

1	2	3	4	5	6
17.	Odisha	76307	60013	62278	17518
18.	Punjab	164274	162733	137599	33751
19.	Rajasthan	173806	160797	138975	33814
20.	Tamil Nadu	185607	302499	171097	44542
21.	Uttarakhand	46942	42380	26615	8263
22.	Uttar Pradesh-East	148250	115225	70814	15103
23.	Uttar Pradesh -West	96939	94004	62945	16033
24.	West Bengal	130889	129857	82966	20154
25.	Kolkata Telephone District	446103	523166	149932	47557
26.	Chennai Telecom District	92525	284476	119491	34957
TOTAL		4459630	5133356	2992806	739873

\* No segregation is maintained between normal faults and Monsoon faults

Note: North East-I includes Meghalaya, Tripura and Mizoram

North East II includes Arunachal Pradesh, Manipur, Nagaland

West Bengal includes Sikkim

Maharashtra includes Goa

Andhra Pradesh includes Telangana

### Shortage of mobile towers

2136. DR. K. V. P. RAMACHANDRA RAO: Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

(a) whether there is a whopping shortage of towers for cellular phone services in the country;

(b) if so, who is responsible for the situation, Government or the private operators;

(c) whether it is a fact that Indian private telecom operators spend hardly fifteen per cent of their outlay on infrastructure as against thirty per cent in China; and

(d) how does Government intend to bring a turnaround in the situation?

THE MINISTER OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (SHRI RAVI SHANKAR PRASAD): (a) to (d) Installation of Cellular tower at particular place is done after carrying out all the feasibility aspects

involved to build new tower. Usually there is need of more number of towers as per population/ subscriber density but operators are facing problem in building required number of Base Trans-receiver Station (BTS) due to multiple factors, such as:

- (i) Unable to install required additional BTS on existing towers due to loading issues, multiple operators are already hosted on most of the towers at required locations.
- (ii) Opposition from local citizen communities due to perceived fear of EMF (Electro-Magnetic Frequency) radiation and safety concerns.
- (iii) Unavailability of suitable structures at required places and unsuitable logistics.
- (iv) Technical constraints in putting more base stations near to each other due to spectrum shortage for operators to deploy multiple BTSs near to each other as it causes frequency interference and quality degradations.
- (v) Inaccessible terrain and transportation difficulties of equipment at various locations especially in Jammu and Kashmir and North East circles including local security issues.
- (vi) Unwarranted delays in commissioning new sites due to various procedural formalities from local administration/ agencies, etc.

In telecom business the majority of the capex is invested in the initial 4-5 years on setting up infrastructure by the telecom companies and the need has not been felt at this juncture for mandatory provision that the investment towards infrastructure development should be 15% or otherwise since these are considered as per business requirements/network expansion plans.

#### **Sharing of spectrum among operators**

2137. SHRI S. THANGAVELU: Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) whether it is a fact that the Telecom Commission has given its approval for sharing of spectrum among operators, if so, the details thereof;
- (b) whether it is also a fact that the regulator has also allowed adding of spectrum; and
- (c) if so, the details thereof?