



सत्यमेव जयते

Department of Telecommunications
Ministry of Communications
Government of India

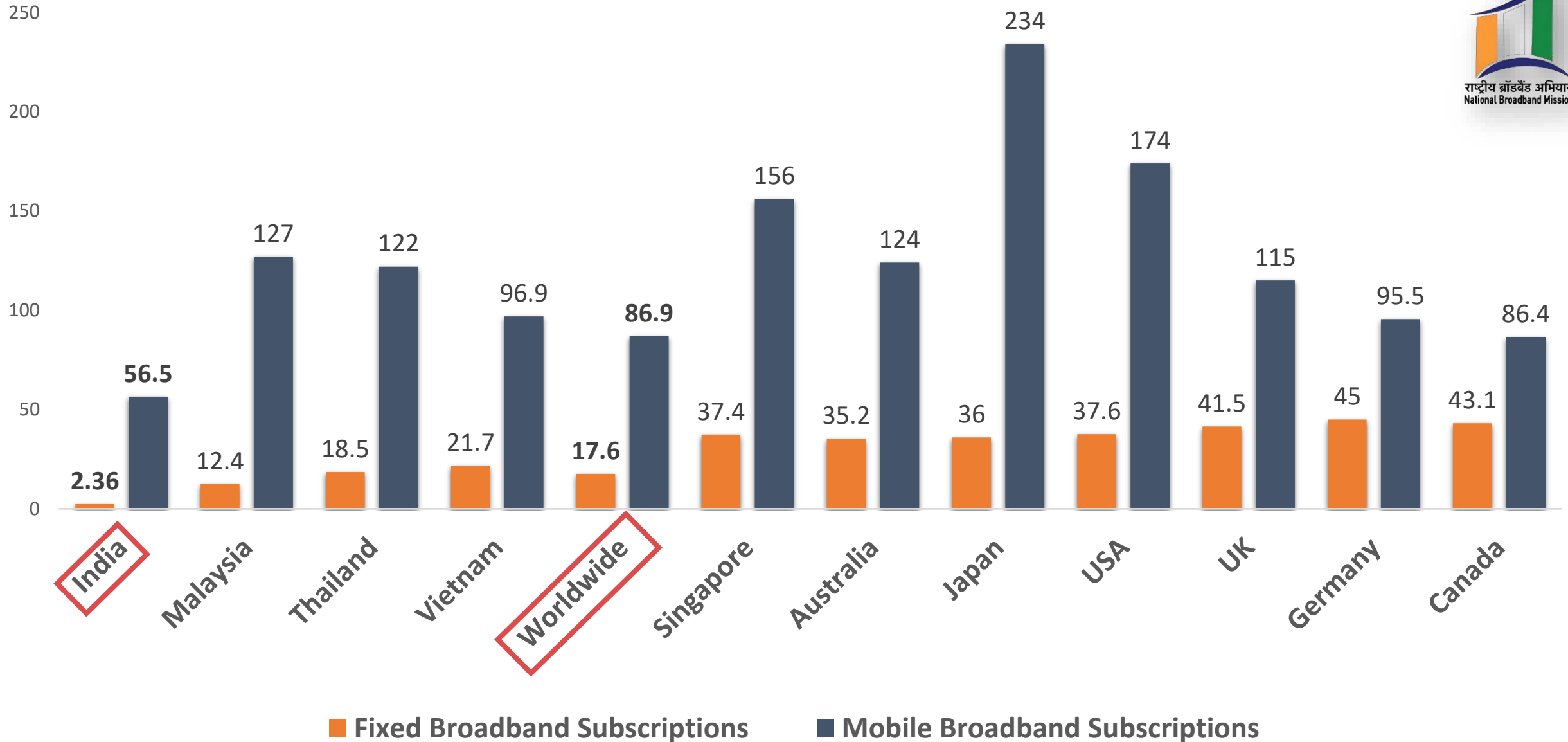
Right of Way and Allied Issue

28th-October-23 (11:35AM -12:00PM)

Session Hall-3

Neeraj Kumar
Mission Director & DDG
National Broadband Mission

Fixed & Mobile Broadband Subscriptions (per 100 People)



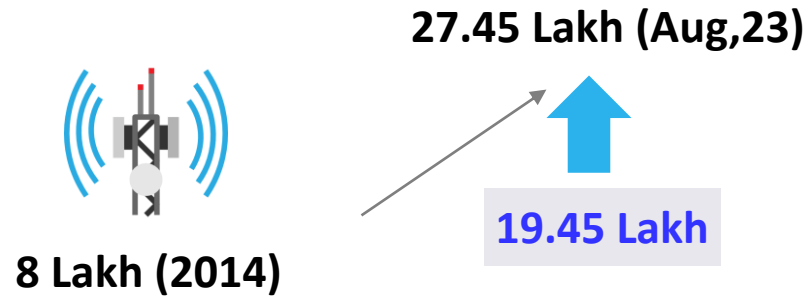
NBM - Annual Implementation Plan & Current Status



KPI	1-year (FY 2020-21)	2-year (FY 2021-22)	3-year (FY 2022-23)	4-year (FY 2023-24)	Status (FY 2023-24)	5-year (FY 2024-25)
Broadband Connectivity to Villages (%)	50%	60%	100%	-	95.32% (31.08.23)	-
*Availability of broadband Speeds (Mbps)	4	10	25	30	Mobile BB- 54 Fixed BB-55 (Sep 2023)	50
Fiberization (Lakh KMs) Cumulative	24	27	30	40	38.06 (30.06.2023)	50
Towers (in lakhs) Cumulative	7	8	10	12	7.75 (10.10.2023)	15
Fiberization of Telecom Towers (%) Cumulative	35	45	55	65	40.53% (31.07.2023)	70
Mapping of Fiber Cumulative	10%	40%	60%	80%	84% (Govt. PSUs) (31.09.2023)	100%

