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# ANNUAL REPORT

2021-2022



TELECOM REGULATORY AUTHORITY OF INDIA





# **Telecom Regulatory Authority of India**

(IS/ISO 9001:2015 Certified Organisation)

## **Annual Report 2021-22**

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## Letter of Transmittal

**To the Central Government through Hon'ble Minister of Communications and Information Technology**

It is my privilege to forward the 25<sup>th</sup> Annual Report for the year 2021-22 of the Telecom Regulatory Authority of India to be laid before both Houses of Parliament. Included in this report is the information required to be forwarded to the Central Government under the provisions of the Telecom Regulatory Authority of India Act, 1997, as amended by TRAI (Amendment) Act, 2000.

The Report contains an overview of the Telecom and Broadcasting sectors and a summary of the key initiatives of TRAI on regulatory matters with specific reference to the functions mandated to it under the Act. The Audited Annual Statement of Accounts of TRAI is also included in the Report.



**(DR. P.D. VAGHELA)**

**CHAIRPERSON**

Dated: November, 2022



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## OVERVIEW OF THE TELECOM AND BROADCASTING SECTORS



## OVERVIEW

The Telecom Regulatory Authority of India (TRAI) completed 25 years of its existence in the year 2021-22 as a statutory body regulating the Telecom and Broadcasting Sectors. TRAI has a mission to nurture balanced growth of these sectors in the country so as to enable India to play a leading role in emerging global information society. It has always been at the forefront of digital revolution of the country and has contributed enormously to the expansion of the Telecom and Broadcasting sectors making them key enabler of Digital India. TRAI has taken various steps to bring benefits to consumers, including a broader choice of services, affordable tariffs, and better quality of Telecom and Broadcasting services across India to end users.

The challenges caused due to the Covid-19 pandemic continued during the year 2021-22 also. Although affected by the epidemic, the telecom sector played a critical role in maintaining seamless connectivity and facilitating uninterrupted access to services. In addition, the industry has contributed to a wide range of economic activities and services, including 'Work from Home/Work from Anywhere,' banking, education, entertainment, etc. A generational shift in telecommunication networks has been brought about during the pandemic. It is expected that this new impetus towards the goal of providing smooth, high-speed connections to all including the remote and rural areas will lead to digital inclusion in future.

During the financial year, 2021-22, various initiatives were taken by TRAI for the growth and development of Telecommunication and Broadcasting sectors. The year showcased upcoming trends in the telecommunication and broadband sector; as India gears up to welcome 5G services in the country.

During the year, many consultation processes were initiated on wide range of subjects such as Licensing Framework for Satellite-based Connectivity for Low Bit Rate Applications, Validity period of Tariff Offers, Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed, Auction of Spectrum in Frequency Bands identified for IMT/5G, Regulatory Framework for Promoting Data Economy through Establishment of Data Centres, Content Delivery Networks and Interconnect Exchanges in India and Promoting Local Manufacturing in the Television Broadcasting Sectors. Transparency and a well-defined consultation process have always been the hallmarks of TRAI's working for determining recommendations, regulations, etc., in the Telecommunication and Broadcasting sectors.

With the advent of 5G technologies, the future of telecom looks promising. Evolution of 5G will bring new applications/technologies such as artificial intelligence, quantum computing, virtual reality, etc. to the fore. 5G will unleash new business opportunities, as it will generate data at an unprecedented velocity and immense volume. 5G is likely to create economic benefits for almost all the industry verticals, accelerating them on an exceptional growth trajectory.

The Government has been taking proactive steps to create incentives by way of fostering an environment to overcome the major hurdles in the way of 5G. A Consultation Paper on "Auction of Spectrum in frequency bands identified for IMT/5G" was released by TRAI. With this, the stakeholders were consulted about steps that need to be taken to facilitate the identification, development, and proliferation of India-specific 5G use cases for different verticals for the benefit of the country.

The new regulations/orders of TRAI for the television and broadcasting sectors gave freedom to consumers to select television channels 'they want to watch'. For the convenience of the customers, TRAI came up with a "TRAI Channel Selector" App and a Channel Selector web portal. Both the App and the portal provide reliable, robust, and transparent systems to subscribers for fetching the data from respective DPOs platform through APIs. The Portal also recommends an optimum configuration i.e., combination of Channels/Bouquets based on consumer's selection to reduce the total monthly bill. In addition, it will suggest a combination of Channels/Bouquets based on the consumers' interest, keeping in view geographical, regional, language, genres, etc. preferences. The prominent feature of both the App and the Portal is optimisation of the subscription before it is sent to DTH/Cable operator, so that subscribers can get the best value for money.

TRAI's initiatives have created a conducive environment for mobile service providers, device manufacturers, infrastructure providers, and Internet companies to build a digital world to live, work and play. The industry has positioned itself as a vital facilitator of Digital India with cutting-edge services and applications like digital payments, Aadhar, e-governance, e-commerce, e-health, e-education, and e-trade. Telecom services act as backbone for these applications, as well as for many other vital service sectors like banking, healthcare, and education, which support the country's overall economic growth. The significant developments relating to Telecommunications and Broadcasting sectors during the year 2021-22 are briefly mentioned below:

## I. TELECOM SECTOR

The Telecom Sector has significantly changed the way individuals lead their lives, creating new ways in which people interact with each other and socialize. The continued growth of internet data services and mobile phone usage has changed how healthcare, education and transport is delivered to an individual. TRAI has played a critical and formative role in shaping the regulatory framework governing the telecom sector in India.

During the year, while discharging various recommendatory and regulatory functions, the Authority addressed several issues and challenges being faced by the telecom sector. Recommendations were made to the Government on key issues like "Enabling Unbundling of Different Layers Through Differential Licensing", "Licensing Framework for Satellite-based connectivity for Low Bit Rate Applications", "Roadmap to Promote Broadband Connectivity and Enhanced Broadband speed" and "Reforming the Guidelines for Transfer/Merger of Telecom Licenses" besides replying to the back references received from DoT on the earlier Recommendations of TRAI. Amendments to the various Telecom Regulations were also issued during this period.

At the end of the financial year 2021-22, the overall telecom subscriber base reached 1166.93 million as compared to the subscriber base of 1201.20 million as on 31<sup>st</sup> March, 2021, registering a decrease of 34.27 million subscribers. The wireless subscriber base was 1142.09 million at the end of 31<sup>st</sup> March, 2022 in comparison to the subscriber base of 1180.96 million as on 31<sup>st</sup> March, 2021, registering a decrease of 38.87 million subscribers during the financial year 2021-22. The total wireline subscriber base as on 31<sup>st</sup> March, 2022 stood at 24.84 million as compared to 20.24 million subscribers on 31<sup>st</sup> March, 2021, registering an increase of 22.73%. Out of 24.84 million wireline subscribers, 22.88 million are urban subscribers and 1.96 million are rural subscribers.



The Internet subscriber base in the country as on 31<sup>st</sup> March, 2022 stood at 824.888 million as compared to 825.301 million as on 31<sup>st</sup> March, 2021. The total broadband subscriber base of the country as on 31<sup>st</sup> March, 2022 is 788.295 million whereas it was 778.095 million on 31<sup>st</sup> March, 2021.

## II. BROADCASTING SECTOR

The year 2021-22 has been another busy and eventful year for the broadcasting and cable services sector. The last decade has witnessed significant changes in the dynamics of the Cable & Satellite (C&S) TV market.

TRAI notified the new regulatory framework for Broadcasting and Cable Services provided through addressable systems on 3<sup>rd</sup> March, 2017. The aforesaid new regulatory framework was inferred w.e.f. 29<sup>th</sup> December, 2018.

The new regulatory framework was quite successful in establishing harmonized business processes in the sector, level-playing-field, bringing-in transparency in TV channel pricing, reducing litigations among stakeholders and providing equal opportunities to smaller Multi System Operators (MSOs). As a result, there was a pronounced reduction in disputes among stakeholders as well as in entry barriers. New Regulatory Framework for Broadcasting and Cable Services also gave freedom to consumers to select television channels they want to watch.

During the year 2021-22, several key consultation papers were released on topics such as 'Promoting Local Manufacturing in the Television Broadcasting Sector', 'Ease of Doing Business in Telecom and Broadcasting Sector' and 'Market Structure/Competition in Cable TV services'. No recommendations were given to the Government during the year 2021-22 as these consultation papers were in progress.

The significant developments relating to Broadcasting sector during the year 2021-22 are briefly mentioned below:

- (i) The broadcasting sector consists of Television and Radio Services. The Television services comprises of cable TV services, DTH services, HITS services, IPTV services in addition to a terrestrial TV network of Doordarshan. As per an industry report, in the year 2021, the TV universe consists of approximately 67 million cable TV households<sup>1</sup>, 3 million HITS subscribers<sup>1</sup> and 43 million<sup>1</sup> Free DTH households. In addition, as reported by the pay DTH operators to TRAI, there were 66.92 million pay DTH total active subscribers at the end of March, 2022. Further, as reported by the IPTV Operators, there were 7,50,306 subscribers at the end of March 2022.
- (ii) The TV broadcasting sector encompasses approximately 350 broadcasters, out of which there are 42 pay broadcasters<sup>2</sup> at the end of March, 2022. Further, there were 1764 (Multi System Operators (MSOs)<sup>3</sup> registered with Ministry of Information and Broadcasting (MIB), 1 HITS operator<sup>2</sup>, 4 pay DTH operators<sup>2</sup> and 20 IPTV<sup>2</sup> operators, at the end of March 2022, in addition to the public service broadcaster - Doordarshan, providing a free-to-air DTH service in India. Further, as per the information provided by MIB, as on 1<sup>st</sup> January, 2022, there were a total number of 81,706 cable operators registered in the country.

<sup>1</sup> FICCI EY Report (March 2022) titled "Tuning into consumer - Indian M&E rebounds with a customer-centric approach"

<sup>2</sup> As reported to TRAI

<sup>3</sup> <https://new.broadcastseva.gov.in/digigov-portal-web-app>

- (iii) At present, there are approximately 898 private satellite TV channels<sup>3</sup> permitted by MIB at the end of March, 2022, out of which, 248 were SD pay TV channels<sup>2</sup> and 97 were HD Pay TV channels<sup>2</sup>.
- (iv) India's television industry stands at Rs. 72,000<sup>1</sup> crore in the year 2021-22 as compared to Rs. 68,500<sup>1</sup> crore in the year 2020-21, thereby registering a growth of around 5%. Subscription revenues account for a major share of the overall industry revenue. Subscription revenue has decreased from Rs. 43,400<sup>1</sup> crore in the year 2020-21 to Rs. 40,700<sup>1</sup> crore in the year 2021-22. Further, advertisement revenue has increased from Rs. 25,100<sup>1</sup> crore in the year 2020 to Rs. 31,300<sup>1</sup> crore in the year 2021-22.
- (v) As reported by the private FM Radio broadcasters to TRAI, there were 386<sup>2</sup> private FM radio stations operational at the end of March, 2022, besides the public service broadcaster- All India Radio (AIR). As far as the data relating to Community Radio Stations is concerned, as per the information provided by the MIB, out of the 467<sup>2</sup> licenses issued so far till the end of March 2022 for the setup of such stations, 349<sup>2</sup> community radio stations have become operational. The reported advertisement revenues by the private FM Radio broadcasters have increased from Rs. 941.47 crore<sup>2</sup> in the year 2020-21 to Rs. 1227.15 crore<sup>2</sup> in the year 2021-22.

### III. REVIEW OF THE IMPLEMENTATION OF THE RECOMMENDATIONS MADE BY TRAI

Over the last few years, TRAI has sent several recommendations to DoT and MIB on important issues concerning the growth of Telecommunications services and Broadcasting and Cable Services in the country, either in response to reference from the Government or suo moto. During this year, TRAI has worked with both DoT and MIB and a number of these recommendations have been accepted during the period. With an objective to put in place a mechanism whereby there is a periodic review of implementation of pending recommendations of TRAI in DoT/MIB and to create central repository for real-time tracking of status of all recommendations, TRAI has developed a Recommendation Status Portal which can be accessed jointly by TRAI, DoT and MIB.

### IV. OTHER ADMINISTRATIVE INITIATIVES

After its inception in 1997, TRAI has been functioning through a rented accommodation. Government of India (GoI) through Department of Telecommunication (DoT) vide letter dated 26<sup>th</sup> November, 2020 had conveyed administrative approval of the competent authority for procurement of built-up Office Space for TRAI in NBCC Commercial Complex being developed as the World Trade Centre (WTC) at Nauroji Nagar, New Delhi.

NBCC (India) Limited vide allotment letter dated 26th February 2021 has allotted TRAI a total 1,15,982 sq. ft. of super built up area (85,545 carpet area) at Tower-F (4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> & 7<sup>th</sup> Floors) at World Trade Centre, Nauroji Nagar, New Delhi with construction linked payment plan. Construction at the site is in full swing and the office space is expected to be handed over to TRAI by the 2<sup>nd</sup> half of year 2023.

<sup>1</sup> FICCI EY Report (March 2022) titled "Tuning into consumer - Indian M&E rebounds with a customer-centric approach"

<sup>2</sup> As reported to TRAI

<sup>3</sup> <https://new.broadcastseva.gov.in/digigov-portal-web-app>

The Schedule-I of the TRAI (Salary, Allowances, and other conditions of Service of the officers and employees) Rules, 2002 has been amended by DoT vide notification dated 11<sup>th</sup> February, 2022 published in the Official Gazette on 14<sup>th</sup> February, 2022 with the issue of Telecom Regulatory Authority of India (Salary, Allowances and other conditions of Service of the officers and employees) Amendment Rules, 2022. Vide this notification dated 11<sup>th</sup> February, 2022, the Central Government has amended part of the Schedule-I and restructured the post of Staff Car Driver into four Grades, insertion of the post of Photocopy Machine Operator and Dispatch Rider and redesignation of the post of Attendant to Multi-Tasking Staff.



## PART - I

# POLICIES AND PROGRAMMES



## (A) REVIEW OF GENERAL ENVIRONMENT IN THE TELECOM SECTOR

- 1.1** At the end of the financial year 2021-22 the overall telecom subscriber base reached 1166.93 million in comparison to the subscriber base of 1201.20 million as on 31<sup>st</sup> March, 2021 registering a decrease of 34.27 million subscribers during the financial year 2021-22. The overall subscriber base and tele-density is depicted in **Table-1**.

**Table-1 : Overall Subscriber base and Tele-density**

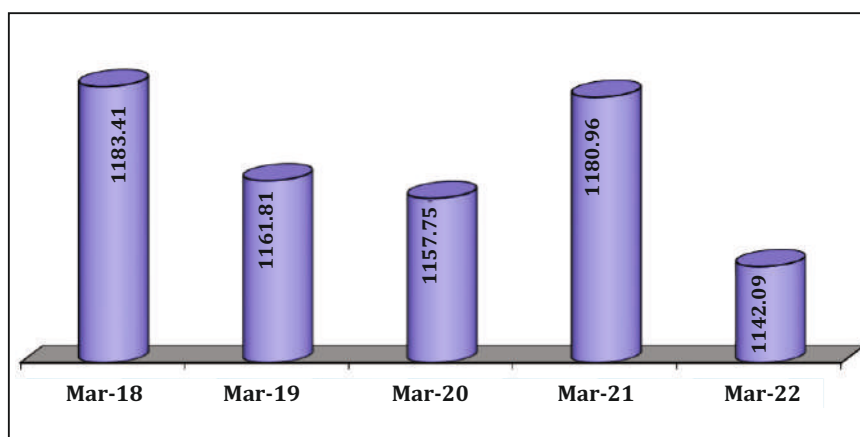
Particulars	Wireless	Wireline	Total (Wireless+Wireline)
Total Subscribers (Million)	1142.09	24.84	1166.93
Urban Subscribers (Million)	624.23	22.88	647.11
Rural Subscribers (Million)	517.86	1.96	519.82
Overall Tele-density	83.07%	1.81%	84.88%
Urban Tele-density	130.17%	4.77%	134.94%
Rural Tele-density	57.85%	0.22%	58.07%
Share of Urban Subscribers	54.66%	92.12%	55.45%
Share of Rural Subscribers	45.34%	7.88%	44.55%
No. of Internet Subscribers (Million)	797.61	27.27	824.89
No. of Broadband Subscribers (Million)	761.05	27.25	788.30

The details of subscriber base in wireless & wireline segments; requests for Mobile Number Portability (MNP); Tele-density; Internet subscribers and Quarterly Telecom Services Performance Indicators are explained in subsequent paragraphs.

### (a) Wireless

- 1.1.1** The wireless subscriber base was 1142.09 million at the end of 31<sup>st</sup> March, 2022 as compared to the subscriber base of 1180.96 million as on 31<sup>st</sup> March, 2021 registering a decrease of 38.87 million subscribers during the financial year 2021-22. The status of wireless subscriber base during the last 5 years is depicted in the **Figure-1**.

**Figure:1 Wireless Subscriber Base for the last five years since March, 2018**  
(In Million)



## (b) Mobile Number Portability

**1.1.2** During the financial year 2021-2022, 113.09 million subscribers have submitted their porting requests to different service providers for availing MNP facility. With this the Mobile Number Portability requests increased from 576.67 million at the end of March, 2021 to 689.76 million at the end of March, 2022. The service area wise cumulative porting request at the end of March, 2021 is depicted in **Table-2**.

**Table-2: Service Area-wise cumulative Porting requests at the end of March, 2022**

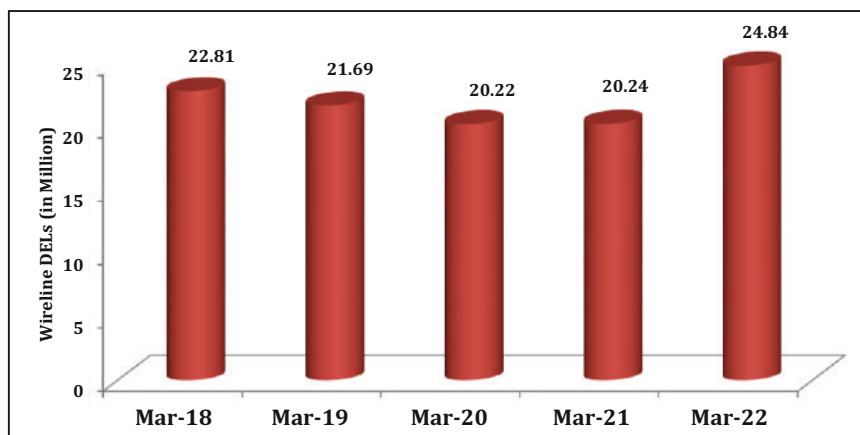
Cumulative MNP Requests (Service Area-wise) at the end of March, 2022				
	Service Area	MNP requests processed by		Total Number of Porting Requests
		Zone-I	Zone-II	
ZONE-I	Delhi	32,046,295	1,267,471	33,313,766
	Gujarat	46,031,045	605,847	46,636,892
	Haryana	22,461,826	465,120	22,926,946
	Himachal Pradesh	3,067,616	49,487	3,117,103
	Jammu & Kashmir	1,480,205	68,118	1,548,323
	Maharashtra	55,447,879	1,391,325	56,839,204
	Mumbai	26,785,091	624,860	27,409,951
	Punjab	23,937,503	1,268,032	25,205,535
	Rajasthan	48,859,782	445,350	49,305,132
	Uttar Pradesh (East)	52,320,289	679,659	52,999,948
	Uttar Pradesh (West)	41,319,937	474,890	41,794,827
ZONE-II	Andhra Pradesh	545,780	50,990,315	51,536,095
	Assam	268,717	4,689,893	4,958,610
	Bihar	1,748,579	32,901,685	34,650,264
	Karnataka	940,450	52,285,532	53,225,982
	Kerala	346,010	18,085,055	18,431,065
	Kolkata	253,855	13,867,655	14,121,510
	Madhya Pradesh	1,030,963	49,430,842	50,461,805
	North East	41,600	1,686,294	1,727,894
	Orissa	204,256	13,032,693	13,236,949
	Tamil Nadu	439,923	49,293,142	49,733,065
	West Bengal	631,002	35,943,577	36,574,579
	<b>Total</b>	<b>360,208,603</b>	<b>329,546,842</b>	<b>689,755,445</b>
	<b>Total (Zone-I + Zone - II)</b>			

## (c) Wireline Services

**1.1.3** The total wireline subscriber base as on 31<sup>st</sup> March, 2022 stood at 24.84 million as compared to 20.24 million subscribers as on 31<sup>st</sup> March, 2021, registering an increase of 22.73% during the year 2021-22. Out of 24.84 million wireline subscribers, 22.88 million are urban subscribers and 1.96 million are rural subscribers. The wireline subscriber base for the last five years is depicted in **Figure – 2**.



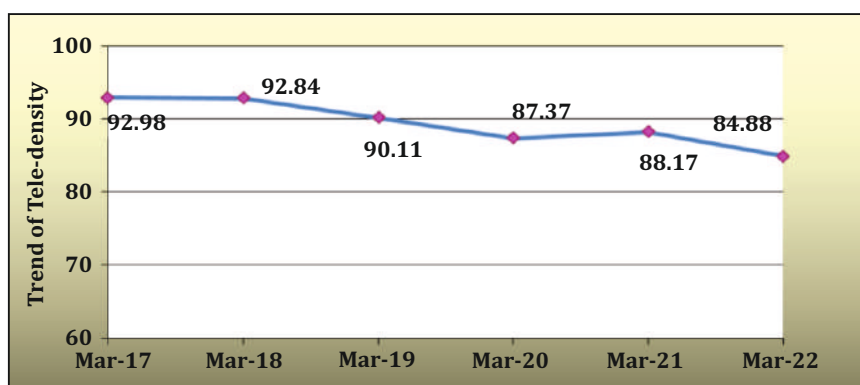
**Figure - 2: Wireline Subscribers in last 5 years**



#### (d) Tele-density

**1.1.4** The tele-density at the end of March, 2022 was 84.88% as compared to 88.17% at the end of previous year recording a decrease of 3.73%. The trend of tele-density since March, 2017 is depicted in **Figure-3**.

**Figure-3: Trend of Tele-density**



#### (e) Internet and Broadband subscribers

**1.1.5.1** The Internet subscriber base in the country as on 31<sup>st</sup> March, 2022 stood at 824.89 million as compared to 825.30 million as on 31<sup>st</sup> March, 2021. The total broadband subscriber base of the country as on 31<sup>st</sup> March, 2022 is 788.29 million whereas it was 778.09 million as on 31<sup>st</sup> March, 2021.

The details of subscription as reported by the service providers in the country as on 31<sup>st</sup> March, 2022 are indicated in **Table-3**.

**Table-3: Internet Subscribers**

(In Million)

Segment			Category	Internet Subscribers		% Growth
				March, 2021	March, 2022	
A.	Wired		Broadband	22.75	27.25	19.77%
			Narrowband	3.25	0.03	-99.15%
			Total	25.99	27.27	4.92%
B.	Wireless	Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)	Broadband	0.67	1.18	75.17%
			Narrowband	0.01	0.01	8.32%
			Total	0.68	1.19	74.62%
		Mobile Wireless (Phone + Dongle)	Broadband	754.67	759.87	0.69%
			Narrowband	43.96	36.56	-16.83%
			Total	798.63	796.43	-0.28%
Total Internet Subscribers			Broadband	778.09	788.29	1.31%
			Narrowband	47.21	36.59	-22.48%
			Total	825.30	824.89	-0.05%

**1.1.5.2** Quarter-wise Internet/Broadband subscription as reported by the service providers for 2021-2022 is at **Table-4**.

**Table-4: Quarter-wise Internet/Broadband Subscriber base of 2021-22**

(In Million)

Service	June, 2021	Sept, 2021	Dec-21	Mar-22
Broadband	792.776	794.881	792.091	788.295
Narrowband	40.931	39.407	37.211	36.593
<b>Total Internet</b>	<b>833.707</b>	<b>834.289</b>	<b>829.302</b>	<b>824.888</b>

## (f) The Indian Telecom Services Performance Indicators

**1.1.6.1** TRAI has been bringing out a monthly press release on Telecom Subscription Data. This press release includes information on total subscriber base, Tele-density, Service Provider wise market share, Mobile Number Portability (MNP) requests, Peak VLR data, Net Additions during the month in wireless, wireline and broadband segments etc. The highlights of the press release on the Telecom Subscription data as on 31<sup>st</sup> March, 2022, are given at **Table-5**.

**Table-5: Highlights of Telecom Subscription Data as on 31<sup>st</sup> March, 2022**

Particulars	Wireless	Wireline	Total (Wireless+Wireline)
<b>Total Telephone Subscribers (Million)</b>	<b>1142.09</b>	<b>24.84</b>	<b>1166.93</b>
Net Addition in March 2022 (Million)	0.57	0.32	0.89
Monthly Growth Rate	0.05%	1.31%	0.08%
<b>Urban Telephone Subscribers (Million)</b>	<b>624.23</b>	<b>22.88</b>	<b>647.11</b>
Net Addition in March 2022 (Million)	-0.95	0.31	-0.64
Monthly Growth Rate	-0.15%	1.37%	-0.10%
<b>Rural Telephone Subscribers (Million)</b>	<b>517.86</b>	<b>1.96</b>	<b>519.82</b>
Net Addition in March 2022 (Million)	1.52	0.01	1.53
Monthly Growth Rate	0.29%	0.58%	0.30%
<b>Overall Tele-density*(%)</b>	<b>83.07%</b>	<b>1.81%</b>	<b>84.88%</b>
Urban Tele-density*(%)	130.17%	4.77%	134.94%
Rural Tele-density*(%)	57.85%	0.22%	58.07%
Share of Urban Subscribers	54.66%	92.12%	55.45%
Share of Rural Subscribers	45.34%	7.88%	44.55%
<b>Broadband Subscribers (Million)</b>	<b>761.05</b>	<b>27.25</b>	<b>788.30</b>

❖ Number of active wireless subscribers (on the date of peak VLR<sup>#</sup>) in March, 2022 was 1021.29 million.

### Note:

- Information in this Press Release is based on the data provided by the Service Providers.
- \* Based on the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', Ministry of Health & Family Welfare.
- # VLR is acronym of Visitor Location Register. The dates of peak VLR for various TSPs are different in different service areas.

**1.1.6.2** TRAI has also been publishing a Quarterly Report on ‘The Indian Telecom Services Performance Indicators’. This report presents the key parameters and growth trends for Telecom & Broadcasting services. A summary of the telecom service performance indicators for the above-mentioned period is illustrated in **Table – 6**.

**Table-6 - Performance Indicator (Data as on 31<sup>st</sup> March, 2022)**

<b>Telecom Subscribers (Wireless+Wireline)</b>	
Total Subscribers	1,166.93 Million
% change over the previous quarter	-0.97%
Urban Subscribers	647.11 Million
Rural Subscribers	519.82 Million
Market share of Private Operators	89.10%
Market share of PSU Operators	10.90%
Tele-density	84.88%
Urban Tele-density	134.94%
Rural Tele-density	58.07%
<b>Wireless Subscribers</b>	
Total Wireless Subscribers	1,142.09 Million
% change over the previous quarter	-1.08%
Urban Subscribers	624.23 Million
Rural Subscribers	517.86 Million
Market share of Private Operators	89.76%
Market share of PSU Operators	10.24%
Tele-density	83.07%
Urban Tele-density	130.17%
Rural Tele-density	57.85%
Total Wireless Data Usage during the quarter	35,885 PB
Number of Public Mobile Radio Trunk Services (PMRTS)	66,392
Number of Very Small Aperture Terminals (VSAT)	2,79,333
<b>Wireline Subscribers</b>	
Total Wireline Subscribers	24.84 Million
% change over the previous quarter	4.42%
Urban Subscribers	22.88 Million
Rural Subscribers	1.96 Million
Market share of PSU Operators	41.07%
Market share of Private Operators	58.93%
Tele-density	1.81%
Rural Tele-density	0.22%
Urban Tele-density	4.77%
No. of Village Public Telephones (VPT)	68,606
No. of Public Call Office (PCO)	66,154

<b>Telecom Financial Data</b>	
Gross Revenue (GR) during the quarter	Rs. 76,387 Crore
% change in GR over the previous quarter	9.60%
Adjusted Gross Revenue (AGR) during the quarter	Rs. 58,886 Crore
% change in AGR over the previous quarter	6.77%
Share of Public sector undertakings in Access AGR	4.17%
<b>Internet/Broadband Subscribers</b>	
Total Internet Subscribers	824.89 Million
% change over previous quarter	-0.53%
Narrowband subscribers	36.59 Million
Broadband subscribers	788.30 Million
Wired Internet Subscribers	27.27 Million
Wireless Internet Subscribers	797.61 Million
Urban Internet Subscribers	493.08 Million
Rural Internet Subscribers	331.81 Million
Total Internet Subscribers per 100 population	60
Urban Internet Subscribers per 100 population	102.82
Rural Internet Subscribers per 100 population	37.06
<b>Broadcasting &amp; Cable Services</b>	
Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking only/both uplinking and downlinking	898
Number of Pay TV Channels as reported by broadcasters	345
Number of private FM Radio Stations (excluding All India Radio)	386
Number of total active subscribers with pay DTH operators	66.92 Million
Number of Operational Community Radio Stations	349
Number of pay DTH Operators	4
<b>Revenue &amp; Usage Parameters</b>	
Monthly ARPU of Wireless Service	Rs. 127.17
Minutes of Usage (MOU) per subscriber per month - Wireless Service	955 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	137.74 Million
<b>Wireless Data Usage</b>	
Average Wireless Data Usage per wireless data subscriber per month	15.80 GB
Average revenue realization per subscriber per GB wireless data during the quarter	Rs. 10.47

## (B) REVIEW OF POLICIES AND PROGRAMMES

**1.2** Since its inception, TRAI's objective has been to create and nurture conditions for orderly growth of the telecom sector in the country in a manner and at a pace which will enable India to play a leading role in the emerging global information society. In pursuance of this objective, TRAI has initiated and implemented various policies and programmes over the period. A review of the policies and programmes of TRAI with respect to the following key areas of telecom sector is provided below:

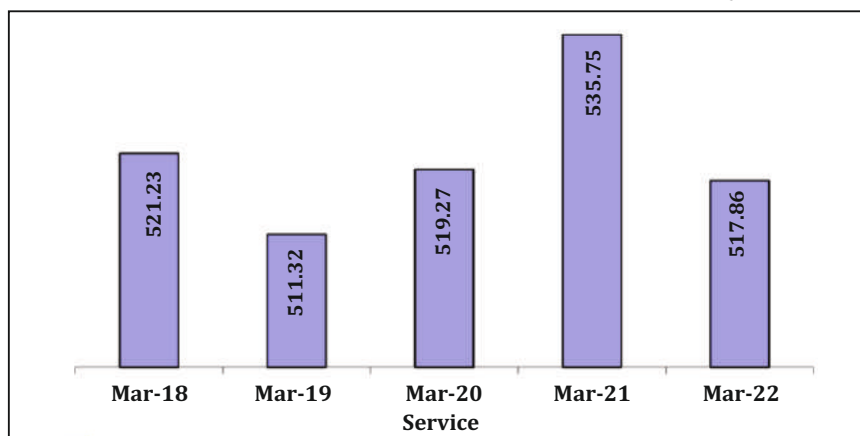
- (a) Rural Telephone Network;
- (b) Expansion of Telephone Network;
- (c) Entry of private sector in both basic and value-added service;
- (d) Technical compatibility and effective interconnection between service providers;
- (e) Telecommunication technology;
- (f) Implementation of National Telecom Policy;
- (g) Quality of Service; and
- (h) Universal Service Obligation

### 1.2.1 Rural Telephone Network

#### 1.2.1.1 Wireless

As on 31<sup>st</sup> March, 2022, the Wireless rural [Mobile and WLL (F)] subscribers have decreased from 535.75 million as on 31<sup>st</sup> March, 2021 to 517.86 million at the end of 31<sup>st</sup> March, 2022. The share of rural subscribers is now 45.35% of total wireless subscribers. The rural wireless subscriber base since March, 2018 is indicated in **Figure-4** below. The service provider wise rural wireless subscriber base & their market shares are shown in **Table-7** and **Figure-5**.

**Figure-4: Rural Wireless Subscriber Base since March 2018**  
(In Million)



**Table-7: Service Provider-wise Rural Wireless Subscribers and Market Share**

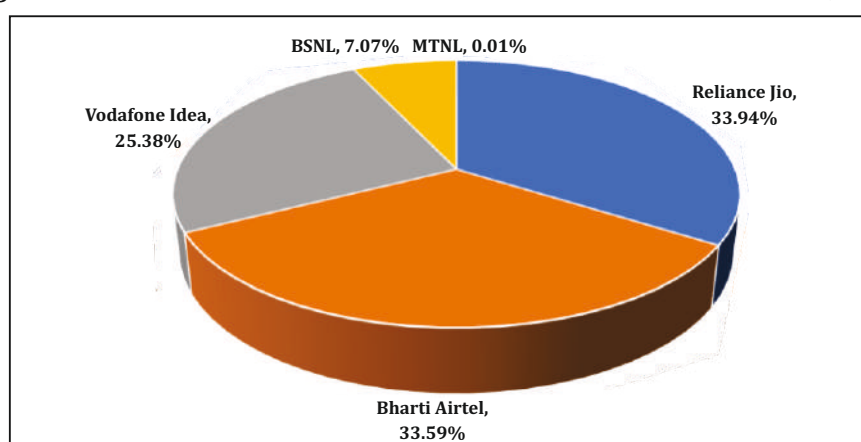
Sl. No.	Wireless Group	Subscribers as on (in million)		Rural Subscribers as on (in million)		Market Share of Rural Subscribers as on	
		March, 2022	March, 2021	March, 2022	March, 2021	March, 2022	March, 2021
1.	RJIL	403.99	422.92	175.77	179.31	33.94%	33.47%
2.	Bharti Airtel	360.33	352.39	173.98	168.63	33.59%	31.47%
3.	Vodafone Idea	260.77	283.71(*)	131.45	149.93*	25.38%	27.98%*
4.	BSNL	113.74	118.63 (@)	36.62	37.84	7.07%	7.06%
5.	MTNL	3.25	3.30	0.04	0.05	0.01%	0.01%
6.	RCL (&)	0	0.01	0	0.00	0%	0.00
	<b>Total</b>	<b>1142.09</b>	<b>1180.96</b>	<b>517.86</b>	<b>535.75</b>	<b>100.00</b>	<b>100.00</b>

Source: As provided by TSPs

Note:

- (\*) M/s Vodafone and M/s Idea Cellular merged their commercial service w.e.f 31<sup>st</sup> August, 2018
- (@) The HLR figure reported by M/s BSNL VNO's for Tamil Nadu Circle is included with BSNL GSM in Tamil Nadu Circle
- (&) M/s RCL/RTL have stopped providing retail services, however, are continuing to provide B2B services

**Figure-5: Market Share of Rural Subscriber base as on 31<sup>st</sup> March, 2022**



### 1.2.1.2 Wireline Services

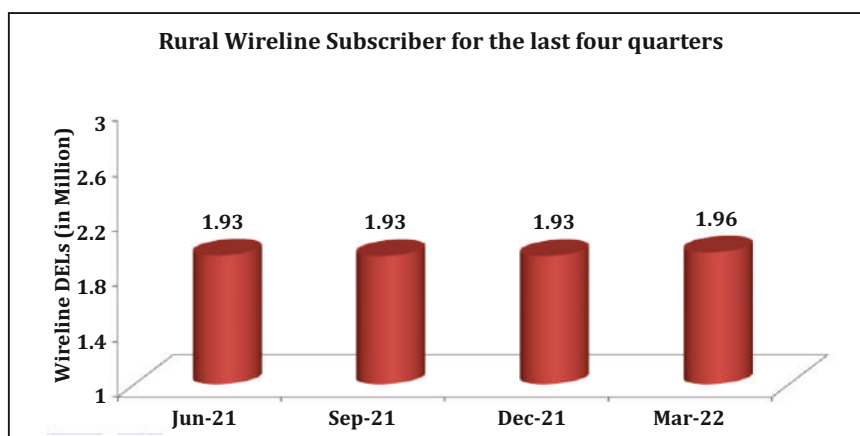
As on 31<sup>st</sup> March, 2022 the rural wireline subscriber base stood at 1.96 (19,56,175) million as compared to 1.67 (16,67,743) million at the end of 31<sup>st</sup> March, 2021, registering an increase of 17.29% over the year. The service provider-wise wireline subscriber base and their market share are shown in **Table-8**.

**Table-8: Service Provider-wise Rural Wireline Subscriber Base and Market Share**

Sl. No.	Name of the Service Provider	Total Wireline Subscribers		Rural Wireline Subscribers		Market Share of Rural Wireline Subscribers (in %)	
		Mar-21	Mar-22	Mar-21	Mar-22	Mar-21	Mar-22
1	BSNL	66,49,439	75,09,030	15,75,018	18,06,675	94.44%	92.36%
2	MTNL	29,03,589	26,93,638	-	-	-	-
3	Bharti Airtel Ltd	47,78,290	58,50,300	-	-	-	-
4	Quadrant Televentures Ltd.	2,16,428	2,66,799	28,107	22,618	1.68%	1.16%
5	Tata Teleservices Ltd.	16,26,525	16,00,819	40,146	37,562	2.41%	1.92%
6	Reliance Communications Ltd.	2,10,328	1,74,121	180	150	0.01%	0.01%
7	Vodafone Idea Ltd.	5,21,357	5,72,478	-	-	-	-
8	Reliance Jio Infocomm Ltd.	33,33,713	61,72,571	24,292	87,170	1.46%	4.55%
	<b>Total</b>	<b>2,02,39,669</b>	<b>2,48,39,756</b>	<b>16,67,743</b>	<b>19,56,175</b>	<b>100.00%</b>	<b>100.00%</b>

- (ii) The status of Rural wireline subscribers for the last four quarters are depicted in the **Figure-6** given below: -

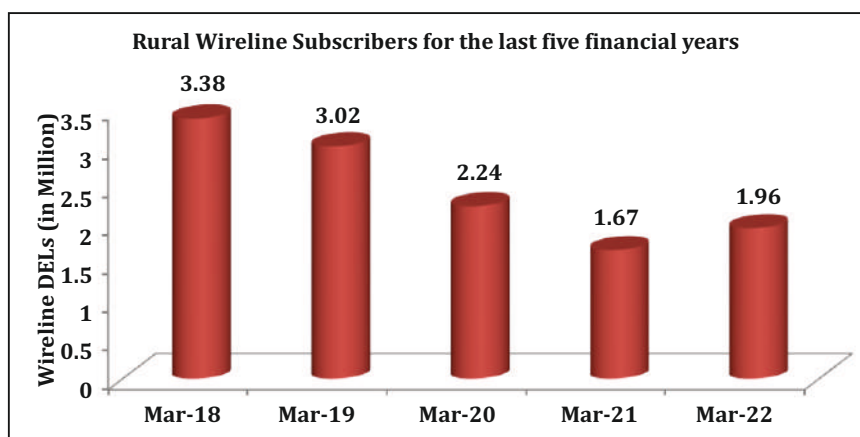
**Figure-6: Bar chart showing Rural Wireline Subscribers**





- (iii) The status of Rural wireline subscribers during the last five financial years is depicted in the **Figure-7** given below: -

**Figure-7: Bar chart showing Rural wireline subscribers during 2018-2022**

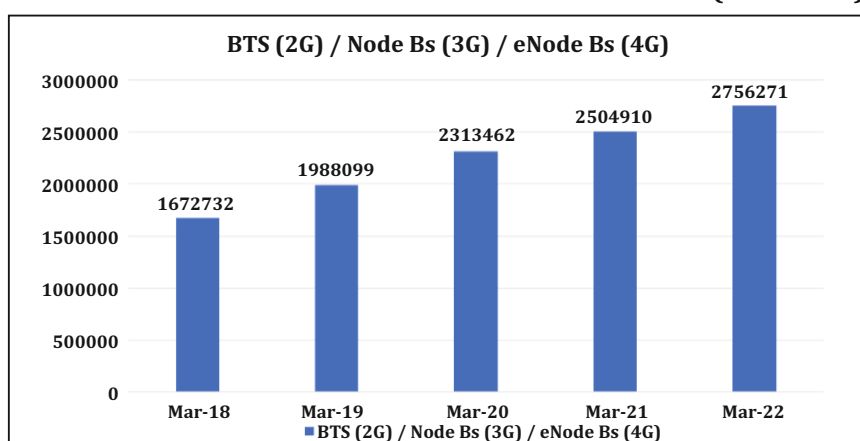


### 1.2.2 Expansion of Telephone Network

There has been a substantial expansion in telecom networks in the country, which can be seen by the increasing number of Base Transceiver Stations (BTS) installed by the telecom service providers. The yearly trend of total number of BTS, which includes 2G, 3G and 4G BTS, from March, 2018 to March, 2022, can be seen in the **Figure-8**. During the financial year 2021-22, the number of BTS have increased from 25,04,910 to 27,56,271, which shows that the telecom networks have expanded at a rate of 10.03%.

