(b) what are the impediments and by when these facilities would be available for people residing in Government colonies in this area?

THE MINISTER OF STATE OF THE MINISTRY OF COMMUNICATIONS (SHRI MANOJ SINHA): (a) and (b) Mahanagar Telephone Nigam Limited (MTNL) has reported that laying of Optical Fibre Cable (OFC) involves large investment. Upgradation/ augmentation of network is a continuous process and the same is done by Mahanagar Telephone Nigam Limited (MTNL) keeping in view the techno-economical considerations. MTNL has reported that in absence of firm demand of a critical mass for high speed broadband connection on optical fiber in and around INA colony of 8 Mbps speed, business cause is not made out.

## Postal and telephone internet services

1397. SHRI C.P. NARAYANAN: Will the Minister of COMMUNICATIONS be pleased to state:

- (a) the amount spent by Government for postal and telephone internet services annually during last three years;
  - (b) the income from these services during these years;
  - (c) the amount spent for upgradation of their technology/quality of service;
- (d) the reasons for complaints persisting against both the services among people; and
  - (e) the action taken by Government on these complaints?

THE MINISTER OF STATE OF THE MINISTRY OF COMMUNICATIONS (SHRI MANOJ SINHA): (a) to (e) The information is being collected and will be laid on the table of the House.

## Call drop problem

1398. DR. K.V.P. RAMACHANDRA RAO: Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether a solution has been found for the call drop problems;
- (b) if not, what has been contributing to the phenomenon and whether it is unique to India;
- (c) the steps Government proposes to take to address the issue in the near future; and

(d) whether Government would consider cancelling license of telecom companies that fail to end call drop problem?

THE MINISTER OF STATE OF THE MINISTRY OF COMMUNICATIONS (SHRI MANOJ SINHA): (a) to (d) The calls on mobile phones which, due to technical reasons, get cut off before the speaking parties had finished their conversation and before one of them has hung up, are classified as dropped calls. This is a universal phenomenon. Call drop in wireless network cannot be eliminated completely. However, this parameter should be within the limits specified by Telecom Regulatory Authority of India (TRAI). Call Drop in wireless network can occur due to antenna related problems, Radio interference, inadequate radio coverage and spectrum, change in traffic pattern, Poor Radio Frequency (RF) optimization etc. Quality of service standards are laid down for call drop in India, as well as in other countries.

In accordance with Telecom Regulatory Authority of India (TRAI) Act, 1997, TRAI has prescribed Standards for Quality of Service (QoS) for Wireline, Cellular Mobile and Broadband Services to be complied by telecommunication service providers in all licensed areas across the country. The current mandated benchmark for Call Drop by TRAI is 2 per cent on monthly average basis for a given Licensed Service Area (LSA) where the country has 22 LSAs in all. Further, any Cell with Traffic Channel (TCH) Blocked Rate more than 3 per cent (per cell site) is treated as bad cell whose performance is meant to be improved. TRAI undertakes assessment for compliance to above-said Regulations mainly by two means: (1) Quarterly Reports, on self-declaration basis from the service providers, and (2) Independent Service Drive-tests on sample basis in different cities at different intervals. Results from the exercises are regularly published by TRAI on their website. As per the performance monitoring reports for the quarter ending December, 2015 and March 2016, submitted by service providers for 2G and 3G services, it is seen that for "call drop rate/Circuit Switch Voice drop rate (benchmark - less than or equal to 2%)" only BSNL (Bharat Sanchar Nigam Limited) in North East Service area has not met the benchmark for this parameter in 2G services and number of instances of non-compliance has increased from 2 in December, 2015 to 3 in March, 2016 for 3G services, whereas for the parameter "worst affected cells having more than 3% TCH drop rate (benchmark - less than or equal to 3%)", the instances of noncompliance have come down from 39 in December 2015 to 27 in March, 2016 for 2G services and from 18 in December, 2015 to 15 in March, 2016 for 3G services for this parameter. TRAI has been pursuing with service providers for improving Quality of Service and in this regard regular interactions are held with the service providers. TRAI has also engaged independent agencies for auditing and assessing the quality of service and surveys are being done regularly through independent agencies to assess the customer perception of service. The results of the audit and assessment of quality of service and surveys are published for the information of stakeholders, which also force the service providers to improve the quality of service. Wherever the quality of service benchmarks are not met, TRAI has also been imposing financial disincentives on service providers, for failure to comply with the benchmarks, in accordance with the provisions of the regulations.