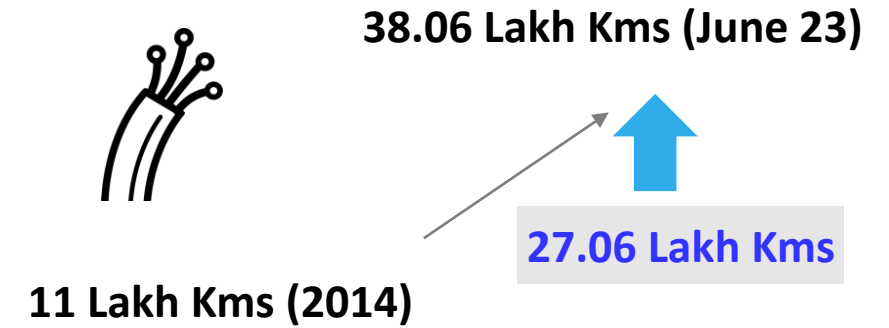
Achievements from 2014 to 2023

Increase in BTS



Source: NEP Portal- Monthly

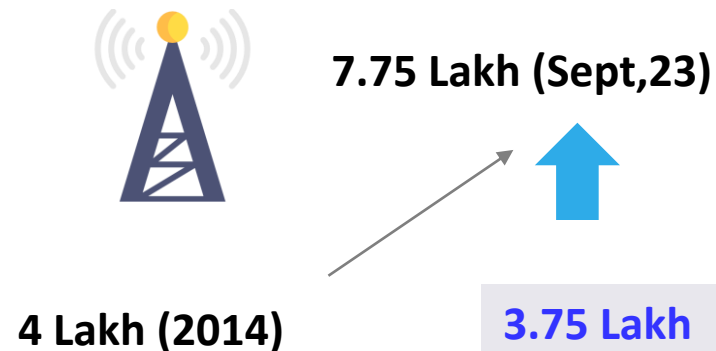
OFC network grew



Source: NBM-LSAs/TSPs/ISPs
Quarterly

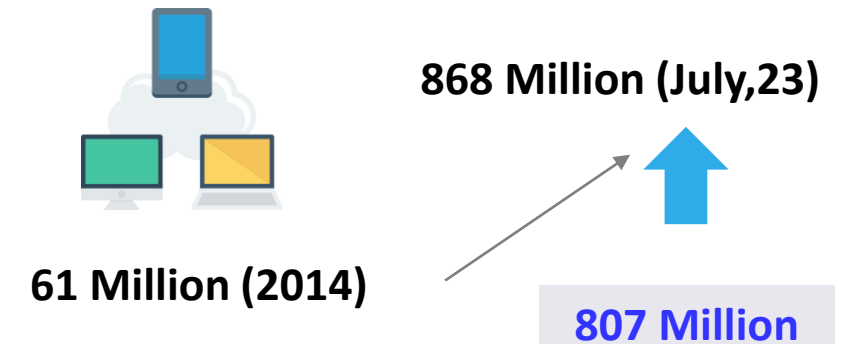


Increase in Towers



Source: NEP Portal- Monthly

Broadband Subscribers increased



Source: TRAI Report - Monthly

NBM Highlights



1



GatiShakti Sanchar Portal -Single Portal

A Centralized Portal integrated With the state portal.

2



Call Before u Dig

To provide an interface between excavator & utility asset owners

3

5G (Form1D)

Activation of 5G Form

on State's RoW Online Portal to facilitate 5G rollout

4



State Policy Alignment

21 State Policy aligned as per Addendum to ITRoW 2016

5



RoW pendency

86594 application approved in last 2 years

6



5G Use Cases

Promotion & demo

Conducted 5G conference in 21 States for awareness of 5G use cases.

7

PM GatiShakti

PM GatiShakti NMP

Mappin for Street Furniture Utilities , telecom tower

Right of Way rules



2016

All aspect related to establishment, maintenance, of telecommunication infrastructure (overground & underground), uniform charges, deemed approval, single window online application

- 35 States/UTs issued policy
- Delhi yet to issue policy

2021

Provision for establishment of overground telegraph line over the immovable property for which one time compensation to be payable for the value of the immovable property, not exceeding 1000/Km

- 21 States/UTs issued Policy
- 15 States/UTs Pending-
Arunachal, Bihar, HP, Haryana, Chhattisgarh, DDNH, Delhi, Gujarat, Karnataka, Kerala, Meghalaya, Nagaland, Punjab, Tamil Nadu, Telangana

2022

Usage of street furniture for installation of small cells and telegraph line and Establishment of telegraph infrastructure over private property

2023

Single application and single permission for multiple sites for establishment of small cells

- No administrative fees or compensation for deployment of small cells on government buildings and structures
- No fee or compensation for the establishment of temporary overground telegraph infrastructure for the period of sixty days in case of damage to underground infra

- Issued on 7th-Aug-2023
- All States/UT's to adopt

IT RoW Amendment Rules 2023-Salient Features

Central Government has notified the Indian Telegraph Right of Way Amendment Rules, 2023 dated 08.08.2023

- Licensee, whose existing underground telegraph infrastructure is damaged, may temporarily establish the overground telegraph infrastructure to restore the telegraph service.
- No fee or compensation for the establishment of temporary overground telegraph infrastructure for the period of sixty days
- “street furniture” means post or pole used for electricity, street light, traffic light, traffic sign, bus stop, tram stop, taxi stand, public lavatory, memorial, public sculpture, utility pole or any other structure or contrivance of such nature
- Single application and single permission for multiple sites for establishment of small cells
- No administrative fees or compensation for deployment of small cells on buildings and structures vested in or under their control of Central government

Indian Telegraph ROW Rules, 2016 and Amendment(2022)-Salient Feature

	Tower	OFC	Small Cell-5G	Street Furniture-5G
Administrative Charges	10,000/Tower For Private property, only intimation	Underground 1000/KM Overground 1000/KM	NIL	Self Establishment- 1000/ Pole
Assam, Chandigarh, Maharashtra,Tripuri, Rajasthan				
Compensation Charges	Once/annually (Decided by appropriate authority)	NIL	Urban- 300/Pole/Yr Rural- 150/Pole/Yr	Compensation for self established Pole - Nil Usage of Street Furniture for telegraph line- 100/Pole/Yr
Restoration Charges	As per CPWD rate As per State PWD rate	By Self- BG 20/% of restoration cost By Local Body- As per CPWD/PWD rate	Establishment of Telecom infrastructure on Private Property. :- <ul style="list-style-type: none">No Permission required for private propertyOnly Intimation required for Private Property (Structure Suitability required)	

Central Ministry- Policy alignment with ITRoW 2016



Policy Dated

Central Ministry RoW Policy



Ministry of Railway

4-10-2022

Master Circular on “ Policy for Management of Railway Land



Ministry of Defence

18-01-2023

Policy on Shared communication Tower and other telecom infrastructure



Ministry of Road
Transport and Highways

17-04-2023

Accommodation of Public and Industrial Utility services along and across
National highway-Clarification OFC/Telecom cables

Ministry of Power issued/ notified:

- An advisory dated 24.05.2023 on the implementation of a **Composite Billing** Scheme for Multiple connections of Telecom Service Providers- MP, Jaipur (Rajasthan)
- The Electricity (**Promoting Renewable Energy through Green Energy Open Access**) Rules, 2022 allowed aggregation of loads within the same division for 100 kW eligibility- MP, Karnataka

• Way Forward:-

LSAs to follow up with all States/UTs to implement the above advisory/notifications issued by the Ministry of Power.