**Figure-8: BTS Installed**

(In Million)

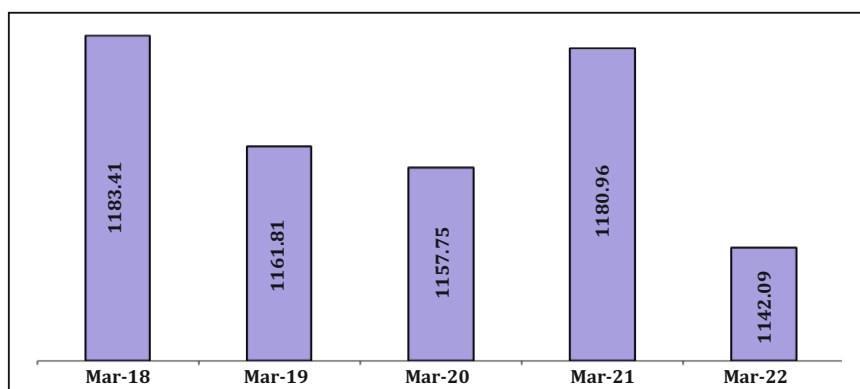


#### 1.2.2.1 Wireless Services

The Wireless Subscriber base is 1142.09 million as on 31<sup>st</sup> March, 2022 in comparison to the subscriber base of 1180.96 million as on 31<sup>st</sup> March, 2021. The subscriber base decreased by

38.87 million subscribers during the financial year 2021-22. The trend of subscriber base from March, 2018 to March, 2022 is depicted in **Figure-9**.

**Figure-9: Subscriber base of wireless Operators**  
(In Million)



The subscriber base of individual wireless service providers from 2017-18 to 2021-22 along with their percentage growth over the financial year 2019-20 is given in the **Table-9**. The market share of different mobile operators as on 31<sup>st</sup> March, 2022 is displayed in **Figure-10**.

**Table-9: Subscriber Base of Wireless Services from 2017-18 to 2021-22**  
(In Million)

Service Providers	2017-18	2018-19	2019-20	2020-21	2021-22	%age growth/reduction over FY 2020-21
Reliance JIO	186.56	306.72	387.52	422.92	403.99	-4.48%
Bharti Airtel	304.19	325.18	327.81(\$)	352.39	360.33	2.25%
Vodafone	222.70	394.84(^)	319.17(^)	283.71(^)	260.77	-8.09%
Idea	211.21					
BSNL	111.68	115.74(~)	119.87(~)	118.63(~)	113.74	-4.12%
MTNL	3.56	3.45	3.36	3.30	3.25	-1.52%
RCOM/RTL (#)	0.19	0.02	0.0178	0.01	--	--
Aircel(+)	74.15	--	--	--	--	--
Tata	31.19	15.85	--	--	--	--
Telenor	37.98	0.00(\$)	--	--	--	--
<b>Total</b>	<b>1183.41</b>	<b>1161.81</b>	<b>1157.75</b>	<b>1180.96</b>	<b>1142.09</b>	<b>-3.29</b>

Source: Service Providers

(\$)

M/s Telenor and M/s TATA have merged with M/s Bharti Airtel w.e.f 14<sup>th</sup> May, 2018 and 6<sup>th</sup> February, 2020 respectively.

(^)

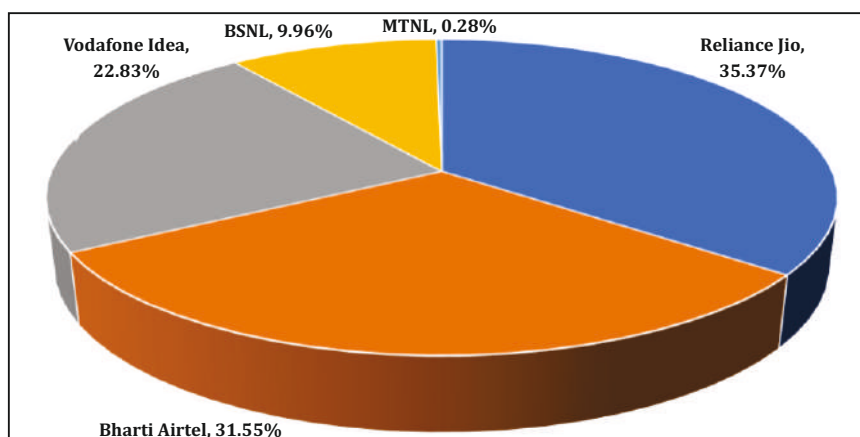
M/s Vodafone and M/s Idea Cellular merged their commercial service w.e.f 31<sup>st</sup> August, 2018.

(~)

The subscriber base of M/s BSNL includes subscribers of VNO service providers also.

- (+) M/s Aircel has stopped providing commercial services since April, 2018 as it has filed insolvency in the NCLT.
- (#) M/s RCL/RTL have stopped providing retail services, however, are continuing to provide B2B services.

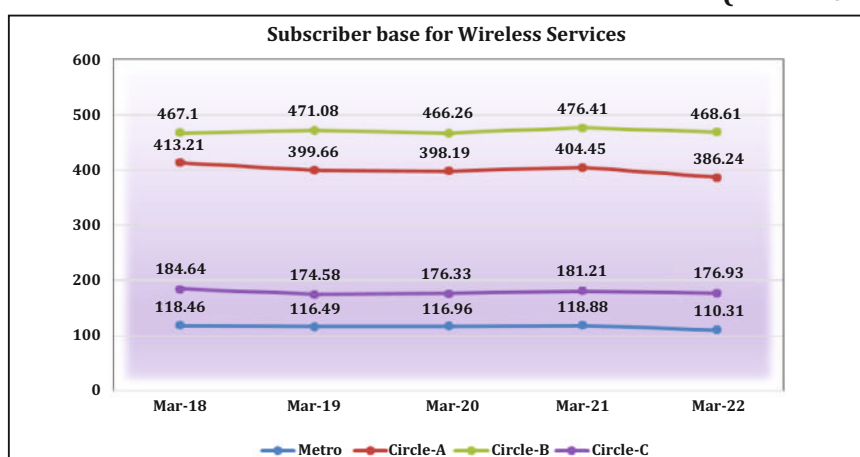
**Figure-10: Market Share of Wireless Service Providers (as on 31<sup>st</sup> March, 2022)**



In terms of subscriber base, M/s Reliance Jio Infocomm Ltd was the largest service provider with 403.99 million subscribers; followed by M/s Bharti Airtel Ltd, M/s Vodafone Idea Ltd, M/s BSNL and M/s MTNL with 360.33 million, 260.77 million, 113.74 million, and 3.25 million, respectively.

The subscriber base for Wireless services in different categories of service areas for the period March, 2018 to March, 2022 is indicated graphically in **Figure-11**.

**Figure-11: Circle-Category wise subscriber base for Wireless Services from March, 2018 to March, 2022 (In Million)**



The list of service providers in various service areas is given in **Table-10**.

**Table-10: Wireless Service Providers as on 31<sup>st</sup> March, 2022**

Sl. No.	Service Providers	Service Areas	Licensed Service Area
1	Bharti Airtel Group	22	All India
2	Reliance Communications Ltd., / Reliance Telecom Ltd.		All India (except Assam & North East) / Kolkata, Madhya Pradesh, West Bengal, Himachal Pradesh, Bihar, Orissa, Assam & North East
3	Vodafone Idea Ltd	22	All India
4	BSNL	20	All India except Delhi & Mumbai
5	MTNL	2	Delhi, Mumbai
6	Reliance Jio Infocomm Ltd	22	All India

Source: DoT Website.

**UL (Virtual Network Operators) (VNO) Access Services licensees who are providing services as on 31<sup>st</sup> March, 2022**

Sl. No	Service Providers	Service Areas	Licensed Service Area
1	ADPAY Mobile Payment India Pvt. Ltd.	1	Tamil Nadu including Chennai
2	SurfTelecom Pvt Ltd (formerly Plintron India Pvt. Ltd.)	22	All India

Source: As reported by TSP

#### 1.2.2.2 Wireline Services

The Service Provider wise break-up of wireline subscribers of 24.84 million as on 31<sup>st</sup> March, 2022, is shown in **Table-11** and the break-up in terms of rural and urban subscribers is shown in **Table-12**. The incumbents BSNL and MTNL have 30.23% and 10.84% market share respectively in the wireline subscriber base, while all the six private operators together have 58.93% share. The share of private operators has increased from 52.80% as on 31<sup>st</sup> March, 2021 to 58.93% as on 31<sup>st</sup> March, 2022, registering an increase of 6.13%.

**Table-11: Service Provider wise details of Wireline Subscriber base as on 31<sup>st</sup> March, 2022**

Sl. No.	Name of the Service Provider	Area of Operation	Subscriber Base (Wireline)
1	BSNL	All India except Delhi & Mumbai	75,09,030
2	MTNL	Delhi & Mumbai	26,93,638
3	Bharti Airtel Ltd	Andhra Pradesh, Delhi, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Punjab, Rajasthan, Tamil Nadu, UP-East and UP-West.	58,50,300
4	Quadrant Televentures Ltd.	Punjab	2,66,799
5	Reliance Communi-cations Ltd.	Andhra Pradesh, Bihar, Delhi, Gujarat, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu, UP-East, UP-West and West Bengal	1,74,121
6	Reliance Jio Infocomm Ltd.	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, North East, Odisha, Punjab, Rajasthan, Tamil Nadu, UP-East, UP-West and West Bengal.	61,72,571
7	Tata Teleservices Ltd. & Tata Teleservices (Maharashtra) Ltd.	Andhra Pradesh, Bihar, Delhi, Gujarat, Haryana, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu, UP-East, UP-West and West Bengal.	16,00,819
8	Vodafone Idea Ltd.	Andhra Pradesh, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu, UP-East, UP-West and West Bengal.	5,72,478
	<b>TOTAL</b>		<b>2,48,39,756</b>

Source: As per data furnished by the TSPs.

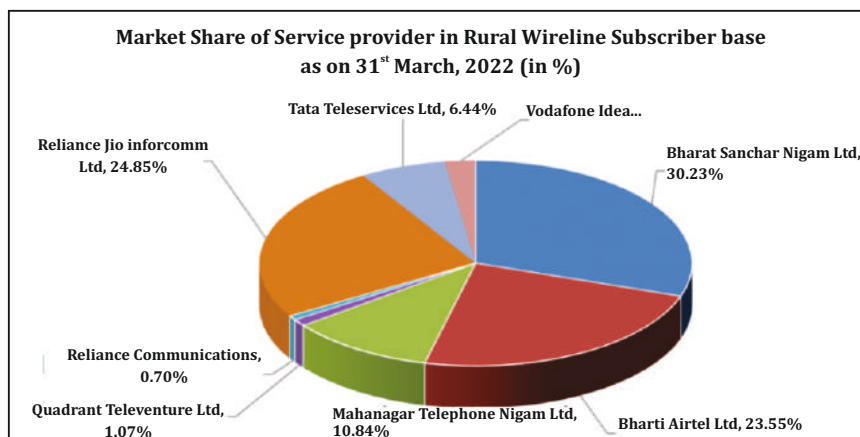
**Table-12: Wireline Subscriber Base of Service Providers as on 31<sup>st</sup> March, 2022**

Sl.No	Name of Service Providers	Urban	Rural	Total Subscribers (Wireline)
1	Bharat Sanchar Nigam Ltd.	5,702,355	1,806,675	7,509,030
2	Mahanagar Telephone Nigam Ltd.	2,693,638	0	2,693,638
3	Bharti Airtel Limited	5,850,300	0	5,850,300
4	Quadrant Televenture Ltd.	244,181	22,618	266,799
5	Reliance Communications Ltd.	173,971	150	174,121
6	Reliance Jio Infocomm Ltd.	6,083,401	89,170	6,172,571
7	Tata Teleservices Ltd.	1,563,257	37,562	1,600,819
8	Vodafone Idea Ltd.	572,478	0	572,478
	<b>Total</b>	<b>22,883,581</b>	<b>1,956,175</b>	<b>24,839,756</b>

### 1.2.2.3 Share of Service Providers in Wireline subscribers

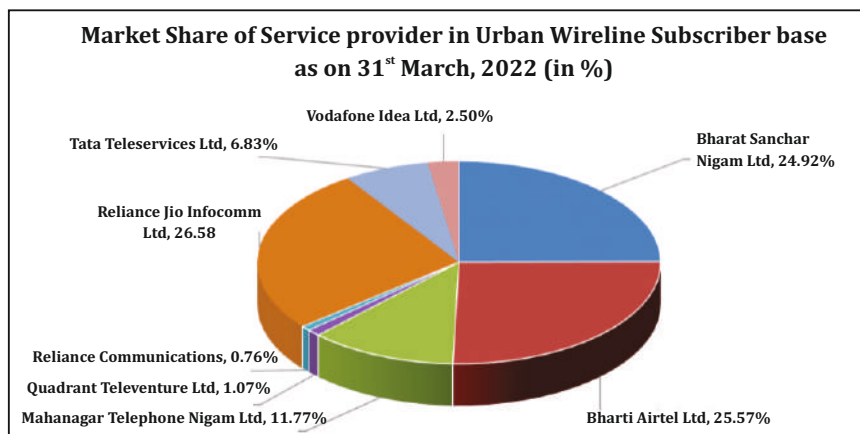
- (i) As on 31<sup>st</sup> March, 2022, 41.07% of total wireline subscribers are connected to the networks of BSNL/MTNL and the remaining wireline connections are provided by different private service providers. The market share of different service providers in total wireline subscriber base is shown in the **Figure-12**.

**Figure - 12: Composition of share of Service Providers**



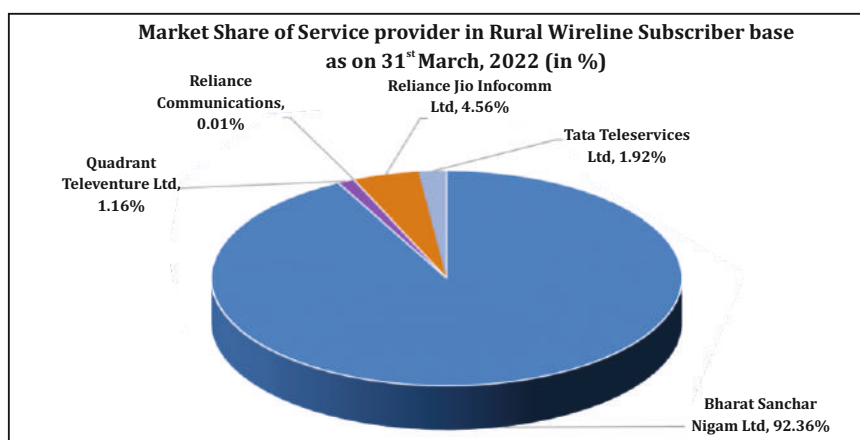
- (ii) As on 31<sup>st</sup> March, 2022, the total Urban wireline subscribers were 22.88 million, out of which about 36.69% were provided by BSNL/MTNL. The market share of different wireline service providers in urban areas is depicted in the **Figure-13**.

**Figure - 13: Composition of share of Wireline Service Providers Base in Urban areas**



- (iii) As on 31<sup>st</sup> March, 2022, the total Rural wireline subscribers were 1.96 million. The market share of different wireline service providers in rural areas is depicted in the **Figure-14**.

**Figure - 14 : Composition of share of Service Providers in Rural areas**



#### 1.2.2.4 Public Call Offices (PCOs)

As on 31<sup>st</sup> March, 2022, the total number of PCOs is 0.066 million as compared to 0.126 million as on 31<sup>st</sup> March, 2021. The number of PCOs provided by BSNL, MTNL and Private Operators is indicated in **Table-13**.

**Table-13: Public Call Offices in India**

S. No.	Name of the Service Provider	As on 31 <sup>st</sup> March, 2021	As on 31 <sup>st</sup> March, 2022
1	BSNL	68,826	45,434
2	MTNL	52,771	16,443
3	Private Operators	4,511	4,277
	<b>Total</b>	<b>1,26,108</b>	<b>66,154</b>

### 1.2.2.5 Village Public Telephones (VPTs)

As on 31<sup>st</sup> March, 2022, the total number of Village Public Telephones (VPTs) provided by the service providers were 0.69 lakh as against 0.69 lakh as on 31<sup>st</sup> March, 2021. **Table-14** provides the number of VPTs functioning in the country.

**Table 14: Village Public Telephones in India**

S. No.	Name of the Service Provider	As on 31 <sup>st</sup> March, 2021	As on 31 <sup>st</sup> March, 2022
1	BSNL	68,606	68,606
	Total	68,606	68,606

### 1.2.2.6 Equipped Switching Capacity

As on 31<sup>st</sup> March, 2022, the service provider-wise total equipped switching capacity and working connections are shown in **Table-15**:-

**Table-15: Service Provider wise Equipped switching capacity**

Sl. No.	Name of the Service Provider	Service Area	As on 31 <sup>st</sup> March, 2022	
			Equipped Switching Capacity (Number of Lines)	Working Connections
1	Bharti Airtel Ltd.	Andhra Pradesh, Delhi, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Punjab, Rajasthan, Tamil Nadu, UP-East and UP-West.	1,07,57,171	58,50,300
2	Bharat Sanchar Nigam Ltd.	All India except Delhi & Mumbai	22,040,358	75,09,030
3	Mahanagar Telephone Nigam Ltd.	Delhi & Mumbai	4,881,215	26,93,638
4	Quadrant Televentures Ltd.	Punjab	548,835	2,66,799
5	Reliance Communications Ltd	Andhra Pradesh, Bihar, Delhi, Gujarat, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu, UP-East, UP-West and West Bengal	1,344,000	1,74,121



Sl. No.	Name of the Service Provider	Service Area	As on 31 <sup>st</sup> March, 2022	
			Equipped Switching Capacity (Number of Lines)	Working Connections
6	Reliance Jio Infocomm Ltd.	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, North East, Odisha, Punjab, Rajasthan, Tamil Nadu, UP-East, UP-West and West Bengal.	23,928,000	61,72,571
7	Tata Teleservices Ltd. & Tata Teleservices (Maharashtra) Ltd	Andhra Pradesh, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu, UP-East, UP-West and West Bengal.	3,389,948	16,00,819
8	Vodafone Idea Ltd	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Northeast, Odisha, Punjab, Rajasthan, Tamil Nadu, UP-East, UP-West and West Bengal.	735,000	5,72,478

Source: Data/report furnished by the Service Providers.

### 1.2.2.7 Internet and Broadband Subscribers

The Internet subscriber base in the country as on 31<sup>st</sup> March, 2022 stood at 824.888 million as compared to 825.301 million as on 31<sup>st</sup> March, 2021. The total broadband subscriber base of the country as on 31<sup>st</sup> March, 2022 was 788.295 million whereas it was 778.095 million on 31<sup>st</sup> March, 2021.

The details of subscription as reported by the service providers in the country as on 31<sup>st</sup> March, 2022 are indicated in **Table-16**.

**Table-16: Details of Internet and Broadband Subscribers**

(In Million)

	Segment		Category	Internet Subscribers		%
				March, 2021	March, 2022	Growth
A.	Wired		Broadband	22.75	27.25	19.77%
			Narrowband	3.25	0.03	-99.15%
			Total	25.99	27.27	4.92%
B.	Wireless	Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)	Broadband	0.67	1.18	75.17%
			Narrowband	0.01	0.01	8.32%
			Total	0.68	1.19	74.62%
		Mobile Wireless (Phone + Dongle)	Broadband	754.67	759.87	0.69%
			Narrowband	43.96	36.56	-16.83%
			Total	798.63	796.43	-0.28%
	Total Internet Subscribers		Broadband	778.09	788.29	1.31%
			Narrowband	47.21	36.59	-22.48%
			Total	825.30	824.89	-0.05%

**1.2.2.8** Quarter-wise Internet/Broadband subscription as reported by the service providers for 2021-2022 is at **Table-17**.

**Table-17: Quarter-wise Internet and Broadband Subscribers**

In Million)

Service	June-2021	Sept-2021	Dec-2021	March 2022
Broadband	792.78	794.88	792.09	788.29
Narrowband	40.93	39.40	37.21	36.59
Total Internet	833.71	834.29	829.30	824.89

### 1.2.3 Entry of Private Sector in basic and value-added service

**1.2.3.1** UL (Virtual Network Operators) (VNO) Access Services licensees who are providing services as on 31<sup>st</sup> March, 2022 are depicted in **Table-18**.

**Table-18: UL (Virtual Network Operators) (VNO) Access Services licensees who are providing services as on 31<sup>st</sup> March, 2022**

Sl. No.	Service Providers	Service Areas	Licensed Service Area
1	ADPAY Mobile Payment India Pvt. Ltd.	1	Tamil Nadu including Chennai
2	SurfTelecom Pvt. Ltd. (Formerly Plintron India Pvt. Ltd.)	22	All India

Source: As reported by TSP

S. No	Type of Licence	Total No. of Licensees issued as on 31.03.2022	No. of Licenses issued during FY 2021-22
1 (i)	NLD (before UL regime)	20	0
1 (ii)	NLD (under UL regime)	22	09
2 (i)	ILD (before UL regime)	16	0
2 (ii)	ILD (under UL regime)	13	06
3	NLD (VNO)	08	04
4	ILD (VNO)	07	05

Source: DoT website

### 1.2.4 Technical compatibility and effective interconnection with service providers

**1.2.4.1** Interconnection is the lifeline of telecommunication services. Subscribers of telecommunication services cannot communicate with each other or connect with services they require unless necessary interconnection arrangements are in place. Availability of effective and expeditious interconnection plays an important role in the growth of the telecommunication services sector.

During the last financial year i.e. 2020-21, TRAI notified “The Telecommunication Interconnection (Second Amendment) Regulations, 2020” on 10<sup>th</sup> July, 2020, which makes the interconnection easier between any two Public Switched Telephone Networks (commonly referred to as the Fixed Line Networks), and between Public Switched Telephone Network (PSTN) and National Long Distance (NLD) Network.

The details of these Regulations are available in Part-II of the Report.

### 1.2.5 Telecommunication Technology

Following technological measures were taken by the Authority to enhance the outreach and interaction of the Authority with the Telecom Consumers:

#### i. DND App 3.0– with TSPs DLT system

DND App was updated to version DND 3.0 last year to implement provisions of TCCCP Regulation, 2018 and to assist consumers for reporting UCC, if any, they receive. Now the App has been

integrated with TSPs DLT (Distributed Ledger Technology) system through data APIs. The specifications for data APIs were prepared by TRAI and TSPs have developed the APIs. All data exchange, like preference registration/modification, complaint registration, complaint status etc., between App and TSP's DLT system is now being done through data APIs only.

## ii. **Reporting Automation**

TRAI has updated the data reporting portal with newer version for data collection and analytical reports. This portal enabled all stakeholders to submit data online. The portal provides automated data collection, validation, processing and reports generation (using Tableau tool) for various divisions of TRAI.

## iii. **Data Analytics and Cloud Services**

Data received by TRAI through crowdsourcing and from various service providers is being used to create meaningful insights and information. To create various informational dashboards, TRAI uses free/licensed tools. It has also leveraged cloud environment, especially NIC Cloud, for hosting of various TRAI applications which has saved in-house/data center infrastructure cost.

## iv. **TRAI Recommendation Status Portal (TRSP)**

The Authority from time to time makes recommendations to the Government of India for the Telecom and Broadcasting Sectors. With an objective to create central repository for real-time tracking of status of all recommendations, TRAI has developed Recommendation Status Portal. This portal facilitates TRAI and DoT/MIB to track the status of recommendations. The implementation/action taken by the Government of India on such recommendations is being updated by respective department and can be viewed through this portal.

## v. **Channel Selector App**

TRAI developed Channel Selector Mobile App in the year 2020 for Android & iOS. The App gave freedom to consumers to select television channels they want to subscribe and watch. Through this app, consumers can view their DPO's offerings, fetch the existing subscription details, choose & optimize channels and Bouquet selection, modify existing selection and set selection with respective DPOs (among 08 DTH/MSO). The App can suggest an optimum configuration i.e., combination of Channels/Bouquet based on consumer's selection to reduce total monthly bill based on consumer's interest.

TRAI has now also developed TV Channel Selector Portal to facilitate subscribers who either don't own smart phone or wish to use web browsers. And at present 17 DPOs are available in both App & Portal. The Channel Selector App and Portal has become very popular among consumers to view & modify their subscriptions. As on date, 17 lakh consumers have checked their TV subscriptions and 10 lakh consumers have activated their subscriptions through the App/Portal.

## vi. **Portal for Exemption from SMS Termination Charges**

To disseminate various G2C information government entities send transactional SMS to consumers, through alphanumeric headers. TRAI has earlier developed a portal for facilitating all government entities, who wish to have exemption from SMS termination charges of up to 5

paisa for sending transactional SMS. Through portal the entities can apply fresh or for renewal of exemption and know other related information.

Now, the data APIs have been integrated in the portal to directly fetch details of header registered in TSPs DLT system. Also, whenever a header has been granted exemption by TRAI, the details are communicated to the TSPs, through data APIs, for configuration in their billing system. This process helps in timely implementation of exemptions granted to various Government Departments/Agencies.

#### **vii. Header Information Portal**

When consumers receive transactional SMS sent through alphanumeric headers, they may wish to know the details of entity who has sent the SMS. To facilitate consumers TRAI has earlier developed Header Information Portal where sender details can be seen. This portal also helps other principal entities to check whether any look-alike header is registered by any other entity. Anyone can query a particular header or download the complete list. TSPs upload the list of alpha-numeric headers assigned to Principal Entities (Business or legal entities).

Now data APIs have been integrated in the portal to fetch the details of header directly from TSPs DLT system without any need for uploading manually by TSPs.

#### **viii. Administrative automation**

Human Resources Management System maintains database of employees including their personal and professional (career) details. The availability of such system with an online and updated database makes it easy for government departments to automate day to day activities like maintaining personal files, leave management, reimbursements, advances, tours etc., much more efficiently and correctly. Now TRAI is implementing e-Human Resource Management System (e-HRMS) developed by NIC.

#### **ix. Infrastructure Upgradation**

- (i) To strengthen the network infrastructure, TRAI has updated Gateway Router and L3 Switch.
- (ii) For effective implementation of e-Office, High Speed Scanners were procured for TRAI HQ and RO's.
- (iii) With the introduction of e-Office in TRAI, all the documents are mandatorily required to be scanned and uploaded and moved in e-Office. To manage scanning activities high speed scanners were procured for TRAI HQ and RO's.
- (iv) Digital Signatures (DSC) have been provided to all officers up to the ranks of SRO.
- (v) All officers/officials of TRAI have been provided with webcam & headset to attend various online meetings/workshops/seminars/OHDs etc.

### **1.2.6. Implementation of National Telecom Policy**

**1.2.6.1** As part of the National Digital Communications Policy (NDCP-2018), DoT through its letter dated 8<sup>th</sup> May, 2019, inter-alia, requested TRAI to furnish recommendations on enabling unbundling of different layers through differential licensing. Accordingly, after a detailed

consultation process, TRAI furnished its Recommendations on "Enabling Unbundling of Different Layers Through Differential Licensing" on 19<sup>th</sup> August, 2021.

DoT through its letter dated 8<sup>th</sup> May, 2019, inter-alia, informed that the National Digital Communications Policy (NDCP), 2018 released by the Government of India under its 'Propel India' mission envisages Catalysing Investments for Digital Communications sector as one of the strategies, and simplifying and facilitating Compliance Obligations by reforming the Guidelines for Mergers & Acquisitions, 2014 to enable simplification and fast tracking of approvals is one of the action plan for fulfilling the aforementioned strategy. Through the said letter dated 8<sup>th</sup> May, 2019, DoT, inter-alia, requested TRAI to furnish recommendations on 'Reforming the Guidelines for Mergers & acquisitions, 2014'. After a detailed consultation process, on 21<sup>st</sup> February, 2020, the Authority submitted its recommendations on "Reforming the Guidelines for Transfer/Merger of Telecom Licenses". DoT, through its letter dated 14<sup>th</sup> October, 2021 sent its back reference to the said Recommendations. After reconsidering the views expressed by DoT, response to the back reference was sent on 27<sup>th</sup> November, 2021.

National Digital Communication Policy (NDCP-2018) as part of its mission has envisaged Creation of Robust Digital Communications Infrastructure to promote Broadband for All as a tool for socio-economic development, while ensuring service quality and environmental sustainability. Provisioning of Broadband for All is one of the objectives of NDCP-2018. For achieving this objective, TRAI has given its recommendations on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed" on 31<sup>st</sup> August, 2021. As part of these recommendations, TRAI has, covered aspects of broadband definition and categorization, broadband Proliferation and speed enhancement, broadband infrastructure creation and sharing, incentives to promote fixed line broadband Proliferation and has, inter-alia, recommended:

- Enactment of National RoW Policy.
- Creation of National Portal for RoW permissions.
- Inclusion of RoW permission in Institutional Mechanism envisaged in National Broadband Mission & reconstitution of committees for better oversight.
- Uniform Restoration charges for open trench and pits, Broadband Readiness Index (BRI) score linked incentives for States/UTs for implementing RoW reforms.
- Incentivize establishment of common ducts and posts for fiberisation & sharing with service providers on non- discriminatory basis.
- Exemption of RoW charges by State Govt/UTs for next five years for laying of common ducts and posts, similar to exemption granted under BharatNet project.
- Establishment of Common Ducts and Posts Development Agency (CDPDA) for planning and development of common ducts and posts infrastructure across the country.
- Notification of design and standards for common ducts and posts by TEC.
- Formulation of Policy for Cross-sector collaboration with other utility providers like roadways, railways, water, electricity, gas etc. for co-deployment of common ducts.



- Establishment of common ducts be made integral part of Smart City development plan.
- GIS mapping of all the passive infrastructure to facilitate sharing.
- Target linked financial incentives in the form of License Fee (LF) exemption for proliferation of fixed-line broadband services in urban and rural areas.
- A pilot DBT (Direct Benefit Transfer) scheme in rural areas for proliferation of fixed-line broadband subscribers.
- Annual spectrum auction of available spectrum for access networks.
- Assignment of backhaul spectrum on demand and in-time bound manner for connectivity of cellular networks.
- Expedite Auction of mid-band spectrum (3300-3600GHZ).
- Allocation of millimeter wave spectrum for IMT-2020.
- Utilization of BharatNet for fiberisation of backhaul of cellular networks
- Declaration of User Equipment category for mobile handsets as per 3GPP standards by manufacturers and marketers for consumer awareness.
- Revision of minimum download speed for broadband connectivity from the present 512 Kbps to 2 Mbps.

### 1.2.7 Quality of Service (QoS)

**1.2.7.1** During the year 2021-22, the focus of monitoring of Quality of Service and disseminating information on QoS and curbing the spam had undergone a change with more focus on technology-based solutions.

Details are given in Part-II of the Report.

### 1.2.8 Universal Service Obligation

**1.2.8.1** As per the Indian Telegraph Act 1885 (as amended in 2003 and 2006), Universal Service Obligation is defined as access to telegraph services to people in rural and remote areas at affordable and reasonable prices. In the present context, it may be said that Universal Service Obligation means providing telecommunication service to all users everywhere with a defined minimum service of specified quality at an affordable price.

Keeping this objective in mind, Universal Service Obligation Fund (USOF) was established on 1<sup>st</sup> April, 2002 under the Indian Telegraph (Amendment) Act 2003 (further amended in 2006), to provide financial support for the provision of telecom services in commercially unviable rural and remote areas of the country.

The Government has launched many schemes using Universal Service Obligation Fund (USOF) for proliferation of the broadband and improving internet access to common people.

To promote the broadband connectivity and to improve its performance, TRAI issued a Consultation Paper on “Roadmap to promote Broadband connectivity and enhanced broadband speed” on 20<sup>th</sup> August, 2020 and sent its Recommendations to the Government on 31<sup>st</sup> August, 2021.





## (C) REVIEW OF GENERAL ENVIRONMENT IN THE BROADCASTING AND CABLE TV SECTOR

- (i) The broadcasting sector consists of Television and Radio Services. The Television services comprises of cable TV services, DTH services, HITS services, IPTV services in addition to a terrestrial TV network of Doordarshan. As per an industry report, in the year 2021, the TV universe consists of approximately 67 million cable TV households<sup>1</sup>, 3 million HITS subscribers<sup>1</sup> and 43 million Free DTH households<sup>1</sup>. In addition, as reported by the pay DTH operators to TRAI, there were 66.92 million pay DTH total active subscribers at the end of March, 2022. Further, as reported by the IPTV Operators, the subscriber base was 7,50,306 at the end of March, 2022.
- (ii) The TV broadcasting sector encompasses approximately 350 broadcasters, out of which, 42 were pay broadcasters<sup>2</sup> at the end of March, 2022. Further, there were 1764 Multi System Operators (MSOs)<sup>3</sup> registered with MIB, 1 HITS operator<sup>2</sup>, 4 pay DTH operators<sup>2</sup> and 20 IPTV<sup>2</sup> operators, at the end of March 2022, in addition to the public service broadcaster - Doordarshan, providing a free-to-air DTH service in India. Further, as per the information provided by MIB, as on 1<sup>st</sup> January, 2022, there were total number 81,706 cable operators registered in the country.
- (iii) At present, there are approximately 898 private satellite TV channels<sup>3</sup> permitted by MIB at the end of March, 2022, out of which, 248 were SD pay TV channels<sup>2</sup> and 97 were HD Pay TV channels<sup>2</sup>.
- (iv) India's television industry stands at ₹ 72,000<sup>1</sup> crore in the year 2021 as compared to ₹ 68,500<sup>1</sup> crore in the year 2020, thereby registering a growth of around 5%. Subscription revenues account for a major share of the overall industry revenue. Subscription revenue has decreased from ₹ 43,400<sup>1</sup> crore in the year 2020 to ₹ 40,700<sup>1</sup> crore in the year 2021. Further, advertisement revenue has increased from ₹ 25,100<sup>1</sup> crore in the year 2020 to ₹ 31,300<sup>1</sup> crore in the year 2021.
- (v) As reported by the private FM Radio broadcasters to TRAI, there were 386<sup>2</sup> private FM radio stations operational at the end of March, 2022, besides the public service broadcaster- All India Radio (AIR). As far as the data relating to Community Radio Stations is concerned, as per the information provided by the MIB, out of the 467<sup>1</sup> licenses issued at the end of March 2022 for the setup of such stations, 349<sup>1</sup> community radio stations have become operational. The reported advertisement revenues by the private FM Radio broadcasters have increased from ₹ 941.47 crore<sup>1</sup> in year 2020-21 to ₹ 1227.15 crore<sup>1</sup> in the year 2021-22.

<sup>1</sup> FICCI EY Report (March 2022) titled "Tuning into consumer - Indian M&E rebounds with a customer-centric approach"

<sup>2</sup> As reported to TRAI

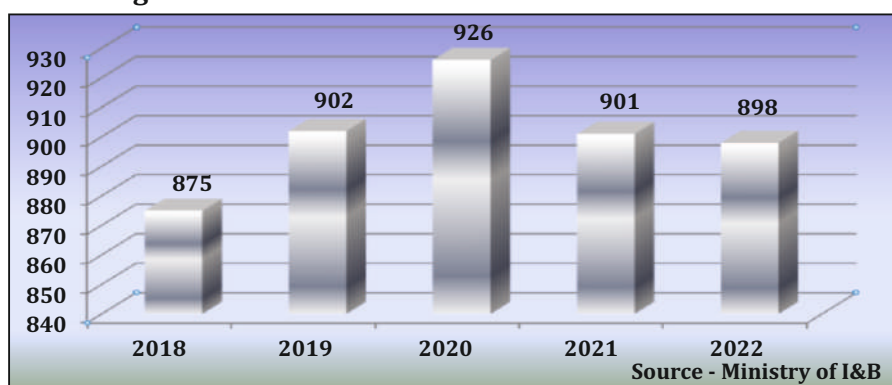
<sup>3</sup> <https://new.broadcastseva.gov.in/digigov-portal-web-app>

**1.3** The present status of various services in the broadcasting sector is outlined as below:

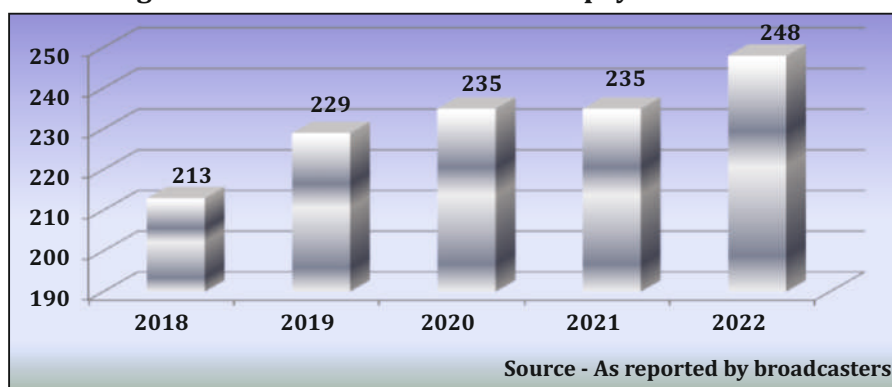
### 1.3.1 Satellite TV Channels

The total number of satellite TV channels permitted by the Ministry of Information and Broadcasting has increased substantially from 875 at the end of March, 2018 to 898 at the end of March, 2022. **Figure-15** depicts year wise total number of TV channels during this period. The number of Standard Definition (SD) pay TV channels has grown from 213 at the end of March 2018 to 248 at the end of March 2022. **Figure-16** depicts year wise total number of SD Pay TV channels during this period. **Figure-17** depicts the year wise number of HD channels reported during this period. At the end of March, 2022, there were a total of 97 operational HD channels. A list of broadcasters & their Pay TV channels (SD & HD) is at Annexure- I as a part of this report.

