpose of ensuring that all general public areas are within safe EMF exposure limits as prescribed by DoT.

   - In case of both ground based towers & roof top towers, there shall be no building right in front of the antenna(e), of equivalent height taking into account the tilt of the lowest antenna on tower as per details in the table below. Further, the antennae at the same height only are to be counted, as the beam width of the mobile antennae, in the vertical direction, is very narrow.

Number of antenna(e) pointed in the same direction	Building/Structure safe distance from the antenna(e) at the same height (in meters)
1	20
2	35
4	45
6	55

   - The distance figures in the above table are based on empirical estimation considering that all the antennae are emitting at their maximum RF power of 20 Watts and exactly in the same direction with same height (a worst case scenario). In practice, the values of safe distance of buildings will depend upon actual deployment scenarios and mostly, may be far less than depicted above.

3. <u>Wall Mounted/Pole mounted Antenna:</u>

   - Wherever the antennae are mounted on the wall of building or pole on/along the road, their height should be at least 5 meters above ground level /road level. However, such installations will have to comply with the radiation limits.
   - As far as safe distance of buildings from antenna is concerned, guidelines as given above will apply.

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