State Initiatives – Some of the Good Practices



Tamil Nadu, Punjab: Scheme for regularisation of existing tower

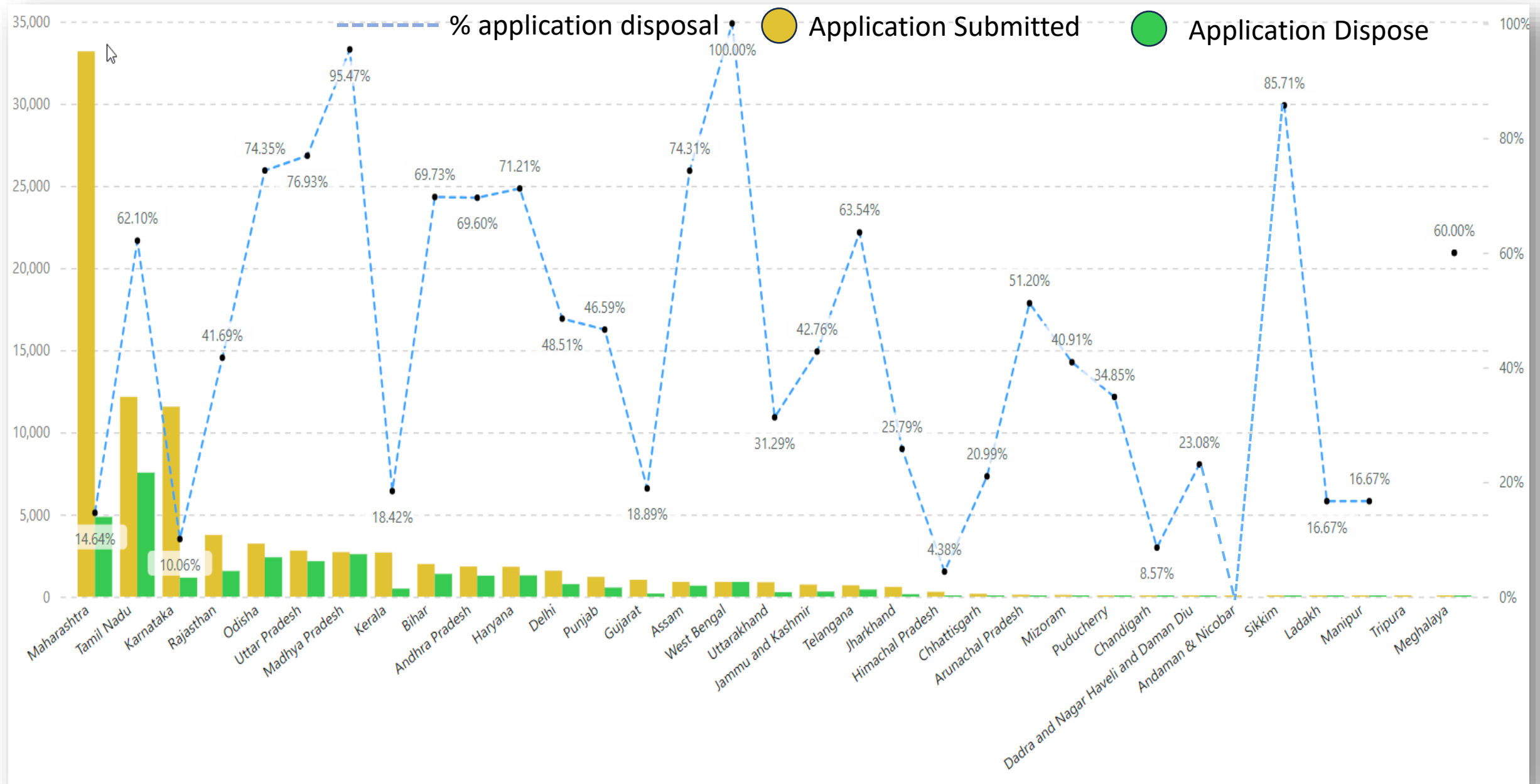
Rajasthan: Implemented intimation for permission for private property

MP: Implemented composite billing and Green energy open access issued by MoP

Maharashtra & HP : Adopted industrial electricity tariff for telecom industry

Madhya Pradesh: Developed the 5G form with GIS features

Disposals Vs Application received- last 6 months



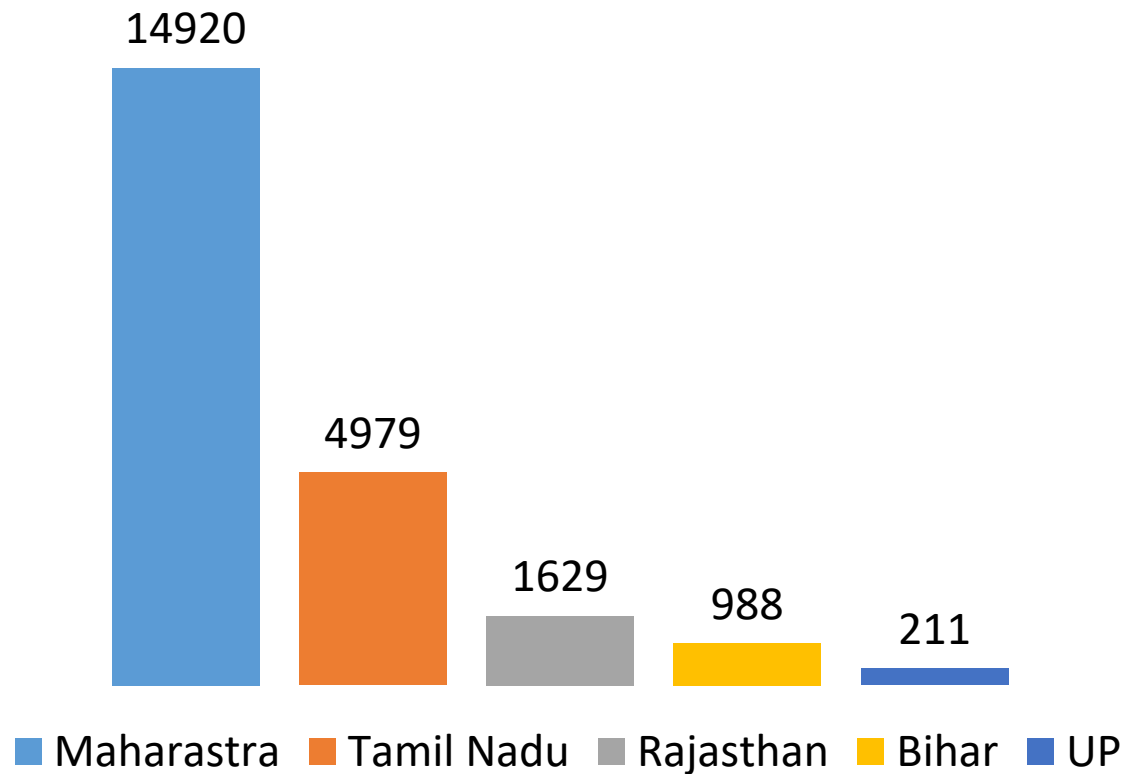
Top-10 States/UTs where % disposal >60 days is high



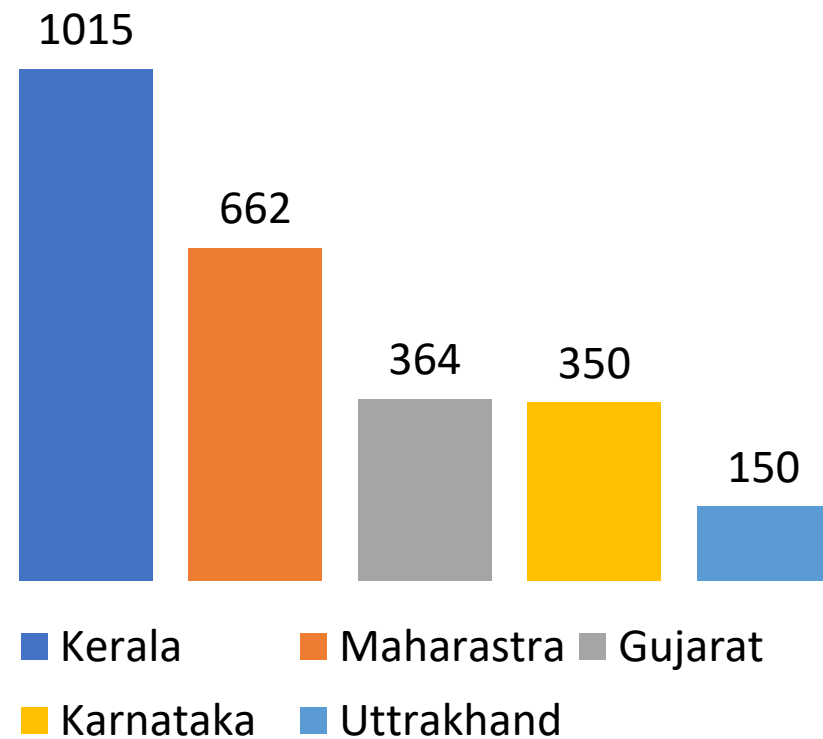
Sr No	State Name	% application disposed>60days
1	Mizoram	91.11
2	Assam	89.57
3	Karnataka	85.14
4	Bihar	81.71
5	Chandigarh	66.67
6	Punjab	50.09
7	Chattisgarh	50
8	Kerala	46.7
9	Gujarat	42,78
10	West Bengal	40.51