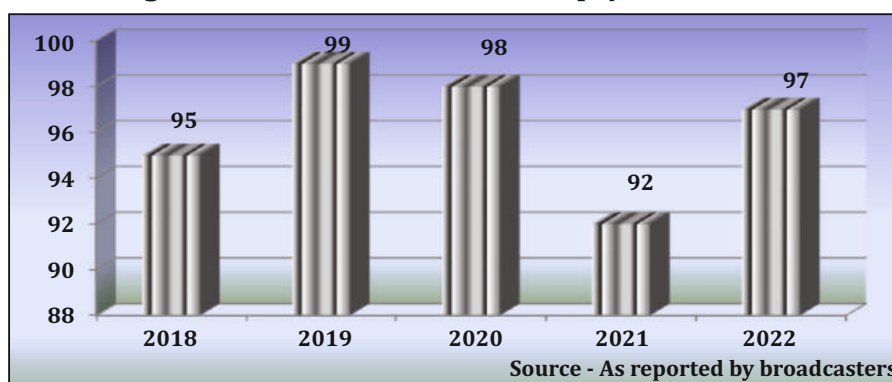
**Figure-15 : Number of satellite TV channels in India**



**Figure-16: Numbers of SD satellite pay TV channels**



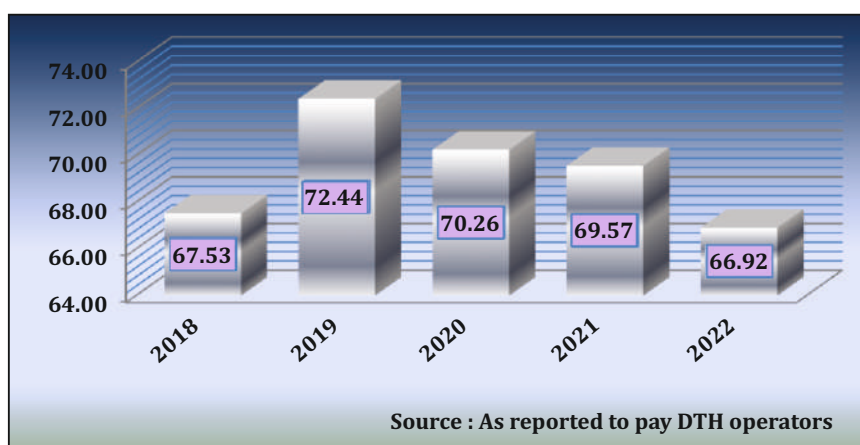
**Figure-17: Number of HD satellite pay TV channels**



### 1.3.2 DTH Services

Since its introduction in the year 2003, Indian DTH service has displayed a phenomenal growth. As reported by the pay DTH operators to TRAI, pay DTH has attained total active subscriber base of around 66.92 million at the end of March, 2022. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). At the end of March, 2022, there are 4 pay DTH service providers catering to this subscriber base. A list of pay DTH operators is placed at Annexure-II. It is important to note that previously (up to March 2019) the subscription figure of total active subscribers included inactive and temporarily suspended subscribers for not more than last 120 days. However, as per new regulatory framework of Broadcasting and Cable TV Services, the total active subscribers include subscribers who have been inactive or temporarily suspended for not more than last 90 days. This point has been duly clarified by the Authority in the Press Release no. 86/2019 dated 8<sup>th</sup> October, 2019 ([https://traigov.in/sites/default/files/PR\\_No.86of2019.pdf](https://traigov.in/sites/default/files/PR_No.86of2019.pdf)). The trend of the sector in terms of its total active subscriber base is depicted in **Figure-18:-**

**Figure-18: Total active subscriber base of pay DTH sector  
(in Million)**



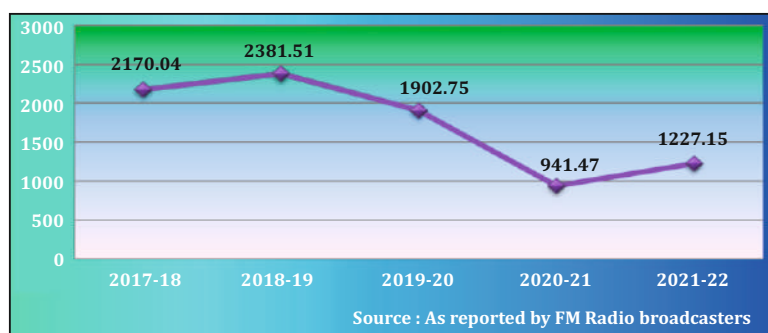
Apart from an increase in the availability of conventional TV channels, the pay DTH operators continue to add several innovative offerings and value-added services (VAS) such as movie-on-demand, gaming, shopping, education etc.

### 1.3.3 FM Radio

Radio is a popular means for mass communication, owing largely, to its wide coverage, portability, low set-up cost and affordability. In India, Radio coverage is available in the Short-wave (SW) and Medium-wave (MW) bands in the Amplitude Modulation (AM) mode and Frequency Modulation (FM) mode. FM Radio broadcasting today, is the one of the most popular and pervasive medium to provide entertainment, information and education to the masses. As reported by the private FM Radio broadcasters to TRAI, there are 386 private FM radio stations operational at the end of March, 2022, besides the terrestrial network of the public service broadcaster- All India Radio (AIR).

At the end of March, 2022, as per the reporting done by FM radio broadcasters to TRAI, 386 FM radio stations have been made operational in 113 cities by 36 private FM broadcasters. Introduction of private FM broadcasters in the radio broadcasting sector has significantly enhanced radio coverage while providing good quality reception and content to listeners. This has also led to encouraging local talent as well as enhancing employment opportunities in these areas. The reported advertisement revenues by the private FM Radio broadcasters to TRAI was Rs. 1227.15 crore in the year 2021-22. The year wise total advertisement revenue of private FM Radio stations is depicted in **Figure-19**.

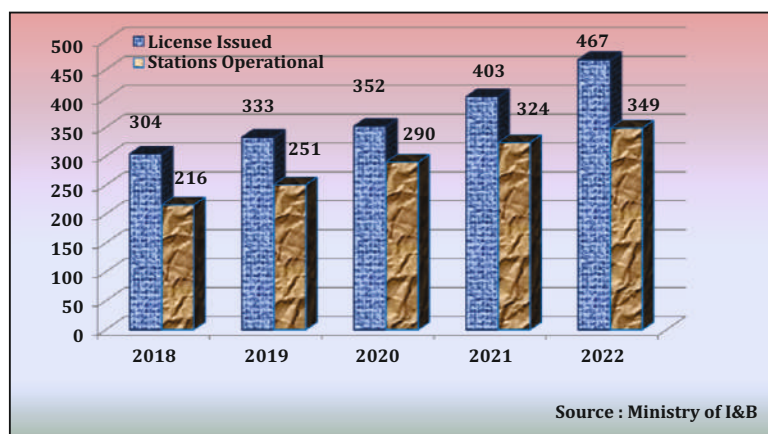
**Figure-19 : FM Radio Advertisement Revenue**  
(₹ in crores)



### 1.3.4 Community Radio

Another area of growth in the radio landscape is the expansion in the number of Community Radio Stations (CRS) in the country. There is huge latent potential in CRS, given the vast landscape of this country, linguistic diversity regional flavours and cultural variations. Community Radio broadcasting can serve as a medium for networking of small groups and communities with a specific focus on daily concerns of the common man and also help them realize local aspirations. CRS are set up in association with educational institutions and civil society organizations. At the end of March, 2022, 349 community radio stations have become operational. The annual growth in the number of community radio stations is depicted in **Figure-20**.

**Figure-20: Number of Community Radio Stations**



Overall status of the broadcasting and cable services sector in the country is placed at the **Table-19**.

**Table-19: Overall status of the Broadcasting and Cable services sector**  
(as on 31<sup>st</sup> March, 2022)

Number of Broadcasters permitted by MIB (approximately)	350
Number of Multi System Operators registered with MIB	1764
Number of Local Cable operators (as on 01.01.2022 as per MIB)	81,706
Number of pay DTH Operators	4
Number of satellite TV Channels registered with MIB (approximately)	898
Number of SD Pay TV Channels	248
Number of HD TV Channels	97
Number of FM Radio Stations (excluding All India Radio)	386
Number of Operational Community Radio Stations	349

## Annexure - I

### List of pay TV channels as on 31<sup>st</sup> March, 2022

Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
1	AETN 18 Media Pvt Limited	1	The History Channel	SD
		2	History TV 18 HD	HD
2	Asianet Star Communications Private Limited	3	Vijay TV	SD
		4	Vijay Super	SD
		5	Vijay HD	HD
		6	Vijay Music	SD
		7	Asianet	SD
		8	Asianet Plus	SD
		9	Asianet Movies	SD
		10	Suvarna Plus	SD
		11	Star Suvarna HD	HD
		12	Asianet HD	HD
		13	Star Suvarna	SD
3	Bangla Entertainment Private Limited	14	AATH	SD
		15	SONY Marathi	SD
4	BBC Global News India Private Limited	16	BBC World News	SD
		17	Cbeebies	SD
5	Bennett, Coleman & Company Limited	18	Zoom	SD
		19	Romedy Now	SD
		20	MN +	HD
		21	Mirror Now	SD
		22	ET NOW	SD
		23	Times Now	SD
		24	Times Now Navbharat HD	HD
		25	Movies Now HD	HD
		26	MNX HD	HD
		27	ET Now Swadesh	SD
		28	MNX	SD
		29	Times Now World	HD
6	Celebrities Management Pvt Limited	30	Travel XP HD	HD
		31	Travel XP Tamil	SD
		32	FoodXP	SD
7	CSL Info Media Private Limited	33	JAN TV PLUS	SD
8	Direct New Private Limited	34	News X	SD
9	Discovery Communications India	35	Animal Planet	SD
		36	Discovery Channel	SD
		37	DTAMIL	SD
		38	Discovery Kids Channel	SD
		39	Discovery Science	SD

Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		40	Discovery Turbo	SD
		41	Investigation Discovery	SD
		42	Discovery HD	HD
		43	Animal Planet HD World	HD
		44	TLC HD	HD
		45	Investigation Discovery HD	HD
		46	TLC	SD
		47	EUROSPORT HD	HD
		48	EUROSPORT	SD
10	Disney Broadcasting (India) Limited	49	Disney Junior	SD
		50	UTV Movies	SD
		51	Marvel HQ	SD
		52	Disney International HD	HD
		53	Hungama TV	SD
		54	The Disney Channel	SD
		55	UTV HD	HD
		56	UTV Bindass	SD
		57	UTV Action	SD
11	Eenadu Television Private Limited	58	ETV	SD
		59	ETV Andhra Pradesh	SD
		60	ETV - Telangana	SD
		61	ETV Cinema	SD
		62	ETV Life	SD
		63	ETV Plus	SD
		64	ETV Abhiruchi	SD
		65	ETV HD	HD
		66	ETV Plus HD	HD
		67	ETV Cinema HD	HD
		68	ETV Balbharat Telugu	SD
		69	ETV Balbharat Hindi	SD
		70	ETV Balbharat Kannada	SD
		71	ETV Balbharat Malayalam	SD
		72	ETV Balbharat Tamil	SD
		73	ETV Balbharat English	SD
		74	ETV Balbharat HD	HD
		75	ETV Balbharat SD	SD
12	IN 10 Media Private Limited	76	EPIC TV	SD
		77	Filamchi	SD
		78	Gubbare	SD
		79	Showbox	SD
		80	Ishara TV	SD
13	Information TV Private Limited	81	India News	SD



Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
14	Fame Media Private Limited	82	4tv News	SD
15	Greycells18 Media Limited	83	Topper TV	SD
16	IBN Lokmat News Private Ltd	84	News 18 Lokmat	SD
17	Living Entertainment Enterprises Private Ltd	85	ZEE ZEST HD	HD
		86	LF HD	HD
18	Lifestyle and Media Broadcasting Limited	87	Good Times	SD
19	Lex Sportel Vision Private Limited	88	1SPORTS	SD
20	Mavis Satcom Limited	89	J Movies	SD
		90	Jaya Max	SD
		91	Jaya Plus	SD
		92	Jaya TV HD	HD
21	MSM Worldwide Factual Media Private Limited	93	SONY BBC EARTH	SD
		94	SONY BBC EARTH HD	HD
22	Media Worldwide Limited	95	Travel XP	SD
23	New Delhi Television Limited	96	NDTV 24*7	SD
		97	NDTV India	SD
		98	NDTV Profit	SD
24	NGC Network (India) Pvt Limited	99	Fox Life	SD
		100	National Geographic Channel (NGC)	SD
		101	Fox Life HD	HD
		102	Nat Geo Wild	SD
		103	National Geographic HD	HD
		104	Nat Geo Wild HD	HD
		105	Baby TV HD	HD
25	Odisha Television Limited	106	Prarthana	SD
		107	Tarang	SD
		108	Tarang Music	SD
		109	Alankar	SD
26	Parshavnath Media Private Limited	110	Dangal Kannada	SD
27	Raj Television Network Limited	111	Raj Digital Plus	SD
		112	Raj Musix	SD
		113	Raj News	SD
		114	Raj TV	SD
28	Silverstar Communications Limited	115	Mega 24	SD
		116	Mega Musiq	SD
		117	Mega TV	SD
29	Sony Pictures Networks India Private Limited	118	Sony YAY!	SD
		119	SET MAX	SD
		120	SAB	SD
		121	SONY ENTERTAINMENT CHANNEL (SET)	SD
		122	PIX	SD



Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		123	SIX	SD
		124	MAX 2	SD
		125	PAL	SD
		126	SET HD	HD
		127	SIX HD	HD
		128	PIX HD	HD
		129	MAX HD	HD
		130	Ten 2 HD	HD
		131	Ten 3 HD	HD
		132	Ten 2	SD
		133	Ten 1	SD
		134	Ten 3	SD
		135	Ten 1 HD	HD
		136	SONYWah	SD
		137	SAB HD	HD
		138	Ten 4	SD
		139	Ten 4 HD	HD
30	Star India Private Limited	140	Star Sports 3	SD
		141	Star Sports 1 Tamil	SD
		142	Star Sports Select 2	SD
		143	Star Bharat	SD
		144	Star Gold 2 (Movies OK)	SD
		145	Star Sports 1 Hindi	SD
		146	Star Gold	SD
		147	Star Jalsha	SD
		148	Star Movies	SD
		149	Star Gold Select	SD
		150	Star Plus	SD
		151	Star Pravah	SD
		152	Star Sports 1	SD
		153	Star Sports 2	SD
		154	Star World	SD
		155	Jalsha Movies	SD
		156	Star Sports HD 2	HD
		157	Star Sports HD 1	HD
		158	Star Bharat HD	HD
		159	Star Gold HD	HD
		160	Star Movies HD	HD
		161	Star Plus HD	HD
		162	Star Sports 1 HD Hindi	HD
		163	Star Sports Select 1	SD
		164	Star Movies Select HD	HD

Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		165	Star World HD	HD
		166	Star Sports First	SD
		167	MAA Gold	SD
		168	MAA Movies	SD
		169	MAA Music	SD
		170	MAA TV	SD
		171	Star Pravah HD	HD
		172	Star Jalsha HD	HD
		173	Jalsha Movies HD	HD
		174	Star Sports Select HD 1	HD
		175	Star Sports Select HD 2	HD
		176	MAA HD	HD
		177	Star Gold Select HD	HD
		178	MAA Movies HD	HD
		179	Star World Premiere HD	HD
		180	Star Sport 1 Telugu	SD
		181	Star Sport 1 Kannada	SD
		182	Star Sports 1 Bangla	SD
		183	Star Utsav	SD
		184	Star Sports 1 Marathi	SD
		185	Star Utsav Movies	SD
31	SUN TV Network Limited	186	Adithya TV	SD
		187	Chintu TV	SD
		188	Chutti TV	SD
		189	Gemini Comedy	SD
		190	Gemini Life	SD
		191	Gemini Movies	SD
		192	Gemini Music	SD
		193	Gemini TV	SD
		194	KTV	SD
		195	Surya Movies	SD
		196	Kushi TV	SD
		197	SUN Life	SD
		198	Sun Music	SD
		199	Sun News	SD
		200	Surya Music	SD
		201	SUN TV	SD
		202	Surya Comedy	SD
		203	Surya TV	SD
		204	Udaya Comedy	SD
		205	Udaya Movies	SD
		206	Udaya Music	SD

Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		207	Udaya TV	SD
		208	Kochu TV	SD
		209	Sun TV HD	HD
		210	KTV HD	HD
		211	Sun Music HD	HD
		212	Gemini TV HD	HD
		213	Gemini Music HD	HD
		214	Gemini Movies HD	HD
		215	Surya TV HD	HD
		216	Udaya TV HD	HD
32	Suryansh Broadcasting Private Limited	217	Flowers	SD
33	Turner International India Pvt Ltd	218	Cartoon Network	SD
		219	CNN International	SD
		220	POGO	SD
		221	Cartoon Network HD+	HD
34	TV 18 Broadcast Limited	222	CNN News 18	SD
		223	CNBC Bazaar	SD
		224	CNBC TV 18 Prime HD	HD
		225	CNBC Awaaz	SD
		226	News 18 Tamil Nadu	SD
		227	News 18 Kerala	SD
		228	News 18 Assam / North East	SD
		229	News 18 India	SD
		230	CNBC TV 18	SD
		231	News 18 Bihar Jharkhand	SD
		232	News 18 Madhya Pradesh / Chattisgarh	SD
		233	News 18 Rajasthan	SD
		234	News 18 Uttar Pradesh/ Uttarakhand	SD
		235	News 18 Urdu	SD
		236	News 18 Kannada	SD
		237	News 18 Bangla	SD
		238	News 18 Punjab/Haryana/Himanchal Pradesh	SD
		239	News 18 Gujarati	SD
		240	News 18 Odia	SD
35	TV Today Network Limited	241	Aaj Tak	SD
		242	India Today	SD
		243	AAJ Tak HD	HD
		244	Good News Today	SD
36	Viacom 18 Media Private Limited	245	Colors	SD
		246	Comedy Central (HD )	HD
		247	MTV	SD
		248	NICK	SD

Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		249	NICK JR	SD
		250	SONIC	SD
		251	VH 1 (HD Distribution)	HD
		252	Colors Infinity HD	HD
		253	Colors Infinity	SD
		254	Colors HD	HD
		255	NICKS HD+	HD
		256	Colors Cineplex	SD
		257	MTV Beats	SD
		258	Colors Kannada HD	HD
		259	Colors Marathi HD	HD
		260	Colors Bangla HD	HD
		261	Colors Super	SD
		262	Colors Bangla	SD
		263	Colors Gujarati	SD
		264	Colors Kannada	SD
		265	Colors Marathi	SD
		266	Colors Oriya	SD
		267	MTV Beats HD	HD
		268	Colors Tamil	SD
		269	Colors Cineplex HD	HD
		270	VH 1	SD
		271	Colors Tamil HD	HD
		272	MTV HD+	HD
		273	Colors Rishtey	SD
		274	Colors Kannada Cinema	SD
		275	Colors Gujarati Cinema	SD
		276	Comedy Central	SD
		277	Rishtey Cineplex	SD
		278	Colors Bangla Cinema	SD
37	Zee Akaash News Private Limited	279	Zee 24 Ghanta	SD
38	Zee Entertainment Enterprises Limited	280	Zee Bollywood	SD
		281	Zee Action	SD
		282	Zee Bangla Cinema	SD
		283	Zee Café HD	HD
		284	Zee Café	SD
		285	Zee Cinema	SD
		286	Zee Talkies	SD
		287	Zee TV	SD
		288	Zing	SD
		289	& Picture	SD
		290	Zee Bangla	SD

Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		291	Zee Marathi	SD
		292	Zee Zest	SD
		293	Zee TV HD	HD
		294	Zee Cinema HD	HD
		295	& TV	SD
		296	& TV HD	HD
		297	Zee Kannada	SD
		298	Zee Telugu	SD
		299	& Pictures HD	HD
		300	Zee Cinemalu	SD
		301	Zee Yuva	SD
		302	Zee Marathi HD	HD
		303	& Prive HD	HD
		304	Zee Bangla HD	HD
		305	Zee Tamil HD	HD
		306	Zee Cinemalu HD	HD
		307	Zee Telugu HD	HD
		308	Zee Tamil	SD
		309	Zee Kannada HD	HD
		310	Zee Anmol Cinema	SD
		311	& Flix HD	HD
		312	& Flix	SD
		313	Zee Keralam HD	HD
		314	Zee Keralam	SD
		315	Zee Vajwa	SD
		316	Zee Anmol	SD
		317	Big Magic	SD
		318	Zee Ganga	SD
		319	Zee Classic	SD
		320	&Xplore HD	HD
		321	ZEE Sarthak	SD
		322	Zee Talkies HD	HD
		323	Zee Punjabi	SD
		324	Zee Thirai	SD
		325	Zee Picchar	SD
		326	Zee Thirai HD	HD
		327	Zee Picchar HD	HD
		328	Zee Biskope	SD
39	Zee Media Corporation Limited	329	Zee 24 Taas	SD
		330	Zee Odisha	SD
		331	Zee Business	SD
		332	Zee Punjab Haryana Himachal	SD

Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		333	Zee Madhya Pradesh Chattisgarh	SD
		334	Zee Salaam	SD
		335	Zee 24 Kalak	SD
		336	WION	SD
		337	Zee Uttar Pradesh Uttrakhand	SD
		338	Zee Hindustan	SD
		339	Zee Bihar Jharkhand	SD
		340	Zee News	SD
		341	Zee Rajasthan News	SD
40	Zoom Entertainment Network Limited	342	Movies Now	SD
41	Sidharth Broadcasting Private Limited	343	Sidharth TV	SD
42	Sarthak Music Private Limited	344	Sidharth Bhakti	SD
		345	Sidharth Gold	SD

## Annexure-II

### List of Pay DTH Operators

S.No	DTH Operator
1.	M/s. Tata Play Ltd
2.	M/s Dish TV India Ltd
3.	M/s SUN Direct TV Private Ltd
4.	M/s Bharti Telemedia Ltd.





## **PART - II**

### **REVIEW OF WORKING AND OPERATION OF THE TELECOM REGULATORY AUTHORITY OF INDIA**



# REVIEW OF WORKING AND OPERATION OF THE TELECOM REGULATORY AUTHORITY OF INDIA

- 2.1 Part-I of the Report gave an overview of the general environment prevailing in the Telecom, TV broadcasting and radio services with a highlight on policies and programmes of the Government during 2021-22. In line with the mandate given under the TRAI Act, TRAI has played a catalytic role in the development of the telecom, broadcasting, and cable services. TRAI's endeavour is to provide a fair and transparent environment that encourages competition and promotes a level-playing field for all service providers while protecting the interest of consumers.
- 2.2 Under Section 36 of the TRAI Act 1997, the Authority may, by notification, make regulations consistent with this Act and the rules made thereunder to carry out the purposes of this Act. Further, Under Section 39 of the TRAI Act 1997, if any difficulty arises in giving effect to the provisions of this Act, the Central Government may, by order, published in the Official Gazette, make such provisions not insistent with the provisions of this Act as may appear to be necessary for removing this difficulty.
- 2.3 To formulate recommendations and suggest policy initiatives, TRAI interacts with various stakeholders such as the service providers, industry organizations, Consumer Advocacy Groups (CAGs) / Consumer Organizations and other experts in the field. It has developed a process, which allows all the stakeholders and the general public to participate in discussions about policy formulation by offering their views whenever sought for. This process involves floating of a consultation paper highlighting the issues involved and soliciting the views of the stakeholders on the issues, holding Open House Discussion (OHD) Meetings arranged online or in physical mode in different cities in the country, inviting written comments on e-mail and through letters, and having interactive sessions with stakeholders and experts to obtain different views and clarifications on policy issues. The Regulations/Orders issued by TRAI also contain an Explanatory Memorandum which explains the basis on which the decisions are taken. The participative and explanatory process adopted by TRAI has received wide acclaim.
- 2.4 TRAI also interacts with the consumer organizations/Non-Government Organizations (NGO) in the Telecom and Broadcasting sectors to obtain their views. It has a system of registering consumer organizations/NGOs connected with telecom services and interact with them at regular intervals. TRAI is constantly adopting measures for strengthening the consumer organizations. It also organizes Seminars and Workshops with the participation of International Experts on various technical issues and invites stakeholders, consumer organizations and other research institutes to attend these events.
- 2.5 Under Section 11 (1) (a) of the TRAI Act 1997, the Authority is required to make recommendations, either suo moto or on a request from the licensor, i.e., Department of Telecommunications, Ministry of Telecommunications or Ministry of Information & Broadcasting in the case of Broadcasting and Cable Services. Recommendations given by TRAI to Government during 2021-22 are given below:-

## 2.5.1 TELECOM SECTOR

Sl. No.	List of Recommendations & Back References and Responses
1	Recommendations dated 19 <sup>th</sup> August, 2021 on "Enabling Unbundling of Different Layers Through Differential Licensing".
2	Recommendations dated 26 <sup>th</sup> August, 2021 on "Licensing Framework for Satellite-based connectivity for Low Bit Rate Applications".
3	Recommendations dated 31 <sup>st</sup> August, 2021 on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband speed".
4	TRAI's Response to DoT back reference dated 14 <sup>th</sup> October, 2021 on Recommendations on "Reforming the Guidelines for Transfer/Merger of Telecom Licenses".
5	TRAI's Response dated 25 <sup>th</sup> February, 2022 to DoT Reference seeking TRAI Recommendations on the detailed framework along with terms & conditions of the proposed agreement between VNOs and ANPs / Unified Licensees

### RECOMMENDATIONS & RESPONSES TO BACK REFERENCES

#### 2.5.1.1 Recommendations dated 19<sup>th</sup> August, 2021 on "Enabling Unbundling of Different Layers Through Differential Licensing"

DoT through its letter No. 20-281/2010-AS-I Vol. XII (Pt) dated 8<sup>th</sup> May, 2019, inter-alia, requested TRAI to furnish recommendations on enabling unbundling of different layers through differential licensing, under the terms of the clause (a) of sub-section (1) of Section 11 of the Telecom Regulatory Authority of India Act, 1997 (as amended).

Pre-Consultation Paper on 'Enabling Unbundling of Different Layers Through Differential Licensing' was released on 9<sup>th</sup> December, 2019 for seeking the issues from the stakeholders to be considered and for changes required in licensing conditions for facilitating such licensing regime. Based on the comments received from stakeholders, a detailed Consultation Paper on the subject was released on 20<sup>th</sup> August, 2020 seeking the comments/counter comments of the stakeholders. Comments from 25 stakeholders and counter comments from 4 stakeholders were received. Thereafter, an online Open House Discussion (OHD) was convened on 3<sup>rd</sup> February, 2021.

Based on the comments/inputs received from the stakeholders and on its own analysis, the Authority on 19<sup>th</sup> August 2021 sent its Recommendations on "Enabling Unbundling of Different Layers Through Differential Licensing" to the Government. These recommendations aim to create a separate license authorization for Access Network provider and provide a broad framework for VNO(s) seeking & entering into an agreement with the Network providers. Implementation of these recommendations is likely to result in increased sharing of network resources, reduction of cost, attract investment, strengthen the service delivery segment, and could also prove to be catalyst in proliferation of 5G services for Industry 4.0, enterprise segment and various other use cases, in a localized manner.

The salient features of these recommendations are given below: -

- (i) A separate authorization under Unified License should be created for Access Network Provider (network layer) to provide network services on wholesale basis. Under this authorization for Network layer only, the Access network provider shall not be permitted to directly provide services to the end customers under the authorization.
- (ii) The scope of the Access Network Provider shall be to establish and maintain access network, including wireless and wireline access network, and selling the network services (capable of carrying voice and non-voice messages and data) on a wholesale basis to VNOs (service delivery operators) for retailing purpose. The Access Network Provider should be permitted to have capabilities to support all the services mentioned in the scope of Access Service authorization under Unified License (UL).
- (iii) The Access Network provider should also be permitted to provide/share its network resources to/with the telecom service providers who are licensees under section 4 of the Indian Telegraph Act, 1885, and vice versa.
- (iv) Licensed service area for Access Network Provider should be kept same as that existing in Access service authorization under UL.
- (v) Access Network provider should be responsible for all the network related terms and conditions specified in the Access Service Authorization under Unified License. However, the terms and conditions related to service delivery should be excluded.
- (vi) Like Unified Licensee with access authorization, the Access Network provider should also be permitted to acquire spectrum through spectrum auctions, subjected to the prescribed spectrum caps, enter into spectrum trading and spectrum sharing arrangement with the other Access Network providers and unified licensees with Access authorization. It should also have access to backhaul spectrum, numbering resources and right to interconnection.
- (vii) The existing licensing regime of Unified License shall be continued. However, if a licensee with Access Service Authorization under UL wishes to migrate to segregated network layer and service layer regime, it should be permitted to do so.
- (viii) The Network Provider shall be permitted to take a separate license under UL (VNO) framework for provision of services to the end subscribers.
- (ix) To bring in transparency and accountability in the entire process for VNO(s) seeking and entering into an agreement with Network provider or Unified Licensee, a broad framework should be prescribed, including the definite process in respect of application filing, application processing and defined timelines etc. The framework should provide the process to be followed for applying for wholesale capacity/network resources along with the detailed proposal, process of acceptance/rejection by the Unified Licensees (including Access Network Providers), along with defined timelines, etc. The key elements of the framework should include:

- a. To ensure that the terms and conditions offered to different VNOs are fair, transparent, and non-discriminatory, the Unified Licensee shall declare their Reference Offer (including commercials) on their website.
  - b. The Unified Licensee shall offer the wholesales services to different VNO(s) (including VNO owned/promoted by itself), in transparent, fair, and non-discriminatory manner.
  - c. For submission and processing of application from VNOs, the Unified Licensees should provide a web-based online portal. Physical exchange of application, documents confirmations etc. should not be allowed.
  - d. The service delivery operator i.e., VNO shall make request to the Unified Licensee through online portal of the concerned Unified Licensee along with detailed proposal. The online portal should generate an acknowledgement of receipt of application and send it to the e-mail IDs provided by the applicant and also place a copy on the portal with digital date and time stamp.
  - e. The Licensee shall share the feasibility status clearly stating acceptance/rejection (with reasons thereof, in case of rejection) of the proposal, through the online portal, with the Applicant party within 30 days. In case any additional information is required by the Unified Licensee, the Applicant may be asked for the same within 15 days of date of receipt of the application and in such case, the 30 days' time will begin from the date of provision of additional information by the Applicant.
  - f. Unified Licensee should be asked to submit an annual self-certification to the licensee certifying the adherence to the prescribed framework.
  - g. After entering into an agreement for service delivery, it should be the joint responsibility of the UL-VNO licensee and Unified Licensee to submit a digital copy of the agreement and their subsequent modifications, if any, to the Licensor as well as to TRAI within 15 days of signing the agreement or carrying out modifications thereof, through online mode.
- (x) The License Fee and Spectrum Usage charges applicable for the Access Network Provider Authorization should be same as that applicable to the Access Service Authorization under Unified License.
- (xi) Since the combined scope of Access Network Provider and UL-VNO (Access service) is equal to the scope of a Licensee with Access Service authorization under UL, the Minimum Equity, Minimum Net worth, Entry Fee and FBG/PBG requirements for the proposed Access Network provider authorization may be arrived at by deducting the amounts prescribed for UL (VNO- Access Service) from the amount prescribed for UL- Access Service authorization.

The recommendations on “Enabling Unbundling of Different Layers Through Differential Licensing” have been placed on TRAI’s website [www.trai.gov.in](http://www.trai.gov.in).

### 2.5.1.2 Recommendations dated 26<sup>th</sup> August, 2021 on “Licensing Framework for Satellite based connectivity for low bit rate applications”

DoT through its letter dated 23<sup>rd</sup> November, 2020, has requested TRAI to furnish recommendations on Licensing framework to enable the provisioning of Satellite based connectivity for low bit-rate applications for both commercial and captive usage.

Considering the constraints of the existing provisions in respect of proposed Satellite based low bit-rate services, DoT has stated that there is a need for suitable licensing framework and requested TRAI to examine all the factors holistically and recommend enabling provisions under the existing licensing framework of DoT, or new licensing framework may be suggested for such services for both commercial and captive usage.

Low Bit-Rate applications and IoT devices require low cost, low power and small size terminals that can effectively perform the task of signal transfer with minimum loss. Many sparsely populated areas with important economic activities suited for IoT related services may not have terrestrial coverage or other forms of connectivity. Therefore, satellites can help bridge this gap by providing coverage to even the most remote areas and will help in fulfilling connect India mission.

Based on the reference received from DoT, Consultation Paper on “Licensing Framework for Satellite based connectivity for low bit rate applications.” was issued on 12<sup>th</sup> March, 2021, seeking comments of the stakeholders. The consultation paper covered the issues related to different models of provision of satellite-based connectivity, various orbits, frequency bands for Low Bit Rate applications, availability of satellite capacities and enabling requirements in licensing framework.

Written comments and counter-comments on the Consultation Paper were invited from the stakeholders by 23<sup>rd</sup> April, 2021 and 7th May 2021 respectively. The Authority received 29 comments and 4 counter-comments from various stakeholders. All these comments and counter comments are available on the TRAI website [www.trai.gov.in](http://www.trai.gov.in). An Open House Discussion (OHD) was also convened on the issues raised in the Consultation Paper on dated 2nd June 2021 through video conferencing.

Based on the comments/inputs received from the stakeholders and on its own analysis, the Authority on 26<sup>th</sup> August, 2021 sent its Recommendations on “Licensing Framework for Satellite based connectivity for low bit rate applications.”

The salient features of these recommendations are:

- (i) For provision of Satellite-based connectivity for IoT and low-bit-rate applications, the relevant service licensees may provide connectivity as per scope of their authorization for any kind of network topology model including Hybrid model, Aggregator model and Direct-to-satellite model.
- (ii) All types of satellite viz. Geo Stationary Orbit (GSO) and Non-GSO (NGSO) satellites and any of the permitted satellite frequency bands may be used for providing satellite-based low-bit-rate connectivity.



- (iii) The relevant existing authorizations under Unified Licensing framework may be suitably amended for enabling satellite-based low-bit-rate connectivity.
- (iv) Scope of authorizations of GMPCS service, Commercial VSAT CUG service and NLD service under Unified License and Captive VSAT CUG service license may be suitably amended to include provision of satellite-based low-bit-rate connectivity for IoT devices.
- (v) The Service Licensees should be permitted to obtain satellite bandwidth from foreign satellites in all the permitted satellite bands to provide satellite-based services. They should be permitted to choose the foreign satellite from the approved list, published for the purpose by the Government and to lease the satellite capacity directly from the chosen foreign satellite and should be mandated to establish the Earth Station in India, corresponding to the chosen foreign satellite system, prior to using the leased capacities.
- (vi) The Government may come out with a roadmap detailing schedule of launch of communication satellites and availability of the domestic satellite capacities in India to facilitate the service licensees to plan and optimize their capacity procurement.
- (vii) The Authority has recommended various measures to make the services cheaper and affordable like permitting hiring of foreign capacities for a longer period as per need instead of 3-5 years, removal of facilitation charges by the government when hiring foreign capacities from the approved list of foreign satellites/satellite systems, leasing the satellite capacity directly from the chosen foreign satellite, reducing the role of intermediaries and removing the prevailing NOCC charges.
- (viii) To improve Ease of Doing Business (EoDB), it has also been recommended that DoT should put in place a comprehensive, simplified, integrated, end-to-end coordinated, single window online common portal for all the agencies involved in grant of various approvals/permissions/allocations etc., like DoS, DOT, WPC and NOCC, wherein the service licensees can place their request and the agencies respond online in a transparent and time-bound manner. All the guidelines, applications forms, fee details, processes, timelines and application status should be made transparently available on the portal.

The recommendations on “Licensing Framework for Satellite based connectivity for low bit rate applications” have been placed on TRAI’s website [www.trai.gov.in](http://www.trai.gov.in).

#### **2.5.1.3 Recommendations dated 31<sup>st</sup> August, 2021 on “Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed”**

DOT vide its letter No. 4-1/2018-Policy-I dated 26<sup>th</sup> April, 2019 sought the recommendations of TRAI on the following points:

- (i) “Different speeds for different categories i.e., fixed vs Mobile with upload/download speeds defined;
- (ii) How different categories of broadband speeds such as basic broadband, high broadband & Ultra-High Broadband etc. can be defined as in Europe; and



- (iii) The roadmap to enhance Broadband speed to achieve the NDCP-2018 objective of 50 Mbps.”

DoT also, through two other separate references viz. No.20-281/2010-AS-I Vol. XII (pt.) dated 8<sup>th</sup> May, 2019 and No.4-27/NDCP2018-NT dated 6th June 2019 sought the recommendations of TRAI for implementing NDCP-2018 strategies “By encouraging innovative approaches to infrastructure creation and access including through resale and Virtual Network Operators (VNO)” and “Promoting broadband connectivity through innovative and alternative technologies”, respectively. Both strategies are part of the mission “Connect India: Creating a Robust Digital Communication Infrastructure”.

Subsequently, DoT through letter No. AS-15/1/2020-AS-V dated 12<sup>th</sup> March, 2021 regarding proliferation of Fixed-line Broadband Services in the Country raised certain new issues like exemption of the license fee on the revenues earned from fixed line broadband keeping in view the current factual matrix and relevant issues, likelihood of misuse by the licensees through misappropriation of revenues due to the proposed exemption of the License Fee on the revenues earned from Fixed-line Broadband services, and promoting proliferation of fixed-line broadband by providing direct benefits to consumers for usage of fixed-line Broadband services. Through this letter, DoT requested TRAI to provide consolidated and updated recommendations in light of the Consultation Paper on 'Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed' dated 20<sup>th</sup> August, 2020.

Pursuant to the references mentioned at para 1 & 2 above, Telecom Regulatory Authority of India (TRAI) issued a Consultation paper on 'Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed' dated 20<sup>th</sup> August, 2020, wherein various issues were identified for seeking comments and counter comments from stakeholders. Subsequently, an Open House Discussion was also held on 18<sup>th</sup> February, 2021.

Further, as per reference mentioned at para 3 above, a supplementary consultation paper on “Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed” was issued on 19<sup>th</sup> May, 2021. Subsequently, an Open House Discussion was also conducted on 23<sup>rd</sup> June, 2021.

Based on the comments received and further analysis, the Authority finalized its recommendations on “Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed”, which was issued to the Government on 31<sup>st</sup> August, 2021.

The salient features of these recommendations are as follows: -

- (i) Definition of broadband has been reviewed and the minimum download speed for broadband connectivity revised upward from the present 512Kbps to 2Mbps. Based on download speed, fixed broadband has been categorized into 3 different categories - Basic, Fast and Super-fast.
- (ii) To encourage lakhs of cable operators to provide broadband services, the Authority’s past recommendation on “Definition of Revenue Base (AGR) for the Reckoning of Licence Fee and Spectrum Usage Charges” has been reiterated.

- (iii) To enhance mobile broadband speed in rural and remote areas by fiberisation of the cellular networks, backhaul connectivity on optical fiber using the BharatNet network with Service Level Agreements (SLA) should be made available to service providers.
- (iv) To incentivise investment in the last-mile linkage for fixed-line broadband, notify a skill development plan and an interest subvention scheme for Cable Operators registered as Micro and Small size enterprises.
- (v) To enhance mobile broadband speed, radio spectrum used for backhauling connectivity of cellular networks should be assigned to service providers on demand and in time-bound manner.
- (vi) Creation of National Portal for RoW permissions to facilitate expeditious rollout of telecom and other essential utilities infrastructure.
- (vii) Incentivize establishment of common ducts and posts for fiberisation of networks. In line with BhartNet Project, exempt RoW charges for next five years for expeditious laying of common ducts and posts.
- (viii) A Centrally Sponsored Scheme (CSS) to incentivize States/UTs for RoW reforms. Incentives to be linked to the net improvement in the Broadband Readiness Index (BRI) score of a State/UT.
- (ix) Mandate co-deployment of common ducts during the construction of any roadway, railway, and water & gas pipelines receiving public funding.
- (x) To facilitate the sharing of passive infrastructure such as ducts, optical fibers, posts, etc., all the passive infrastructure available in the country should be mapped by each service provider and infrastructure provider using Geographic Information System (GIS). The Telecom Engineering Center (TEC) should notify the standards for this purpose. Establishment of e-marketplace on common GIS platform to facilitate leasing and trading of passive infrastructure.
- (xi) Target linked incentive i.e., License Fee (LF) exemption on specified revenues to eligible licensees for proliferation of fixed-line broadband services in urban and rural areas.
- (xii) A pilot DBT (Direct Benefit Transfer) scheme in rural areas for proliferation of fixed-line broadband subscribers. After ascertaining the practicability of the pilot DBT scheme in accelerating the growth of fixed-line broadband services; specifics of the DBT scheme like eligibility criteria for beneficiaries, quantum of benefit, period of the scheme etc., to be worked out subsequently.

#### **2.5.1.4 TRAI's Response dated 27<sup>th</sup> November, 2021 to Department of Telecommunications (DoT) back reference dated 14<sup>th</sup> October, 2021 on Recommendations on "Reforming the Guidelines for Transfer/Merger of Telecom Licenses"**

TRAI had sent its recommendations on "Reforming the Guidelines for Transfer / Merger of Telecom Licenses" on 21<sup>st</sup> February, 2020 to DoT. DoT vide its letter dated 14<sup>th</sup> October, 2021 referred back some of the recommendations for reconsidered opinion/recommendations.

After considering the views given by the DoT, the Authority furnished its response to the Government on 27<sup>th</sup> November, 2021. The response to the Government has been placed on TRAI's website [www.trai.gov.in](http://www.trai.gov.in).

#### **2.5.1.5 TRAI's Response dated 25<sup>th</sup> February, 2022 to DoT Reference seeking TRAI Recommendations on the detailed framework along with terms & conditions of the proposed agreement between VNOs and ANPs / Unified Licensees**

DoT through their letter dated 24<sup>th</sup> January, 2022 has stated that – "At present, the TRAI's Recommendations dated 19<sup>th</sup> August, 2021 on 'Enabling Unbundling of Different Layers Through Differential Licensing' are under consideration in the Department. In the meanwhile, in respect of the Recommendation No. 3.3, it has been decided to seek the recommendations of TRAI on the detailed framework along with terms and conditions of the reference agreement between VNOs and ANPs/ Unified Licensees".

