

Government had sought the recommendations of TRAI on the auction of spectrum in various bands, which includes the newly allocated band from 3300 Mhz to 3600 Mhz. The recommendations of the TRAI has been accepted by the Digital communications commission.

The 5G services are expected to be introduced gradually and advance to a full range of services as ecosystem and demand for services grows including in smart cities.

Connectivity of Gram Panchayats in Karnataka

516. SHRI RAJEEV CHANDRASEKHAR: Will the Minister of COMMUNICATIONS be pleased to state:

(a) whether the Ministry is committed to provide internet access across villages in the country;

(b) if so, the status of implementation to connect all Gram Panchayats to provide high speed internet services in the country;

(c) how many Gram Panchayats have been connected during the last five years and the current year, State/UT-wise including Karnataka;

(d) the funds earmarked/allocated and spent by Government under phase-1 of the said project, State/UT-wise including Karnataka; and

(e) what is the parameter used for a gram to be considered digitally converted?

THE MINISTER OF STATE IN THE MINISTRY OF COMMUNICATIONS (SHRI DHOTRE SANJAY SHAMRAO): (a) and (b) BharatNet project is being implemented in a phased manner to provide broadband connectivity to all the Gram Panchayats (approx. 2,50,000) in the country.

As on 24.01.2020, by laying 4,08,926 km Optical Fibre Cable, a total of 1,46,717 Gram Panchayats (GPs) have been connected, out of which 1,32,993 GPs have been made Service Ready. In addition, 1255 GPs have been provided connectivity through satellite media.

(c) The State/UT-wise details of the Gram Panchayats, connected during the last five years and the current year in the country including Karnataka, are given in the Statement-I (*See* below).

(d) A lump sum amount is allocated and disbursed from Universal Service Obligation Fund for execution of BharatNet project. The details of State/UT-wise funds disbursed by Bharat Broadband Network Limited under BharatNet Project, are given in the Statement-II (*See* below).

(e) As per the information provided by the Ministry of Electronics and Information Technology, with the availability of connectivity, the Digital Village Pilot Project, initiated by them, is facilitating the various digital services including-Tele-Consultation and Veterinary Tele-consultation, Education, Financial Inclusion Awareness Programme, Skill Development, Solar panel powered street lights, including Government to Citizens Services (G2C), Business to Citizen (B2C) Services to the rural citizens.

Statement-I

*State/UT-wise details of BharatNet progress during the last five years
and the current year*

Sl. No.	States/Union Territory	Service Ready GPs (Including BHQs)
1	2	3
1.	Andaman and Nicobar Islands	8
2.	Andhra Pradesh	1628
3.	Arunachal Pradesh	244
4.	Assam	1622
5.	Bihar	8067
6.	Chhattisgarh	4712
7.	Dadra and Nagar Haveli	21
8.	Daman and Diu	18
9.	Gujarat	10545
10.	Haryana	6188
11.	Himachal Pradesh	250
12.	Jammu and Kashmir and Ladakh	1011
13.	Jharkhand	2478

1	2	3
14.	Karnataka	6244
15.	Kerala	1129
16.	Lakshadweep	0
17.	Madhya Pradesh	12922
18.	Maharashtra	15534
19.	Manipur	427
20.	Meghalaya	194
21.	Mizoram	66
22.	Nagaland	129
23.	Odisha	3892
24.	Puducherry	101
25.	Punjab	12542
26.	Rajasthan	8724
27.	Sikkim	18
28.	Tamil Nadu	0
29.	Telangana	2047
30.	Tripura	647
31.	Uttar Pradesh	28998
32.	Uttarakhand	1557
33.	West Bengal	2285
TOTAL		134248

Statement-II*Details of funds disbursed under BharatNet Project Ph-I by BBNL*

Sl. No.	State/Union Territory	Funds Disbursed (in INR)
1.	Andaman and Nicobar Islands	152184834
2.	Assam	1627920812

Sl. No.	State/Union Territory	Funds Disbursed (in INR)
3.	Bihar	4533580503
4.	Chhattisgarh	5202892683
5.	Haryana	3851661631
6.	Jammu and Kashmir and Ladakh	771127190
7.	Karnataka	6545168327
8.	Kerala	718487912
9.	Maharashtra	12810480894
10.	Madhya Pradesh	12970065825
11.	Punjab	3757757151
12.	Rajasthan	7007699363
13.	Uttar Pradesh	12645855667
14.	Uttarakhand	2479300282
15.	West Bengal	3963543831
16.	Sikkim	761284289
17.	Puducherry	48606957
18.	Arunachal Pradesh	455796430
19.	Manipur	495044991
20.	Meghalaya	666137967
21.	Mizoram	341256527
22.	Nagaland	600672076
23.	Tripura	732190894
24.	Gujarat, Dadra and Nagar Haveli and Daman and Diu	3821047516
25.	Lakshadweep	1034134
26.	Telangana	2139124557

Sl. No.	State/Union Territory	Funds Disbursed (in INR)
27.	Odisha	4086256256
28.	Jharkhand	2327820360
29.	Himachal Pradesh	824901952
30.	Andhra Pradesh	1124088805
31.	Tamil Nadu	108055326
TOTAL		97571045947
GPON & OFC		9760953785
Ad hoc payment done for BSNL		2748880599
GRAND TOTAL		110080880331

Essential difference between 4G network and 5G system

517. SHRI MANISH GUPTA: Will the Minister of COMMUNICATIONS be pleased to state:

(a) whether the 5G wireless technology when adopted in the country will amount to a quantum leap in the world of wireless networks, if so, the details thereof;

(b) what would be the essential difference between the existing 4G networks and the proposed 5G system; and

(c) whether any fresh spectrum allocation is likely to take place in this connection in the current year, if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF COMMUNICATIONS (SHRI DHOTRE SANJAY SHAMRAO): (a) 5G technology has the potential for ushering a major societal transformation in India by enabling a rapid expansion of the role of information technology across manufacturing, educational, healthcare, agricultural, financial and social sectors. The 5G can unleash new economic opportunities and societal benefits to the extent that it may transform Indian society and help in actualizing the 'Digital India' vision.

(b) The essential difference between the existing 4G technology and 5G Technology is as tabulated below:-