Top-5 States/UT RoW Pendency Status

Row Pendency-Tower



Row Pendency-OFC



RoW Pending Applications (GatiShakti Sanchar Portal)



Total
Pendency
27724

Top 10 State /UT's
Pendency
26284

Top 10 State /UT's
Pendency>90days
18897

S.No.	State / UT	RoW Application Pendency (as on 09.10.2023)			RoW Application Pendency (>90 days) (As on 09.10.2023)		
		Fresh	Regularization	Total	Fresh	Regularization	Total
1	Maharashtra	4914	10680	15594	3925	5353	9298
2	Tamil Nadu	330	4794	5124	137	4588	4725
3	Rajasthan	1629	0(~10K)	1629	1589	0	1589
4	Kerala	1015	0	1015	778	0	778
5	Bihar	994	14	1008	979	14	993
6	Uttar Pradesh	292	192	484	173	192	365
7	Karnataka	436	28	464	377	14	391
8	Gujarat	398	0	398	355	0	355
9	Delhi	194	106	300	188	92	280
10	Jharkhand	268	0	268	123	0	123

Demand Note to
be raised-7226

Data as per 25th-Oct-23

1. Deemed approval:

- a. Implemented in Policy of 33 States/UTs (Pending in Nagaland & DDNH)
- b. Implemented in the portal of 27 states/UTs
- c. Pending implementation in Portals of (9) – GJ, PB, KL, HR, DNH, Delhi (NDMC), Nagaland, Tripura, KTK (KMDS)
- d. Implemented in Maharashtra, Delhi, Arunachal J&K, Puducherry and approval is granted after 60 days but States not issuing Demand Note
- e. Pending integration – Kerala Tower Portal, Mizoram OFC Portal

2. 5G form implementation Pendency(19) – Assam, WB, Arunachal, Bihar, DNH, Delhi, Gujarat, Haryana, HP, Jharkhand, Karnataka, Kerala, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Tamil Nadu, UP.

Major Gaps in alignment - RoW 2016 and amendment 2022



Assam

- Permission required for private property. ITRoW 2022 recommends intimation only
- Deemed approval is 60 working days, it should be 60 calendar days

Chandigarh

- Permission required for private property. ITRoW 2022 recommends intimation only
- In case of delay in installation of tower penalty @12% applicable, it may be avoided
- RTT not allowed in residential area

Chhattisgarh

- Local bodies are charging for Tower License fee Rs. 25,000-1,50,000 with renewal & sharing fee of Rs. 10,000-30,000 & Rs. 10,000. It should be Rs 10,000 as administrative fee

Kerala

- Higher charges for U/G (INR 75,000/km as track Rental to be deposited in CM relief fund). No track charges should be levied.

Maharashtra

- Permission required for private property . ITRoW 2022 recommends intimation only
- Regularization charges formula leading to high charges need rationalization
- One Time charges for tower in Private property is Rs. 10,000, It should be avoided

Gap in alignment by States / UTs with RoW 2016 and amendment 2022



Rajasthan

- One Time & annual charges for tower in Private property is Rs. 10,000, It should be Nil.

Telangana

- High Charges for Tower- local bodies are charging up to 30,000-1,00,000, It should be Rs. 10,000/tower

Tripura

- Annual compensation for telegraph line on pole is Rs. 300 and microcell Rs. 500/ 300, It should be Rs. 100/annum/pole for telegraph line and Rs.300/150 for small cell
- Permission required for private property ITRoW 2022 recommends intimation only

West Bengal

- Pole charge are high (Installation of telegraph line-Rs.5000/pole for hilly area and Rs. 20,000/pole for other areas, and usage of street furniture- Rs. 5000,it should be Rs. 100.
- Tower charges Rs. 30,000 for each TSP, it should be Rs. 10,000 per tower
- OFC charges Rs. 5000/Km , it should be Rs. 1000
- Permission validity is 15 years, It should be co-terminus

Goa

- One Time for tower in Private property is Rs. 10,000, It should be Nil.

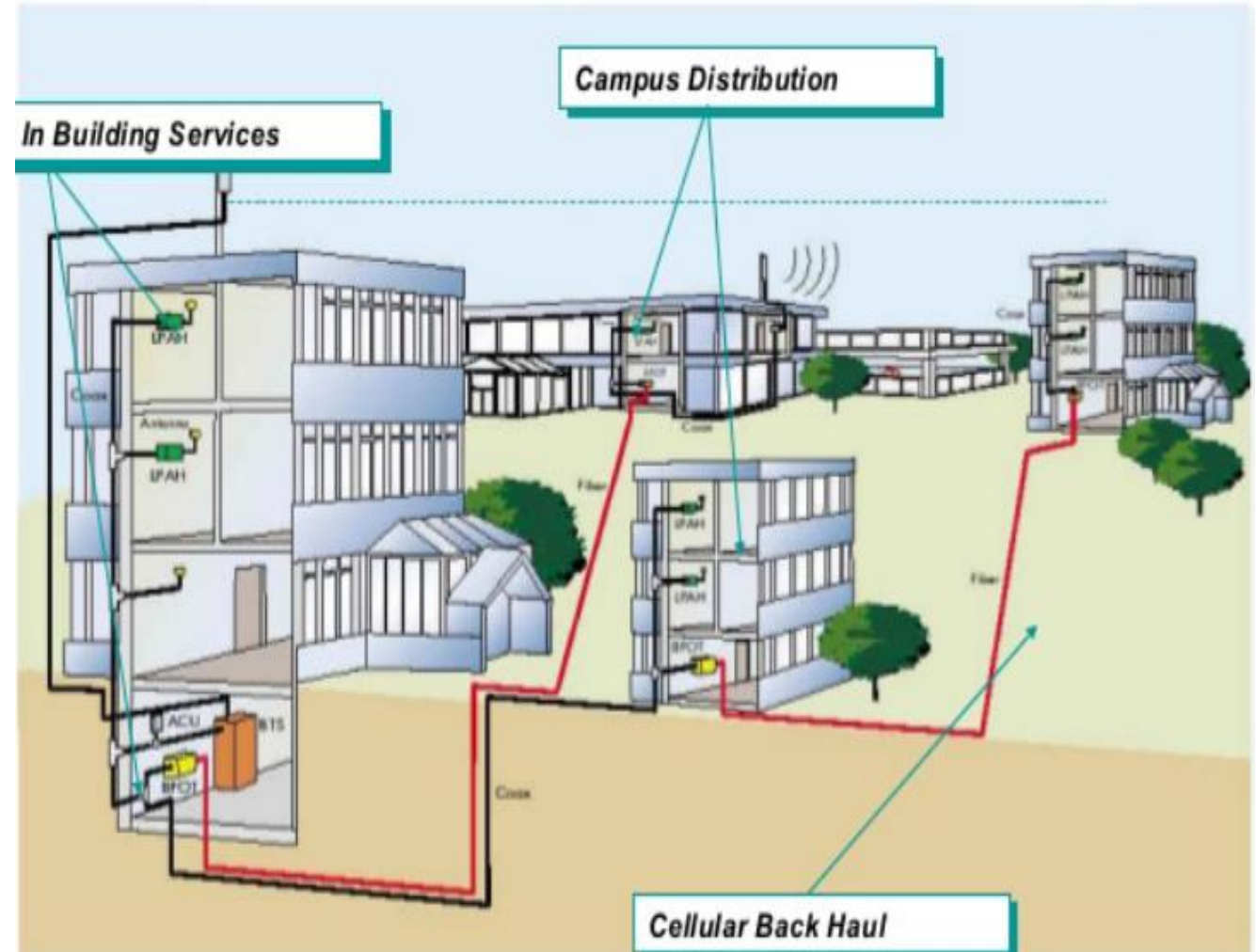
State Specific Policy Implementation Issues