DoT, through the said letter, requested TRAI to furnish recommendations under the terms of the Telecom Regulatory Authority of India Act, 1997 (as amended) in respect of the detailed framework along with terms and conditions of the reference agreement (as recommended through the Recommendation No. 3.3) between VNOs and ANPs/ Unified Licensees.

After examining the issues involved, TRAI was of the view that detailed terms and conditions of the reference agreement between Network Providers/Unified Licensees and VNOs need not be prescribed, rather it should be left to the mutual commercial arrangement between the two. Accordingly on 25<sup>th</sup> February, 2022, TRAI forwarded its response to DoT stating that the Authority is of the view that no further recommendations are required to be furnished on this issue.

### **2.5.2 BROADCASTING SECTOR**

During the year 2021-22 no recommendations were given to the Government for this sector.

### **2.6 Additional Information with respect to the Important Recommendations furnished to the Government previously**

Over the last few years, TRAI has sent several recommendations to DoT and MIB on important issues concerning growth of Telecommunications services and Broadcasting and Cable Services in the country either on reference or suo moto. During the year, TRAI has worked with both DoT and MIB and by the concerted efforts, a number of these recommendations have been accepted during the period. However, many of the important recommendations are still pending for decision/implementation by DoT and MIB which, if implemented, would have significant positive impact on the Telecommunication and Broadcasting Sector. It is felt that the technological advancements and changes keep on happening in the Telecom and Broadcasting

Sector, and if decisions are not taken in a reasonable timeframe, the recommendations lose their relevance and the whole purpose of making the Recommendation as envisaged by TRAI is defeated. Sometimes the Recommendations are accepted/implemented partially which defeats the very intent envisaged in comprehensive approach towards a subject while making recommendations. Further, mere acceptance of recommendations does not help the sector, until they are implemented on ground. If the Recommendations are accepted, but implemented after a lapse of many years, the impact that a particular Recommendation is supposed to make on the sector may get reduced due to this delay.

Therefore, there is a need for feedback mechanism through which the Ministries may share information with TRAI about the acceptance/implementation or otherwise of TRAI's Recommendations. In cases of non-acceptance/partial acceptance/delay in acceptance, the reasons of rejection/partial acceptance /pendency of TRAI's recommendations with relevant details need to be shared with TRAI by the concerned ministry (DoT/MIB). This mechanism whereby there is periodic review of implementation of pending recommendations of TRAI in DoT/MIB, will help TRAI in future formulation of policies and regulatory framework.

With above objective in view and to create central repository for real-time tracking of status of all recommendations, TRAI has developed a Recommendation Status Portal which can be accessed jointly by TRAI, DoT and MIB for updating the recommendations made and the details regarding the action taken/status of Recommendations.

### 2.6.1 Accepted recommendations related to the Telecom Sector during the period

Out of the several Recommendations made by the TRAI to DoT in the past, the following important recommendations which have been accepted by the Government during the year 2021-22 (as per the status provided by DoT) and the resultant positive impact of implementation of these Recommendations on the telecom sector are detailed below:

- (i) Recommendations on "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT CUG Service Authorization" were forwarded on 28<sup>th</sup> July, 2020 as there was a need to enhance the scope of the VSAT license to permit the licensee to provide satellite based backhaul connectivity to mobile operators. These recommendations have been accepted by the Government. This will help in connecting rural, inaccessible areas of the country through mobile and internet.
- (ii) Recommendations on "Definition of Revenue Base (AGR) for the Reckoning of Licence Fee and Spectrum Usage Charges" were forwarded on 6<sup>th</sup> January, 2015 as there was a need to rationalize taxes, duties and levies impacting the Indian Telecom sector. These recommendations have been partially accepted by the Government. The implementation of these Recommendations will help to avoid litigations between licensor and licensees on definition of Gross Revenue and Adjusted Gross Revenue for different telecom services.

### 2.6.2 Accepted Recommendations related to the Broadcasting & Cable Services Sector during the period

One important Recommendation on “Sharing of Infrastructure in TV Broadcasting Distribution Sector” has been partially accepted by MIB. The details are as under:

- (i) Recommendations on “Sharing of Infrastructure in TV Broadcasting Distribution Sector” were forwarded to the Government 29<sup>th</sup> March, 2017. The sharing of infrastructure for DTH Operators & HITS Operators were already allowed during the year 2020-21. Accordingly, the amended DTH guidelines and HITS guidelines, incorporating the provisions for sharing of Infrastructure by DTH operators & HITS operators were notified on 30.12.2020 and 06.11.2020 respectively. Further, during the year 2021-22, the guidelines for sharing of infrastructure by Multi System Operators (MSOs) with other MSOs has been allowed on 29.12.2021.

### 2.6.3 Pending recommendations related to the Telecom Sector at the end of period

The list of Recommendations that are pending with Government for acceptance and implementation as on 31<sup>st</sup> March, 2022 are detailed below:

Sl. No.	Topic	Date of Forwarding
1.	Recommendations on “Allocation and pricing of Microwave Access (MWA) and Microwave Backbone (MWB) RF carriers”	29-08-2014
2.	Recommendations on “Complaints/Grievance Redressal in the Telecom Sector”	10-03-2017
3.	Recommendations on “Promoting Local Telecom Equipment Manufacturing”	08-03-2018
4.	Recommendations on “Next Generation Public Protection and Disaster Relief (PPDR) communication networks”	04-06-2018
5.	Recommendations on “Making ICT accessible for Persons with Disabilities”	09-07-2018
6.	Recommendations on “Privacy, Security and Ownership of the Data in the Telecom Sector”	16-07-2018
7.	Recommendations on “Method of allocation of spectrum for Public Mobile Radio Trunking Service (PMRTS) including auction, as a transparent mechanism”	20-07-2018
8.	Recommendations on “Reforming the Guidelines for Transfer/Merger of Telecom Licenses”	21-02-2020
9.	Recommendations on “Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration”	13-03-2020
10.	Recommendations on “Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing”	17-08-2020
11.	Recommendations on “Cloud Services”	14-09-2020
12.	Recommendations on “Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality”	22-09-2020
13.	Recommendations on “Enabling Unbundling of Different Layers Through Differential Licensing”	19-08-2021

14.	Recommendations on “Licensing Framework for Satellite-based connectivity for Low Bit Rate Applications”	26-08-2021
15.	Recommendations on “Roadmap to promote Broadband Connectivity and enhanced Broadband speed”	31-08-2021

#### 2.6.4 Pending Recommendations related to the Broadcasting & Cable Services Sector

Several Recommendations were made by the Authority to the Ministry of Information and Broadcasting from time to time. However, almost 08 important Recommendations forwarded to the Ministry of Information and Broadcasting are still pending with Government are detailed below:

Sl. No.	SUBJECT	Date of Issue
1	Restrictions on certain entities from entering business of broadcasting and distribution of TV channels	28-12-2012
2	Issues related to Radio Audience Measurement and Ratings in India	15-09-2016
3	Issues related to Digital Terrestrial Broadcasting (DTT) in India	31-01-2017
4	Issues related to Digital Radio Broadcasting in India	01-02-2018
5	Issues relating to Uplinking and Downlinking of Television channels in India	25-06-2018
6	Reserve Price for auction of FM Radio Channels in new cities	10-04-2020
7	Interoperability of Set-Top Box	10-04-2020
8	Review of Television Audience Measurement and Rating System in India	28-04-2020

#### 2.7 During the year 2021-22, the Authority in discharge of its functions assigned under the Telecom Regulatory Authority of India Act, 1997, has framed the following Regulation in Broadcasting sector:

##### BROADCASTING SECTOR

Sl. No.	List of Regulations
1.	The Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Third Amendment) Regulations, 2021” dated 11 <sup>th</sup> June, 2021

#### 2.7.1 The Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Third Amendment) Regulations, 2021” dated 11<sup>th</sup> June, 2021

TRAI on 11<sup>th</sup> June, 2021, released the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Third Amendment) Regulations, 2021. The highlights are as under:

- The framework is the first step to define an indigenous set of specifications in line of international standards.
- A tightly synchronized working of CAS and SMS, as specified by the framework, will enable factual reporting of subscriber base etc. This will reduce the revenue loss to stakeholders on account of erroneous subscription reporting. Better assurance of due



revenue, in turn, may encourage the stakeholders to invest for further improvement in quality of content and service thereby benefiting the end consumer.

- (iii) The framework will usher-in better content security in the distribution value chain. This, in turn, shall give confidence to the global content developer community and will pave way for increased availability of better quality, high-definition content to Indian television viewers.
- (iv) The framework will improve end-to-end compliance and reduce litigations among the service providers.

## 2.8 Tariff Orders

During the year 2021-22, the Authority issued the following Tariff Orders in Telecom Sector:

### TELECOM SECTOR

Sl. No.	List of Tariff Order
1.	Telecom Tariff (66 <sup>th</sup> Amendment) Order, 2022 dated 27 <sup>th</sup> January, 2022.
2.	Telecom Tariff (67 <sup>th</sup> Amendment) Order, 2022 dated 31 <sup>st</sup> March, 2022.

#### 2.8.1 Telecom Tariff (66<sup>th</sup> Amendment) Order dated 27<sup>th</sup> January, 2022

After following an exhaustive consultation process and online Open House Discussion, the TRAI notified the Telecom Tariff (66th Amendment) Order, 2022 on 27<sup>th</sup> January, 2022 which is available at link [https://tra.gov.in/sites/default/files/Regulation\\_27012022.pdf](https://tra.gov.in/sites/default/files/Regulation_27012022.pdf).

The Amendment Order inserts the following after sub-clause (x) In clause 6 of the Telecommunication Tariff Order, 1999 and come into force within sixty days from the date of its publication in official Gazette.

- (xi) Every Telecom Service Provider shall offer at least one Plan Voucher, one Special Tariff Voucher and one Combo Voucher having a validity of thirty days.
- (xii) Every Telecom Service Provider shall offer at least one Plan Voucher, one Special Tariff Voucher and one Combo Voucher which shall be renewable on the same date of every month.

#### 2.8.2 Telecom Tariff (67<sup>th</sup> Amendment) Order dated 31<sup>st</sup> March, 2022

After following an elaborate consultation process and online Open House Discussion, the TRAI notified the Telecom Tariff (67<sup>th</sup> Amendment) Order, 2022 on 31<sup>st</sup> March, 2022 which is available at link [https://tra.gov.in/sites/default/files/Regulation\\_31032022.pdf](https://tra.gov.in/sites/default/files/Regulation_31032022.pdf)

The Amendment Order provides for deletion of the sub-clause (xii) after sixty days from the date of commencement of this amendment and following sub-clause inserted.

- (xii) Every Telecom Service Provider shall offer at least one Plan Voucher, one Special Tariff Voucher and one Combo Voucher which shall be renewable on the same date of every month and if the date of such renewal is not available in a month, the date of renewal shall be the last date of that month."

## 2.9 Directions

TRAI issued the following Directions to the Service Providers during the year 2021-22 for compliance of its order/Regulations:-

### TELECOM SECTOR

Sl. No.	List of Directions
1.	Direction dated 2 <sup>nd</sup> September, 2021 issued to Telecom Service providers for ensuring compliance with TRAI's Regulations/Directions/ Advisories/Orders in respect of tariff offering on 2 <sup>nd</sup> September, 2021.
2.	Direction dated 7 <sup>th</sup> December, 2021 issued to Telecom Service Providers for ensuring compliance with TRAI's Regulations/Directions in respect of outgoing SMS facility to porting out customers.

#### 2.9.1 Direction dated 2<sup>nd</sup> September, 2021 issued to all Telecom Service Providers for ensuring compliance with TRAI's Regulations/Directions/ Advisories/Orders in respect of tariff offering

The Authority on 2<sup>nd</sup> September, 2021 issued direction to all TSPs for ensuring compliance with TRAI's Regulations/Directions/Advisories/Orders in respect of tariff offering on and directed to ensure that:

- Only the tariffs reported to TRAI are offered through their channel partners/distributors/retailers/third-party apps/etc. and;
- All tariff offers comply with extant TRAI Regulations/Directions/Orders/etc. issued in this regard as, where the TSP's name/brand is used for marketing/offering/selling products and services, the responsibility of ensuring compliance of TRAI's regulatory guidelines/provisions shall remain with the TSP.

The Direction is available at link [https://tra.gov.in/sites/default/files/Direction\\_02092021.pdf](https://tra.gov.in/sites/default/files/Direction_02092021.pdf)

#### 2.9.2 Direction dated 7<sup>th</sup> December, 2021 issued to Telecom Service Providers for ensuring compliance with TRAI's Regulations/Directions /Advisories/Orders in respect of outgoing SMS facility to porting out customers

The Authority on 7<sup>th</sup> December, 2021 issued direction to all Telecom Service Providers for ensuring compliance with TRAI's Regulations/Directions/ Advisories/Orders in respect of tariff offering and directed all access service providers to enable, with immediate effect, for all mobile subscribers, both prepaid and post-paid, requesting for a unique porting code, the facility to send SMS on short code 1900, in order to exercise their right to avail porting facility in accordance with the Telecommunication Mobile Number Portability Regulations, 2009, irrespective of the value



of the tariff offers/vouchers. The Direction is available at link [https://traigov.in/sites/default/files/Direction\\_02092021.pdf](https://traigov.in/sites/default/files/Direction_02092021.pdf).

## BROADCASTING SECTOR

Sl. No.	List of Directions
1.	Direction dated 24 <sup>th</sup> January, 2022 issued to all DPOs to ensure compliance with the provisions of the Telecommunication (B&CS) Interconnection (Addressable Systems) Regulations, 2017 dated 3 <sup>rd</sup> March, 2017, regarding listing of channels in electronic programme guide.

### 2.9.3 Direction dated 24<sup>th</sup> January, 2022 issued to all DPOs to ensure compliance with the provisions of the Telecommunication (B&CS) Interconnection (Addressable Systems) Regulations, 2017 dated 3<sup>rd</sup> March, 2017, regarding listing of channels in electronic programme guide

The Authority on 24<sup>th</sup> January, 2022 issued direction to all the Distribution Platform Operators (DPO) to ensure compliance to regulation 18 of the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 and regulation 38 of the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017, by ensuring that all the television channels of a particular language in a genre are displayed together consecutively in the electronic programme guide and one television channel appears at one place only.

### 2.10 Consultation Papers

TRAI issued following Consultation Papers to seek views of the stakeholders on the various issues:

## TELECOM SECTOR

Sl. No.	List of Consultation Papers
1.	Consultation Paper dated 13 <sup>th</sup> May, 2021 on "Validity period of tariff offers".
2.	Supplementary Consultation Paper dated 19 <sup>th</sup> May, 2021 on "Roadmap to promote Broadband connectivity and enhanced Broadband Speed".
3.	Consultation Paper dated 3 <sup>rd</sup> November, 2021 on "tariff issues related to SMS & Cell Broadcast Alerts disseminated through Common Alerting Protocol (CAP) platform during disaster/non disasters".
4.	Consultation Paper dated 15 <sup>th</sup> November, 2021 on "Licensing Framework for Establishing Satellite Earth Station Gateway".
5.	Consultation Paper dated 30 <sup>th</sup> November, 2021 on "Auction of Spectrum in frequency bands identified for IMT/5G".

6.	Consultation Paper dated 16 <sup>th</sup> December, 2021 on “Regulatory Framework for Promoting Data Economy Through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India”.
7.	Consultation Paper dated 11 <sup>th</sup> February, 2022 on “Promoting Networking and Telecom Equipment Manufacturing in India”.
8.	Consultation Paper dated 23 <sup>rd</sup> March, 2022 on “Use of Street Furniture for Small Cell and Aerial Fiber Deployment”.
9.	Consultation Paper dated 25 <sup>th</sup> March, 2022 on “Rating of Buildings or Areas for Digital Connectivity”.

#### **2.10.1 Consultation Paper dated 13<sup>th</sup> May, 2021 on “Validity period of tariff offers”**

The Authority on 13<sup>th</sup> May, 2021 issued paper on “Validity period of tariff offers” for the consultation of stakeholders. This Consultation Paper was issued to review the monthly tariff offering. The consultation paper issued on validity period of tariff offers is available at link [https://traigov.in/sites/default/files/CP\\_13052021.pdf](https://traigov.in/sites/default/files/CP_13052021.pdf). After due consultation and OHD process, TTO (66<sup>th</sup> & 67<sup>th</sup> Amendment) have been notified which is available in public domain on TRAI website.

#### **2.10.2 Supplementary Consultation Paper dated 19<sup>th</sup> May, 2021 on “Roadmap to promote Broadband connectivity and enhance Broadband Speed”**

DoT sought recommendations of the Authority on issues relating to the broadband speed and its categorizations, infrastructure creation, and promoting broadband connectivity. Accordingly, the Authority on 20<sup>th</sup> August, 2020 issued a Consultation Paper (CP) on “Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed” for seeking comments from stakeholders. Subsequently, another reference was received from DoT on 12<sup>th</sup> March, 2021 seeking consolidated and updated recommendations on proliferation of fixed-line broadband services in the Country. To consult these issues with stakeholders, a supplementary Consultation Paper was issued on 19<sup>th</sup> May, 2021.

#### **2.10.3 Consultation Paper dated 3<sup>rd</sup> November, 2021 on “Tariff issues related to SMS & Cell Broadcast Alerts disseminated through Common Alerting Protocol (CAP) platform during disaster/non disaster”**

The Authority on 3<sup>rd</sup> November, 2021 issued Consultation Paper for the consultation of stakeholders. This Consultation Paper is issued on tariff issues related to SMS & Cell Broadcast Alerts disseminated through Common Alerting Protocol (CAP) platform during disaster/non-disaster. The consultation paper is available at link [https://traigov.in/sites/default/files/CP\\_03112021.pdf](https://traigov.in/sites/default/files/CP_03112021.pdf)

#### **2.10.4 Consultation Paper dated 15<sup>th</sup> November, 2021 on “Licensing Framework for Establishing Satellite Earth Station Gateway”**

DoT, through its letter dated 10<sup>th</sup> September 2021 requested TRAI, under section 11(1)(a) of the TRAI Act of 1997, to furnish recommendations on “Licensing Framework for Establishing Satellite Gateway”.

In its letter, DoT stated that the current licensing framework of DoT with respect to satellite services has limitations with respect to proposed satellite gateway(s) operations, as there are no provisions regarding usage of gateway by service provider established by a satellite constellation operator. Considering the constraints of the existing provisions in respect of proposed satellite gateway(s) operations, DoT has stated that there is a need for suitable licensing framework and requested TRAI to examine all the factors holistically and recommendation on licensing framework for satellite gateway(s) operations may be suggested including the entry fee, license fee, bank guarantee, NOCC charges, and any other issue(s) which may be relevant for LEO/MEO/HTS systems.

In this regard, a Consultation Paper on “Licensing Framework for Establishing Satellite Earth Station Gateway” was released on 15<sup>th</sup> November, 2021 seeking inputs from the stakeholders.

The consultation paper is uploaded on TRAI’s official website [www.trai.gov.in](http://www.trai.gov.in).

#### **2.10.5 Consultation Paper dated 30<sup>th</sup> November, 2021 on “Auction of spectrum in the frequencies identified for International Mobile Telecommunications (IMT) / 5G”**

DoT, through its letter dated 13<sup>th</sup> September, 2021, requested TRAI to provide recommendations on “Auction of spectrum in the frequencies identified for International Mobile Telecommunications (IMT)/5G”. Subsequently, DoT through its letter dated 23<sup>rd</sup> September, 2021 informed about the Government’s telecom reform decisions with regard to future spectrum auctions and requested TRAI to consider/factor in the same while providing recommendations. Accordingly, DoT, inter-alia, requested TRAI to provide recommendations on the following issues:

- (i) Applicable reserve price, band plan, block size, quantum of spectrum to be auctioned and associated conditions for auction of spectrum in 526-698 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 3300-3670 MHz and 24.25 – 28.5 GHz bands for IMT/5G.
- (ii) Quantum of spectrum/band, if any, to be earmarked for private captive/isolated 5G networks, competitive/transparent method of allocation, and pricing, for meeting the spectrum requirements if captive 5G applications of industries for machine/plant automation purposes/M2M in premises.
- (iii) Associated conditions like upfront payments, applicable moratorium period after upfront payments, number of deferred payment instalments and other related modalities for auction of spectrum with validity for 30 years.
- (iv) For creating provisions for surrender of spectrum, conditions, and fee for such surrender of spectrum.
- (v) Any other recommendations deemed fit for the purpose of spectrum auction in these frequency bands, including the regulatory / technical requirements as enunciated in the relevant provisions of the latest ITU-R Radio Regulations.

In this regard, TRAI on 30<sup>th</sup> November, 2021 released a Consultation Paper on “Auction of spectrum in the frequencies identified for International Mobile Telecommunications (IMT)/5G”

seeking inputs from the stakeholders. In this consultation paper specific issues were raised for consideration of stakeholders on the above-mentioned issues.

The consultation paper is uploaded in the TRAI's official website [www.trai.gov.in](http://www.trai.gov.in).

#### **2.10.6 Consultation Paper dated 16<sup>th</sup> December, 2021 on “Regulatory Framework for Promoting Data Economy Through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India”**

Digital infrastructure is boosting the data economy, and the services are fast moving beyond the traditional telecom services domain. The key contemporary infrastructure that is required to boost the digital ecosystem and facilities include Data Centres, Content Delivery Networks and Internet Exchange Points.

National Digital Communications Policy (NDCP)-2018 also emphasizes that “Digital infrastructure and services are increasingly emerging as key enablers and critical determinants of a country's growth and well-being”. To achieve the stated mission, NDCP-2018 lists out various strategies. Evolving enabling regulatory frameworks and incentives for promoting the establishment of International Data Centres, Content Delivery Networks, and Independent Interconnect exchanges in India is one such strategy that has been spelt out in NDCP-2018 for establishing India as a global hub for cloud computing, content hosting and delivery, and data communication systems and services. Accordingly, a Consultation Paper (CP) was initiated suo-moto by the Authority to seek the inputs of stakeholders on regulatory framework for promoting the establishment of (i) Data Centres, (ii) Content Delivery Networks, and (iii) Internet Exchange Points in the country.

TRAI on 16<sup>th</sup> December, 2021 issued a Consultation Paper on “Regulatory Framework for Promoting Data Economy Through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India”.

#### **2.10.7 Consultation Paper dated 11<sup>th</sup> February, 2022 on “Promoting Networking and Telecom Equipment Manufacturing in India”**

The Authority on 11<sup>th</sup> February, 2022 issued a Consultation Paper on “Promoting Networking and Telecom Equipment Manufacturing in India” to take the view of the stakeholders on existing concerns in Networking and Telecom Equipment Manufacturing. It intends to further examine measures that should be taken to meet the demand of the growing market both within the country and outside. It also intends to solicit views on measures required for transforming the telecommunication manufacturing landscape and establish the country as an export hub.

#### **2.10.8 Consultation Paper dated 23<sup>rd</sup> March, 2022 on “Use of Street Furniture for Small Cell and Aerial Fiber Deployment”**

The Authority on 23<sup>rd</sup> March, 2022 issued a Consultation Paper on “Use of Street Furniture for Small Cell and Aerial Fiber Deployment” to take the view of the stakeholders on issues related to outdoor small cell and aerial fiber deployment using street furniture for the successful rollout of next generation networks in the country.

### 2.10.9 Consultation Paper dated 25<sup>th</sup> March, 2022 on “Rating of Buildings or Areas for Digital Connectivity”

The Authority on 25<sup>th</sup> March, 2022 issued a Consultation Paper on “Rating of Buildings or Areas for Digital Connectivity.” The highlights of the paper are as under:

- To deliberate on policy interventions and explore possibility of new regulatory framework which may be required for facilitating TSPs and IPs in improving digital connectivity inside buildings, specific areas, specific transport corridors, public transport hubs etc.
- To create an ecosystem that might be required to design, deploy, operate, expand, and upgrade digital connectivity infrastructure inside such buildings and areas.
- To develop a methodology to measure and evaluate quality of experience in such areas and buildings and empower end users to get requisite infrastructure for digital connectivity, whether on their own, or via agents working in their interest, or by creating pressure on relevant entities.
- Need to create an ecosystem for planning, designing and installation of DCI on the similar lines as it is being done in case of civil and electrical engineering works.
- The last date for written comments by stakeholders was 4<sup>th</sup> May, 2022 and counter comments, if any, by 18<sup>th</sup> May, 2022.
- Later, in view of various requests, received from stakeholders, the last date was extended to 15<sup>th</sup> June, 2022 and counter comments, if any, by 29<sup>th</sup> June, 2022.

### BROADCASTING & CABLE TV SECTOR

Sl. No.	List of Consultation Papers
1.	Consultation Paper dated 25 <sup>th</sup> October, 2021 on “Market Structure/Competition in Cable TV Service” on MIB back reference on TRAI's Recommendations dated 26 <sup>th</sup> November, 2013 on “Monopoly/Market dominance in the cable TV Services”.
2.	Consultation Paper dated 8 <sup>th</sup> December, 2021 on “Ease of Doing Business in Telecom and Broadcasting Sector”.
3.	Consultation Paper dated 22 <sup>nd</sup> December, 2021 on “Promoting Local Manufacturing in the Television Broadcasting Sector”.

#### **2.10.10 Consultation Paper dated 25<sup>th</sup> October, 2021 on “Market Structure/Competition in Cable TV Service”**

MIB vide its letter dated 12<sup>th</sup> December, 2012 sought recommendations of the Authority (TRAI) under Section 11(1)(a) of the TRAI Act, 1997, on the issues related to monopoly/market dominance in the cable TV services. After following a due consultation process, TRAI sent its recommendations on “Monopoly/Market dominance in the cable TV services” to MIB on 26<sup>th</sup> November, 2013.

On 19<sup>th</sup> February, 2021, a back reference was received from MIB mentioning therein that a considerable time has passed since the recommendations were made and that the media and entertainment (M&E) landscape has changed drastically, particularly with the advent of new digital technologies in this sector; and, therefore, MIB felt that some of the issues need further consideration by the Authority and it may provide a fresh set of recommendations in the matter looking at the subsequent developments/expansion in the M&E sector.

Accordingly, on 25<sup>th</sup> October, 2021, TRAI released Consultation paper on “Market Structure/Competition in Cable TV Service” to seek the comments/views of the stakeholders on monopoly/market dominance/competition issues in cable TV services.

#### **2.10.11 Consultation Paper dated 8<sup>th</sup> December, 2021 on “Ease of Doing Business in Telecom and Broadcasting Sector”**

Telecommunication and broadcasting sectors have emerged as key drivers of economic and social development and has made the country a favourite business destination amongst investors. Telecom and Broadcasting sector have immense potential to move on the higher trajectory of growth, if business environment could be made more attractive by simplifying the existing provisions of policy frameworks in various ministries and departments including Ministry of Information and Broadcasting, Department of Telecommunications, Ministry of Electronics, and Information Technology involved in issuing permission, registrations, and licenses to the players of the sector.

TRAI on 8<sup>th</sup> December, 2021, suo-moto floated consultation paper on “Ease of Doing Business in Telecom and Broadcasting Sector” to identify various concerns in the existing processes and suggest measures for the reforms required in the regulatory processes, policies, practices and procedures in the Telecom and Broadcasting sector for creating a conducive business environment in India.

The consultation paper sought comments of the stakeholders on the various issues and difficulties being faced by them in commencement and operation of their businesses in Telecom and Broadcasting sectors in the country. Comments are invited to suggest measures for making the existing processes simple, business friendly and creating an ecosystem for attracting more and more investment in the sectors. It also emphasizes on single window concept for submitting applications and getting approvals from different agencies without running to each agency separately for its approval.



The consultation papers also sought comments on simplifying the applications which have just the required details for the conduct of business and well-documented timelines with query response systems, having seamless integration with other ministries.

#### **2.10.12 Consultation Paper dated 22<sup>nd</sup> December, 2021 on “Promoting Local Manufacturing in the Television Broadcasting Sector”**

Digitalization of the Indian broadcasting sector began in year 2012 and was completed across the country by March, 2017. It provided a unique opportunity for the growth of local manufacturers to cater to the demand. The Government of India, vide recently launched initiatives such as ‘Make in India’ and ‘Digital India’, has accorded the highest priority to transform India into a global design and manufacturing hub. However, the share of locally manufactured equipment/devices in the broadcasting distribution networks remains quite low.

Keeping this in view, TRAI on 22<sup>nd</sup> December, 2021 issued suo-moto consultation paper on “Promoting Local Manufacturing in the Television Broadcasting Sector”. The paper aims to identify underlying challenges as well as enabling measures that can facilitate the transition from an import-driven industry to a sustained ‘Atmanirbhar ecosystem’.

# REVIEW OF WORKING AND OPERATION OF THE TELECOM REGULATORY AUTHORITY OF INDIA

The working and operation of Telecom Regulatory Authority of India in the specific context of policy framework is reviewed in the following paragraphs in respect of (a) Rural Telephone Network; (b) Expansion of Telephone Network; (c) Entry of Private Sector in basic and value added service; (d) Technical Compatibility and effective interconnection with service providers; (e) Telecommunication Technology; (f) Implementation of National Telecom Policy; (g) Quality of Service; and (h) Universal Service Obligation as elaborated below:-

## (a) Rural Telephone Network

**2.11** As on 31<sup>st</sup> March, 2022, the rural wireline subscriber base stood at 1.96 million as compared to 1.67 million at the end of 31<sup>st</sup> March, 2021, registering an increase of 17.29% over the year.

## (b) Expansion of Telephone Network

**2.12** The total wireline subscriber base as on 31<sup>st</sup> March, 2022 stood at 24.84 million as compared to 20.24 million subscribers on 31<sup>st</sup> March, 2021, registering an increase of 22.73% during the year 2021-22. Out of 24.84 million wireline subscribers, 22.88 million are urban subscribers and 1.96 million are rural subscribers.

## (c) Entry of Private Sector in basic and value-added service

**2.13** The list of service providers in various service areas is given in the table below:

**Wireless Service Providers as on 31<sup>st</sup> March, 2022**

Sl. No.	Service Providers	Service Areas	Licensed Service Area
1	Bharti Airtel Group	22	All India
2	Reliance Communications Ltd., / Reliance Telecom Ltd.		All India (except Assam & North East) / Kolkata, Madhya Pradesh, West Bengal, Himachal Pradesh, Bihar, Orissa, Assam & North East
3	Vodafone Idea Ltd	22	All India
4	BSNL	20	All India except Delhi & Mumbai
5	MTNL	2	Delhi, Mumbai
6	Reliance Jio Infocomm Ltd	22	All India

**Source: DoT Website.**



**UL (Virtual Network Operators) (VNO) Access Services licensees who are providing services as on 31<sup>st</sup> March, 2022**

Sl. No.	Service Providers	Service Areas	Licensed Service Area
1	ADPAY Mobile Payment India Pvt. Ltd.	1	Tamil Nadu including Chennai
2	Surf telecom Pvt Ltd (formerly Plintron India Pvt. Ltd.)	22	All India

Source: As reported by TSP

Sl. No.	Type of Licence	Total No. of Licensees issued as on 31.03.2022	No. of Licenses issued during FY 2021-22
1 (i)	NLD (before UL regime)	20	0
1 (ii)	NLD (under UL regime)	22	09
2 (i)	ILD (before UL regime)	16	0
2 (ii)	ILD (under UL regime)	13	06
3	NLD (VNO)	08	04
4	ILD (VNO)	07	05

Source: DoT website

**(d) Technical Compatibility and effective interconnection with service providers**

**2.14** Under the TRAI Act, the Authority is mandated to fix the terms and conditions of interconnectivity and to ensure technical compatibility and effective interconnection between service providers. Interconnection lies at the core of the telecom business in a multi-operator environment. The terms and conditions of interconnection need to be regulated to ensure a level playing field among service providers. The latest amendment in “The Telecommunication Interconnection Usage Charges Regulations, 2003” were issued during the last financial year i.e., 2020-21 for effective interconnection between service providers:

*“The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020” dated 17<sup>th</sup> April, 2020.*

TRAI issued “The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020” on 17<sup>th</sup> April, 2020. Through these Regulations, the regime of fixed International Termination charges (ITC) @ ₹ 0.30 per minute has been revised to forbearance regime within a prescribed range of ₹ 0.35 per minute to ₹ 0.65 per minute. Further, to ensure the level playing field between standalone and integrated International Long-Distance Operators (ILDs), it is mandated that an Access Service Provider shall offer the non-discriminatory rate of ITC to everyone i.e., to its own associated ILDO as well as to standalone ILDOs. These Regulations came into force from 1<sup>st</sup> May, 2020.

## (e) Telecommunication Technology

**2.15** Following technological measures were taken by the Authority to enhance the outreach and interaction of the Authority with the Telecom Consumers:

### i. DND App 3.0– with TSPs DLT system

DND App was updated to version DND 3.0 last year to implement provisions of TCCCP Regulation, 2018 and to assist consumers for reporting UCC, if any, they receive. Now the App has been integrated with TSPs DLT (Distributed Ledger Technology) system through data APIs. The specifications for data APIs were prepared by TRAI and TSPs have developed the APIs. All data exchange, like preference registration/modification, complaint registration, complaint status etc., between App and TSP's DLT system is now being done through data APIs only.

### ii. Reporting Automation

TRAI has updated the data reporting portal with newer version for data collection and analytical reports. This portal enabled all stakeholders to submit data online. The portal provides automated data collection, validation, processing and reports generation (using Tableau tool) for various divisions of TRAI.

### iii. Data Analytics and Cloud Services

Data received by TRAI through crowdsourcing and from various service providers is being used to create meaningful insights and information. To create various informational dashboards, TRAI uses free/licensed tools. TRAI has also leveraged cloud environment, especially NIC Cloud, for hosting of various TRAI applications which has saved in-house/data center infrastructure cost.

### iv. TRAI Recommendation Status Portal (TRSP)

The Authority from time to time makes recommendations to the Government of India for Telecom and Broadcasting Sector. With an objective to create central repository for real-time tracking of status of all recommendations, TRAI had developed the Recommendation Status Portal. This portal facilitates TRAI and DoT/MIB (Department of Telecommunications/Ministry of Information and Broadcasting) to track the status of recommendations. The implementation/action taken by the Government of India on such recommendations is being updated by respective departments and can be viewed through this portal.

### v. Channel Selector App

TRAI developed Channel Selector Mobile App in the year 2020 for Android & iOS. The App gave freedom to consumers to select the television channels they wanted to subscribe and watch. Through this app consumers can view their DPO's offerings, fetch the existing subscription details, choose & optimize channels and Bouquet selection, modify existing selection and set selection with respective DPOs (among 08 DTH/MSO). The App can suggest an optimum configuration i.e., combination of Channels/Bouquet based on consumer's selection to reduce the total monthly bill based on consumer's interest.

TRAI has also developed TV Channel Selector Portal to facilitate subscribers who either don't own smart phone or wish to use web browsers. And at present 17 DPOs are available in both App

& Portal. The Channel Selector App and Portal has become very popular among consumers to view & modify their subscriptions. As on date, 17 lakh consumers have checked their TV subscriptions and 10 lakh consumers have activated their subscriptions through the App/Portal.

#### vi. **Portal for Exemption from SMS Termination Charges**

To disseminate various G2C information government entities send transactional SMS to consumers, through alphanumeric headers. TRAI has earlier developed a portal for facilitating all government entities, who wish to have exemption from SMS termination charges of up to 5 paisa for sending transactional SMS. Through portal the entities can apply fresh or for renewal of exemption and know other related information.

Now, the data APIs has been integrated in the portal to directly fetch details of header registered in TSPs DLT system. Also, whenever a header has been granted exemption by TRAI, the details are communicated to the TSPs, through data APIs, for configuration in their billing system.

#### vii. **Header Information Portal**

When consumers receive transactional SMS sent through alphanumeric headers, they may wish to know the details of entity who has sent the SMS. To facilitate consumers, TRAI has earlier developed Header Information Portal where sender details can be seen. This portal also helps other principal entities to check whether any look-alike header is registered by any other entity. Anyone can query a particular header or download the complete list. TSPs upload the list of alpha-numeric headers assigned to Principal Entities (Business or legal entities).

Now data APIs has been integrated in the portal to fetch the details of header directly from TSPs DLT system without any need for uploading manually by TSPs.

#### viii. **Administrative automation**

Human Resources Management System maintains the database of employees including their personal and professional (career) details. The availability of such system with an online and updated database makes easy for government departments to automate day to day activities like maintaining personal files, leave management, reimbursements, advances, tours etc., much more efficiently and correctly. Now TRAI is implementing e-Human Resource Management System (e-HRMS) developed by NIC.

#### ix. **Infrastructure Upgradation**

- (i) To strengthen the network infrastructure, TRAI has updated Gateway Router and L3 Switch.
- (ii) For effective implementation of e-Office, High Speed Scanners were procured for TRAI HQ and RO's.
- (iii) With the introduction of e-Office in TRAI, all the documents are mandatorily required to be scanned and uploaded and moved in e-Office. To manage scanning activities high speed scanners were procured for TRAI HQ and RO's.
- (iv) Digital Signatures (DSC) has been provided to all officers upto the ranks of SRO.

- (v) All officers/officials of TRAI have been provided with webcam & headset to attend various online meetings/workshops/seminars/OHDs etc.

## 2.16. Consumer Outreach

Given the importance of reaching out to consumers all over the country, TRAI has a public interface with telecom subscribers through its website, social media platforms such as twitter, Facebook, YouTube channel and through Consumer Outreach Programmes conducted across the country. TRAI has instituted a system for registration of consumer organizations as Consumer Advocacy Groups (CAGs). The registered CAGs act as interlocutors between consumers, Telecom Service Providers & TRAI and assist TRAI in consumer education. TRAI is also constantly working for enhancing consumer awareness about their rights and service-related issues by bringing out educational/publicity material and undertaking media campaigns in the print and electronic media. During the pandemic TRAI continued these programmes through digital mode.

### (f) Implementation of National Telecom Policy

**2.17** As part of the National Digital Communications Policy (NDCP-2018), DoT through its letter dated 8<sup>th</sup> May, 2019, inter-alia, requested TRAI to furnish recommendations on enabling unbundling of different layers through differential licensing. Accordingly, after detailed consultation process, TRAI furnished its Recommendations on "Enabling Unbundling of Different Layers Through Differential Licensing" on 19<sup>th</sup> August, 2021.

The DoT through its letter dated 8<sup>th</sup> May, 2019, inter-alia, informed that the National Digital Communications Policy (NDCP), 2018 released by the Government of India under its 'Propel India' mission envisages Catalysing Investments for Digital Communications sector as one of the strategies, and simplifying and facilitating Compliance Obligations by reforming the Guidelines for Mergers & Acquisitions, 2014 to enable simplification and fast tracking of approvals is one of the action plan for fulfilling the aforementioned strategy. Through the said letter dated 8<sup>th</sup> May, 2019, DoT, inter-alia, requested TRAI to furnish recommendations on 'Reforming the Guidelines for Mergers & acquisitions, 2014'. After a detailed consultation process, on 21<sup>st</sup> February, 2020, the Authority submitted its recommendations on "Reforming the Guidelines for Transfer/Merger of Telecom Licenses". DoT, through its letter dated 14<sup>th</sup> October, 2021 sent its back reference to the said Recommendations. After reconsidering the views expressed by DoT, response to the back reference was sent on 27<sup>th</sup> November, 2021.

