

**GOVERNMENT OF INDIA  
MINISTRY OF COMMUNICATIONS  
DEPARTMENT OF TELECOMMUNICATIONS**

**RAJYA SABHA  
UNSTARRED QUESTION NO. 1128  
TO BE ANSWERED ON 29<sup>TH</sup> JULY, 2021**

**MOBILE TOWER RADIATION**

**1128. SHRI NEERAJ DANGI:**

Will the Minister of Communications be pleased to state:

- (a) the number of mobile towers in the country and the radiation related criteria for the same, State-wise/ UT-wise;
- (b) whether cases of violation of the said criteria by Telecommunication Service Providers (TSP) have come to the notice of Government and, if so, the year-wise and State/UT-wise details thereof during the last five years and the current year and the service provider-wise amount of fine imposed on them;
- (c) the amount of fine collected by Government during the last five years along with year-wise details thereof; and
- (d) the details of other reformative steps taken by Government in this regard?

ANSWER

**MINISTER OF STATE FOR COMMUNICATIONS  
(SHRI DEVUSINH CHAUHAN)**

(a) Sir, as on 22-07-2021, there are 6,63,411 mobile towers in the country. The State/UT wise details of mobile towers is enclosed as Annexure-1. The present Electro Magnetic Field (EMF) radiation limits as laid down for Base Transceiver Station (BTSs) installed at various mobile towers across India are as follows:

Frequency Range	E-Field Strength (Volt/Meter)	H-Field Strength (Amp/Meter)	Power Density (Watt/Sq. Meter)
400 MHz to 2000 MHz	$0.434 f^{1/2}$	$0.0011 f^{1/2}$	$f / 2000$
2 GHz to 300 GHz	19.29	0.05	1

*(f is the frequency of operation in MHz)*

- (b) Yes Sir. State/ UT wise details of such violations during the last five years and the current year and Telecom Service Provider wise details of penalty imposed for exceeding the prescribed EMF radiation limits on actual testing are enclosed as **Annexure-2**.
- (c) The details of the fine collected by the Government during last five years are enclosed as **Annexure-3**.
- (d) Government has put in place a well-structured process and mechanism for monitoring any violation, so that Telecom Service Providers strictly adhere to the prescribed norms including submission of self-certificate before commercial start of Base Transceiver Station (BTS) site. The field units of Department of Telecommunications also regularly carry out the EMF audit upto 10% BTS Sites annually on random basis.

Government has also doubled the penalty for violation of the prescribed EMF norms from Rs.5 lakhs to Rs.10 lakhs per BTS per incidence with effect from 20.11.2013 and further to 20 Lakhs per site on 29-03-2019.

**ANNEXURE-1****STATE/UT WISE NUMBER OF MOBILE TOWERS AS ON 22-07-2021**

<b>S/N</b>	<b>State/UT</b>	<b>Grand Total</b>
1	Andaman & Nicobar (UT)	263
2	Andhra Pradesh	23863
3	Arunachal Pradesh	1226
4	Assam	15148
5	Bihar	34570
6	Chandigarh	1160
7	Chattisgarh	13286
8	Dadra & Nagar Haveli and Daman & Diu	411
9	Delhi	20263
10	Goa	1515
11	Gujarat	40629
12	Haryana	21189
13	Himachal Pradesh	7893
14	Jammu & Kashmir	9818
15	Jharkhand	17629
16	Karnataka	43186
17	Kerala	18989
18	Laddakh	412
19	Lakshadweep	32
20	Madhya Pradesh	35936
21	Maharashtra	69254
22	Manipur	2302
23	Meghalaya	1840
24	Mizoram	1042
25	Nagaland	1427
26	Odisha	21739
27	Puducherry	682
28	Punjab	21348
29	Rajasthan	35869
30	Sikkim	650
31	Tamilnadu	44168
32	Telangana	25836
33	Tripura	2318
34	Uttar Pradesh	77114
35	Uttarakhand	8150
36	West Bengal	42254
<b>Grand Total</b>		<b>6,63,411</b>

## ANNEXURE-2

State/ UT wise details of violation of EMF radiation norms during the last five years and the current year and Telecom Service Provider (TSP) wise details of penalty imposed

State /UT	Financial Year	Details of Violations		Penalty Imposed TSP wise
		No. of Towers/ Sites found exceeding EMF radiations	No. of BTSs involved in the violation	
West Bengal	2016-17	1	1	VIL-Rs 20,00,000
J&K	2017-18	1	9	Airtel-Rs. 33,09,277; Aircel- Rs. 10,38,644, Vodafone- Rs. 20,00,000, Idea- Rs. 72,044
Karnataka	2016-17	2	16	Airtel-Rs. 4800000, TTSL-Rs. 460000, Vodafone -Rs. 6560000
	2017-18	5	42	Airtel- Rs. 8380000, Idea- Rs. 460000, RCOM-Rs. 1780000, RJIL-Rs. 3660000, TTSL-Rs. 3580000, Vodafone-Rs. 4440000
	2018-19	3	20	Airtel-Rs.1980000, RJIL-Rs. 9740000, Vodafone-Rs.900000
	2019-20	3	15	Airtel-Rs. 7480000, RJIL-Rs. 6000000, Vodafone-Rs. 4700000
Kerala	2020-21	1	2	RJIL-40,00,000
Maharashtra	2016-17	1	1	RJIL-Rs. 20,00,000
TN	2018-19	4	30	Airtel: Rs. 89,20,000 VIL (Idea): Rs. 2340000 VIL (Voda): Rs. 5440000 RJIL: Rs. 20,00,000
	2019-20	3	18	Airtel: Rs. 3120000 VIL (Voda): Rs. 1320000 RJIL: Rs. 9400000 BSNL: Rs. 1400000
Telangana	2019-20	1	1	VIL(Idea): Rs. 20,00,000
	2020-21	1	7	Airtel: Rs 5,20,000 VIL (Idea): Rs. 6,40,000 RJIL: Rs. 36,20,000
Mizoram	2017-18	1	1	VIL: Rs 20,00,000

THE AMOUNT OF FINE COLLECTED BY GOVERNMENT DURING LAST FIVE YEARS

SN	State/UTs	The amount of fine collected
1	Karnataka	2016-2017=Rs. 52,60,000, 2017-2018=Rs. 1,56,20,000, 2018-2019=Rs.0, 2019-2020=Rs. 0 Total fine collected=Rs. 2,08,80,000
2	Tamilnadu	2016-17: Rs. 94,25,000 2017-18: Rs. 75,000 2018-19: Rs. 20,55,000 2019-20: Rs. 1,90,000 2020-21: Rs. 41,40,000 Total fine collected=Rs.1,58,85,000

- The collection of fine imposed in other State/UTs as referred to in Annexure-2 is pending because the imposition of fine is under challenge before Hon'ble Telecom Disputes Settlement and Appellate Tribunal (TDSAT).

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