State/UT`	Main issue in Policy Implementation/ Other Issues
Gujarat	<ul style="list-style-type: none"> Gujarat Industrial Development Corporation (GIDC) follows its own byelaws and not following state RoW policy and grants permission for only 5 years instead of full license period. GIDC may be asked to follow State RoW policy. Also, Surat Municipal Corporation (SMBC) denied permission of laying underground OFC and insisting to use ducts of third party whose rental is higher. State may examine the issue.
Haryana	<ul style="list-style-type: none"> Gurugram, Ambala and Panchkula municipal authority is still following its own bye laws. It may be asked to follow State RoW policy.
Karnataka	<ul style="list-style-type: none"> To examine issue of fiber cuts by BBMP, Mysore CMC and issue of PWD dept. not processing RoW application. Permissions for Overground, Structured Aerial Cabling are also not being provided by the BBMP and Mysore CMC. In Smart Cities like Shimoga and Belgaum, no Underground Ducts are being provided, and similarly, no own Poles are being permitted for telecom infrastructure deployment. Hence, TSPs are unable to deploy new OFC Infrastructure.
Madhya Pradesh	<ul style="list-style-type: none"> Housing Board Township and Bhopal Development are not following state RoW policy in letter and spirit. They may be asked to follow State RoW policy.
Uttar Pradesh	<ul style="list-style-type: none"> Noida and Ghaziabad local authorities follow their own byelaws. Ghaziabad Municipal Corporation charges an annual license fee of Rs. 25000/- per tower, whereas the Noida authority doesn't allow installation of mobile towers in residential areas. Also, Districts authorities are also not following State ROW Policy like Hapur, Meerut, They may be asked to follow State RoW policy.
West Bengal	<ul style="list-style-type: none"> In Kolkata, new permissions of overhead fiber are not being provided by local bodies (Panihati Municipality, Konnagar Municipality, Rishra Municipality, Serampore Municipality, Baidyabati Municipality, Bansberia Municipality) and existing fibre is also being cut. State may direct local authorities, not to resort to any restrictions, on roll out of telecom infrastructure where RoW permission is granted by the local bodies or dismantle already deployed overhead cables.
Tripura	<ul style="list-style-type: none"> Municipal corporation not following state policy like Khowai, Need to align as per state policy
Maharashtra	<ul style="list-style-type: none"> High restoration charges in Mumbai, Pune , to be restricted as per CPWD/PWD Municipal corporation like Pune, Nasik, PCMC, Aurangabad etc. not following state policy w.r.t charges

Addendum To Model Building Bye-Laws, 2016

- MoHUA has issued an addendum to Model Building Bye-Laws, 2016 on “*In-building Access by Telecom Service provider*”
- It aims for creation of common telecom Infrastructure & IBS, Making cities smarter through In-Building and Gated Buildings Solutions
- States/UTs may incorporate addendum in the States bye laws



Addendum to Model Building Bye-Laws, 2016 on “*In-building Access by Telecom Service provider*” in March 2022

The **salient points** are as below:

- Provision of Common telecom Infrastructure through In- Building and Gated Buildings Solutions
- Access Permission to Telecom Service Providers/Infrastructure providers
- Common Telecom Infrastructure facilities should not be seen as a source of revenue, rather to facilitate digital connectivity at par with water and electricity connectivity
- No fee will be charged for Indoor Building Solutions/ Fiber to the Home Network. Charges may be levied for power

States/UTs incorporated MoHUA Policy (15)-Andhra Pradesh, Arunachal Pradesh, Assam, Goa, Haryana, Jammu and Kashmir, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Manipur, Punjab, Rajasthan, Telangana, Uttarakhand
Rest 21 States/UTs need to adopt MoHUA Policy

5G conference in State/UT-Status



State Pending 15

1. Arunachal Pradesh
2. Bihar
3. Goa
4. Himachal Pradesh
5. Maharashtra
6. Meghalaya
7. Nagaland
8. Odisha
9. Punjab
10. Sikkim
11. Tripura
12. Andaman & Nicobar
13. J&K
14. Ladakh
15. Lakshadweep

Start Up Participated 11

1. Nayan Tech
2. Amanatya
3. Superceuticals
4. Perkant Tech
5. TexhXr
6. Nav Wireless
7. Nimble Vision
8. Sensorise
9. Arivation

Live Demo of 5G Use Cases in States 5

1. Delhi
2. West Bengal
3. Uttarakhand
4. Karnataka
5. Chhattisgarh

DO issued by DoT to all states' DGP, Secretary UDD, Secretary-Transport, CEO Smart City to plan pilot POCs in their state

1. Various States raised the enquiry and contacted the startup to explore 5G use case
2. Uttarakhand & Kerala are discussing with startup for POC in Transport and Health and Traffic sector
3. Tamil Nadu State organised meeting with Startup for Pilot