National Digital Communication Policy (NDCP-2018) as part of its mission has envisaged Creation of Robust Digital Communications Infrastructure to promote Broadband for All as a tool for socio-economic development, while ensuring service quality and environmental sustainability. Provisioning of Broadband for All is one of the objectives of NDCP-2018. For achieving this objective, TRAI has given its recommendations on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed" on 31<sup>st</sup> August, 2021. As part of these recommendations, TRAI has, covered aspects of broadband definition and categorization, broadband Proliferation and speed enhancement, broadband infrastructure creation and sharing, incentives to promote fixed-line broadband Proliferation and has, inter-alia, recommended:

- Enactment of National RoW Policy,
- Creation of National Portal for RoW permissions,
- Inclusion of RoW permission in Institutional Mechanism envisaged in National Broadband Mission & reconstitution of committees for better oversight,
- Uniform Restoration charges for open trench and pits, Broadband Readiness Index (BRI) score linked incentives for States/ UTs for implementing RoW reforms,
- Incentivize establishment of common ducts and posts for fiberisation & sharing with service providers on non- discriminatory basis,
- Exemption of RoW charges by State Govt/UTs for next five years for laying of common ducts and posts, similar to exemption granted under BharatNet project,
- Establishment of Common Ducts and Posts Development Agency (CDPDA) for planning and development of common ducts and posts infrastructure across the country,
- Notification of design and standards for common ducts and posts by TEC,
- Formulation of Policy for Cross-sector collaboration with other utility providers like roadways, railways, water, electricity, gas etc. for co-deployment of common ducts,
- Establishment of common ducts be made integral part of Smart City development plan,
- GIS mapping of all the passive infrastructure to facilitate sharing,
- Target linked financial incentives in the form of License Fee (LF) exemption for proliferation of fixed-line broadband services in urban and rural areas,
- A pilot DBT (Direct Benefit Transfer) scheme in rural areas for proliferation of fixed-line broadband subscribers,
- Annual spectrum auction of available spectrum for access networks,
- Assignment of backhaul spectrum on demand and in time-bound manner for connectivity of cellular networks,
- Expedite Auction of mid-band spectrum (3300-3600GHZ),
- Allocation of millimeter wave spectrum for IMT-2020,
- Utilization of BharatNet for fiberisation of backhaul of cellular networks,
- Declaration of User Equipment category for mobile handsets as per 3GPP standards by manufacturers and marketers for consumer awareness,
- Revision of minimum download speed for broadband connectivity from the present 512 Kbps to 2 Mbps.

### (g) Quality of Service (QoS)

**2.18** TRAI has laid down the benchmark for various Quality of Service parameters through the following regulations:

- (i) The Quality of Service of Broadband Service Regulations, 2006.
- (ii) The Standards of Quality of Service of Basic Telephone Service (wireline) and Cellular Mobile Telephone Service Regulations, 2009.
- (iii) The Standards of Quality of Service for Wireless Data Services Regulations, 2012.

The regulations for Wireline, Cellular and Broadband provides the network and customer parameters for compliance. On non-compliance of parameters, there is a provision for imposing Financial Disincentives on Service Providers.

The Quality-of-Service performance of service providers against the benchmarks is assessed through compliance reports submitted by service providers to TRAI. The compliance reports for Cellular Mobile Telephone Services, Wireless Data Services, Basic services (Wireline) and Broadband services are submitted on a quarterly basis.

The QoS regulations were reviewed in 2019 and TRAI issued “The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (seventh Amendment) Regulations, 2019” dated 1<sup>st</sup> November, 2019 thereby standardizing the duration of alert for the called party.

For ensuring compliance with the Quality of Service benchmarks and to protect the interests of the consumers, TRAI had prescribed the system of financial disincentives through the Second Amendment regulations issued on 8<sup>th</sup> November, 2012. These regulations provide financial disincentives for non-compliance with the benchmarks, delay in submission of compliance reports and false reporting.

For delay in submission of compliance report financial disincentives of Rs. 5,000/- per day. For false reporting, the financial disincentive is Rs. 10,00,000/- per parameter.

The details of the financial disincentives for Non-Compliance are given below:

#### **Cellular Services**

- (i) Not exceeding Rupees one lakh per parameter for first non-compliance with the benchmark in a quarter,
- (ii) Non-compliance with the benchmark of the same parameter consecutively in two or more subsequent quarters, not exceeding Rupees one and a half lakh for second consecutive contravention and not exceeding Rupees two lakh for each consecutive contravention thereof;
- (iii) Non-compliance with the benchmark for the same parameter in any subsequent quarter, which is not a consecutive non-compliance, Rupees one lakh per parameter.



### Basic Services (Wireline)

For non-compliance with the benchmarks the financial disincentive is ₹ 50,000/- per parameter.

### Broadband Wireless Services

For non-compliance with the benchmarks first instance the financial disincentive is ₹ 50,000/- per parameter and for alternate instance the financial disincentive is ₹ 1,00,000/- per parameter.

### Unsolicited Commercial Communications

- (i) For non-compliance due to failure to curb UCC from their networks the graded financial disincentive is as follows:

	Value of "Counts of UCC for RTMs for one calendar month"	Financial disincentives in Rupees
(a)	More than zero but not exceeding hundred	Rupees one thousand per count
(b)	More than hundred but not exceeding one thousand	Maximum financial disincentives at (a) plus Rupees five thousand per count exceeding hundred
(c)	More than one thousand	Maximum financial disincentives at (b) plus Rupees ten thousand per count exceeding one thousand

- (ii) For non-compliance to the provisions of Code(s) of Practice, Service Provider shall be liable to pay following amount:-

- not exceeding Rupees five thousand per day for the period of exceeding the timeline if the period of delay is less than or equal to thirty days;
- not exceeding Rupees twenty thousand per day for the additional period of delay which is more than thirty days;

The performance of the service providers is evaluated every quarter based on the compliance reports submitted by service providers and also based on the reports of the audit agencies engaged by TRAI. Wherever deficiencies in achieving the quality-of-service benchmarks have been noticed through close monitoring of the performance of service providers by way of periodic reports, audit and assessment of quality of service through independent agencies is conducted. TRAI has been following up with the service providers for addressing such deficiencies in achieving the benchmarks for the various parameters.

In this regard, various meetings were held in TRAI with the service providers from time to time. These meetings and follow-up action with the service providers have been pivotal in improving the quality of service.

Further, based on compliance reports, wherever non-compliance with the benchmarks is observed, the explanation of the service provider is called for and considering the explanation submitted by the service provider, gravity of non-compliance, action taken to improve the service, financial disincentives are imposed on service providers. The total financial disincentive imposed by TRAI during the financial year 2021-22 is ₹ 19,575,000/-. The total amount of financial disincentive received during the financial year 2021-22 on account of QoS regulations violations was ₹ 17,265,000/-.

TRAI also publishes information about the Quality of Service performance by service providers, the results of Audit and assessment of Quality of Service undertaken by Independent Agencies through its website for the information of stakeholders. The publishing of Quality of Service related information has also been forcing the service providers to improve the Quality of Service performance and also to address deficiencies in meeting the benchmarks.

#### **(h) Universal Service Obligation**

**2.19** The Authority made Recommendations for Support for Rural Wire-line Connections installed before 1<sup>st</sup> April, 2002 vide its recommendations dated 14<sup>th</sup> May, 2012. For the first year an amount of ₹ 1500 Crore was recommended as support and for the second year an amount ₹ 1250 Crore was recommended.

Further vide its Recommendation dated 22<sup>nd</sup> July, 2014, on “Improving Telecom Services in Andaman & Nicobar Islands and Lakshadweep”, the Authority forwarded a comprehensive telecom development plan for Andaman & Nicobar Islands and Lakshadweep.

In accordance with TRAI recommendation to Telecom Commission, an integrated and comprehensive telecom development plan for Andaman & Nicobar Islands and Lakshadweep was approved. As per the plan, CAPEX worth ₹ 2035 Crore will be funded by USO fund to provide submarine OFC connectivity with islands, Satellite bandwidth augmentation, seamless 2G coverage, and intra-island OFC network in Andaman & Nicobar Islands.

In 2016, the Union Cabinet approved the proposal to extend subsidy support of ₹ 1250 crore to BSNL from the USOF as compensation for the deficit incurred by BSNL in operating rural wire-line connections installed prior to 1<sup>st</sup> April, 2002.

In its recommendations dated 19<sup>th</sup> December, 2016 on provisioning of free data, the Authority has recommended that in order to bridge the affordability gap for the persons residing in rural areas and to support Government’s efforts towards cashless economy by incentivizing digital means, a scheme of providing free data of approx. 100 MB per month to rural subscribers for free may be launched and the cost of implementation of the scheme may be met from USOF.

To promote the broadband connectivity and to improve its performance, TRAI issued a Consultation Paper on “Roadmap to promote Broadband connectivity and enhanced broadband speed” on 20<sup>th</sup> August, 2020, and sent its Recommendations to the Government on 31<sup>st</sup> August, 2021.



Further, Chairman TRAI visited the State of Sikkim in August, 2021 and reviewed the status of Telecom Services in the state. During the review meeting, there was participation from the TSPs and BBNL, an SPV for BharatNet Project funded by USOF and State Government.

The present state of Telecom Network in the state and action plan for further improvement in the Telecom Network of the state through the USO funded projects were discussed and following broad actions were proposed:

- (i) Creation of a single window system at state level for clearances of various issues taken up by the service providers specially those related to RoW, Permission for space installations of towers/Fiber based equipment at GPs and also provision of electricity.
- (ii) Both BSNL & BBNL to sort out their issues and resolve to complete BharatNet Project at the earliest in a time bound manner.
- (iii) Possibilities should be explored to share infrastructures not only for quick roll out of network but also avoid multiple expenditure on creation of similar type of infrastructure by each service provider.
- (iv) Utilization and leveraging of PGCIL Fibre/Bandwidth infrastructure should also be explored by TSPs.
- (v) It should be ensured that connectivity to unconnected people needs to be extended. No one should be deprived of communication facilities in the state. Support from the Govt if any, needs to be clearly spelt out by TSPs.

TRAI from time to time evaluates and proposes suitable measures for USOF Project implementation.

## 2.20 Other Activities

### 2.20.1 Open House Discussion (OHD)

- **OHD held on 2<sup>nd</sup> June, 2021 through Video Conferencing on the Consultation Paper on “Licensing Framework for Satellite-based connectivity for low bit rate applications”**

TRAI on 2<sup>nd</sup> June, 2021 convened an Open House Discussion through Video Conferencing on the Consultation Paper on “Licensing Framework for Satellite-based connectivity for low bit rate applications”.

The OHD was convened to obtain the valuable inputs of the concerned stakeholders. Several stakeholders including telecom service providers, Industry associations, etc. participated in the open house discussion. There was a good response for conducting the OHD through Video Conferencing even during the Covid pandemic.

- **OHD held on 23<sup>rd</sup> June, 2021 through Video Conferencing on the Supplementary Consultation Paper on “Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed”**

TRAI on 23<sup>rd</sup> June, 2021 convened an Open House Discussion through Video Conferencing on the Supplementary Consultation Paper on “Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed”.

The OHD was convened to obtain the valuable inputs of the concerned stakeholders. Several stakeholders including telecom service providers, Industry associations etc participated in the open house discussion. There was a good response for conducting the OHD through Video Conferencing even during the Covid pandemic.

- **OHD held on 28<sup>th</sup> July, 2021 through Video Conferencing on the Consultation Paper on “Validity period of Tariff Offers”**

TRAI on 28<sup>th</sup> July, 2021 convened an Open House Discussion through Video Conferencing on the Consultation Paper on “Validity period of Tariff Offers”.

The OHD was convened to obtain the valuable inputs of the concerned stakeholders. Several stakeholders including telecom service providers, Industry associations etc participated in the open house discussion. There was a good response for conducting the OHD through Video Conferencing even during the Covid pandemic.

- **OHD held on 19<sup>th</sup> January, 2022 through Video Conferencing on the Consultation Paper on “Tariff issues related to SMS and Cell Broadcast alerts disseminated through Common Alerting Protocol (CAP) platform during disasters/non-disasters”**

TRAI on 19<sup>th</sup> January, 2022 convened an Open House Discussion through Video Conferencing on the Consultation Paper on “Tariff issues related to SMS and Cell Broadcast alerts disseminated through Common Alerting Protocol (CAP) platform during disasters/non-disasters”.

The OHD was convened to obtain the valuable inputs of the concerned stakeholders. Several stakeholders including telecom service providers, Industry associations etc participated in the open house discussion. There was a good response for conducting the OHD through Video Conferencing even during the Covid pandemic.

- **OHD held on 27<sup>th</sup> January, 2022 through Video Conferencing on the Consultation Paper on “Market Structure/Competition in cable TV services”**

TRAI on 27<sup>th</sup> January, 2022 convened an Open House Discussion through Video Conferencing on the Consultation Paper on “Market Structure/Competition in cable TV services”.

The OHD was convened to obtain the valuable inputs of the concerned stakeholders. Several stakeholders participated in the open house discussion. There was a good response to the OHD conducted through Video Conferencing even during the Covid pandemic.

- **OHD held on 8<sup>th</sup> February, 2022 through Video Conferencing on the Consultation Paper on “Auction of Spectrum in frequency bands identified for IMT/5G”**

TRAI on 8<sup>th</sup> February, 2022 convened an Open House Discussion through Video Conferencing on the Consultation Paper on “Auction of Spectrum in frequency bands identified for IMT/5G”.

The OHD was convened to obtain the valuable inputs of the concerned stakeholders. Several stakeholders including telecom service providers, Industry associations etc participated in the open house discussion. There was a good response to the OHD conducted through Video Conferencing even during the Covid pandemic.

- **OHD held on 25<sup>th</sup> February, 2022 through Video Conferencing on the Consultation Paper on “Licensing Framework for Establishing Satellite Earth Station Gateway”**

TRAI on 25<sup>th</sup> February, 2022 convened an Open House Discussion through Video Conferencing on the Consultation Paper on “Licensing Framework for Establishing Satellite Earth Station Gateway”.

The OHD was convened to obtain the valuable inputs of the concerned stakeholders. Several stakeholders including telecom service providers, Industry associations etc participated in the open house discussion. There was a good response to the OHD conducted through Video Conferencing even during the Covid pandemic.

#### **2.20.2 Study Paper dated 31<sup>st</sup> May, 2021 on “Achievements in Digital Communications 2014-2020”**

The Authority on 31<sup>st</sup> May, 2021 issued a study paper on “Achievements in Digital Communications 2014-2020”. The study paper elaborates on empowering the Consumers, Ease of doing Business Initiatives, Strategic Initiatives Light Touch Regulations, Harnessing the power of Digitization, Framework for Futuristic Telecom Services, Enhancing Consumer Choice in Broadcasting and Covid-19 Pandemic Pre-emptive Measures. This document enlists the achievements made by India in the communication sector as a whole and digital communication in particular, during the period from 2014 to 2020 and the contribution of TRAI in this journey.

#### **2.20.3 Pilot study for Next Generation Telecom Infrastructure deployment using street furniture**

In order to expedite the availability of digital infrastructure for quick roll out of next generation networks, TRAI has formed four working groups at Kandla Port, Smart City Bhopal, Delhi Airport and Namma Metro Bengaluru for next Generation Telecom Infrastructure deployment using street furniture. These working groups have representatives of TRAI, DoT, Local Authorities, concerned Central Ministries and major Telecom Service Providers. The learning from these pilots will help in enabling small cell deployment at various locations using existing street furniture such as traffic signals, lit signage, lamp posts, light poles, utility poles, billboards etc. These pilots aim to put in place the enabling Regulatory and Policy framework for all stakeholders much ahead of actual deployment.

After the formation of working groups, the kickstart pilot study at GMR International Airport at Delhi was held on 21<sup>st</sup> March, 2022 and at Smart City Bhopal on 29<sup>th</sup> March, 2022.

#### **2.20.4 Consumer Outreach Programme (COP)**

Given the importance of reaching out to consumers all over the country, TRAI has a public interface with telecom subscribers through its website, social media platforms such as Twitter, Facebook, YouTube channel and through Consumer Outreach Programmes conducted across the country. TRAI has instituted a system for registration of consumer organizations as Consumer Advocacy Groups (CAGs). The registered CAGs act as interlocutors between consumers, Telecom Service Providers & TRAI and assist TRAI in consumer education. TRAI is also constantly working for enhancing consumer awareness about their rights and service by bringing out

educational/publicity material and undertaking media campaigns in the print and electronic media.

To enhance consumer education and awareness, TRAI organises Consumer Outreach Programmes (COPs) across the length and breadth of the country. These COPs also provide a platform to consumers to raise their local issues with TRAI and telecom service providers. During the year, TRAI organised 49 Consumer Outreach Programmes (COPs) through online platform catering to different places all over the country. The list of COPs organized is at Annexure -I.

#### 2.20.5 Registration of Consumer Advocacy Groups

Consumer Advocacy Groups (CAGs) registered with TRAI co-ordinate and assist TRAI in dissemination of information about TRAI activities to consumers awareness programs in their areas. They also participate in consumer outreach program conducted by TRAI. These CAGs also are members of the Advisory Committee to the Appellate Authorities of TSPs. A review of the performance of CAGs whose tenure were due for renewal w.e.f. 1<sup>st</sup> April, 2022 was carried out. Some new organisations have also applied. A total of 41 applications for fresh registration and 25 applications (out of 32) for renewal have been received.

Regional Workshops are conducted regularly for the Capacity building of CAGs. In the year 2021-22, total three workshops were conducted, respectively on 18<sup>th</sup> October, 2021 at Manali (HP), 19 November 2021 at Bhuj-Kutch (Gujarat) and 23<sup>rd</sup> December, 2021 at Amarkantak (MP).







**Dr. P.D. Vaghela, Chairman, TRAI inaugurated Regional Workshop on Capacity Building of Consumer Advocacy Groups (CAGs) at Manali (HP).**

#### **2.20.6 Consumer Education Literature and Media Campaigns**

MNP Videos in Hindi and English have been developed for easy understanding of simplified procedure of MNP. These videos help consumers participating in Consumer Outreach Programs of TRAI. These videos can also be used by CAGs in their Consumer Awareness Programs. These videos are also made available on TRAI portal and YouTube channel for wider accessibility of consumers. Consumer Handbook of Broadcasting and Cable Services have been prepared and made available on TRAI Portal.

#### **2.20.7 Seminars/Webinars on Consumer Interests and Protection**

One of the important objectives of TRAI is to create awareness and safeguard consumer interests. To achieve this objective, TRAI organizes seminars on contemporary technological and consumer related issues. These seminars provide consumers to update themselves about the developments in Telecom and Broadcasting space. The webinars conducted through online platform enabled participants to join the events from any part of the country with a simple registration process. The Ten Webinars (Seminars held through online mode) organised by TRAI during the year are as follows:

S. No.	Topics	Conducted by RO	Date
1	Internet of things (IoT)- Trends, Security Challenges and Solutions	Hyderabad	28.10.2021
2	Cloud Computing - Demystified	Jaipur	18.11.2021
3	Satellite Communications – Emerging Trends & Challenges	Bangalore	02.12.2021
4	5G in India-Architecture & Features, Use Cases, Roadmap and Challenges	Bhopal	17.12.2021
5	Cyber Frauds- General Awareness and Cyber Securities Measures	Hyderabad	20.01.2022
6	Telecom Infrastructure for 5G readiness in North-eastern States of India	Kolkata	01.02.2022
7	Blockchain technology and its applications	Jaipur	11.03.2022
8	Use of Street Furniture for 5G Deployment	Kolkata	15.03.2022
9	Enabling Broadband connectivity in India	Bhopal	16.03.2022
10	Consumer Protection in Digital Era	Bengaluru	24.03.2022

### 2.20.8 Redressal of Consumer Grievances

TRAI Act, 1997 does not envisage handling of individual consumer complaints by TRAI. However, to protect the interest of consumers, TRAI has mandated all Telecom Service Providers to establish a two-tier Complaint Grievance Redressal mechanism for handling consumer complaints. In terms of this mechanism, a consumer can lodge service-related complaints at the complaint centre of their Telecom Service Providers (TSPs). In case complaint is not redressed satisfactorily by the service provider at the complaint centre, an appeal can be registered with Appellate Authority of the TSPs.

The complaints received in TRAI are forwarded to concerned service providers for taking appropriate action. During the period from 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022, TRAI received 51927 complaints related to Telecom services and 8472 complaints in Broadcasting and Cable TV. All these complaints were forwarded to concerned service providers for appropriate action. Complaints of generic nature or requiring class action were handled to address the underlying issues.

To discuss the consumer centric issues regular meetings were held with service providers on various issues like number of consumer complaints and appeals, major areas of consumer grievances and efforts of service providers for improvement etc.

## 2.21. Broadcasting Sector

### 2.21.1 Channel Selector Portal

TRAI, in March 2017, notified the 'New Regulatory Framework' (or the New Framework) for Broadcasting and Cable services. The new framework came into effect on 29<sup>th</sup> December, 2018. The new framework gave the consumers the freedom to select only those channels which they want to watch and remove other channels from their existing subscription.

In order to help consumers for ease in selection of channels (addition/deletion), TRAI launched TV Channel Selector Portal on 16<sup>th</sup> June, 2021 to facilitate subscribers who either don't own a smart phone or wish to use web browsers. TRAI also earlier launched Channel Selector App on 25<sup>th</sup> June, 2020. The prominent feature of both App and portal is optimisation of the subscription before it is sent to DTH / Cable operator, so that subscribers can get best value for money. The portal has all the existing features of an App, along with download facility and help subscribers to:

- Check their own subscription
- View all channels and Bouquets provided by their DTH/Cable Operator
- Choose only the channel of interest and remove other channels
- Get optimized solution
- Facility to add channels in the applicable NCF
- Allow users to modify existing subscription
- Check real time status of your subscription request
- Download and print current subscription, offerings & set subscription request

#### **2.21.2 Letter dated 8<sup>th</sup> December, 2021 to all Broadcasters and Distributors of TV Channels regarding implementation of Telecommunication (Broadcasting and Cable) Services Register of Interconnection Agreements and all such other matters Regulations, 2019**

TRAI issued letter dated 8<sup>th</sup> December, 2021 vide which all the broadcasters and distributors of TV channels were requested to immediately implement the provisions of the Telecommunication (Broadcasting and Cable) Services Register of Interconnection Agreements and all such other matters Regulations, 2019, and submit the compliance report within fifteen days from the date of issue of this letter; failing which, action would be taken as per the provisions of the said regulations and TRAI Act, 1997.

#### **2.21.3 Empanelment of auditors to carry out audit of Digital Addressable System (DAS) in Broadcasting and Cable Service sector**

During the year 2021-22, TRAI has empanelled 7 new auditors to carry out the audit of digital addressable system in compliance of provision of regulation 15 of the Interconnection Regulation, 2017 as amended. During the year 2021-22, TRAI has also granted extension of empanelment to 14 existing empanelled auditors to carry out audit of DAS for further period of two years. Updated list of empanelled auditors is available in public domain of TRAI website for reference of stakeholders.

As per reports received from the empanelled auditors and BECIL, during the year 2021-22, a total number of 520 audits of Digital Addressable Systems were undertaken by them. Out of these 520 Audits, DPO-caused audits were 332 and broadcasters-caused audits were 188 during the year.

## 2.22 International Relations

### 2.22.1 India's Status as Collaborative Regulatory Regime

The development of the G5 benchmark index by the International Telecommunication Union (ITU) was prompted by the need to measure how countries transition to a holistic digital collaborative regulation and policy making in the digital economy. In this context, ITU has defined a matrix that allows countries to understand their position in the transition to the next frontier in the regulatory and policy-making environment.

TRAI has been submitting data for the ICT Regulatory Survey being conducted by ITU every year. In the year 2020, India was categorised as a country at transitioning stage on G5 Benchmark of collaborative regulation with a G5 score of 55.77. As per the latest ITU G5 benchmark scorecard of various countries for the year 2021, G5 score of India is 76.85 and it has been categorized as a country having advanced stage of collaborative regulation.

### 2.22.2 Bi-lateral Agreements (Letter of Intent) signed by TRAI

TRAI is a Sector Member of International Telecommunications Union (ITU) and has been actively involved in not only ITU Related activities, but also activities related to other international multilateral platforms such as APT (Asia Pacific Tele-community), SATRC (South Asian Telecom Regulatory council), ASEAN (Association of South East Asian Nations), BRICS (Brazil, Russia, India, China, South Africa) etc.

For further strengthening the existing friendly relations and to boost cooperation between TRAI and international regulatory bodies, TRAI has signed bi-lateral agreements in the forms of Letter of Intent (LoI) and Memorandum of Understanding (MoU) with International Regulators in the past.

The bi-lateral agreements help in cooperation in matters of mutual interest through the exchange of ideas, information, personnel, skills and it has reciprocal benefits to both the signing Parties.

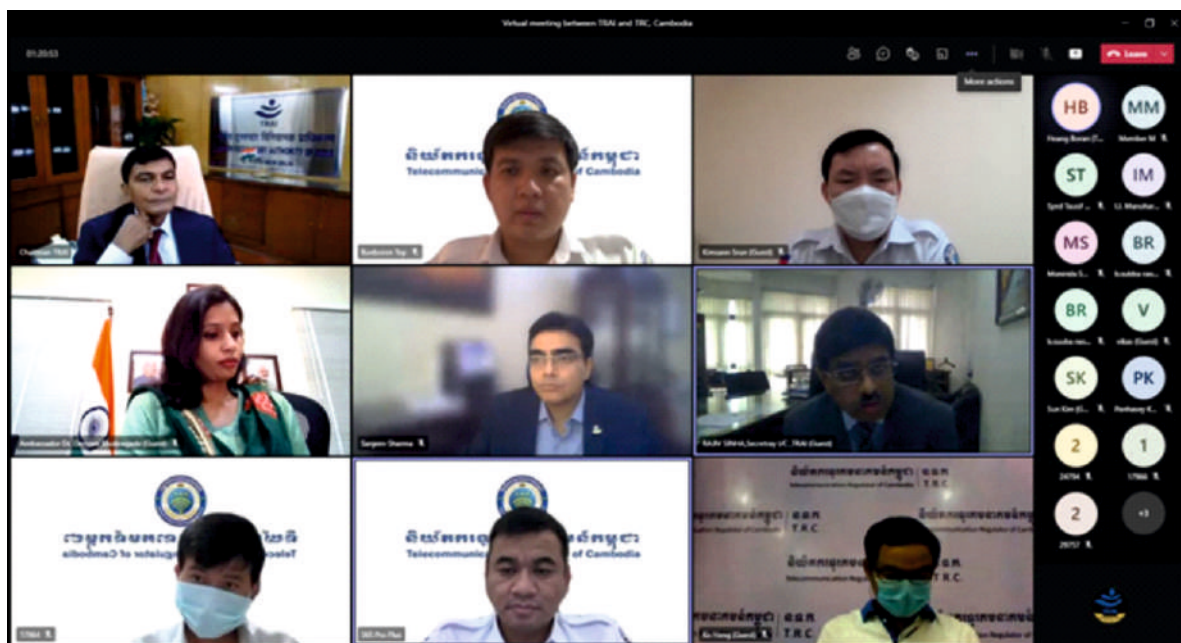
During the year, TRAI has signed the following Bi-lateral Agreements (Letter of Intent):

S. No.	Name of the Regulator/Organisation	Signed on
1	Telecommunications and Post Regulatory Authority (TPRA), Sudan	6 <sup>th</sup> April, 2021
2	Telecommunications Regulator of Cambodia (TRC), Cambodia	17 <sup>th</sup> June, 2021
3	Botswana Communications Regulatory Authority (BOCRA), Botswana	22 <sup>nd</sup> June, 2021
4	Information and Communications Technologies (ICT) Authority, Mauritius	07 <sup>th</sup> July, 2021

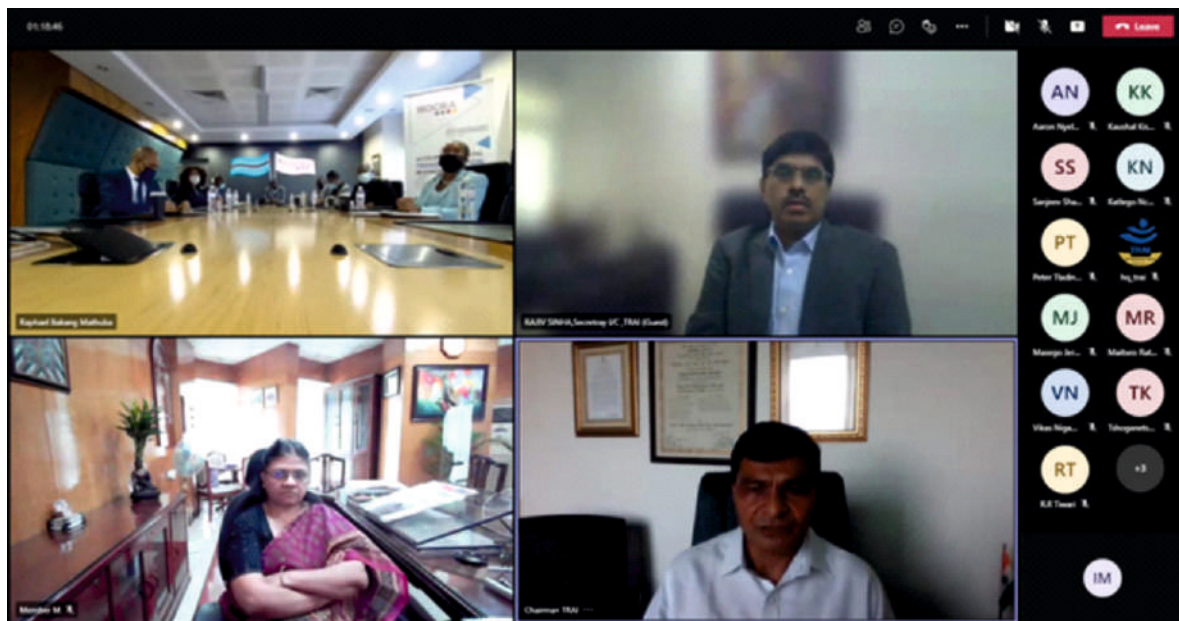




Letter of Intent (LoI) was signed between Telecom Regulators of India and Sudan. In the presence of HE Dr. Ravindra P. Jaiswal, Indian Ambassador to Sudan, Dr. P.D. Vaghela, Chairman TRAI and H.E. Dr. Elsdig Gamalden, President, TPRA signed the agreement.



A Letter of Intent has been signed between Telecom Regulators of India & Cambodia. Dr. P.D. Vaghela, Chairman, TRAI & H.E. Chenda Thong, Chairman, TRC signed an agreement in the presence of H.E. Dr. Devyani Uttam Khobragade, Indian Ambassador to Cambodia.



**A Letter of Intent has been signed between Telecom Regulatory Authority of India (TRAI) & Botswana Communications Regulatory Authority (BOCRA). Dr. P.D. Vaghela, Chairman, TRAI & H.E. Tsaone Ruth Thebe, Board Chair, BOCRA signed the agreement virtually.**



**A Letter of Intent has been signed between Telecom Regulatory Authority of India (TRAI) & Information & Communication Technologies Authority (ICTA), Mauritius. Dr. P.D. Vaghela, Chairman, TRAI & Mr. Dick Christophe NG SUI WA, Chairperson, ICTA signed the agreement**



### 2.22.3 Capacity Building Programme for Officers from BICMA (Bhutan InfoComm and Media Authority) and Ministry of Information and Communications (MoIC), Royal Government of Bhutan (26<sup>th</sup> July to 30<sup>th</sup> July, 2021)

TRAI conducted a 5-day online Training Programme for the officers of BICMA and MoIC from 26<sup>th</sup> to 30<sup>th</sup> of July, 2021. The training was attended by 12 participants, 10 from BICMA and 2 from MoIC, Royal Government of Bhutan. For the session on Emerging Technologies, 8 more participants joined from MoIC. The TRAI Officers were the resource persons for this training programme.

The modular training programme was designed including the topics suggested by Bhutan as mentioned below: -

**Module 1** - 5G Spectrum Planning and Technology Implementation

**Module 2** - Mobile (Voice and Data) Quality of Service (QoS)

Regulations, Benchmarking and Monitoring.

**Module 3** - Accounting Separation

There was enthusiastic participation in all the sessions by the participants. The sessions were highly interactive and informative. Excellent Feedback was received from all the participants of this course.



#### 2.22.4 Capacity Building Program for Telecommunications & Posts Regulatory Authority (TPRA), Sudan (20<sup>th</sup> September to 27<sup>th</sup> September, 2021)

TRAI has conducted a virtual training programme for the officers of TPRA (Telecommunications & Post Regulatory Authority), Sudan under the ITEC (Indian Technical and Economic Cooperation) programme from 20<sup>th</sup> to 27<sup>th</sup> September, 2021. The training was attended by 18 participants. The TRAI Officers handled all the sessions as the resource persons.

The training programme was designed module-wise, including the topics requested by TPRA, Sudan, which are mentioned below :-

**Module 1 - Infrastructure Sharing**

**Module 2 - Interconnection Regulation and Policies**

**Module 3 - Telecom Tariff and Pricing Regulation**

There was enthusiastic participation in all the sessions by the participants. The sessions were highly interactive and informative. The training programme was well received by all the participants of this course.



A five-day online Capacity Building Program for officers from the Telecommunication and Posts Regulatory Authority (TPRA), of Sudan, was inaugurated on 20.09.2021

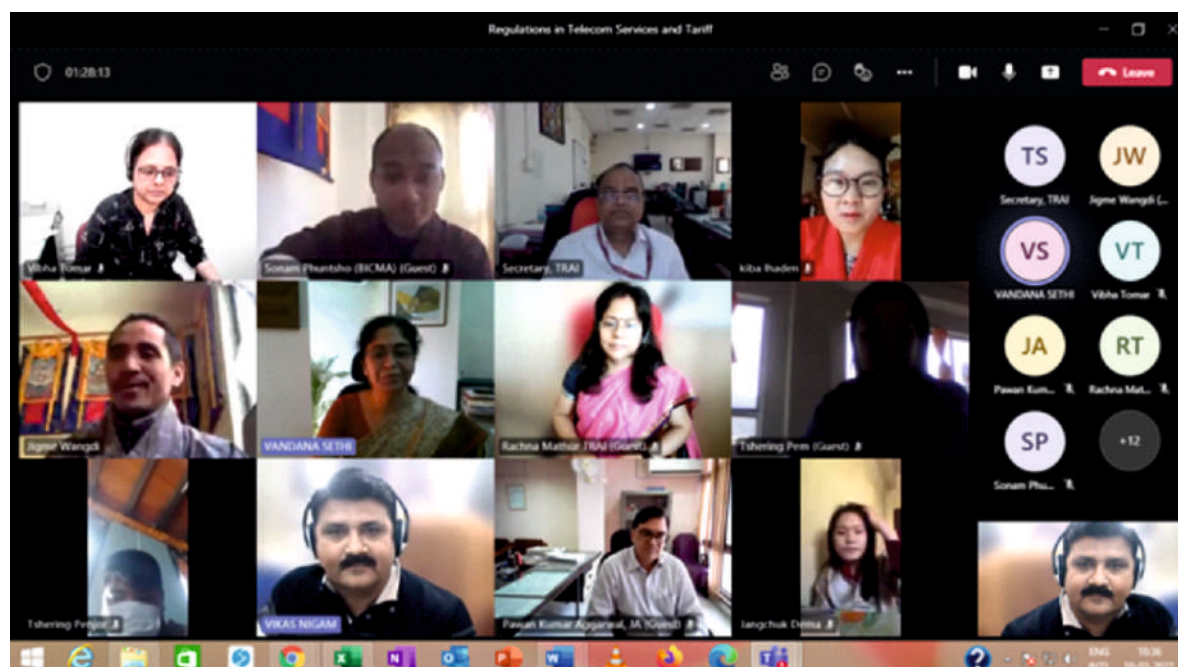
### 2.22.5 Capacity Building Programme for Officers from BICMA, Royal Government of Bhutan (10<sup>th</sup> & 11<sup>th</sup> March, 2022)

TRAI conducted a virtual training programme for the officers of BICMA (Bhutan InfoComm and Media Authority), Bhutan on 10<sup>th</sup> -11<sup>th</sup> March, 2022. The training was attended by 10 participants from BICMA. The TRAI officers were resource persons who made presentations on the various topics.

The training programme was designed by experts from TRAI by including the topics suggested by BICMA, Bhutan, which are mentioned below: -

- Telecom Regulation (MNP, Interconnection and IUC)
- Quality of Service Regulation
- Universal Training Programmes in Telecommunications
- Social Impact and Regulation due to Emerging Technologies
- Regulation on Foreign Satellite Service
- Tariff Regulation and Accounting Separation

The participants gave a positive feedback regarding effective handling of the topics and sessions. The quality of presentations was also appreciated by the participants and the session were conducted in an interactive manner.





### 2.22.6 Bi-lateral Meetings held by the Authority

- i. Bilateral meetings were held by Authority-TRAI with following dignitaries during their visit to attend 'GSMA Mobile World Congress' at Barcelona, Spain from 28<sup>th</sup> February, to 2<sup>nd</sup> March, 2022
  - Ms. Annemarie Sipkes, Chairwoman – BEREC (Body of European Regulators for Electronic Communication)
  - Ms. Jessica Rosenworcel, Chairwoman FCC (Federal Communications Commission), United States of America



**Bilateral Meeting of Authority-TRAI with Chair-BEREC (Body of European Regulators for Electronic Communication)**



**Bilateral Meeting of Authority- TRAI with Chairwoman, FCC (Federal Communications Commission), USA**

#### **2.22.7 Virtual Bilateral Meetings**

- (i) Virtual Bilateral Meetings were held between Officers of TRAI and Ofcom, UK on 17<sup>th</sup> November, 2021 and 15<sup>th</sup> December, 2021.
- (ii) Virtual meeting was held between two study groups of NTRA and TRAI on 12<sup>th</sup> January, 2022.

#### **2.22.8 Two joint study groups were constituted between NTRA and TRAI – (i) Joint study group on Spectrum related issues (ii) Joint study group on Regulatory Challenges & Business Growth**

#### **2.23 In addition to the various matters discussed in the report, there are certain important Administrative and Legal issues which are under consideration of DoT as following:**

##### **(i) Proposal for Amendment of TRAI Act 1997**

TRAI has been established under TRAI Act 1997, inter-alia to regulate the telecommunication services and to protect the interest of service providers and consumers of telecom sector. The Authority has been conferred powers to issue directions, regulations, and orders in discharge of its regulatory functions but does not have any power to take punitive action to secure compliance of the regulatory measures taken by it. In order to ensure effective discharge of its functions under TRAI Act, 1997 the Authority sent a comprehensive proposal for amendment in the TRAI Act in the year 2007. Thereafter, several correspondences were made with DoT and two draft notes for Cabinet were also prepared by DoT, but the proposed amendments are yet to be made. Therefore, a comprehensive proposal for amendment in TRAI Act was sent to DoT on 3<sup>rd</sup> June, 2016. Subsequently, several meetings have been held between TRAI and DoT to discuss the

proposed amendments. TRAI also forwarded the detailed comments on 27<sup>th</sup> June, 2017. In this regard last meeting was held on 1<sup>st</sup> December, 2017 and some clarifications were also forwarded to DoT on 5<sup>th</sup> December, 2017, 10<sup>th</sup> April, 2018, 21<sup>st</sup> August, 2019 and 9<sup>th</sup> December, 2019. Another letter dated 12<sup>th</sup> February, 2021 was received from DoT requesting TRAI to furnish inputs on proposed amendments to TRAI Act, 1997 as well as on the draft Telecommunication Bill. Therefore, a comprehensive proposal for amendments to TRAI Act, 1997 was again sent to DoT on 2<sup>nd</sup> June, 2021. A meeting was held with DoT on 18<sup>th</sup> August, 2021 and some clarifications were forwarded to DoT on 5<sup>th</sup> October, 2021. A reminder was also sent to DoT on 19<sup>th</sup> January, 2022 to expedite the proposed amendments.

The proposal for amendment of TRAI Act, 1997 is under consideration of DoT.

**(ii) Amendment in Schedule I of TRAI (Salary, Allowances and other conditions of service of the officers and employee) Rules, 2002**

Schedule I of TRAI (Salary, Allowances and other conditions of service of the officers and employee) Rules, 2002 needs modifications to incorporate scales as per 7<sup>th</sup> Pay Commission.

Schedule-I of the TRAI (Salary, Allowances and other conditions of Service of the officers and employees) Rules, 2002 has been amended by DoT vide notification dated 11<sup>th</sup> February, 2022 published in the Official Gazette on 14<sup>th</sup> February, 2022 with the issue of Telecom Regulatory Authority of India (Salary, Allowances and other conditions of Service of the officers and employees) Amendment Rules, 2022. Vide this notification dated 11<sup>th</sup> February, 2022, the Central Govt. has amended part of the Schedule-I and restructured the post of Staff Car Driver into four Grades, insertion of the post of Photocopy Machine Operator and Dispatch Rider and also redesignation of the post of Attendant to Multi-Tasking Staff.