The Department of Telecommunications has also been pursuing with service providers for improving Call Drop scenario and in this regard regular interactions were held with the service providers. In addition to the above, the Government has taken steps to resolve the issues raised by the Telecom Service Providers (TSPs) and as a result the Ministry of Urban Development has agreed to permit installation of mobile towers/ in-building solutions in the Government buildings under their control subject to structural safety and payment of appropriate Licence fee by the TSPs. Such mobile towers/ in-building solution shall be a shared facility for all TSPs. As on 15th July 2016, allotments for installation of 18 towers in Delhi have been processed and lead operators have been asked to install such towers. In addition, two mobile BTSs and one pole mounted BTS have been installed in Parliament House and 06 mobile BTSs have also been installed in the Lutyens Zone, Delhi (New Delhi Municipal Council (NDMC)'s jurisdiction), which are shared by multiple operators.

At the National level, the TSPs has expanded their network and also added BTSs in their network to improve the Call Drop scenario. This can be seen from the status of 2G/3G network infrastructure of service providers for last four quarters (June 2015, September 2015, December 2015 and March 2016), which is attached as Statement (*See* below).

The Government is reviewing the situation of Call Drop from time to time and at present there is no plan to take extreme steps like cancellation of the licenses of TSPs.

Statement The status of 2G/3G network infrastructure of service providers for last four quarters

Service Provider	BTS / Node-B as on 30.06.2015				BTS/Node-15 as on 30.09.2015			
	3G	2G	CDMA	Total	3G	2G	CDMA	Total
Bharti	51005	144927	0	195932	55946	146771	0	202717
RTL	4411	16228	0	20639	4411	16014	0	20425
RCL	5906	31411	21417	58734	5927	31097	21074	58098
Voclafone	35723	131001	0	166724	38754	131928	0	170682
BSNL	27136	77575	11189	115900	27851	78286	11112	117249
Idea	32421	115357	0	147778	38012	118980	0	156992
Tata	11282	43261	13303	67846	11910	43285	12997	68192
Aircel	11748	47056	0	58804	12020	47711	0	59731
MTNL	1454	2110	275	3839	1438	2107	275	3820
Sistema Shy	am 0	0	8249	8249	0	0	8222	8222
Telenor	0	23589	0	23589	0	23594	0	23594
Quadrant	0	2235	13	2248	0	2293	13	2306
Videocon	0	5067	0	5067	0	5084	0	5084
Total	181086	639817	54446	875349	196269	647150	53693	897112
Service Provider	BTS/Node-B as on 31.12.2015				BTS/Node-B as on 31.03.2016			
	3G	2G	CDMA	Total	3G	2G	CDMA	Total
1	2	3	4	5	6	7	8	9
Bharti	60865	148181	0	209046	90627	150893	0	241520
RTL	4519	6401	0	10920	4982	6450	0	11432
RCL	5997	30787	20645	57429	6231	30783	19934	56948
Vodafone	40298	133248	0	173546	54440	136202	0	190642
BSNL	28587	79027	11060	118674	29660	80004	11010	120674

208	Written Ans	wers to	[RA	AJYA SABI	IA]	Unstarred Questions		
1	2	3	4	5	6	7	8	9
Idea	44901	122215	0	167116	48928	126571	0	175499
Tata	12471	42745	12978	68194	13113	43384	12867	69364
Aircel	14928	48831	0	63759	16255	49540	0	65795
MTNL	1440	2112	243	3795	1441	2114	0	3555
Sistema	Shyam 0	0	8214	8214	0	0	8166	8166
Telenor	0	24112	0	24112	0	24575	0	24575
Quadran	t 0	2376	13	2389	0	2394	13	2407
Videocor	n 0	5070	0	5070	0	5102	0	5102
Total	214006	645105	53153	912264	265677	658012	51990	975679

BTS - Base Transceiver Station; Node-B - BTS for 3G Services

RTL - Reliance Telecom Limited;

RCL-Reliance Communication Limited;

BSNL - Bharat Sanchar Nigam Limited;

MTNL - Mahanagar Telephone Nigam Limited

## TRAI Myspeed app

1399. SHRI T. RATHINAVEL: Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether it is a fact that the Telecom Regulatory Authority of India (TRAI) has launched TRAI Myspeed, a mobile App through which consumers can check the speed of internet connection on their smartphones, if so, the details thereof;
- (b) whether it is also a fact that telecom operators allege that the regulator had conducted selective drive tests to determine instances of call drops; and
- (c) whether it is also a fact that TRAI has maintained its stance saying that the area of drive tests were selected in consultation with the operators?

THE MINISTER OF STATE OF THE MINISTRY OF COMMUNICATIONS (SHRI MANOJ SINHA): (a) Telecom Regulatory Authority of India (TRAI) has launched a mobile App named "TRAI My Speed". This application allows customers to measure their data speed experience and sends the results to TRAI. The application captures and sends coverage, data speed and other network information along with device and location of the tests. The app does not send any personal user information. All results are reported anonymously.