Startup Pilot details -State Government initiatives after 5G Conference

Startup	State	Department	Project Details and Location
Perkant Tech Private Contact-Saniya Jeswan Mob-8226008918	Uttrakhand	Health Department	Health screening systems for the Char dham yatra to ensure pilgrim safety and health screening
Nayan Technology Contact-Mr.Jayant Ratti Mobile-9899398646	Delhi/Uttrakhand	PWD/Traffic Police	AI model combined with CCTV footage and physical logbooks of security guards and other workers , will give real time reports of damages to road and footpaths discolouring of pavemnts and theft of iteams like decorative lights or steel sculptures.
Easiofy Contact-Ms. Noor Fatima Mob-995849937	MP	Health Department	Vidisha District Hospital.ImagiXAI is the platform name. Its cloud based AI enabled image analysis platform
	Arunachal Pradesh	Health Department	Bakin Pertin General Hospital & Training Center,Pasighat.ImagiXAI is the platform name. Its cloud based AI enabled image analysis platform
	Nagaland	Health Department	Naga Hospital Authority, Dimapur.ImagiXAI is the platform name. Its cloud based AI enabled image analysis platform
	Manipur	Health Department	District Hospital, Senapati.ImagiXAI is the platform name. Its cloud based AI enabled image analysis platform
	Mizoram	Health Department	District Hospital, Serchhip.ImagiXAI is the platform name. Its cloud based AI enabled image analysis platform
	Meghalaya	Health Department	District Medical &Health Officer,South Garo Hills District, Baghmara.ImagiXAI is the platform name. Its cloud based AI enabled image analysis platform
	Tripura	Health Department	Indira Gandhi Memorial Hospital, Agartala.ImagiXAI is the platform name. Its cloud based AI enabled image analysis platform
TechXR Contact-Mr. Prashant Mishra Mobile-8889500018	Madhya Pradesh	Education	CM Rise school, Natheri,CM Rise School, Vidisha,Subhash Government Higher Secondary School, Bhopal,
	Arunachal Pradesh	Education	Government College of Nursing, Pasighat
	Uttarakhand	Education	Government Inter College, Champawat,
Nav Technology Contact-Mr. Prashant Gandhi Mobile-9819503295	Assam	AMTRON	Connected 4 Locations in Guwahati for ASWAN Network (one installation on the Carnival Island which was used for G20 Meet in Feb'23 and another across the Brahmaputra River having Aerial distance of 6.5 Kms.)
	Gujarat	BSF/Education	1-At BSF NADABET Complex Stadium for TCGL - in the Middle of Rann at Pakistan Border. 2-Dharoi Dam: Connected Dharoi Dam for Seismological Department, 3-DST (GFGNL's BharatNet Horizontal Connectivity) 4-Connected Sachivalay with State Data Centre for GSWAN (for GIL). 5-Schools at Mithavi Rana and Kanji Gram Panchayat under Completion (GFGNL's BharatNet Horizontal Connectivity)
	Uttrakhand	ITDA	Connected ITDA Hq. with the Secretariate at Dehradun.
	Ladakh	Education	Connected Institutes HIAL and SECMOL of Mr Sonam Wangchuk



To coordinate for proposed excavation/digging activities and to safeguard existing underlying utility assets like Optical Fibre Cables, Water Pipelines, Electric Cables, Gas Pipelines etc. from damages.



Total registered
user
49692

Total registered
Excavators
15747

Excavation
Enquires
5591

Call Before u Dig (CBuD) Mobile App

Launched by **Hon'ble Prime Minister**, on 22nd March 2023

CBuD Status and Action required



State Name	Enquiry Target for 2023-24	Enquiries against target	% Achievement against Target
GUJARAT	430	2133	496%
DNH	40	89	223%
ASSAM	460	855	186%
KERALA	180	217	121%
CHANDIGARH	10	12	120%
WEST BENGAL	300	348	116%
PUDUCHERRY	50	48	96%
LAKSHADWEEP	10	8	80%
MP	680	489	72%
RAJASTHAN	430	302	70%
PUNJAB	300	176	59%
CHHATTISGARH	430	244	57%
KARNATAKA	410	226	55%
ANDAMAN & NICOBAR	40	18	45%
HARYANA	290	123	42%
JHARKHAND	310	118	38%

State Name	Enquiry Target for 2023-24	Enquiries against target	% Achievement against Target
UK	170	56	33%
HP	160	50	31%
J&K	260	61	23%
BIHAR	500	110	22%
UP	980	210	21%
MAHARASHTRA	470	95	20%
DELHI	140	26	19%
MEGHALAYA	160	29	18%
ODISHA	390	63	16%
TAMIL NADU	500	74	15%
TELANGANA	430	45	10%
ANDHRA PRADESH	340	34	10%
GOA	30	1	3%
SIKKIM	80	2	3%
MANIPUR	210	3	1%
AP	330	0	0%
LADAKH	30	0	0%
MIZORAM	140	0	0%
NAGALAND	200	0	0%
TRIPURA	110	0	0%
Total	10000	6265	

Activities to be taken up by States/Central Ministries



1. All excavation approval letter(s) format is modified to include, **“Agency which is excavating must use the CBuD App before commencing any excavation on public lands/roads in the State”**. All State departments must be asked to issue necessary orders in this regard.
2. States to take action to enhance the usage of the CBuD app.
3. DoT has come out with a notification dated 3rd Jan 2023 reg. safety of Telecom assets which mandates the use of a common portal/app (CBuD) and prescribes the procedure of giving notices etc. for digging and applicable damages in case of damage to telegraph property. **States may come out with similar notifications covering respective areas of Electricity, Gas, Water pipelines etc.**
4. To make arrangement more pointed, it is proposed to send the alert to nodal officer only if the concerned department has its asset mapped at this particular location for this all underground **assets need to be mapped on NMP**