**List of COPs held during the period from 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022**

S. No.	Targeted area of the online COPs	Date
1.	Rajasthan	06.07.2021
2.	Karnataka	14.07.2021
3.	Chhattisgarh	15.07.2021
4.	West Bengal (Kolkata)	16.07.2021
5.	Andhra Pradesh	22.07.2021
6.	Uttarakhand	05.08.2021
7.	Maharashtra	06.08.2021
8.	Jharkhand (Dhanbad City)	10.08.2021
9.	Gujarat	13.08.2021
10.	Telangana	17.08.2021
11.	West Bengal (Malda Town)	24.08.2021
12.	Haryana	27.08.2021
13.	Goa	03.09.2021
14.	Maharashtra	08.09.2021
15.	Agartala, Tripura	14.09.2021
16.	Odisha	15.09.2021
17.	Kerala	23.09.2021
18.	Sikkim (Gangtok)	28.09.2021
19.	Punjab	29.09.2021
20.	Uttar Pradesh	30.09.2021
21.	Port Blair, A&N Islands	08.10.2021
22.	Tamil Nadu	21.10.2021
23.	Bihar (Patna)	26.10.2021
24.	Rajasthan	29.10.2021
25.	Madhya Pradesh	29.10.2021
26.	Arunachal Pradesh (Itanagar)	12.11.2021
27.	Kerala	17.11.2021
28.	Karnataka	24.11.2021
29.	Andhra Pradesh	26.11.2021
30.	Chhattisgarh	29.11.2021
31.	Nagaland and Manipur	01.12.2021
32.	Gujarat	08.12.2021
33.	Uttarakhand	10.12.2021
34.	Telangana	15.12.2021
35.	Meghalaya & Mizoram	16.12.2021
36.	Maharashtra	22.12.2021
37.	Haryana	30.12.2021
38.	Uttar Pradesh	12.01.2022

39.	Assam	19.01.2022
40.	Punjab	21.01.2022
41.	Odisha	28.01.2022
42.	Kerala	28.01.2022
43.	Rajasthan	11.02.2022
44.	Goa	22.02.2022
45.	Madhya Pradesh	24.02.2022
46.	Tamil Nadu	25.02.2022
47.	Bhopal	23.03.2022
48.	Andhra Pradesh	25.03.2022
49.	Gujarat	30.03.2022

## **PART - III**

**FUNCTIONS OF THE TELECOM REGULATORY  
AUTHORITY OF INDIA IN RESPECT OF MATTERS  
SPECIFIED IN SECTION 11 OF THE TRAI ACT**



## FUNCTIONS OF THE TELECOM REGULATORY AUTHORITY OF INDIA IN RESPECT OF MATTERS SPECIFIED IN SECTION 11 OF THE TRAI ACT

Section 11 of the Telecom Regulatory Authority of India Act, 1997, as amended, provides that –

- (1) notwithstanding anything contained in the Indian Telegraph Act, 1885 (13 of 1885), the functions of the Authority shall be to—
  - (a) make recommendations, either suo motu or on a request from the licensor, on the following matters, namely:
    - (i) need and timing for introduction of new service provider.
    - (ii) terms and conditions of licence to a service provider.
    - (iii) revocation of licence for non-compliance of terms and conditions of licence.
    - (iv) measures to facilitate competition and promote efficiency in the operation of telecommunication services so as to facilitate growth in such services.
    - (v) technological improvement in the services provided by the service providers.
    - (vi) type of equipment to be used by the service providers after inspection of equipment used in the network.
    - (vii) measures for the development of telecommunication technology and any other matter relatable to telecommunication industry in general.
    - (viii) efficient management of available spectrum.
  - (b) discharge the following functions, namely:
    - (i) ensure compliance of terms and conditions of licence.
    - (ii) notwithstanding anything contained in the terms and conditions of the licence granted before the commencement of the Telecom Regulatory Authority of India (Amendment) Act, 2000, fix the terms and conditions of inter-connectivity between the service providers.
    - (iii) ensure technical compatibility and effective inter-connection between different service providers.
    - (iv) regulate arrangement amongst service providers of sharing their revenue derived from providing telecommunication services.
    - (v) lay-down the standards of quality of service to be provided by the service providers and ensure the quality of service and conduct the periodical survey of such service provided by the service providers so as to protect interest of the consumers of telecommunication service.
    - (vi) lay-down and ensure the time period for providing local and long-distance circuits of telecommunication between different service providers.

- (vii) *maintain register of interconnect agreements and of all such other matters as may be provided in the Regulations.*
- (viii) *keep register maintained under clause (vii) open for inspection to any member of public on payment of such fee and compliance of such other requirement as may be provided in the regulations.*
- (ix) *ensure effective compliance of universal service obligations.*
- (c) *levy fees and other charges at such rates and in respect of such services as may be determined by Regulations.*
- (d) *perform such other functions including such administrative and financial functions as may be entrusted to it by the Central Government or as may be necessary to carry out the provisions of this Act:*

*Provided that the recommendations of the Authority specified in clause (a) of this sub-section shall not be binding upon the Central Government.*

*Provided further that the Central Government shall seek the recommendations of the Authority in respect of matters specified in sub-clauses (i) and (ii) of clause (a) of this sub-section in respect of new licence to be issued to a service provider and the Authority shall forward its recommendations within a period of sixty days from the date on which that Government sought the recommendations:*

*Provided also that the Authority may request the Central Government to furnish such information or documents as may be necessary for the purpose of making recommendations under sub-clauses (i) and (ii) of clause (a) of this sub-section and that Government shall supply such information within a period of seven days from receipt of such request:*

*Provided also that the Central Government may issue a licence to a service provider if no recommendations are received from the Authority within the period specified in the second proviso or within such period as may be mutually agreed upon between the Central Government and the Authority:*

*Provided also that if the Central Government having considered that recommendation of the Authority, comes to a prima facie conclusion that such recommendation cannot be accepted or needs modifications, it shall, refer the recommendation back to the Authority for its reconsideration, and the Authority may within fifteen days from the date of receipt of such reference, forward to the Central Government its recommendation after considering the reference made by that Government. After receipt of further recommendation if any, the Central Government shall take a final decision.*

- (2) *Notwithstanding anything contained in the Indian Telegraph Act, 1885 (13 of 1885), the Authority may, from time to time, by order, notify in the Official Gazette the rates at which the telecommunication services within India and outside India shall be provided under this Act including the rates at which messages shall be transmitted to any country outside India:*

*Provided that the Authority may notify different rates for different persons or class of persons for similar telecommunication services and where different rates are fixed as aforesaid the Authority shall record the reasons there for.*

- (3) *While discharging its functions under sub-section (1) or sub-section (2) the Authority shall not act against the interest of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality.*
- (4) *The Authority shall ensure transparency while exercising its powers and discharging its functions.*

3. The Authority, in pursuance of achieving the objectives of ensuring growth of industry and protecting interest of consumers has made several Recommendations either suo moto or on matters referred to it by the Government; notified various Regulations to carry out purposes of the Act; taken action to enforce licence terms and conditions; and initiated work on several other issues. By discharging various recommendatory & regulatory functions, TRAI has contributed to growth of telecom services including the broadcasting and cable TV services in terms of increased number of consumers and a vast network providing telecom services across the length and breadth of the country. These continued measures have also resulted in overall benefits to the consumer in terms of choice of services, reduced tariff of telecom service, better quality of service etc. Some of the specific functions carried out by TRAI in respect of various matters specified in Section 11 of the TRAI Act are as follows.

**a) Telecommunication rates both within India and outside India including the rates at which messages shall be transmitted to any country outside India**

3.1 Section 11 (2) of the Telecom Regulatory Authority of India Act, 1997 as amended by TRAI (Amendment) Act, 2000, empowers the Authority to notify in the Official Gazette the rates at which telecommunication services within India and outside India shall be provided, including the rates at which the messages shall be transmitted to any country outside India. It also provides that the Authority may notify different rates for different persons or class of persons for similar telecommunication services. Besides specifying the tariff regime applicable to various services, TRAI is also required to ensure that tariffs prevailing in the market are consistent with the specified tariff regime. For this purpose, the Authority monitors the rates at which the service providers provide the various telecom services. Further, the function of specifying norms for fixation of rates for Pay Channels as well as fixation of rates for Cable Services is also assigned to TRAI.

3.1.1 As per the existing tariff framework, the tariff for mobile services and data services is under forbearance. The service providers have the flexibility to decide the rates for various types of calls, SMS or internet data offers with multiple combinations for different service areas of their operation. However, the tariff offers are to be in accordance with the Telecommunication Tariff Orders and Telecom Consumer Protection Regulation.

TRAI looks after consumer interests through tariff regulation. Tariff regulation takes the form of ensuring clarity and transparency in tariff offers to consumers and fixing tariff charges where the market is not delivering optimal rates.

**b) Recommendations on (i) the need and timing of the new service providers; (ii) the terms and conditions of license to a new service provider; and (iii) revocation of licence for non-compliance of terms and conditions of licence**

**3.2** Under Section 11 (1) (a) of the TRAI Act 1997, the Authority is required to make recommendations either suo moto or on a request from the licensor, i.e., Department of Telecommunications (DoT) or Ministry of Information & Broadcasting (MIB) in the case of Broadcasting and Cable Services. Recommendations forwarded by TRAI to Government during 2021-22 are given below: -

- (i) Recommendations dated 19<sup>th</sup> August, 2021 on "Enabling Unbundling of Different Layers Through Differential Licensing".
- (ii) Recommendations dated 26<sup>th</sup> August, 2021 on "Licensing Framework for Satellite-based connectivity for Low Bit Rate Applications."
- (iii) Recommendations dated 31<sup>st</sup> August, 2021 on 'Roadmap to Promote Broadband Connectivity and Enhanced Broadband speed.'

The details of these Recommendations have already been discussed in Part-II of this Report.

**c) Ensure technical compatibility and effective interconnection**

**3.3** Interconnection is the lifeline of telecommunication services. Subscribers of telecommunication services cannot communicate with each other or connect with services they require unless necessary interconnection arrangements are in place. Availability of effective and expeditious interconnection plays an important role in the growth of the telecommunication services sector.

TRAI on 10<sup>th</sup> July, 2020 notified, "The Telecommunication Interconnection (Second Amendment) Regulations, 2020", which makes the interconnection easier between any two Public Switched Telephone Networks (commonly referred to as the Fixed Line Networks), and between Public Switched Telephone Network (PSTN) and National Long Distance (NLD) Network.

**d) Regulating arrangement amongst service providers of sharing their revenue derived from providing telecommunication service**

**3.4** Interconnection Usage Charges (IUC) regime is an essential requirement to enable subscribers of one service provider to communicate with subscribers of another service provider. Providing interconnection entails costs for which service providers need to be fairly compensated. The IUC regime not only determines the revenue accruable to the service providers but also how this revenue is to be distributed among them. An efficient interconnection and charging regime is central to efficient and seamless connectivity between various networks.

The Authority specified IUC for the first time in 2003. Subsequently, these charges have been revised through various amendments. These charges were further revised through "The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020" issued on 17<sup>th</sup> April, 2020. Through these Regulations, the regime of fixed International



Termination charges (ITC) @ ₹ 0.30 per minute has been revised to forbearance regime within a prescribed range of ₹ 0.35 per minute to ₹ 0.65 per minute. Further, to ensure the level playing field between standalone and integrated International Long-Distance Operators (ILDs), it is mandated that an Access Service Provider shall offer the non-discriminatory rate of ITC to everyone i.e., to its own associated ILDO as well as to standalone ILDOs. These Regulations came into force from 1<sup>st</sup> May, 2020.

**e) Time period for providing local and long-distance circuits of telecommunication between different service providers**

**3.5** The timeframe for provisioning of ports for initial interconnection and augmentation of ports at POIs has been increased to 42 days in the year 2018-19 vide “The Telecommunication Interconnection (Amendment) Regulations, 2018” dated 5<sup>th</sup> July, 2018.

**f) Ensuring compliance of the Terms and Conditions of License**

**3.6** This function is discharged by TRAI from time to time through a multi-pronged approach. One of these approaches is through analysing reports received from the Service Providers and the other approach is through feedback / representations received from consumers / consumer organizations, experts etc.

**g) Steps taken to protect the Interest of the Consumers of Telecommunications Services**

**3.7** TRAI, with a view to enhance consumer education and awareness organizes Consumer Outreach Programmes, Seminars, Workshops on Capacity Building of TRAI registered consumer organization and brings out consumer education material and undertake media campaigns. Programmes organized and campaigns undertaken during 2021-22 have been detailed in the Part-II of the report. Additionally, other steps taken to protect the interest of the Consumers of Telecommunications Services are given in the following paragraphs:

**3.7.1 Auditing of Metering and Billing System**

In order to (i) bring uniformity and transparency in the procedures being followed by service providers with regard to metering and billing; (ii) prescribe standards relating to accuracy of measurement, reliability of billing; (iii) measure the accuracy of billing provided by the Service Providers from time to time and to compare them with the norms so as to assess the level of performance; (iv) minimize the incidences of billing complaints; (v) and to protect the interest of consumers of telecommunication services, TRAI had reviewed the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 and issued the Quality of Service (Code of Practice for Metering and Billing Accuracy) (Amendment) Regulations, 2013 on 25<sup>th</sup> March, 2013.

The Regulation mandates the service providers to arrange audit of their Metering and Billing System on an annual basis through any one of the auditors notified by TRAI and to furnish to TRAI an audit certificate thereof not later than 31<sup>st</sup> July of every year.

The Regulation also provides that the service providers must take corrective action on the inadequacies, if any, pointed out by the Agency in the Certificate and to file with TRAI an Action Taken Report thereon not later than 15<sup>th</sup> November of every financial year. Further, for effective

implementation of these regulations TRAI has also enforced financial disincentive at the rate of ₹ 1,00,000/-per week for delay in submission of Audit Reports and Action Taken Reports and Financial disincentive not exceeding an of ₹ 10,00,000/- per action taken report for false or incomplete information.

The service providers have submitted the audit reports and action taken reports within the time limit. The audit has helped in identifying billing and charging deficiencies leading to refunds of excess charges levied to affected customers and addressing systemic issues.

### 3.7.2 Regulation to specify the duration of call alert

In order to provide sufficient time to subscriber to pick up the call and not to make inconvenience to the subscriber due to inappropriately long duration of call alert, TRAI on 1<sup>st</sup> November, 2019 notified The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (Seventh Amendment) Regulations, to specify duration of alert for the called.

Access Provider would have to maintain the time duration of alert for an incoming voice call, which is neither answered nor rejected by the called party, to 30 seconds for Cellular Mobile Telephone Service and 60 seconds for Basic Telephone Service.

The terminating network shall, on expiry of 30 second in case of Cellular Mobile Telephone Service and 60 seconds in case of Basic Telephone Service, release the incoming voice call and transmit the call release message to the originating network. However, originating network may release an unanswered call after 90 seconds in case the call release message is not received from the terminating network.

### 3.7.3 Spam Control

To curb the problem of Unsolicited Commercial Communication (UCC) through Telecom networks, TRAI has reviewed the framework and notified Telecom Commercial Communication Customer Preference Regulation, 2018 dated 19<sup>th</sup> July, 2018, mandating the adoption of new technological platform i.e., Distributed Ledger Technology (DLT). The regulations provide for Registration of senders (businesses and telemarketers), Headers, subscribers' consent, Message template etc. and fine-grained control over preferences. It is a Co-regulation where Telecom Service Providers/ Access Providers establish and arrange the framework, which is legally backed by regulation.

To facilitate consumers following measures have been taken under these regulations:

### 3.7.4 TRAI DND App

This Mobile Application facilitates customers to register their Do-not-disturb (DND) preference and complaints with any Service Provider through one common mode. It assists the subscribers in reporting their complaints, using an intelligent spam detection engine and Updates about action taken on complaints within the App.

### 3.7.5 Header Information portal

The Header Information Portal facilitates Customers to know the sender of Commercial and Government awareness communications. This portal may also help other principal entities to check whether any look-alike header is registered by any other entity. Anyone can query a particular header or download the complete list. TSPs can upload the list of alpha-numeric headers assigned to Principal Entities (Business or legal entities).

### 3.7.6 Exemption to Government organizations for sending SMS of public interest

Portal for Exemption from SMS Termination Charges: This Portal facilitates Government entities to apply online for the exemption from SMS termination charges up to 5 paisa for registered headers under Regulation 35 of TCCCPR, 2018. This portal also helps Government entities to know about the renewal dates and other information related to 5 paisa exemption from SMS Termination charges.

### 3.7.7 Quality of Service improvement inside the Buildings

TRAI, on 22<sup>nd</sup> September, 2020 published a Monograph - “Quest for a good quality network inside Multi-storey Residential Apartments”. The monograph suggests a blended approach in improving the network, i.e., both general interventions and solutions that are specific to a user’s requirement. It also advocates the involvement of users in defining and achieving the optimum outcomes for themselves. The monograph assesses the effectiveness of the existing rules and practices, the technological solutions that are emerging, and the experience of policies in the other parts of the world to suggest the way forward for India.

TRAI published a report on 5<sup>th</sup> March, 2019, on Mobile Network Quality of Service at Airport and Dhaulakuan covering Dhaulakuna, Airport Terminals, Runways and Apron Areas, Airport Express Line and Terminal Area. Detailed report is available on TRAI website at link [https://traigov.in/sites/default/files/QoS\\_PMO\\_Airport\\_Report\\_06032019.pdf](https://traigov.in/sites/default/files/QoS_PMO_Airport_Report_06032019.pdf). The report highlights various systemic issues, infrastructure deficiencies and concerns related to commercial arrangements. The report has been forwarded to DoT on 6<sup>th</sup> March, 2019, for further action too.

To identify the factors which causes gap in quality perceived by the users and quality reflected during assessments, TRAI has conducted further cases studies during year 2019-2020 focusing on quality inside the buildings. The scope of analysis for these case studies was limited to Multi-storey Apartments. To cover different scenarios, multiple residential societies were selected from different cities such as Delhi, Gurugram, Bengaluru, Hyderabad, Kolkata, Jaipur, Indore, and Jabalpur. Case studies have revealed that the issue of poor quality inside building is due to non-availability of a good quality network which depends upon various aspects such as good design, good choices available to the TSPs or infrastructure Providers at the time of deployment, business case to deploy solutions etc.

It is also revealed that in building solutions are neither expensive nor intractable, although they do require some coordination between a multitude of agencies. Another major hurdle faced in the deployment of mobile network inside the apartment or building areas is non-grant of permission to deploy telecom infrastructure to service providers and EMF concerns

expressed by some of the residents or Residence Welfare Associations (RWAs). Deployment of illegal jammers and boosters by some users also cause degradation of Quality of Services.

Wi-Fi Access Network Interface (WANI): DoT has released framework and guidelines on Wi-Fi access network and penetration of Public Data Offices (PDOs) to help in improving voice quality of service, based on the recommendations of TRAI.

Key initiatives by service providers to improve in-building coverage: To improve coverage of mobile networks and leverage availability of data connectivity via fixed line networks, TSPs have launched Voice over Wi-Fi (Vo-WiFi). Major TSPs have either already launched it, or they have plan to launch it. With this, users can make voice call from Wi-Fi networks of any ISP and thus resulting into improvement of QoS inside the buildings where penetration of mobile signal from outdoor antennas is difficult. Any kind of Data connectivity also enables to make voice call using mobile Apps.

Recently, TRAI, on 25<sup>th</sup> March, 2022, has issued consultation paper on Ratings of Buildings or Areas for Digital Connectivity for inviting comments/counter comments from the stakeholders.

This consultation paper has been issued to deliberate on policy interventions and explore possibility of new regulatory framework which may be required for facilitating TSPs and IPs in improving digital connectivity inside buildings, specific areas, specific transport corridors, public transport hubs etc. After considerations of the view/comments of stakeholders, TRAI will make recommendations to create holistic framework for digital connectivity infrastructure in the country.

### **3.7.8 Steps taken to protect the Interest of the Consumers of Broadcasting Services**

TRAI actively promotes protection of consumer interest through tariff regulation. Tariff regulation assures clarity and transparency in tariff offers. In broadcasting sector, the Authority notified various tariff orders for DAS, DTH etc. for regulating the broadcasting tariff for safeguarding consumer interests.

### **h) Steps taken to facilitate competition and promote efficiency in the operation of telecommunication services to facilitate growth in such services**

**3.8** TRAI has always endeavoured to establish policies that are contemporary, in tune with the current developments, simple and pragmatic. They have desired impact on competition, infrastructure, revenue and customer welfare. It has been conscious of the fact that regulatory certainty is important for formulation of appropriate business strategies, promoting competition and thereby giving customer the fruits of innovation. TRAI has carried out the job of increasing competition and easing entry of competitive service providers in all seriousness. Measures in the form of recommendations/regulations/tariff orders/directions etc. have proved to be key for growth of the industry.

To facilitate competition and promote efficiency in the operation of telecommunications TRAI issued “The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020” on 17<sup>th</sup> April, 2020. Through these Regulations, the regime of fixed International Termination charges (ITC) @ ₹ 0.30 per minute has been revised to forbearance

regime within a prescribed range of @ ₹ 0.35 per minute to @ ₹ 0.65 per minute. Further, to ensure the level playing field between standalone and integrated International Long-Distance Operators (ILDs), it is mandated that an Access Service Provider shall offer the non-discriminatory rate of ITC to everyone i.e., to its own associated ILDO as well as to standalone ILDOs. These Regulations came into force from 1<sup>st</sup> May, 2020.

**i) Levy of fees and other charges at such rates and in respect of such services as may be determined by Regulations**

**3.9** TRAI is mandated to decide the tariff policies for telecommunications and broadcasting services. TRAI looks after consumer interests through tariff regulation. Tariff regulation takes the form of ensuring clarity and transparency in tariff offers to consumers and fixing tariff charges where the market is not delivering optimal rates.

**j) Steps taken to ensure effective compliance of universal service obligation (USO)**

**3.10** The Government has launched many schemes using Universal Service Obligation Fund (USOF) for proliferation of the broadband and improving internet access to common people.

To promote the broadband connectivity and to improve its performance, TRAI issued a Consultation Paper on “Roadmap to promote Broadband connectivity and enhanced broadband speed” on 20<sup>th</sup> August, 2020, sent its Recommendations to the Government on 31<sup>st</sup> August, 2021.

Further, Chairman TRAI visited the State of Sikkim in August, 2021 and reviewed the status of Telecom Services in the state. During the review meeting, there were participation from the TSPs and BBNL, an SPV for BharatNet Project funded by USOF and State Government.

The present state of Telecom Network in the state and action plan for further improvement in the Telecom Network of the state through the USO funded projects were discussed and following broad actions were proposed:

- (i) Creation of a single window system at state level for clearances of various issues taken up by the service providers specially those related to RoW, Permission for space installations of towers/Fiber based equipment at GPs and also provision of electricity.
- (ii) Both BSNL & BBNL to sort out their issues and resolve to complete BharatNet Project at the earliest in a time bound manner.
- (iii) Possibilities should be explored to share infrastructures not only for quick roll out of network but also avoid multiple expenditure on creation of similar type of infrastructure by each service provider.
- (iv) Utilization and leveraging of PGCIL Fibre/Bandwidth infrastructure should also be explored by TSPs.
- (v) It should be ensured that connectivity to unconnected people needs to be extended. No one should be deprived of communication facilities in the state. Support from the Govt if any, needs to be clearly spelt out by TSPs.



TRAI from time to time evaluates and proposes suitable measures for USOF Project implementation.

**k) Details of advice rendered to the Central Government in the matter relating to development of telecommunication technology and any other matter relatable in telecommunication industry in general**

**3.11** Details of advice rendered by TRAI to the Central Government in the matters relating to development of telecommunication is given below:

- a) Recommendations dated 19<sup>th</sup> August, 2021 on "Enabling Unbundling of Different Layers Through Differential Licensing".
- b) Recommendations dated 26<sup>th</sup> August, 2021 on "Licensing Framework for Satellite-based connectivity for Low Bit Rate Applications".
- c) Recommendations dated 31<sup>st</sup> August, 2021 on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband speed".
- d) TRAI's Response dated 27<sup>th</sup> November, 2021 to DoT back reference dated 14<sup>th</sup> October, 2021 on Recommendations on "Reforming the Guidelines for Transfer/Merger of Telecom Licenses".

Further details in this regard have already been discussed in Part-II of the report.

**l) Monitoring of the quality of service and details of promotional survey of such services by the service providers**

**3.12 Reports received from service providers**

**3.12.1 Basic and Cellular Mobile Services**

TRAI monitors the performance of Basic and Cellular Mobile service against the benchmarks prescribed by TRAI through quarterly performance monitoring report (PMR) received from service providers in accordance with the directions. In order to improve the quality of service provided by the service providers, TRAI has prescribed financial disincentive through The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (Second Amendment) Regulations, 2012 dated 8<sup>th</sup> November, 2012 on Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service operators for non-compliance with the benchmark for the Network Service Quality Parameters and Customer Service Quality Parameters.

These regulations also provide for deterrent as financial disincentives against false reporting and delay in submission of report of the Quality of Service benchmarks.

**3.12.2 Broadband Service**

TRAI monitors the performance of the service providers against the Quality of Service benchmarks laid down by TRAI, through the quarterly Performance Monitoring Reports (PMRs) vide Regulation on Quality of Service of Broadband Service dated 6<sup>th</sup> October, 2006. The quarterly reports submitted by Broadband service providers are analyzed for assessing their performance with regard to the QoS benchmark. To further strengthen the quality of standards

TRAI on 25<sup>th</sup> June, 2014 issued “The Quality of Service of Broadband Service (Second Amendment) Regulations, 2012, for improving the speed of Broadband.

### 3.12.3 Network/Point of Interconnection (POI) reports

TRAI is monitoring the level of congestion at the POI between various Service Providers on Monthly basis. This parameter signifies the ease by which a customer of one network is able to communicate with a customer of another network. This parameter also reflects as to how effective is the interconnection between two networks. The benchmark notified by TRAI in the QoS Regulations for this parameter is <0.5%. TRAI receives monthly PoI Congestion Reports from Basic and Cellular Mobile Services for assessing their performance with regard to Quality of Service benchmarks.

### 3.12.4 TRAI MyCall App

The “TRAI MyCall App” is intended to measure the call quality through crowd sourcing. TRAI MyCall is a mobile application for Crowd sourced Voice Call Quality Monitoring, available for android and iOS platforms. The Application helps Mobile phone users rate their experience about voice call quality in real time and help TRAI gather customer experience data along with Network data.

### 3.12.5 TRAI MySpeed App

This application allows subscribers to measure wireless 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. Myspeed portal displays a comparison of the wireless data speeds from such samples across the service providers in each License service area.

### m) Inspection of equipment used in the network and recommendation made on the type of equipment to be used by the service providers

### 3.13 The specific steps taken under this head are as under:

Recommendations dated 22<sup>nd</sup> April, 2020 on ‘Network Testing Before Commercial Launch of Services for Wireline Access Services’

The Authority after due consultation process finalized its Recommendations on ‘Network Testing Before Commercial Launch of Services for Wireline Access Services’ and forwarded the same to DoT on 22<sup>nd</sup> April, 2020 for its consideration.





## **PART - IV**

### **ORGANISATIONAL MATTERS OF TELECOM REGULATORY AUTHORITY OF INDIA AND FINANCIAL PERFORMANCE**

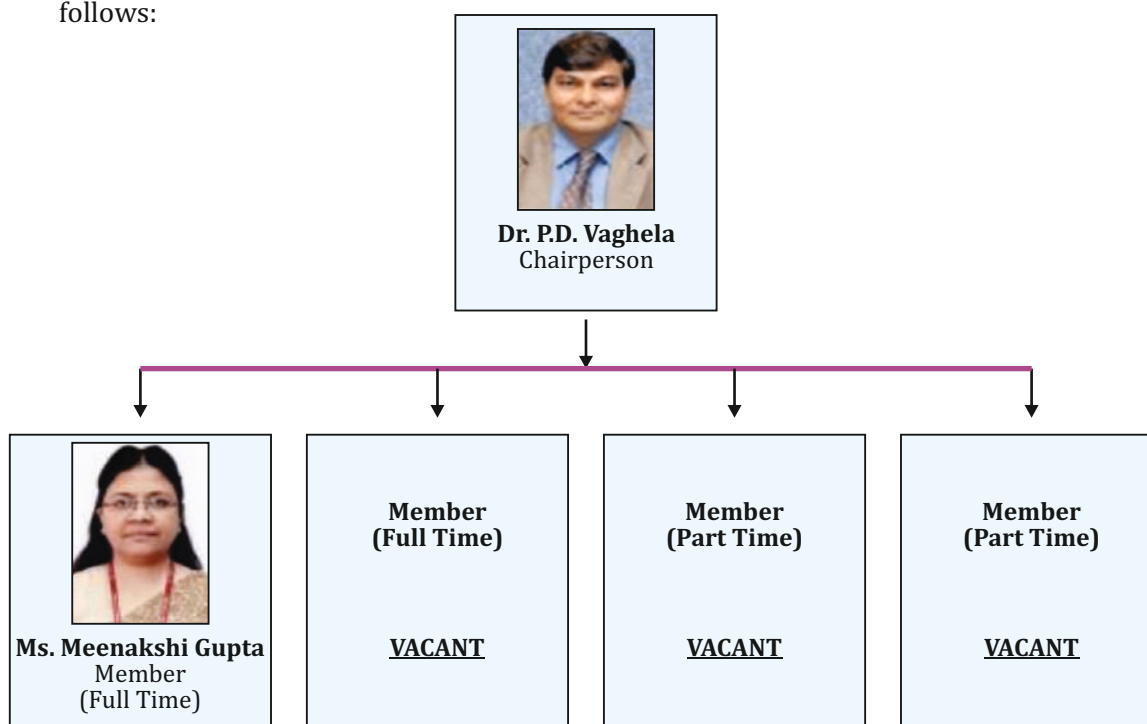


## (A) ORGANISATIONAL MATTERS OF TELECOM REGULATORY AUTHORITY OF INDIA AND FINANCIAL PERFORMANCE

**4.1** This section provides information on organizational matters of TRAI relating particularly to organization structure, funding, human resources covering the areas of recruitment, capacity building and other general issues.

### 4.2 Organisation

The Telecom Regulatory Authority of India was established under the Telecom Regulatory Authority of India Act, 1997 enacted on 28<sup>th</sup> March, 1997. The Telecom Regulatory Authority of India (Authority) is a body corporate by the name aforesaid, having perpetual succession and a common seal, with power, subject to the provisions of this Act, to acquire, hold and dispose of property, both movable and immovable, and to contract, and shall, by the said name, sue or be sued. The TRAI (Amendment) Act, 2000 led to the reconstitution of the Authority. The Authority consists of a Chairperson, not more than two whole-time Members and not more than two-part time Members that are appointed by the Central Government. The head office of the Authority is at New Delhi. The constitution of the Authority as on 31<sup>st</sup> March, 2022 was as follows:



### 4.3 Secretariat of TRAI (HQ)

The Authority functions with a Secretariat headed by the Secretary and assisted by seven Divisions which are as follows:

(i) Administration & International Relations (Admn. & IR); (ii) Broadcasting & Cable Services (B&CS); (iii) Financial & Economic Analysis (F&EA); (iv) Networks, Spectrum and Licensing (NSL); (v) Quality of Service (QoS) (vi) Legal and (vii) Consumer Affairs, Information Technology & Technology Development (CA, IT & TD).

#### 4.4 Administration & International Relations (Admn. & IR) Division

Administration is responsible for all administrative and personnel functions which include planning and control of human resource development in TRAI as well as ensuring coordinated availability of information for the Authority's use. Administration has the responsibility of management and control of activities of Administration & Personnel Section (A&P), General Administration Section (GA), Communication & Public Relation (Comm. & PR) Section, OL Section, Management Representative and RTI (MR&RTI) Section. The Division has managed a well-equipped Library having a good collection of knowledge, which includes Technical Books, Legal Books, Literature books etc. It also has the institutional membership of DELNET to share the resources. The Division handles International Relations of TRAI which includes coordination with International Organizations/bodies viz., ITU, APT, World Bank, CTO, WTO, SATRC, BRICS, IIC and Regulatory Bodies in other countries.

#### 4.5 Broadcasting & Cable Services (B&CS) Division

The Broadcasting and Cable Services (B&CS) Division is responsible for advising the Authority to lay down the overall regulatory framework; encompassing tariff, interconnection and quality of services aspects; for the broadcasting sector including broadcasting of satellite TV channels, Direct to Home (DTH) services, Cable TV services, Head-end in the Sky (HITS) services, Internet Protocol Television (IPTV) services, FM Radio broadcasting etc. The division is also responsible for examining the issues relating to modernization/ digitalisation of the broadcasting sector and making recommendations on various policy issues and terms & conditions of licenses/ permissions issued by the Government to various service providers in broadcasting sector. The division advises the Authority regarding the measures required to protect the interests of all the stakeholders of the broadcasting sector, which include facilitation of consumer choice, availability of services of desirable quality at affordable prices and promoting competition.

#### 4.6 Financial & Economic Analysis (F&EA) Division

F&EA Division is primarily responsible for ensuring compliance of the provisions contained in The Telecom Tariff Orders, certain provisions contained in the Telecom Consumer Protection Regulations, 2012 and Directions issued by the Authority on related aspects from time to time. Further, the F&EA Division is also responsible for providing advice on various operational aspects of telecom sector viz., tariff regulation (including fixation of tariffs for telecom services wherever required, prescribing tariff principles to be followed by service providers, ensuring reporting of tariffs and examining those for consistency with regulatory framework etc.), fixation of cost based interconnections charges, fixation of per port transaction charges for mobile portability, cost methodologies and costing for telecom services etc. The F&EA Division is also responsible for undertaking a review of financials statements, Accounting Separation Reports, AGR Reports etc., for ensuring consistency of the same with the extant regulatory framework. F&EA division also compiles "The Indian Telecom Services Performance Indicators Report" and publishes it on quarterly basis.

#### 4.7 Networks, Spectrum and Licensing (NSL) Division

The Network, Spectrum and Licensing (NSL) Division is responsible for fixing the terms and conditions of Interconnection, ensuring effective interconnection between various Telecom Service Providers, handling of all interconnection issues including determination of Interconnection Usage Charges (IUC) and regular review thereof. The issues related to regulation of Access Facilitation and co-Location Charges of Submarine Cable Landing Stations are also handled by the Division. Further, the division is responsible for making recommendations on matters related to license conditions of Access Services including Internet/Broadband, National Long Distance (NLD) Service, Global Mobile Personal Communication by Satellite (GMPCS) Service, International Long Distance (ILD) Service, Mobile Radio Trunking Service, Very Small Aperture Terminal (VSAT) service, Public Mobile Radio Trunking Service (PMRTS), value-added services such as Audio Conferencing / Audiotex/ Voice Mail and Machine to Machine (M2M) Communication Service. The Division also provides recommendations on efficient management of spectrum including its sharing, trading and re-farming. The Division is also responsible for providing recommendations on matters related to introduction of new technologies and services. The matters related to cross sector co-ordination i.e., Infrastructure Sharing, Sustainable Telecommunications, Radio Communications Systems for Public Protection & Disaster Relief (PPDR) are also handled. The division also deals with issues related to National Numbering Plan, Intelligent Network (IN) Service, Calling Cards and Satcom Policy.

The Division monitors compliance of license conditions by service providers for all type of services mentioned above. It handles recommendations on issues related to Universal Service Obligation (USO) and all related matters. The Division also regulates Mobile Number Portability (MNP) and ensures its compliance. Issues like Convergence, Right of Way and Policy for using Street Furniture are also dealt. The Division also monitors Wireline, Wireless Internet and Broadband subscriptions in the country.

#### 4.8 Quality of Service (QoS) Division

QoS Division is responsible for laying down regulations to ensure the standards of quality of service (Basic Telephone Service, Cellular Mobile Telecom Service, Wireless Data Service, and Broadband Service) to be provided by the service providers; to protect the interest of Telecom Consumers; to ensure accuracy of metering and billing; to prevent Unsolicited Commercial Communications (UCC), spam. The division is responsible for framing of guidelines for registration of consumer organizations/Non-Governmental Organizations (NGOs) and their interactions with TRAI.

The division monitors the Quality of Service through periodic performance reports submitted by the Service Providers on various Performance Indicators. Quality of service of the service providers is also assessed through field measurements conducted across the country. It handles recommendations on the references received before introduction of new technologies in telecom sector. The division is also responsible for maintaining a register of interconnect agreements and of all such other matters as may be provided in the regulations.

#### **4.9 Legal Division**

Legal Division is responsible for rendering legal advice to the Authority on all regulatory issues, drafting and vetting of all legal documents. The Division manages all litigation matters in which TRAI is a party.

#### **4.10 Consumer Affairs, Information Technology & Technology Development (CA, IT & TD) Division**

CA Section is responsible for the development of consumer advocacy in the telecommunication sector and creating general awareness amongst consumers about various measures taken by the Telecom Regulatory Authority of India to protect the interest of consumers. The section facilitates registration of consumer organizations and non-governmental organizations from all over the country with TRAI and interacts with them on various issues concerning the consumers. The other activities of the division include organizing consumer education/outreach programmes, capacity building of consumer organizations registered with TRAI, by organizing regional workshops & seminars on relevant topics, undertake media campaigns, developing and publishing consumer education material in Hindi, English and regional languages for enhancing consumer education etc.

The IT section in TRAI is responsible for catering IT needs of various divisions like analytics & visualization of data, implementation & maintenance of various portals & TRAI website, web applications, mobile app development, video conferencing etc. TRAI's IT section also maintains computer hardware assets and LAN setup of TRAI.

TD section conducts technical sessions from time to time by inviting eminent persons in their respective fields, so as to create awareness regarding new technology trends and capacity building among officers of TRAI. The division also publishes technical information paper in the form of 'Technology Digest' from time to time for spreading knowledge in Telecom and Broadcasting domain.

#### **4.11 Human Resources**

A staff of 186 (as on 31<sup>st</sup> March, 2022) is handling the work in the Secretariat of TRAI (HQ), which performs the tasks assigned to it by the Authority in the discharge of its functions.



#### 4.12 Staff strength of TRAI HQ (as on 31<sup>st</sup> March, 2022)

As on 31<sup>st</sup> March, 2022, the Staff strength of the TRAI (Headquarters) was as under:

S.No.	POSTS	SANCTIONED	ACTUAL
1.	SECRETARY	01	01
2.	PR. ADVISOR	14	13
3.	ADVISOR		
4.	JT. ADVISOR	25	25
5.	DY. ADVISOR	10	10
6.	SR. PR. PRIVATE SECRETARY	03	03
7.	SR. RESEARCH OFFICER	30**	22
8.	PRINCIPAL PRIVATE SECRETARY	05	04
9.	TECHNICAL OFFICER	17**	16
10.	TECHNICAL OFFICER (ENGINEERING)	5	0
11.	SECTION OFFICER	20	12
12.	PRIVATE SECRETARY	12	11
13.	ASSISTANT	48	38
14.	PERSONAL ASSISTANT	18	09
15.	JR. HINDI TRANSLATOR	01	00
16.	LDC	07	00
17.	STAFF CAR DRIVER SPECIAL GRADE	01	00
18.	STAFF CAR DRIVER GRADE-I	04	02
19.	STAFF CAR DRIVER GRADE-II	04	04
20.	STAFF CAR DRIVER ORDINARY GRADE	04	04
21.	PCMO	02	02
22.	DESPATCH RIDER	01	01
23.	MULTI TASKING STAFF	05	08
	<b>TOTAL</b>	<b>237</b>	<b>186</b>




**\*\* Five (05) posts of SRO are being operated as Technical Officer.**

#### 4.13 Details of Secretary, Pr. Advisors / Advisors Level Officers in TRAI (HQ) as on 31<sup>st</sup> March, 2022

SNo.	Name of the Officer	Post held	Photograph
1	Shri V. Raghunandan	Secretary	
2	Dr. M.P. Tangirala	Principal Advisor (F&EA)	



SNo.	Name of the Officer	Post held	Photograph
3	Shri Rajiv Sinha	Principal Advisor (NSL)	
4	Shri Mahendra Srivastava	Principal Advisor (CA, QoS, IT)	
5	Ms. Vandana Sethi	Advisor (Admin. & IR)	
6	Shri Anil Kumar	Advisor (B&CS)	
7	Shri Sanjeev Kumar Sharma	Advisor (BB&PA)	
8	Shri S.T. Abbas	Advisor (NSL)-II	
9	Shri Rajiv Ranjan Tiwari	Advisor (Legal)	

SNo.	Name of the Officer	Post held	Photograph
10	Shri Asit Kadayan	Advisor (QoS)	
11	Shri Kaushal Kishore	Advisor (F&EA)	
12	Shri Amit Sharma	Advisor (F&EA)	

**4.14** TRAI personnel are initially drawn on deputation from the Government Departments. These deputationists with relevant experience in the fields of telecommunication, economics, finance, administration, etc., are initially appointed for a period of two years and thereafter, if required, requests are sent to concerned Government Departments/Organizations for extending their deputations. Seeking extension of deputations in respect of trained and experienced existing employees has often proved to be difficult. While the scope, scale and complexity of Authority's functions continue to grow at a fast pace, the Authority is facing the problem of losing trained and experienced personnel due to their frequent repatriation to their parent departments. The Authority has, therefore, constituted a cadre of officers and staff with specialized expertise and skills with the option of permanent absorption in TRAI.

#### **4.15 Recruitment**

The Authority has constituted its own cadre of officers and staff by way of absorbing the officials who are on deputation to TRAI from various Ministries/Departments/PSUs. However, most deputationists, particularly in the senior and middle levels do not exercise option for permanent absorption. Therefore, the recruitment of personnel for its Secretariat by way of deputation from other Ministries/Departments/PSUs continues. This is due to the reason that among Government employees, the relevant expertise is available mainly in the Ministries or with the Government owned Telecom Operators.

#### **4.16 Training**

TRAI accords utmost importance to human resource initiatives to develop expertise for its staff in the fields of Telecom and Broadcasting especially related to tariffs and quality of services standards, the conduct of surveys on Quality of Service and other consumer-related matters. A

structured training policy has been put in place covering all the employees. The following types of training are being given to employees of TRAI: -

- i. Orientation / Entry Level Training
- ii. Short Term Thematic Training
- iii. Long Term Training – Mostly online courses
- iv. Mid-Career Training Program
- v. Others – International training and On Job training

This initiative has proved to be useful for its officers and staff in participating effectively in the consultative process for the Authority, and effective discharge of functions and mandate assigned to the Authority through careful preparation of consultation papers, analysis of feedback and responses received in writing and also during Open House Discussion. This has also helped in developing the policy framework to address various issues which arise in effectively regulating the Telecom and Broadcasting sectors. While selecting and designing training programmes/ workshops, TRAI's endeavour is to impart diverse skills for macro-level policy formulation and for handling of technoeconomic operating details relevant for implementation and monitoring of policies. Special programmes are to be identified/ designed and run to meet the specific needs of TRAI. The Authority sponsors its officers for international trainings under the 'Institutional Capacity Building Project' for further developing their expertise within the organization.

Due to COVID-19 pandemic face-to-face trainings could not be conducted during the period. However, many TRAI officers were nominated during the year to attend the On-line Training programmes conducted by International Telecommunications Union (ITU), NPC, ISTM, NIFM, IIM, etc. During the year 155 officers/officials have attended training in 34 online trainings. The officers have received valuable inputs through these trainings and the inputs have enriched their skills in their respective area of regulatory work. These include Principle of Micro-Economics, Competition Law and Market Regulation, Artificial Intelligence and e-Machine learning for business, Technological innovation in electronics and related field for aerospace and Defence production, Shaping the future of Regulations in emerging digital era, Certificate course in 5G, Artificial intelligence, Machine learning and deep learning applications, Designing and drafting of regulations and its management etc.

#### **4.17 Seminar / Workshops**

In order to keep pace with the developments taking place globally, the Authority has nominated members of its staff to various international events, meetings and symposia, which were held through virtual platform due to COVID-19 Pandemic. These programs not only helped gather valuable feedback/ inputs for its own policy formulation as well to keep abreast with the latest development in the fields of technology but has also contributed to the international efforts being focused on issues of major regulatory concerns in India and many other countries and enabled India to play a leading role in the emerging global information society.

#### 4.18 Office accommodation

After inception in 1997, TRAI has been functioning through rented accommodation. Government of India (GoI) through Department of Telecommunication (DoT) vide letter dated 26<sup>th</sup> November, 2020 had conveyed administrative approval of the competent authority for procurement of built-up Office Space for TRAI in NBCC Commercial Complex being developing as World Trade Centre (WTC) at Nauroji Nagar, New Delhi.

NBCC (India) Limited vide allotment letter dated 26<sup>th</sup> February, 2021 has allotted TRAI a total 1,15,982 sq. ft. of super built up area (85,545 carpet area) at Tower-F (4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> & 7<sup>th</sup> Floors) at World Trade Centre, Nauroji Nagar, New Delhi with construction linked payment plan. Till now, an amount of ₹225.95 crore has already been released to NBCC as on 31<sup>st</sup> March, 2022 and construction at site is in full swing and expected to be delivered to TRAI by 2<sup>nd</sup> half of year 2023.

#### 4.19 Residential quarters for TRAI staff

As per the existing policy of the Government of India employees joining the Authority on deputation are permitted retention of general pool accommodation on payment of Special Licence Fee by the Authority who may recover normal licence fee from the employees. Permissible period of retention is till the superannuation of the employees or till the duration of their tenure with the Authority, whichever is earlier. The eligibility for allotment of General Pool residential accommodation is restricted to the officers posted in the Secretariat of the Authority (TRAI) in Delhi, who were eligible for allotment of accommodation from General Pool prior to their joining in the Authority on payment of special licence fee by TRAI to the Directorate of Estates. In view of the forgoing position, the Directorate of Estates is neither allotting the general pool accommodation nor allowing retention of the accommodation already allotted to the officers and staff, after they get absorbed in TRAI.

Arrangement for providing accommodation to the employees of TRAI has also been made by signing MoU with MTNL/BSNL whereby MTNL/BSNL shall earmark an accommodation pool of residential quarters on lease basis to TRAI for renting them to its employees.

#### 4.20 Observance of various Days / Diwas in TRAI

- (i) Every year 8<sup>th</sup> March is celebrated globally as "International Women's Day" to celebrate the social, economic, cultural, and political achievements of women around the world. With the objective of celebrating International Women's Day duly following the guidelines issued by the Government of India for the prevention of Corona (the Covid-19) pandemic, a session on Gender sensitization was organised for TRAI employees followed by an interactive session with all the women officers and employees of the Authority.



- (ii) The seventh “International Yoga Day” was observed in TRAI on 21<sup>st</sup> June, 2021. The officers and staff of the Authority participated massively in yoga sessions in hybrid mode.

#### 4.21 Medical facility to employees of TRAI after retirement

Medical facility to employees of TRAI is governed by the Schedule II of TRAI (Salary, Allowance and Other Conditions of the Officers and Employees) Rules, 2002 as amended from time to time. The Officers and employees of the Authority, both serving and retired, are entitled to medical facilities.

#### 4.22 Funding

TRAI is a regulatory body set up by an Act of Parliament. It is wholly funded by the Government of India. According to Section 21 of the TRAI Act, 1997, the Central Government may, after due appropriation made by Parliament by law in this behalf, make to the Authority grants of such sums of money as are required to pay salaries and allowances to the Chairperson, the Members, the Officers and other employees of the Authority. Section 22(1) (a) & (b) of the Act states that there shall be constituted a fund to be called the Telecom Regulatory Authority of India general fund and all grants, fees and charges received by the Authority under this act; and all sums received by the Authority from such other sources as may be decided by the Central Government, shall be credited to this fund. The total expenditure incurred by TRAI in the year 2021-22 was ₹ 93.01 crore. The major heads of expenditure during the period were ‘salaries’, ‘rent’, ‘professional fee’ etc.

- 4.23 If a minor portion of the licence fees being recovered from the regulatees is allowed to be utilized to meet TRAI’s operational expenses, in the form of administrative charges, the need for governmental support in the form of grant-in-aid would totally cease. Such an arrangement would give TRAI the necessary flexibility and independence to perform effectively as an independent regulator. Regulators like IRDA, SEBI and RBI enjoy the freedom to recruit new



talent at different levels from non-governmental sources also and determine their service conditions. There is an urgent need to emulate such healthy practices to enable TRAI to have the necessary skills to deal with the complex issues that arise in the telecom sector globally.

#### 4.24 TRAI Regional Offices

Authority had approved 11 (eleven) Regional Offices of TRAI at various locations across the country in the year 2012. The Authority reviewed the working of the Regional Offices and approved the closure of 5 Regional Offices located at Chandigarh, Patna, Mumbai, Guwahati and Lucknow and continuation of 6 (six) Regional Offices located at Hyderabad, Kolkata, Bengaluru, Bhopal, Jaipur and Delhi during 2014-15 with revised jurisdictions. These Regional Offices of TRAI are operating on Pilot Project basis under Plan Fund as part of the Capacity Building Project of TRAI. TRAI has decided to continue the 06 Regional Offices up to 31<sup>st</sup> March, 2025 as a part of capacity building Project. The locations of Regional Office with revised License –Service Areas covered (during 2021-22) are as follows: -

S. No.	Location of TRAI Regional Offices	License Service Areas covered by each Regional Offices
1	Bengaluru	Karnataka, Kerala, Maharashtra, Mumbai
2	Bhopal	Madhya Pradesh, UP (East), UP (West)
3	Delhi	Delhi, Himachal Pradesh, Jammu & Kashmir
4	Hyderabad	Andhra Pradesh, Tamil Nadu including Chennai, Orissa
5	Jaipur	Rajasthan, Gujarat, Haryana, Punjab,
6	Kolkata	West Bengal, Kolkata, Northeast, Assam, Bihar

#### 4.25 Staff strength of TRAI Regional Offices (as on 31<sup>st</sup> March, 2022)

As on 31<sup>st</sup> March, 2022, the Staff strength of the TRAI (Regional Offices) was as under:

SL. NO.	POSTS	SANCTIONED	WORKING
1.	Advisors	06	05
2.	Jt. Advisor /Dy. Advisor	12	08
3.	Sr. Research Officer	12	07
4.	Assistant	06	05
	<b>TOTAL</b>	<b>36</b>	<b>25</b>

#### 4.26 Details of Advisor level officers in TRAI Regional Offices (as on 31<sup>st</sup> March, 2022)

Sl No.	Location of Regional Office	Name of the Officer (S/Shri/Smt.)	Post	Photograph
1.	Hyderabad	Shri A. Munisekhar	Advisor	
2.	Bengaluru	Shri Brajendra Kumar	Advisor	
3.	Bhopal	Shri Vinod Gupta	Advisor	
4.	Jaipur	Shri Shyam Sunder Chandak	Advisor	
5.	Kolkata	Dr. Swadesh Kumar Samantha	Advisor	
6.	Delhi*	Vacant	Advisor	Advisor (CA), TRAI Hq – looks after the charge

\* Is being operated by TRAI (HQ)



**4.27 A. The role and functions of the above Regional Offices (ROs) are:**

- (i) Ensuring compliance of Tariff related Guidelines & effective monitoring of Retail Tariff of Telecommunications, Broadcasting & Cable Services;
- (ii) Proper coordination with Service Providers with regard to Regulatory and marketing aspects;
- (iii) Monitoring of Quality of Service and handling of consumer grievance;
- (iv) Organizing Open House Discussions (OHD) / Consumer Advocacy Groups (CAG) meetings of TRAI;
- (v) Coordination & monitoring of Audit and Survey by Independent Agencies appointed by TRAI;
- (vi) Development of CAG upto District / Block level and close interaction with CAGs;
- (vii) Organizing Consumer Education Workshops;
- (viii) Close interaction with TERM Cell of DoT;
- (ix) Monitoring of implementation of Mobile Number Portability (MNP) Regulations and Unsolicited Commercial Communications (UCC) Regulations;
- (x) Monitoring of registration of MSOs/LCOs on the portal and validity of registration of LCOs;
- (xi) Perform such other functions including such administrative and financial functions as may be entrusted to it by the Headquarters of TRAI or as may be necessary to carry out the provisions of TRAI Act;
- (xii) Monitoring of information of MSOs and LCOs on Service Provider Portal (SPP). ROs will interact with MSOs to ensure that entry on Portal is done by all MSOs and their LCOs;
- (xiii) Analysis and up-keeping of Agreement between MSO and LCO(MIA/SIA);
- (xiv) Monitoring and Implementation of QoS Regulation for MSOs;
- (xv) Logging of Consumer Complaints against DTH Operators and major MSOs received at Regional Offices in BCCMS portal;
- (xvi) Uploading consumer complaints received by them in TCCMS portal and coordinating with the Service Provider for the proper conduct of consumer education programs; and
- (xvii) Analysis of DCR matrix for each quarter and follow up with TSPs to improve upon the Quality of Services.

**4.28 Right to Information Act**

During the financial year 2021-22, total 655 RTI applications were received for seeking various information under the RTI Act 2005. All these applications were promptly dealt with, and replies have been sent within the stipulated time period.

#### 4.29 IS/ISO 9001:2015 Certification to TRAI

Telecom Regulatory Authority of India (TRAI) was awarded ISO 9001:2000 certificate in December 2004 by the Bureau of Indian Standards (BIS). The certificate was renewed in the year 2007 and 2010. While renewing the certificate in November 2010, BIS issued IS/ISO 9001:2008 and this was subsequently renewed in 2013 and 2016. Further, BIS while renewing in 2016, have issued the latest series of ISO Certification i.e., ISO 9001:2015 and this certification was renewed in September, 2021. As a part of the Management commitment, TRAI has defined Quality Policy, Quality Objectives and the Working Procedures. To evaluate the implementation and effectiveness of Quality Management System (QMS), BIS has been conducting Surveillance Audit once in every year. The last BIS Surveillance Audit was conducted through virtual means on 28<sup>th</sup> and 29<sup>th</sup> July, 2021. TRAI is required to conduct Internal Quality Audits twice a year as outlined in the Quality Manual. As a part of the audit process, TRAI regularly trains its officials to act as internal quality auditors. At present, the TRAI has 32 Internal Quality Auditor (IQA) personnel for conducting internal audits. Further, the Quality Management Review meetings are taken by Secretary on quarterly basis. The Quality Management Review Meetings were conducted four times during 2021-22. In addition to the above meetings there is also an annual management review meeting taken by the top management to ensure that the requirements of ISO 9001:2015 are met.

#### 4.30 Implementation of Official Language Policy

An Official Language Section under the supervision of the Secretary, TRAI is functioning in the Telecom Regulatory Authority of India to implement the provisions of the Official Language Act, 1963, Official Languages Rules, 1976, and other administrative instructions issued on the subject from time to time by the Department of Official Language (Ministry of Home Affairs). TRAI makes every effort to ensure compliance with the Official Language Policy of the Union Government in TRAI. Besides, it also caters to the translation needs of various Divisions as and when regulations, press communique, tender notices, gazette notifications, and other documents are issued in bilingual form.

The implementation of the Official Language Policy of the Union Government by all the Divisions and Sections of TRAI is monitored by the Official Language Implementation Committee (OLIC) constituted under the Chairmanship of Secretary, TRAI. Meetings of the OLIC are held regularly every quarter. In these meetings, special emphasis is given to increasing the progressive use of Hindi in official work. Besides, a review of the current status of implementation of the Official Language policy in TRAI is also done and a future action plan in this regard is drawn. Valuable suggestions of the members of the Committee are invited to gear up the work relating to Official Language. During the period of the report, 4 meetings of OLIC were held on 5<sup>th</sup> June, 2021, 30<sup>th</sup> September, 2021, 30<sup>th</sup> December, 2021, and 30<sup>th</sup> March, 2022, respectively.

In compliance with the directives received from the Department of Official Language (Ministry of Home Affairs) and Department of Telecommunications, "Hindi Month-2021" was organized in TRAI from 16<sup>th</sup> August, 2021 to 14<sup>th</sup> September, 2021. During this period, Eight Hindi competitions such as Hindi Quiz, Hindi Poetry, Hindi Short Speech, Hindi Typing Speed, Hindi Shorthand Speed, Monthly Hindi Task, Hindi Essay Writing Competition, and for drivers and

Group-D category Hindi Essay Writing Competition were organized through the online mode. Several officers up to the rank of Senior Research Officer and staff took part in the competition with great zeal and enthusiasm. On the occasion of Hindi Divas, a message from Chairperson, TRAI for ensuring the compliance of Official Language rules/regulations was circulated among the officers/staff.

In order to increase the progressive use of Hindi in day-to-day official work, an annual incentive scheme viz. “Varshik Protsahan Yojna” has been introduced in TRAI for officers/officials for the last 10 years. Under this scheme, 10 cash prizes are given every year to the officers/officials for doing official work in Hindi during the period of the scheme. This scheme has proved to be very popular among the staff and it has encouraged the staff to do most of their official work in Hindi throughout the year.

With a view to facilitate officers/officials to do noting and drafting in Hindi and also to apprise them of the Official Language Policy of the Union Government, regular Hindi workshops are organized every quarter. During these workshops, dictionaries, administrative glossaries, help/reference books, etc. are distributed to the participants, which facilitate their official work in Hindi. During the period under report, six (06) Hindi workshops were organized on 30<sup>th</sup> April, 2021, 27<sup>th</sup> May, 2021, 04<sup>th</sup> June, 2021, 14<sup>th</sup> July, 2021, 15<sup>th</sup> November, 2021, and 19<sup>th</sup> January, 2022 respectively.



**On the occasion of Hindi Diwas – 2021, an online function organised under the chairmanship of Dr. P.D. Vaghela, Chairman, TRAI**

#### **4.31 Implementation of Reservation Prescribed for Reserved Categories**

TRAI has been adhering to the provisions of reservation for eligible categories while making promotions. No appointment on direct recruitment basis has been made in TRAI during the year. A Liaison Officer of the rank of Director has been appointed to take care of implementation of instructions relating to special representation of reserved categories.

#### **4.32 Collaboration with Other Regulators**

##### **4.32.1 Forum of Indian Regulators**

TRAI has been a member of Forum of Indian Regulators (FOIR) since August 2016, which is an organization consisting of members from Central Electricity Regulatory Commission (CERC), State Electricity Regulatory Commissions (SERCs) and other sector regulators such as Tariff Authority for Major Ports (TAMP), Airport Economic Regulatory Authority (AERA), Petroleum and Natural Gas Regulatory Board (PNGRB), Insolvency and Bankruptcy Board of India (IBBI) and Competition Commission of India (CCI) etc. TRAI regularly takes part in all the activities of FOIR, such as AGM, GBM, and the colloquiums for the Members of FOIR etc.

##### **4.32.2 Joint Standing Committee of Regulators**

A joint standing committee of Regulators has been formed at the initiative of TRAI to study future regulatory implications in the digital world and to collaboratively work on future regulations. Representatives from Securities and Exchanges Board of India (SEBI), Reserve Bank of India (RBI), Ministry of Consumer Affairs and TRAI are members of the committee.

## B) AUDITED ACCOUNTS OF TRAI FOR THE YEAR 2021-22

### *Separate Audit Report of the Comptroller & Auditor General of India on the Annual Accounts of Telecom Regulatory Authority of India for the year ended 31<sup>st</sup> March, 2022*

1. We have audited the attached Balance Sheet of the Telecom Regulatory Authority of India as on 31<sup>st</sup> March, 2022 and the Income and Expenditure Account/Receipts and Payments Account for the year ended on that date under Section 19(2) of the Comptroller & Auditor General (Duties, Powers & Conditions of Service) Act, 1971 read with Section 23(2) of the Telecom Regulatory Authority of India Act, 1997 (as amended in January 2000). These financial statements are the responsibility of the Telecom Regulatory Authority of India's management. Our responsibility is to express an opinion on these financial statements based on our audit.
2. This Separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum performance aspects, etc. if any, are reported through Inspection Reports/CAG's Audit Reports separately.
3. We have conducted our audit in accordance with the auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by managements, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
4. Based on our audit, we report that:
  - i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of audit.
  - ii. The Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this report have been drawn up in the 'Uniform format of Accounts' approved by the Controller General of Accounts under Section 23 (1) of the Telecom Regulatory Authority of India Act, 1997 (as amended in January 2000)
  - iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Telecom Regulatory Authority of India as required under Section 23 (1) of the Telecom Regulatory Authority of India Act, 1997 (as amended in January 2000) in so far as it appear from our examination of such books.
  - iv. We further report that:

#### A. Balance Sheet

Fixed Assets (Schedule 8) ₹ 8,44,79,695

The above head is overstated by an amount of ₹10.35 lakh due to charging of less depreciation on Mobile Handsets purchased during the year 2020-21 and 2021-22. Depreciation charged by the Authority was in contravention of its own Office Memorandum dated 3<sup>rd</sup> January 2020. This has also resulted in overstatement of surplus by this amount.



## B. Income and Expenditure Account

Other Administrative Expenses (Schedule 21) ₹ 42,51,74,455

The above head is understated by an amount of ₹ 30.35 lakh due to non-booking of loss of Router Cisco 2921, L3 Switch, Catalyst 4500-X and 10GBASE-SR SEP Module, damaged during fire occurred in October 2020. This has also resulted in overstatement of Fixed Assets and the surplus by the same amount.

## C. Grants in Aid

Out of the revenue grants in aid of ₹ 113.06 Crore (including unspent balance of ₹ 21.06 Crore of the earlier year) received during the year, TRAI utilized as sum of ₹ 91.43 Crore leaving a balance of ₹ 21.63 Crore, as unutilized capital grant as on 31<sup>st</sup> March, 2022.

- i. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this Report are in agreement with the books of accounts.
- ii. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure-I to this Audit Report give a true and fair view in conformity with the accounting principles accepted in India:
  - a. In so far as it relates to the Balance Sheet, of the state of affairs of the Telecom Regulatory Authority of India as on 31<sup>st</sup> March, 2022; and
  - b. In so far as it relates to the Income and Expenditure Account of the Surplus for the year ended on that date.

**For and on behalf of the  
Comptroller & Auditor General of India**

**Dated : 10-11-2022**

**Place : Delhi**

Sd/-  
(Roli Shukla Malge)  
Principal Director of Audit  
(Finance & Communication)

## **Annexure-I to Draft Separate Audit Report on the accounts of Telecom Regulatory Authority of India for the year ended 31<sup>st</sup> March, 2022**

As per the information and explanations give to us, the books and records examined by us in normal course of audit and to the best of our knowledge and belief, we further report that:

### **1. Adequacy of Internal Audit System**

The Internal Audit of TRAI was conducted up to March, 2022 and got approved by the Secretary, TRAI. The Internal Audit System of the organization is adequate and commensurate with its size and nature of its functions.

### **2. Adequacy of Internal Control System**

The Internal Control System of the organization is adequate and commensurate with its size and the nature of its functions. Wherever, some deficiencies were found, the same were pointed out in Inspection Report of the Transaction audit for the current year.

### **3. System of Physical Verification of Fixed Assets**

The registers of Fixed Assets are maintained manually as well as in computerized form, Physical verification of Assets/stores is being conducted annually.

In our opinion, the System of Physical verification of fixed assets of the organisation is adequate and commensurate with its size and the nature if its functions.

### **4. System of Physical Verification of Inventory**

Inventory of store items like stationery and consumable items are kept in stock register and physical verification is done at the year end.

In our opinion, the system for physical verification of inventory is adequate and commensurate with its size and the nature of its functions.

### **5. Regularity in payment of Statutory Dues**

These was no disputed amount payable in respect of any other statutory dues including Contributory Provident Fund.

Sd/-  
(Roli Shukla Malge)  
Principal Director of Audit  
(Finance & Communication)



## Brief note on the Internal Control System in Telecom Regulatory Authority of India- for the year 2021-22

An evaluation of the Internal Control System existing in Telecom Regulatory Authority of India (TRAI) was done during the course of Certification of the Annual Accounts of TRAI for the year 2021-22 and the report on the same is furnished below:

### 1. Organizational Setup

The Authority consists of one Chairperson, two full-time Members and two part-time Members, who are assisted by the Secretary in discharging their functions. The secretariat of TRAI is headed by the Secretary and works through seven functional divisions viz (i) Administration & International Relations (A&IR) (ii) Broadcasting and Cable Services (B&CS) (iii) Financial & Economic Analysis (F&EA) (iv) Networks, Spectrum and Licencing (NSL) (v) Quality of Services (QoS) (vi) Legal division (vii) Consumer Affairs & Information Technology (CA&IT). Each of these divisions is headed by a Principal Advisor/Advisors and they report to the Secretary. Each Principal Advisor/Advisors is assisted by Deputy Advisors or Joint Advisors who in turn are assisted by the respective Senior Research Officers.

### 2. Policies and Procedures

The policies and procedures for appointment of staff/officers, fixation of pay, extension of terms of consultants, settlement of personal claims, TA claims, Training and Study tours of officers and staff and regulations on various matters are framed according to provisions contained in the TRAI Act. Wherever some deficiencies were found, the same was pointed out in Inspection Report of the Transaction audit for the current year.

### 3. Scope and Independence of Internal Audit

TRAI has its own Internal Audit Division headed by Technical Officer (TO) directly reporting to the secretary TRAI. The Reports of Internal Audit are submitted to the Secretary for approval and are thereafter forwarded to the respective divisions for necessary corrective measures. The actions taken by the division are monitored continuously and regularly. Internal Audit Report for the year 2021-22 was approved by the Secretary TRAI.

### 4. Receipts and Disbursement of Cash

The work relating to receipt and disbursement of cash is done by the cashier under the supervision of the Dv. Advisor (Finance). The Cash Book remains under the custody of the Cashier and the Physical verification of cash is being regularly done. The maximum limit of cash balance, as prescribed by the Authority, is being maintained.

### 5. TRAI General Fund

TRAI General Fund is maintained by department of Telecommunications (DoT), Grants from the Government of India to TRAI are credited to this fund separately. Expenditure of TRAI is met out of the release of grants by DoT and utilization certificates in respect of grants released are furnished by TRAI to DoT.

## 6. Fixed Assets

The Register of Fixed Assets is being maintained manually as well as in computerized form. Physical verification of Assets/Stores is being conducted annually.

## 7. Receipts and disbursement of cash

All sanctions of the Competent Authority, which are forwarded to the Finance Division for payment are checked with existing Rules/orders, approval of the competent Authority, availability of funds under the allocated Head of Accounts etc. and final orders for payment are issued accordingly. Orders of authority which is not in consonance with Govt's decisions/orders are rectified by the Finance.

## 8. Pay Rolls/Loans and Advances to Individuals

The salary/loans and advances of the TRAI Employees are being prepared and paid as per the provisions contained in the orders by the Govt of India from time to time.

## 9. Bank Balance/Bank Reconciliations

Cheques are issued on basis of sanctions received from the respective Divisions. TRAI is maintaining a Cheque Issue Register in which the details of cheques issued and received are entered. Bank Reconciliation Statements are prepared on monthly basis. Funds received through Govt Grants are kept in Current Accounts in the Bank.

## 10. Register of BHA/MCA/Computer/Scooter advances

HBA/MCA/Computer/Scooter advances are being paid to its employees by TRAI. While making payments of these advances to its employees. TRAI has been considering the debit balances of the parent/previous officers of the employees who took absorption.

Sd/-  
(Roli Shukla Malge)  
Principal Director of Audit  
(Finance & Communication)

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31<sup>st</sup> MARCH, 2022**

Income	Schedule	REVENUE	
		Current Year 2021-22	Previous Year 2020-21
Income from Sales/Services	12		
Grants/Subsidies	13	92,00,00,000	90,00,00,000
Fee/Subscriptions	14	-	-
Income from Investments (Income on Invest from earmarked /endow. Funds transferred to Funds	15	-	-
Income for Royalty, Publication etc.	16	-	-
Interest Earned	17	1,79,07,118	7,04,564
Other Income	18	5,34,403	193,488
Increase(decrease) in stock of Finished goods and works-in-progress	19		
<b>TOTAL(A)</b>		<b>93,84,41,521</b>	<b>90,08,98,052</b>
EXPENDITURE			
Establishment Expenses	20	48,94,42,293	43,06,41,796
Other Administrative Expenses etc	21	42,51,74,455	46,47,68,002
Expenditure on Grants, Subsidies etc	22	-	-
Interest	23	-	-
Depreciation (Net Total at the year end-corresponding to Schedule 8)		1,55,75,774	1,61,13,587
<b>TOTAL (B)</b>		<b>93,01,92,522</b>	<b>91,15,23,385</b>
Balance being excess of Income over Expenditure (A-B)			
Transfer to Special Reserve (Specify each)			
Transfer to / from General Reserve			
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/CAPITAL FUND			
SIGNIFICANT ACCOUNTING POLICIES	24	<b>82,48,999</b>	<b>(1,06,25,333)</b>
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

Sd/-  
Chairperson

Sd/-  
Member

Sd/-  
Secretary

Sd/-  
Pr. Advisor (F&EA)

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**BALANCE SHEET AS ON 31<sup>ST</sup> MARCH, 2022**

		REVENUE	
		2021-22	2020-21
CORPUS/CAPITAL FUND	1	(4,16,62,136)	(4,99,11,135)
RESERVES AND SURPLUS	2		
EARMARKED/ENDOWMENT FUNDS	3	4,96,390	22,61,98,520
SECURED LOANS AND BORROWINGS	4		-
UNSECURED LOANS AND BORROWINGS	5		-
DEFERRED CREDIT LIABILITIES	6		-
CURRENT LIABILITIES AND PROVISIONS	7	35,90,24,249	36,92,99,430
<b>TOTAL</b>		<b>31,78,58,503</b>	<b>54,55,86,815</b>
<b>ASSETS</b>			
FIXED ASSETS	8	8,44,79,695	8,77,39,210
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9		-
INVESTMENTS-OTHERS	10		-
CURRENT ASSETS, LOANS, ADVANCES ETC	11	23,33,78,808	45,78,47,605
MISCELLANEOUS EXPENDITURE			
(to the extent not written off or adjusted)			
<b>TOTAL</b>		<b>31,78,58,503</b>	<b>54,55,86,815</b>
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

Sd/-  
Pr. Advisor (F&EA)

Sd/-  
Secretary

Sd/-  
Member

Sd/-  
Chairperson

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE I - CORPUS/CAPITAL FUND**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
Balance as at the beginning of the year	(4,99,11,135)	(3,92,85,802)
Add:/Less Contributions towards Corpus/Capital Fund		
Add/(Deduct): Balance of net income/(expenditure) transferred from the Income and Expenditure Account	82,48,999	(1,06,25,333)
<b>BALANCE SHEET AS AT THE YEAR-END</b>	<b>(4,16,62,136)</b>	<b>(4,99,11,135)</b>

**SCHEDULE 2 - RESERVES AND SURPLUS**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
<b>1. Capital Reserve:</b>	-	-
As per last Account	-	-
Addition during the year	-	-
Less: Deductions during the year	-	-
<b>2. Revaluation Reserve:</b>	-	-
As per last Account	-	-
Addition during the year	-	-
Less: Deductions during the year	-	-
<b>3. Special Reserve:</b>	-	-
As per last Account	-	-
Addition during the year	-	-
Less: Deductions during the year	-	-
<b>4. General Reserve:</b>	-	-
As per last Account	-	-
Addition during the year	-	-
Less: Deductions during the year	-	-
<b>TOTAL</b>	<b>-</b>	<b>-</b>

Sd/-  
Consultant (F&EA)

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 3 - EARMARKED/ENDOWMENT FUNDS**

(Amount in ₹)

	Building Fund Fund Fund			TOTAL REVENUE	
	Fund	XX	YY	ZZ	
a) Opening balance of the funds	22,61,98,520				
b) Additions of the funds:					
i. Donations/grants					
ii. Income from investments made on account of funds					
iii. Other additions(Misc income, receipt of advances)					
(iv) Funds Received from DOT for building	113,00,00,000				
<b>TOTAL (a+b)</b>	<b>135,61,98,520</b>				
c) Utilisation/expenditure towards objectives of funds					
i. Capital Expenditure					
- Fixed Assets					NIL
- Others					NIL
Building advance NBCC	135,57,02,130				
Total					
ii. Revenue Expenditure					
- Salaries,Wages and Allowances etc					
- Rent					-
- Other Administrative Expenses					-
Total					
<b>TOTAL (c)</b>	<b>135,57,02,130</b>				
<b>NET BALANCE AS AT THE YEAR-END (a+b+c)</b>	<b>4,96,390</b>				

**Notes**

- 1) Disclosures shall be made under relevant head based on conditions attaching to the grants
- 2) The balance is lying in current Account of TRAI general fund shown in Bank balances at Schedule 11 of Current Assets loans and advances.

Sd/-  
Consultant (F&EA)

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 4 - SECURED LOANS AND BORROWINGS**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1. Central Government	-	-
2. State Government (Specify)	-	-
3. Financial Institutions	-	-
4. Banks	-	-
a) Term Loans	-	-
- Interest accrued and due	-	-
b) Other-Loans (Specify)	-	-
- Interest accrued and due	-	-
5. Other Institutions and Agencies	-	-
6. Debentures and Bonds	-	-
7. Others (Specify)	-	-
<b>TOTAL</b>	-	-

**Note** : Amount due within one year.

**SCHEDULE 5 - UNSECURED LOANS AND BORROWINGS**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1. Central Government	-	-
2. State Government (Specify)	-	-
3. Financial Institutions	-	-
4. Banks	-	-
a) Term Loans	-	-
- Interest accrued and due	-	-
b) Other-Loans (Specify)	-	-
- Interest accrued and due	-	-
5. Other Institutions and Agencies	-	-
6. Debentures and Bonds	-	-
7. Others (Specify)	-	-
<b>TOTAL</b>	-	-

**Note** : Amount due within one year.

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 6 - DEFERRED CREDIT LIABILITIES**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
a) Acceptances secured by hypothecation of capital equipment and other assets	-	-
b) Others	-	-
<b>TOTAL</b>	-	-

**Note: Amounts due within one year.**

**SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS** (Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
<b>A. CURRENT LIABILITIES</b>		
1) Acceptances	-	-
2) Sundry Creditors	-	-
a) For Goods	-	-
b) Others	-	-
3) Advances Received	-	-
4) Interest accrued but not due on:	-	-
a) Secured loans/borrowings	-	-
b) Unsecured Loans/borrowings	-	-
5) Statutory Liabilities	-	-
a) Overdue	-	-
b) Others	-	-
6) Other current Liabilities	-	-
1) For TRAI General Fund (EMD)	8,38,387	57,01,871
2) For Telemarketers Registration Fees	1,917	1,78,302
3) For Customer Education Fees	123	15,631
4) Penalty from Telemarketers	1,13,90,037	92,00,000
<b>TOTAL (A)</b>	<b>1,22,30,464</b>	<b>1,50,95,804</b>
<b>B. PROVISIONS</b>		
1. For Taxation		
2. Gratuity	10,38,75,036	9,25,26,411
3. Superannuation/Pension	-	-
4. Accumulated Leave Encashment	12,13,45,565	9,98,88,759
5. Trade Warranties/Claims	-	-
6. Other(Specify)	-	-
Provisions for expenses	12,15,73,184	16,17,88,456
<b>TOTAL (B)</b>	<b>34,67,93,785</b>	<b>35,42,03,626</b>
<b>TOTAL (A+B)</b>	<b>35,90,24,249</b>	<b>36,92,99,430</b>

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 8 - FIXED ASSETS**

(Amount in ₹)

DESCRIPTION	GROSS BLOCK			DEPRECIATION			NET BLOCK	
	Cost/ valuation as at beginning of the year	Additions during the year	Deductions during the year	Cost/valuation at the year-ended	As at the beginning of the year	Additions during the year	Deductions during the year	Total up to the year-end
<b>A. FIXED ASSETS:</b>								
1. LAND								
a) Freehold	-	-	-	-	-	-	-	-
b) Leasehold	-	-	-	-	-	-	-	-
2. BUILDINGS								
a) On Freehold Land	-	-	-	-	-	-	-	-
b) On Leasehold Land	-	-	-	-	-	-	-	-
c) Ownership Flats/Premises	-	-	-	-	-	-	-	-
d) Superstructures on land not belonging to the entity	-	-	-	-	-	-	-	-
3. PLANT MACHINERY & EQUIPMENTS								
4. VEHICLES	94,62,471	-	21,98,774	72,63,697	53,65,451	7,79,729	20,81,102	40,64,078
5. FURNITURE, FIXTURES	2,83,85,660	13,11,942	-	2,96,97,602	2,39,81,434	9,54,361	15,824	2,49,19,971
6. OFFICE EQUIPMENT	4,31,73,359	23,93,613	-	4,55,66,972	3,62,83,411	24,21,714	4,81,519	3,82,23,606
7. COMPUTER/PERIPHERALS	12,87,74,955	65,33,656	-	13,53,08,611	7,24,51,538	66,65,984	15,83,881	7,75,33,641
8. ELECTRIC INSTALLATIONS	1,17,35,827	46,930	-	1,17,82,757	91,56,383	4,50,949	-	96,07,332
9. LIBRARY BOOKS	44,47,558	66,566	-	45,14,124	44,01,767	30,007	-	44,31,774
11. AUDITORUM	2,20,90,493	-	-	2,20,90,493	86,91,129	42,73,030	-	1,29,64,159
<b>TOTAL OF CURRENT YEAR</b>	<b>24,80,70,323</b>	<b>1,03,52,707</b>	<b>21,98,774</b>	<b>25,62,24,256</b>	<b>16,03,31,113</b>	<b>1,55,75,774</b>	<b>41,62,326</b>	<b>17,17,44,561</b>
<b>PREVIOUS YEAR</b>	<b>23,44,81,205</b>	<b>1,35,89,118</b>	<b>0</b>	<b>24,80,70,323</b>	<b>14,42,17,526</b>	<b>1,61,13,587</b>	<b>0</b>	<b>16,03,31,113</b>
<b>B. CAPITAL WORK-IN-PROGRESS</b>								
<b>TOTAL</b>								

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 9 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS**

(Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1. In Government Securities	-	-
2. Other approved Securities	-	-
3. Shares	-	-
4. Debentures and Bonds	-	-
5. Subsidiaries and Joint Ventures	-	-
6. Others (to be specified)	-	-
<b>TOTAL</b>	-	-

**SCHEDULE 10 - INVESTMENTS OTHERS**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1. In Government Securities	-	-
2. Other approved Securities	-	-
3. Shares	-	-
4. Debentures and Bonds	-	-
5. Subsidiaries and Joint Ventures	-	-
6. Others (to be specified)	-	-
<b>TOTAL</b>	-	-

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)  
TELECOM REGULATORY AUTHORITY OF INDIA  
SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC**

(Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
<b>A. CURRENT ASSETS:</b>		
1. <u>Inventories</u>		
a) Stores and Spares	-	-
b) Loose tools	-	-
c) Stock-in-trade	-	-
Finished Goods	-	-
Work in progress	-	-
Raw Material	-	-
2. <u>Sundry Debtors:</u>		
a) Debts Outstanding for a period exceeding six months	-	-
b) Others	-	-
3. <u>Cash balances in hand ( including cheques/drafts and imprest)</u>	25,844	26,385
4. Bank Balances:		
a) With Scheduled Banks		
- On Current Accounts TRAI General fund	21,37,59,848	3,00,801
- Building Fund (For new building of TRAI)	5,42,113	
- On Current Accounts Registration Fees	1,310	1,77,695
- Penalty from Telemarketers	123	15,318
- On Savings Account Customer Education Fees		
- On Savings Account Financial Disincentive	1,13,90,037	92,00,000
- Fixed deposits with union Bank of India	26,40,000	43,65,00,000
b) With non-Scheduled Banks		
- On Current Accounts	-	-
- On Deposit Accounts	-	-
- On Savings	-	-
5. Post Office-Savings Accounts	-	-
<b>TOTAL (A)</b>	<b>22,83,59,275</b>	<b>44,62,20,199</b>

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Contd.....