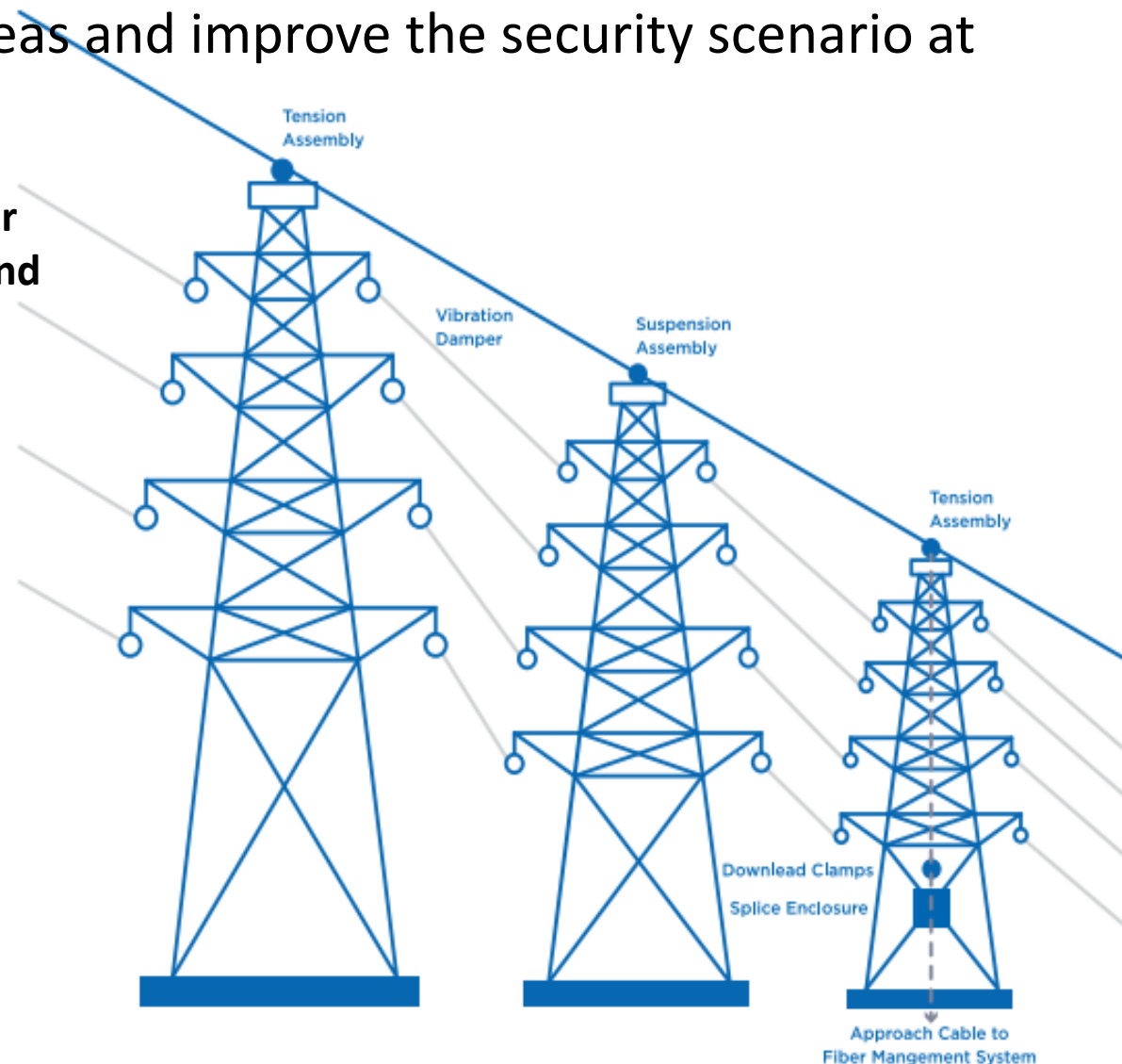
Unexpected Events- OPGW Solution

- OPGW Dark Fiber will help to reach far flung areas and improve the security scenario at Indian borders during unexpected events

Optical Ground Wire (OPGW) is a specialized type of optical fiber cable that is designed for use in overhead power transmission and distribution lines.

Industry which are utilizing the services include:

- Government departments including Defence
- National Knowledge Network (NKN) connecting Educational institutions
- Telecom Service Providers (TSPs)
- Enterprise segment
- Internet Service Providers
- Indefeasible Right to Use (IRU) basis Customers with commitment to provide bandwidth upto 20 years



Common Duct Requirement – DoT issued guidelines



Metro Rail

- Reduces pollution
- Better air quality
- Reduces global warming
- Reduces FOREX outgo
- Reduces CO2 emission
- Lesser Congestion on roads



Common Duct

- **Avoid frequent Digging** and Excavation
- **Decrease costs** for the Nation
- **Multiple RoW permission** can be avoided
- **Digital Ready infrastructure**
- **Improved aesthetics of City**
- **Better for environment**

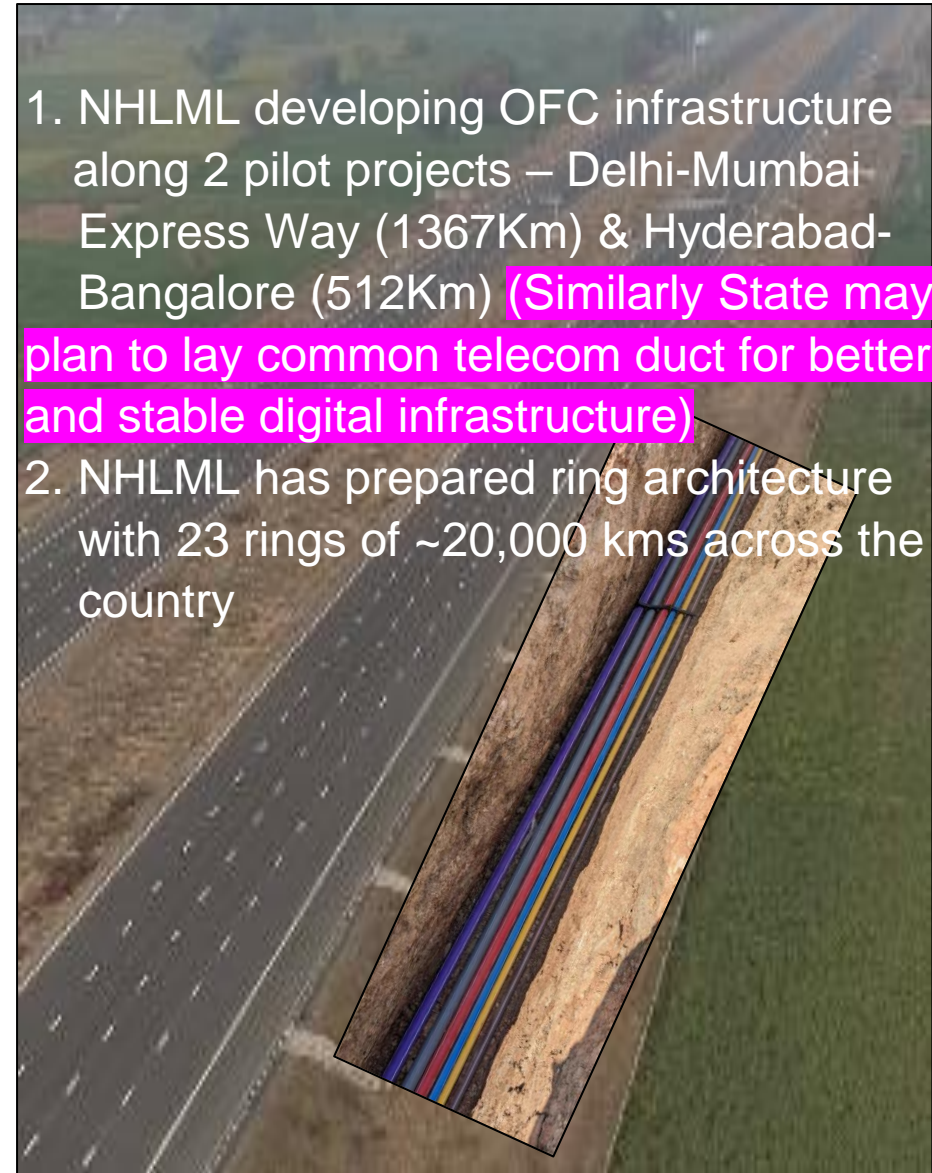
Different Type of Common Ducts

GIFT Utility Duct: Gandhinagar



Gujarat International Finance Tec-City (GIFT)
RCC duct containing prefabricated HDPE
developed the vision of “Digging Free City

1. NHLML developing OFC infrastructure along 2 pilot projects – Delhi-Mumbai Express Way (1367Km) & Hyderabad-Bangalore (512Km) (Similarly State may plan to lay common telecom duct for better and stable digital infrastructure)
2. NHLML has prepared ring architecture with 23 rings of ~20,000 kms across the country



- ✓ Fiberization of BTS(base trans receiver station) is connecting of BTS with optical fiber so that BTS could handle more of Voice and Data traffic.
- ✓ Benefits of fiberization:
 - I. Better Quality of Service for mobile coverage
 - II. Higher internet speeds
 - III. More transparent E-governance
 - IV. Will attract more investments from industry in areas with better coverage
 - V. Better coverage and internet speeds in public institutions like hospitals, government offices, schools etc.

BTS Fiberization



S.no	Name of State/UTs	Total BTSs	Connected on fiber	% Fiberization
1	A&N (UT)	901	637	70.7
2	Ladakh (UT)	1497	936	62.53
3	Delhi	70859	40509	57.17
4	Chandigarh (UT)	3463	1755	50.68
5	Puducherry	2299	1102	47.9
6	J&K (UT)	40128	18941	47.2
7	Karnataka	173567	80762	46.53
8	Tamilnadu	161589	72686	44.98
9	Uttarakhand	34864	15076	43.24
10	Telangana	90150	38753	42.99
11	Chhattisgarh	49587	21114	42.58
12	Assam	62491	26289	42.07
13	Maharashtra	105322	251761	41.83
14	Haryana	1188	521	41.47
15	Gujarat	142393	58382	41
16	Rajasthan	150191	61274	40.8
17	MP	127073	51330	40.39
18	DNH & DD	1824	721	39.53

S.no	Name of State/UTs	Total BTSs	Connected on fiber	% Fiberization
19	Meghalaya	7534	2936	38.97
20	West Bengal	160158	62321	38.9
21	Mizoram	3947	1534	38.86
22	Tripura	8417	3211	38.15
23	Andhra Pradesh	85178	32409	38.05
24	Kerala	113541	43066	37.93
25	Arunachal Pradesh	5008	1890	37.74
26	Jharkhand	51525	19423	37.7
27	Sikkim	2641	990	37.49
28	Punjab	82155	30489	37.11
29	Odisha	77917	28440	36.5
30	UP	326141	117848	36.13
31	Manipur	7783	2797	35.94
32	Goa	5904	2117	35.86
33	Nagaland	5410	1886	34.86
34	Himachal Pradesh	27377	8973	32.78
35	Bihar	119390	38120	31.93
36	Lakshadweep	69	4	5.8
	Total	2540093	1029445	40.53

Target-65% by March-24

Format of Street furniture



1. Street furniture of the following states has been **mapped** on NMP:
 - a) 245 government buildings, 401355 electric poles, 53 bus terminals, 70 traffic lights, and 97 bus shelters of Jharkhand.
2. All States are requested to provide data of the following assets which will be used as street furniture for the 5G rollout: Street furniture” means post or pole used for electricity, street light, traffic light, traffic sign, bus stop, tram stop, taxi stand, public lavatory, memorial, public sculpture, utility pole or any other structure or contrivance of such nature established over the property of an appropriate authority
3. Data can be provided in Excel format to BISAG, and complete data need to be mapped not partial

Sr. No.	State	City Name	Street Furniture Type	Latitude(min. 5 decimal places)	Longitude(min. 5 decimal places)	Authority	Street Furniture Id/Name	Street Furniture Height(meters, 2 decimal places)	Structure Type of Street furniture	Class	Sub Class
1			Pole	23.23235	75.12345	MPEB	3045	8.56	Steel	State government	DISCOM
2			Bus Shelter	23.45676	75.45677	MC Bhopal	ISBT	10.12	RCC(reinforced cement concrete)	State government	Transport Department

Status of street furniture mapped in DoT format (1/2)



S. No.	LSA	State	Traffic lights	Govt. Buildings	Bus Terminals	Bus Shelters	Electric Poles
1	West Bengal	Andaman and Nicobar Islands	-	683	5	104	9546
2	Andhra Pradesh	Andhra Pradesh	545	151823	117	357	530644
3	NE	Arunachal Pradesh	2	611	12	-	-
4	Assam	Assam	0	750	10	50	0
5	Bihar	Bihar	0	40	0	0	94,000
6	Punjab	Chandigarh	1,443	2,975	37	190	33,864
7	Madhya Pradesh	Chattisgarh	0	0	0	0	6,07,618
8	Gujarat	Dadra and Nagar Haveli and Daman and Diu	14	0	0	0	13991
9	Delhi	Delhi	351	16,861	-	194	1,51,802
10	Maharashtra	Goa		414			30,00,145
11	Gujarat	Gujarat	0	5,825	0	116	5,49,280
12	Haryana	Haryana	3	17,764	55	914	4,17,755
13	Himachal Pradesh	Himachal Pradesh	30	0	62	-	1,48,874
14	Jammu & Kashmir	Jammu & Kashmir	Not Received				
15	Bihar	Jharkhand	84	293	53	97	4,01,355
16	Karnataka	Karnataka	6,17	4,379	-	9,916	1,98,2614
17	Kerala	Kerala	2,417	0	113	56	21,517
18	Jammu & Kashmir	Ladakh	Not Received				






Status of street furniture mapped in DoT format OFC (2/2)



S. No.	LSA	State	Traffic lights	Govt. Buildings	Bus Terminals	Bus Shelters	Electric Poles
19	Kerala	Lakshadweep	0	12	-	-	949
20	Madhya Pradesh	Madhya Pradesh	40	900	12	25	58,00,550
21	Maharashtra	Maharashtra	0	107	595	-	52,58,763
22	NE	Manipur	30	77	119		64,035
23	NE	Meghalaya	-	1,295	5	-	-
24	NE	Mizoram	8	6,275	8	-	-
25	NE	Nagaland	10	65	55		0
26	Odisha	Odisha	0	0	0	0	22,05,338
27	Tamil Nadu	Puducherry	27	938	206		765
28	Punjab	Punjab	5	1,934	7	9	5,26,837
29	Rajasthan	Rajasthan	533	47,694	6,490		0
30	West Bengal	Sikkim		7			524
31	Tamil Nadu	Tamil Nadu	1,217	3,051	-	626	-
32	Andhra Pradesh	Telangana	398	643	-	-	-
33	NE	Tripura	31	13,000	2	120	20,268
34	UP(East & West)	Uttar Pradesh	1,316	2,071	-	270	3,01,6182
35	UP(West)	Uttarakhand	96	-	-	-	2,60,312
36	West Bengal	West Bengal	18	15	0	0	3,00,000(WBSEDCL) + 50,000(KMC)

Leveraging DoT PM GatiShakti NMP



1.  Planning of the 4G Saturation project was done using NMP where NMP was used to find out the distance of the nearest OFC, roads, land, electric supply etc. from the sites proposed for mobile towers.
2.  Found out the towers of other TSPs lying within 3/2.5/2 Km (aerial radial distance) of 19,618 USOF 4G planned sites.
3.  Ongoing exercise to find out habitations without adequate 4G coverage (less than -110 dBm) as directed by MoC in the meeting dated 28th May 2023. Exercise completed for Assam and ongoing for North East Circle.
4.  To find the availability of OFC nearest to a village for BharatNet phase III through (a) API-based integration of DoT NMP with private operators to find out OFC nearest to the villages and (b) comparison of physical distance data to be received from TSPs/ISPs/IPs against Lat./Long. Of villages.
5.  Ongoing exercise to find out the mobile towers, BTS, OFC, and USOF sites within all the parliamentary constituencies of India.

Steps for Resolution of RoW issues

1 'a'

Examine all pending RoW applications in consultation with DiPA/TSPs

1 'b'

Make an officer Nodal for districts/Local Bodies with mandate to facilitate resolution of pending RoW applications

2

Any issues not resolved at local bodies/department level may be taken up with Chief Secretaries in State Broadband Committee (SBC) meeting

3

Inform DGT, about cases not resolved even in SBC

4

Still pending RoW application may be taken up by Secretary T with States/UTs

5

Further higher level intervention at DoT/PMO as per need



Working for NBM 2.0

Request Suggestions

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