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)  
TELECOM REGULATORY AUTHORITY OF INDIA  
SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC**

(Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
<b>B. LOANS, ADVANCES AND OTHER ASSETS</b>		
1. <u>Loans</u>		
a) Staff	-	-
b) Other Entities engaged in activities/objectives similar to that of Entity	-	-
c) Others (TA, LTC and Festival Advances to Officers & Staff)	31,51,118	31,11,912
2. <u>Advance and other amounts recoverable in cash or in kind or for value to be received:</u>		
a) On Capital Account	-	-
b) Prepayments	12,00,810	77,76,372
c) Others	-	-
3. <u>Income Accrued</u>		
a) On Investments from Earmarked/Endowment Funds	-	-
b) On Investments-Others	-	-
c) On Loans and Advances	6,67,605	7,39,122
d) Others	-	-
(includes income due unrealised Rs.)		
5. Claims Receivable	-	-
<b>TOTAL (B)</b>	<b>50,19,533</b>	<b>1,16,27,406</b>
<b>TOTAL (A+B)</b>	<b>23,33,78,808</b>	<b>45,78,47,605</b>

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 12 - INCOME FROM SALES/SERVICES**

(Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
<b>1. Income from Sales</b>	-	-
a) Sale of Finished Goods	-	-
b) Sale of Raw material	-	-
c) Sale of Scraps	-	-
<b>2. Income from Services</b>	-	-
a) Labour and Processing Charges	-	-
b) Professional/Consultancy Services	-	-
c) Agency Commission and Brokerage	-	-
d) Maintenance Services (Equipment/Property)	-	-
e) Others (Specify)	-	-
<b>TOTAL</b>	-	-

**SCHEDULE 13 - GRANTS/SUBSIDIES**

(Irrevocable Grants & Subsidies Received)	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1) Central Government	92,00,00,000	90,00,00,000
2) State Government(s)	-	-
3) Government Agencies	-	-
4) Institutions/Welfare Bodies	-	-
5) International Organisations	-	-
6) Other (Swachh Bharat)	-	-
<b>TOTAL</b>	<b>92,00,00,000</b>	<b>90,00,00,000</b>

**SCHEDULE 14 - FEES/SUBSCRIPTIONS**

(Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1. Entrance Fees	-	-
2. Annual Fees/Subscriptions	-	-
3. Seminar/Program Fees	-	-
4. Consultancy Fees	-	-
5. Others(specify)	-	-
<b>TOTAL</b>	-	-

**Note: Accounting Policies towards each item are to be disclosed**

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 15 - INCOME FROM INVESTMENTS**

(Amount in ₹)

(Income on Investment from Earmarked/ Endowment Funds Transferred to Funds)	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1) Interest	-	-
a) On Govt Securities	-	-
b) Other Bonds/Debentures	-	-
2) Dividends	-	-
a) On Shares	-	-
b) On Mutual Fund Securities	-	-
3) Rents	-	-
4) Others (Specify)	-	-
<b>TOTAL</b>	-	-

**TRANSFERRED TO EARMARKED/ENDOWMENT FUNDS**

**SCHEDULE 16 - INCOME FROM ROYALTY, PUBLICATION ETC**

(Amount in ₹)

(Income on Investment from Earmarked/ Endowment Funds Transferred to Funds)	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1. Income from Royalty	-	-
2. Income from Publications	-	-
3. Misc Income	-	-
<b>TOTAL</b>	-	-

**SCHEDULE 17 - INTEREST EARNED**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1) On Term Deposits	-	-
a) With Scheduled Banks	-	-
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Flexi Accounts	1,79,07,118	7,04,564
2) On Savings Account	-	-
a) With Scheduled Banks	-	-
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Others	-	-
3) On Loans	-	-
a) Employees/Staff	-	-
b) Others	-	-
4) Interest on Debtors and Other Receivables	-	-
<b>TOTAL</b>	<b>1,79,07,118</b>	<b>7,04,564</b>

**Note - Tax deducted at source to be indicated**

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 18 - OTHER INCOME**

(Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
1. Profit on Sale/disposal of Assets		
a) Owned assets		
b) Assets acquired out of grants, or received free of cost		
2. Export Incentives realized		
3. Fees for Miscellaneous Services		
4. Miscellaneous Income	5,34,403	2,84,667
5. Registration Fees from Telemarketers		
6. Customer Education Fees from Telemarketers		
7. Penalty from Telemarketers		
8. Financial Disincentive		
<b>TOTAL</b>	<b>5,34,403</b>	<b>2,84,667</b>

**SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
a) Closing stock		
- Finished Goods	0	0
- Work-in-progress	0	0
b) Less Opening Stock		
- Finished Goods	0	0
- Work-in-progress	0	0
<b>NET INCREASE/(DECREASE) [a-b]</b>	<b>0</b>	<b>0</b>

**SCHEDULE 20 - ESTABLISHMENT EXPENSES**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
a) Salaries and Wages	38,26,08,775	35,23,25,335
b) Allowances and Bonus	4,52,459	4,70,913
c) Contribution to Provident Fund	2,31,14,825	1,93,28,583
d) Contribution to Other Fund(specify)	-	-
e) Staff Welfare Expenses	14,38,157	10,52,062
f) Expenses on Employees Retirement and Terminal Benefits	6,40,40,501	4,22,46,667
g) Others (LTC, Medical to Officers & Staff and OTA to Staff)	1,77,87,576	1,52,18,236
<b>TOTAL</b>	<b>48,94,42,293</b>	<b>43,06,41,796</b>

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC**

(Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
a) Purchases	-	-
b) Labour and processing expenses	-	-
c) Cartage and Carriage Inwards	-	-
d) Electricity and power	28,40,809	19,75,235
e) Water charges	-	-
f) Insurance and bank charges	2,08,399	1,95,686
g) Repairs and maintenance	1,10,49,290	1,06,68,605
h) Excise Duty	-	-
i) Rent, Rates and Taxes	32,94,13,292	30,01,02,796
j) Vehicles Running and Maintenance	14,69,394	14,74,332
k) Postage, Telephone and Communication Charges	92,60,002	1,16,51,249
l) Printing and Stationery	10,44,703	17,83,148
m) Travelling and Conveyance Expenses	2,05,28,393	2,22,98,087
n) Expenses on Seminar/Workshops	1,39,149	1,30,333
o) Subscription Expenses	61,23,010	57,15,398
p) Prior period expenses	(3,71,13,704)	(528,240)
q) Auditors Remuneration	2,03,100	1,90,000
r) Hospitality Expenses	3,05,329	4,90,794
s) Professional Charges	2,82,49,435	4,22,04,312
t) Consultation and training	14,50,134	2,63,19,680
u) Swachh Bharat expenses	-	-
v) loss on sale of assets	-	-
w) Freight and Forwarding Expenses	-	-
x) Software develop expenses	17,06,676	-
y) Advertisement and Publicity	17,84,626	25,35,500
z) Others	-	-
(i) Others (Payment to Security, Housekeeping etc.)	4,65,12,418	3,75,61,087
<b>TOTAL</b>	<b>42,51,74,455</b>	<b>46,47,68,002</b>

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**TELECOM REGULATORY AUTHORITY OF INDIA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 22 - EXPENDITURE ON GRANTS, SUBSIDIES ETC**

(Amount in ₹)

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
a) Grants given to Institutions/Organisations	-	-
b) Subsidies given to Institutions/Organisations	-	-
<b>TOTAL</b>	-	-

**Note: Name of Entities, their Activities along with the amount of Grants/Subsidies are to be disclosed**

**SCHEDULE 23 - INTEREST**

	REVENUE	
	Current Year 2021-22	Previous Year 2020-21
a) On Fixed Loans	-	-
b) On Other Loans (including Bank Charges)	-	-
c) Others (specify)	-	-
<b>TOTAL</b>	-	-

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**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) TELECOM REGULATORY AUTHORITY OF INDIA  
RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 31<sup>st</sup> MARCH, 2022**

RECEIPTS	REVENUE		PAYMENTS	REVENUE	
	Current Year 2021-22	Previous Year 2020-21		Current Year 2021-22	Previous Year 2020-21
<b>I. Opening Balance</b>					
a) Cash in hand	26,385	66,822		47,04,43,332	41,30,18,567
i) In current accounts	3,00,801	20,84,12,360		45,35,58,310	47,12,79,323
ii) In deposit accounts in building fund	22,61,98,520	-			
iii) In TRAI General fund	21,03,01,480	-			
iv) Savings accounts penalty registration fees	15,318	5,46,363			
customer education fees	1,77,694	1,78,302			
Financial disincentive	92,00,000	7,93,30,015		135,57,02,130	90,38,01,480
<b>II. Grants Received</b>					
a) From Government of India	92,00,00,000	90,00,00,000		-	-
b) From State Government	-	-		5,42,113	22,61,98,520
c) Grant received from DOT for Building Fund	113,00,00,000	113,00,00,000		26,40,000	21,03,01,480
(Grants for capital & revenue exp to be shown separately)				1,03,41,519	1,35,89,118
<b>III. Income on Investments from</b>					
a) Earmarked/Endow Funds	-	-		-	-
b) Own Funds(Other Investment)	1,79,07,118	7,04,564		-	-
<b>IV. Interest Received</b>				1,81,697	5,108
a) On Bank deposits	-	-		-	-
b) Loans, Advances etc	71,517	-		19,278	5,46,363
c) Miscellaneous	-	-		1,73,07,995	7,93,30,015
<b>V. Other Income(Specify)</b>					
To Miscellaneous Income	5,34,403	7,21,728			
<b>VI. Amount Borrowed</b>					
<b>VII. Any other receipts(give details)</b>					
To Security Deposits other advances	65,75,562	7,60,602		49,02,690	22,90,705
To Sale of Assets	-	-		25,844	26,385
Advance Against sale of Vehicle	-	-		21,37,59,848	3,00,801
To registration fees	5,313	1,39,382		1,310	1,77,694
To customer education fees	-	5,108		-	-
To penalty from telemarketers	4,083	15,631		-	-
To financial disincentive	1,94,98,032	92,00,000		1,13,90,037	15,318
<b>TOTAL</b>	<b>254,08,16,226</b>	<b>233,00,80,877</b>	<b>TOTAL</b>	<b>254,08,16,226</b>	<b>233,00,80,877</b>
Sd/- Pr. Advisor (F&EA)	Sd/- Secretary	Sd/- Member	Sd/- Chairperson		

## SCHEDULE 24 - SIGNIFICANT ACCOUNTING POLICIES

### 1 Accounting Conventions

- The financial statements have been prepared in the "Uniform Form of Accounts" as approved by the Controller General of Accounts vide their letter No. F.No.19(1)/Misc./2005/TA/450-490 dated 23<sup>rd</sup> July, 2007 for Revenue Head.
- Accounts have been prepared on accrual basis for the current year i.e., 2021-22. There is no change in Method of Accounting from the preceding year.
- Provisions for all the undisputed and known liabilities have been made in the Books of Accounts.
- Figures have been rounded off to the nearest rupee.
- Contingent liabilities are disclosed after careful evaluation of facts and legal aspects of the matter involved.

### 2 Fixed Assets

Fixed Assets are stated at cost of acquisition inclusive of inward freight, duties and taxes and incidental and direct expenses related to acquisition.

### 3 Depreciation

- Depreciation on Fixed Assets is provided on Straight Line Method at the rates specified in Part "C" of Schedule II of the Companies Act, 2013 except for the categories mentioned below on which higher rates of depreciation have been applied:

Category	Minimum prescribed depreciation rate as per Companies Act, 1956	Depreciation rate applied
Office Equipments	19.00%	19.00% *
Furnitures and Fixtures	9.50%	10.00%
Electrical Appliances	9.50%	10.00%
Airconditioners	9.50%	10.00%
Books and Publications	6.33%	20.00%

\* Office Equipments includes Mobile Handsets provided to the officers for official purposes. It has been decided by the Competent Authority vide Order No. 2-1/97-LAN dated 4<sup>th</sup> May, 2007 to provide/write off these handsets in three years on the same pattern as DoT. Accordingly depreciation on Mobile Handsets from the year 2007-08 onwards have been charged off @ 33.33%.

- In respect of additions to Fixed Assets during the year, depreciation is considered on Pro-rata basis.

- Assets costing ₹5,000/- or less, each are fully provided.

### 4 Foreign Currency Transactions

Transactions denominated in foreign currencies are recorded at the exchange rate prevailing at the time of transaction.

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## 5 Retirement Benefits

- Provision for Leave Salary and Pension Contribution up to 31<sup>st</sup> March, 2022 in the case of employees on deputations have been provided in the Books of Accounts at the rates prescribed by Government of India under Fundamental Rules from time to time.
- In the case of Regular employees, Provision for Leave Encashment and Gratuity for the year 2021-22 have been made on the basis of report furnished by the actuary.

## 6 Govt. Grant

- Govt. grants are accounted for on the basis of grants received during the year from the Government.
- The money received on account of Registration Fee, Customer Education Fee, Penalty on Telemarketers and Financial Disincentive has been accounted for on cash basis.

## SCHEDULE 25 - CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS

### 1 Contingent Liabilities

Claims against the Entity not acknowledged as debts Current Year (Nil), Previous Year (Nil)

### 2 Current Assets, Loans and Advances

In the opinion of the Management, the current assets, loans and advances have a value on realization in the ordinary course of business, equal at least to the aggregate amount shown in the Balance Sheet.

### 3 Taxation

As per clause 32 of the TRAI Act, 1997, TRAI is exempted from tax on Wealth and Income.

### 4 Grants

During the financial year 21-22 a sum of ₹ 92 Crores have been received as govt Grant from DOT for meeting the day to day expenses of TRAI.

### 5 Earmarked Grant

From time to time, TRAI was requesting the Ministry of Communication for allotting of funds for Office space. On 26<sup>th</sup> November, 2020, DOT vide letter no 15-11/2012-Restg conveyed TRAI regarding the administrative approval of the Comptent authority for an area of 1,15,188 sq feet for Office space. Thereafter vide letter no 1-15/2021-B/313 and No. 1-15/2020-B/208 Dated 14<sup>th</sup> June, 2021 and No. 1-15/2020-B/456 dated 1<sup>st</sup> November, 2021 has been allocated a sum of ₹ 226 Crores for Building. Out of which ₹ 225.95 Crores have been paid to NBCC till the closing of the financial year i.e. 31<sup>st</sup> March, 2022 The said building fund and its utilization has been disclosed in schedule 3 of the Balance sheet.

### 6 Prior Period Items

Old provisions standing in books of accounts from 1997-98 to 2017-18 have been reviewed and as suggested by the Govt auditors in their last year report, a sum of ₹ 3.71 crores have been written back and shown under prior period head in schedule 21 forming part of Income and expenditure account.

Sd/-

Consultant (F&EA)

## 7 Previous year figures

Corresponding figures for the previous year have been regrouped/arranged wherever necessary. The expenditure/income relating to the previous year i.e prior period expenditure/income have been routed through income and expenditure Account.

## 8 Transactions in Foreign Currencies

Expenditure in Foreign Currency :

(a) Travel : A sum of ₹ 36,41,597.00 was incurred on account of Foreign Tour Expenses. Out of which an amount of ₹ 4,87,033.00 was paid in Foreign Currency.

A sum of ₹ 55,15,913.00 was paid for participation fees for foreign institutions in Foreign Currency.

(b) Remittances and Interest payment to Financial Institution,

Banks in Foreign Currency : Nil

(c) Other Expenditure : Nil

9 Schedules 1 to 25 are annexed to and form an integral part of the Balance Sheet as at 31<sup>st</sup> March, 2022 and the Income and Expenditure Account for the year ended on that date.

Sd/-  
Pr. Advisor (F&EA)

Sd/-  
Secretary

Sd/-  
Member

Sd/-  
Chairperson



## C) AUDITED CONTRIBUTORY PROVIDENT FUND ACCOUNTS OF TRAI FOR THE YEAR 2021-22

*Separate Audit Report on the Annual Accounts of Telecom Regulatory Authority of India-Contributory Provident Fund Account for the year ended 31<sup>st</sup> March, 2022.*

### 1. Introduction

We have audited the attached Balance Sheet of the Telecom Regulatory Authority of India-Contributory Provident Fund Account as on 31<sup>st</sup> March, 2022 and the Income and Expenditure Account/Receipts and Payments Account for the year ended on that date under Section 19(2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Rule 5 (5) of the Telecom Regulatory Authority of India (Contributory Provident Fund) Rules, 2003, issued under Government of India, Extraordinary Gazette Notification No. GSR 333(E) dated 10<sup>th</sup> April, 2003. These financial statements are the responsibility of the Telecom Regulatory Authority of India-Contributory Provident Fund Account's Management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This Separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum performance aspects, etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance that the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
4. Based on our audit, we report that:
  - i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of audit;
  - ii. The Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this report have been drawn up in the 'Uniform format of Accounts' approved by the Controller General of Accounts under Rule 5 of the Telecom Regulatory Authority of India (Contributory Provident Fund) Rules, 2003.
  - iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Telecom Regulatory Authority of India – Contributory Provident Fund Account.

- iv. We report that the Balance Sheet and the Income and Expenditure Account/Receipt and Payments Account dealt with by this Report are in agreement with the books of accounts.
- v. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements, read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure-I to this Audit Report, give a true and fair view in conformity with the accounting principles accepted in India:
  - a. In so far as it relates to the Balance Sheet of the state of affairs of the Telecom Regulatory Authority of India-Contributory Provident Fund Account as on 31<sup>st</sup> March, 2022; and
  - b. In so far as it relates to the Income and Expenditure Account of the 'Excess of Income over Expenditure' for the year ended on that date.

**Sd/-**  
**(Aman Deep Chatha)**  
**Director General of Audit**  
**(Finance & Communication)**

### **Annexure-I to Separate Audit Report**

**Telecom Regulatory Authority of India-Contributory Provident Fund for the year ended 31<sup>st</sup> March, 2022.**

As per the information and explanations given to us, the books and records examined by us in normal course of audit and to the best of our knowledge and belief, we further report that:

#### **(1) Adequacy of Internal Audit System**

The Internal Audit Report of TRAI-CPF accounts are available for 2021-22 and got approved by Secretary, TRAI. CPF Accounts up to 31<sup>st</sup> March, 2022 were verified by Internal Audit wing in the month of May, 2022. The Internal Audit System of the organization is adequate and commensurate with its size and nature of its function.

#### **(2) Adequacy of Internal Control System**

The Internal Control System of the organization is adequate and commensurate with its size and the nature of its functions.

**Sd/-**  
**(Aman Deep Chatha)**  
**Director General of Audit**  
**(Finance & Communication)**

## Brief note on the Internal Control System in Telecom Regulatory Authority of India-Contributory Provident Fund Account 2021-22

An evaluation of the Internal Control System existing in Telecom Regulatory Authority of India (TRAI)-CPF Account was done during the period w.e.f. 30-06-2022 to 06-07-2022 of TRAI for the year 2021-22 and the report on the same is furnished below:

### 1. Introduction

The Telecom Regulatory Authority of India - Contributory Provident Fund (TRAI-CPF) Account was established with effect from 5<sup>th</sup> May, 2003 in pursuance of Rule 3 (1) of the Telecom Regulatory Authority of India (Contributory Provident Fund) Rules, 2003, issued under Government of India, Extraordinary Gazette Notification No. GSR 333(E) dated 10<sup>th</sup> April, 2003. TRAI has a total sanctioned strength of 237 and 186 men in position as on 31<sup>st</sup> March, 2022. The deductions from salary on account of GPF/EPF/CPF (as the case may be) are made from the employees on deputation and are remitted to their parent offices as per terms and conditions of their appointment. In the case of regular staff of TRAI, CPF deductions are made from their salary as per the CPF Rules and employees' as well as employer's contributions are remitted to TRAI-CPF Account, by TRAI on a month to month basis along with the details of deduction of each employee.

### 2. Organizational Setup

TRAI-CPF Account has no separate employees on its own. The entire work of maintenance of TRAI-CPF Account is done by the Board of Trustees, which is constituted from the employees of TRAI only. As per decision taken by the TRAI Authority, the Dy. Advisor (F&EA) is the Secretary to the Board of Trustees. The following are the trustees of the Board:

(i) Advisor (Administration)	: President (Ex-officio) TRAI CPF Trust
(ii) Joint Advisor (HR)	: Trustee (Ex-officio)
(iii) Joint Advisor (F&EA)	: Trustee (Ex-officio)
(iv) Dy. Advisor (NSL-II)	: Trustee
(v) Assistant (QoS)	: Trustee
(vi) Dy. Advisor (F&EA)	: Secretary (CPF)

The Secretary to the Board of Trustees is responsible for maintenance of Accounts of the TRAI-CPF Account and conducting the meetings of the Board of Trustees. All decisions of the Board of Trustees are taken in their periodical meetings.

### 3. Scope and independence of Internal Audit

TRAI has its own Internal Audit division headed by Technical Officer (IAU). The reports of Internal Audit, including CPF-Accounts, are submitted to the Secretary for approval and are thereafter forwarded to the respective divisions for necessary corrective measures. The actions taken by the divisions are monitored continuously and regularly.

#### 4. Receipts and Disbursement of Funds

The work relating to receipt and disbursement of the funds is done by a Section Officer under the supervision of Secretary to the Board of Trustees. No cash transaction is done in TRAI CPF Account as all receipts and payments are made through cheques only. Receipt of CPF deductions from TRAI and payments made to the members of TRAI-CPF Account, if any, on account of CPF withdrawal or advance are regularly recorded in bank book.

#### 5. Investments

The funds of TRAI-CPF Account are invested in various Securities as per Government norms. The interests accrued/ received on these securities are credited in interest income. The decisions of making investments are taken in the periodical meetings of Board of Trustees.

#### 6. Interest

Interest on the CPF deposits of the members is credited to their individual accounts at the rate specified by the Central Government from time to time for the payment of interest on subscriptions to the General Provident Fund. Deficit, if any, in the interest payable to the members is met from TRAI General Fund.

#### 7. Withdrawal/Advance of CPF

The members of TRAI-CPF Account are entitled for withdrawal or for temporary advance out of their balance as per the guidelines of CPF Rules. In the case of advances given to the members, the Drawing and Disbursement Officer of TRAI is informed regarding the monthly deductions to be made from salary of the concerned members towards recovery of advances.

Sd/-  
(Aman Deep Chatha)  
Director General of Audit  
(Finance & Communication)

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD / YEAR ENDED 31<sup>st</sup> March, 2022**

Income	Schedule	Current Year 2021-22	Previous Year 2020-21	(Amount in ₹)
Income from Sales/ Services	12	-	-	-
Grants/ Subsidies	13	-	-	-
Fee/ Subscriptions	14	-	-	-
Income from Investments (Income on Invest from earmarked /endow. Funds transferred to Funds)	15	14,600,812.65	12,290,199.14	
Income for Royalty ,Publication etc	16	-	-	-
Interest Earned	17	7,583,324.00	8,060,553.00	
Other Income	18	-	188,763.00	
Increase(decrease) in stock of Finished goods and works-in-progress	19	-	-	-
<b>TOTAL (A)</b>		<b>22,184,136.65</b>	<b>20,539,515.14</b>	
EXPENDITURE				
Establishment Expenses	20	-	-	-
Other Administrative Expenses etc	21	95,840.80	77,864.90	
Expenditure on Grants, Subsidies etc	22	-	-	-
Interest	23	21,655,485.00	18,526,682.00	
Diminution Value of Investments in Mutual Funds		-	-	-
Depreciation (Net Total at the year end-corresponding to Schedule 8)		-	-	-
<b>TOTAL (B)</b>		<b>21,751,325.80</b>	<b>18,604,546.90</b>	
Balance being excess of Income over Expenditure (A-B)		432,810.85	1,934,968.24	
Transfer to Misc Expenditure to the extent not written off - on account of				
Diminution Value of Investments				
Transfer to / from General Reserve		432,810.85	1,934,968.24	
Balance being Surplus/ (Deficit) carried to Corpus/ Capital Fund				
SIGNIFICANT ACCOUNTING POLICIES	24	-	-	
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25	-	-	
Sd/-	Sd/-	Sd/-	Sd/-	Sd/-
Meetu Gulati	Mayur Gupta	Manish Jain	Vandana Sethi	
Dy. Advisor (F&EA)	Jt. Advisor (F&EA)	Jt. Advisor (HR)	Advisor (Admin)	
Secretary (CPF)	Ex-Officio Trustee	Ex-Officio Trustee	Ex-Officio President	

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**BALANCE SHEET AS AT 31<sup>st</sup> March, 2022**  
**(Amount in ₹)**

<b>CORPUS/CAPITAL FUND AND LIABILITIES</b>	<b>Schedule</b>	<b>Current Year 2021-22</b>	<b>Previous Year 2020-21</b>
TRAI - CPF MEMBERS' ACCOUNT	1	353,895,741.00	292,965,139.00
RESERVES AND SURPLUS	2	6,821,024.35	6,388,213.50
EARMARKED/ ENDOWMENT FUNDS	3	-	-
SECURED LOANS AND BORROWINGS	4	-	-
UNSECURED LOANS AND BORROWINGS	5	-	-
DEFERRED CREDIT LIABILITIES	6	-	-
CURRENT LIABILITIES AND PROVISIONS	7	-	440,226.00
<b>TOTAL</b>		<b>360,716,765.35</b>	<b>299,793,578.50</b>
ASSETS			
FIXED ASSETS	8	-	-
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9	-	-
INVESTMENTS - OTHERS	10	346,600,000.00	280,600,000.00
CURRENT ASSETS, LOANS, ADVANCES ETC	11	14,116,765.35	19,193,578.50
MISCELLANEOUS EXPENDITURE			
(to the extent not written off or adjusted)			
<b>TOTAL</b>		<b>360,716,765.35</b>	<b>299,793,578.50</b>
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

Sd/- Meetu Gulati Dy. Advisor (F&EA) Secretary (CPF)	Sd/- Reshma S. Usmani Asstt. (QoS) Trustee	Sd/- Sonia Madan Dy. Advisor (NSL-II) Trustee	Sd/- Mayur Gupta Jt. Advisor (F&EA) Ex-Officio Trustee	Sd/- Manish Jain Jt. Advisor (HR) Ex-Officio Trustee	Sd/- Vandana Sethi Advisor (Admin) Ex-Officio President
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**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)  
THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT  
FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 1 - TRAI - CPF MEMBERS' ACCOUNT**

(Amount in ₹)

	<b>Current Year 2021-22</b>	<b>Previous Year 2020-21</b>
Balance as at the beginning of the year	292,965,139.00	260,833,399.00
Deduct: Adjustments for previous year	-	-
Add: Contributions towards Members' Account	60,930,602.00	32,131,740.00
Add/(Deduct): Balance of net income/(expenditure) transferred from the Income and Expenditure Account	-	-
<b>BALANCE AS AT THE YEAR-END</b>	<b>353,895,741.00</b>	<b>292,965,139.00</b>

**SCHEDULE 2 - RESERVES AND SURPLUS**

	<b>Current Year 2021-22</b>	<b>Previous Year 2020-21</b>
<b>1. Capital Reserve:</b>		
As per last Account	-	-
Addition during the year	-	-
Less: Deductions during the year	-	-
<b>2. Revaluation Reserve:</b>		
As per last Account	-	-
Addition during the year	-	-
Less: Deductions during the year	-	-
<b>3. Special Reserve:</b>		
As per last Account	-	-
Addition during the year	-	-
Less: Deductions during the year	-	-
<b>4. General Reserve:</b>		
As per last Account	6,388,213.50	4,453,245.26
Addition during the year	432,810.85	1,934,968.24
Less: Deductions during the year		
<b>TOTAL</b>	<b>6,821,024.35</b>	<b>6,388,213.50</b>

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 3 - EARMARKED/ ENDOWMENT FUNDS**

(Amount in ₹)

	Current Year 2021-22	Previous Year 2020-21
<b>a) <u>Opening balance of the funds</u></b>		
<b>b) <u>Additions of the funds:</u></b>		
i. Donations/grants		
ii. Income from investments made on account of funds		
iii. Other additions (specify nature)		
 <b>c) <u>Utilisation/expenditure towards objectives of funds</u></b>		
i. Capital Expenditure		
- Fixed Assets		
- Others		
Total		
ii. Revenue Expenditure		
- Salaries, Wages and allowances etc		
- Rent		
- Other Administrative expenses		
 <b>NET BALANCE AS AT THE YEAR-END (a+b+c)</b>		

**Notes**

- 1) Disclosures shall be made under relevant head based on conditions attached to the grants.
- 2) Plan funds received from the Central/State Governments are to be shown as separate funds and not to be mixed up with any other Funds.

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 4 - SECURED LOANS AND BORROWINGS**

(Amount in ₹)

	Current Year 2021-22	Previous Year 2020-21
1. Central Government		
2. State Government (Specify)		
3. Financial Institutions		
4. Banks		
a) Term Loans		
-Interest accrued and due		
b) Other-Loans (Specify)		
-Interest accrued and due		
5. Other Institutions and Agencies		
6. Debentures and Bonds		
7. Others (Specify)		
<b>TOTAL</b>		

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 5 - UNSECURED LOANS AND BORROWINGS**

(Amount in ₹)

	Current Year 2021-22	Previous Year 2020-21
1. Central Government		
2. State Government (Specify)		
3. Financial Institutions		
4. Banks		
a) Term Loans		
-Interest accrued and due		
b) Other-Loans(Specify		
-Interest accrued and due		
5. Other Institutions and Agencies		
6. Debentures and Bonds		
7. Others(Specify)		

**TOTAL**

Note: Amount due within one year

**SCHEDULE 6 - DEFERRED CREDIT LIABILITIES**

(Amount in ₹)

	Current Year 2021-22	Previous Year 2020-21
a) Acceptances secured by hypothecation of capital equipment and other assets		
b) Others		

**TOTAL**

Note: Amounts due within one year

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS**

(Amount in ₹)

	Current Year 2021-22	Previous Year 2020-21
<b>A. CURRENT LIABILITIES</b>		
1) Acceptances		
2) Sundry Creditors		
a) For Goods		
b) Others		
3) Advances Received		
4) Interest accrued but not due on:		
a) Secured loans/borrowings		
b) Unsecured Loans/borrowings		
5) Statutory Liabilities		
a) Overdue		
b) Others		
6) Other current Liabilities		
<b>TOTAL (A)</b>	-	-
<b>B. PROVISIONS</b>		
1. For Taxation	-	-
2. Gratuity	-	-
3. Superannuation/Pension/Removal	-	306,919.00
4. Accumulated Leave Encashment	-	-
5. Trade Warranties/Claims	-	-
6. Other (Payable to MEA/TRAI)	-	133,307.00
<b>TOTAL (B)</b>	-	440,226.00
<b>TOTAL (A+B)</b>	-	<b>440,226.00</b>

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 8 - FIXED ASSETS**

SCHEDULE	GROSS BLOCK		DESCRIPTION		NET BLOCK	
	"Cost/valuations at beginning of the year"	As at the year ended	Cost/valuation at the year ended	On additions during the year	On Deduction during the year	Total up As at the current year end
<b>A. FIXED ASSETS:</b>						
1. LAND						
a) Freehold						
b) Leasehold						
2. BUILDINGS						
a) On Freehold Land						
b) On Leasehold Land						
c) Ownership Flats/Premises						
d) Superstructures on land not belonging to the entity						
3. PLANT MACHINERY & EQUIPMENT						
4. VEHICLES						
5. FURNITURE, FIXTURES						
6. OFFICE EQUIPMENT						
7. COMPUTER/PERIPHERALS						
8. ELECTRIC INSTALLATIONS						
9. LIBRARY BOOKS						
10. TUBEWELLS & WATER SUPPLY						
11. OTHER FIXED ASSETS						
<b>TOTAL OF CURRENT YEAR</b>						
<b>PREVIOUS YEAR</b>						
<b>B. CAPITAL WORK-IN-PROGRESS</b>						
<b>TOTAL</b>						

(Note to be given as to cost of assets on hire purchase basis included above)

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 9 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
1. In Government Securities	/	/
2. Other approved Securities	/	/
3. Shares		
4. Debentures and Bonds		
5. Subsidiaries and Joint Ventures		
6. Others ( to be specified)		
<b>TOTAL</b>		

**SCHEDULE 10 - INVESTMENTS OTHERS**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
1. In Government Securities	181,500,000.00	186,500,000.00
- Long - term Investments		
- Current Investments		
2. Other Approved Securities		
3. Shares		
4. Debentures and Bonds		
5. Subsidiaries and Joint Ventures		
6. Others (Fixed Deposits in Banks/PSU) - Long - term	165,100,000.00	94,100,000.00
<b>TOTAL</b>	<b>346,600,000.00</b>	<b>280,600,000.00</b>



**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
<b>A. <u>CURRENT ASSETS:</u></b>		
1. <u>Inventories</u>		
a) Stores and Spares		
b) Lose tools		
c) Stock-in-trade		
Finished Goods		
Work in progress		
Raw Material		
2. <u>Sundry Debtors:</u>		
a) Debts Outstanding for a period exceeding six months		
b) Others		
3. <u>Cash balances in hand ( including cheques/drafts and imprest)</u>		
4. <u>Bank Balances:</u>		
a) With Scheduled Banks		
- On Current Accounts		
- On Deposit Accounts (includes margin money)	-	-
- On Savings Account	45,83,363.29	50,14,663.09
b) With non-Scheduled Banks		
- On Current Accounts		
- On Deposit Accounts		
- On Savings Account		
5. <u>Post Office-Savings Accounts</u>		
<b>TOTAL (A)</b>	<b>45,83,363.29</b>	<b>50,14,663.09</b>

*Contd.....*

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
<b>B. LOANS, ADVANCES AND OTHER ASSETS</b>		
1. <u>Loans</u>		
a) Staff		
b) Other Entities engaged in activities/objectives similar to that of Entity		
c) Other (Specify)		
2. <u>Advance and other amounts recoverable in cash or in kind or for value to be received:</u>		
a) On Capital Account		
b) Prepayments		
c) Others		
3. <u>Income Accrued</u>		
a) On Investments from Earmarked/Endowment Funds		
b) On Investments - Others	95,33,402.06	1,41,78,915.41
c) On Loans and Advances		
d) Others		
(includes income due unrealised Rs.)		
4. <u>Claims Receivable</u>		
<b>TOTAL (B)</b>	95,33,402.06	1,41,78,915.41
<b>TOTAL (A+B)</b>	<b>1,41,16,765.35</b>	<b>1,91,93,578.50</b>

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 12 - INCOME FROM SALES/SERVICES**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
1. <u>Income from Sales</u>		
a) Sale of Finished Goods		
b) Sale of Raw material		
c) Sale of Scraps		
2. <u>Income from Services</u>		
a) Labour and Processing Charges		
b) Professional/Consultancy Services		
c) Agency Commission and Brokerage		
d) Maintenance Services (Equipment/Property)		
e) Others (Specify)		
<b>TOTAL</b>		

**SCHEDULE 13 - GRANTS/SUBSIDIES**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
(Irrevocable Grants & Subsidies Received)		
1) Central Government		
2) State Govenemnt(s)		
3) Government Agencies		
4) Institutions/Welfare Bodies		
5) International Organisations		
6) Other (Specify)		
<b>TOTAL</b>		

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 14 - FEES/ SUBSCRIPTIONS**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
1. Entrance Fees		
2. Annual Fees/Subscriptions		
3. Seminar/Program Fees		
4. Consultancy Fees		
5. Others (specify)		
<b>TOTAL</b>		

Note: Accounting Policies towards each item are to be disclosed

**SCHEDULE 15 - INCOME FROM INVESTMENTS**

	(Amount in ₹)	
(Income on Invest. from Earmarked/Endowment Funds Transferred to Funds)	Current Year 2021-22	Previous Year 2020-21
1) Interest		
a) On Govt Securities	14,600,812.65	12,290,199.14
b) Other Bonds/Debentures		
2) Dividends		
a) On Shares		
b) On Mutual Fund Securities		
3) Rents		
4) Others		
<b>TOTAL</b>	<b>14,600,812.65</b>	<b>12,290,199.14</b>
<b>TRANSFERRED TO EARMARKED/ ENDOWMENT FUNDS</b>		

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 16 -INCOME FROM ROYALTY, PUBLICATION ETC**

(Amount in ₹)

	Current Year 2021-22	Previous Year 2020-21
1. Income from Royalty	/	/
2. Income from Publications	/	/
3. Others (Specify)	/	/
<b>TOTAL</b>		

**SCHEDULE 17 - INTEREST EARNED**

(Amount in ₹)

	Current Year 2021-22	Previous Year 2020-21
1) On Term Deposits		
a) With Scheduled Banks	7,403,480.00	7,883,605.00
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
2) On Savings Account		
a) With Scheduled Banks	179,844.00	176,948.00
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
3) On Loans		
a) Employees/Staff		
b) Others		
4) Interest on Debtors and Other Receivables		
<b>TOTAL</b>	<b>7,583,324.00</b>	<b>8,060,553.00</b>

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 18 - OTHER INCOME**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
1. Profit on Sale/ Disposal of Assets		
a) Owned assets		
b) Assets acquired out of grants, or received free of cost		
2. Export Incentives realized		
3. Fees for Miscellaneous Services		
4. Miscellaneous Income	--	188,763.00
<b>TOTAL</b>	--	<b>188,763.00</b>

**SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS**

	Current Year 2021-22	Previous Year 2020-21
a) Closing stock		
- Finished Goods		
- Work-in-progress		
b) Less Opening Stock		
- Finished Goods		
- Work-in-progress		
<b>NET INCREASE/(DECREASE) [a-b]</b>		

**SCHEDULE 20 - ESTABLISHMENT EXPENSES**

	Current Year 2021-22	Previous Year 2020-21
a) Salaries and Wages		
b) Allowances and Bonus		
c) Contribution to Provident Fund		
d) Contribution to Other Fund(specify)		
e) Staff Welfare Expenses		
f) Expenses on Employees Retirement and Terminal Benefits		
g) Others		
<b>TOTAL</b>		

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31<sup>st</sup> MARCH, 2022**

**SCHEDULE 21-OTHER ADMINISTRATIVE EXPENSES ETC**

(Amount in ₹)

	Current Year 2021-22	Previous Year 2020-21
a) Purchases		
b) Labour and processing expenses		
c) Cartage and Carriage Inwards		
d) Electricity and power		
e) Water charges		
f) Insurance		
g) Repairs and maintenance		
h) Excise Duty		
I) Rent, Rates and Taxes		
j) Vehicles Running and Maintenance		
k) Postage, Telephone and Communication Charges		
l) Printing and Stationery		
m) Travelling and Conveyance Expenses		
n) Expenses on Seminar/Workshops		
o) Subscription Expenses		
p) Expenses on Fees		
q) Auditors Remuneration		
r) Hospitality Expenses		
s) Professional Charges		
t) Provision for Bad and Doubtful Debts/Advances		
u) Irrecoverable Balances Written-off		
v) Packing Charges		
w) Freight and Forwarding Expenses		
x) Distribution Expenses		
y) Advertisement and Publicity		
z) Others		
DLIS	60,000.00	
Bank & Finance Charges	35,840.80	77,864.90
<b>TOTAL</b>	<b>95,840.80</b>	<b>77,864.90</b>



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31<sup>st</sup> MARCH, 2022**  
**SCHEDULE 22-EXPENDITURE ON GRANTS, SUBSIDIES ETC**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
a) Grants given to Institutions/Organisations	/	/
b) Subsidies given to Institutions/Organisations	/	/

**TOTAL**

Note: Name of Entities, their Activities along with the amount of Grants/Subsidies are to be disclosed

**SCHEDULE 23 - INTEREST**

	(Amount in ₹)	
	Current Year 2021-22	Previous Year 2020-21
a) On Fixed Loans		
b) On Other Loans (including Bank Charges)		
a) Others (specify) - Interest Payable to Members	21,655,485.00	18,526,682.00
<b>FINANCE CHARGES</b>		
<b>TOTAL</b>	<b>21,655,485.00</b>	<b>18,526,682.00</b>

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31st March, 2022**

(Amount in ₹)

RECEIPTS	Current Year 2021-22	Previous Year 2020-21	PAYMENTS	Current Year 2021-22	Previous Year 2020-21
<b>I. Opening Balance</b>			<b>1. Expenses</b>		
a) Cash in hand			a) Establishment Expenses		359.90
b) Bank Balances			b) Administrative Expenses	70.80	3,540.00
i) In current accounts			c) Bank Charges		
ii) In deposit accounts			d) Finance Charges	35,770.00	75,735.00
iii) Savings accounts	5,014,663.09	9,874,490.93	<b>II Payments made against funds for various projects</b>		
<b>II. Grants Received</b>			(Name the fund or project should be shown along with the particulars of payments made for each project)		
a) From Government of India			<b>III. Investments and Deposits made</b>		
b) From State Government			a) Out of Earmarked/ Endowment funds		
c) From Other Sources (Details)			b) Out of Own Funds (Investments - Others)	164,900,000.00	63,700,000.00
(Grants for capital & revenue exp to shown seperately)			(Investments - Flexi Account)		
<b>III. Income on Investments from</b>			<b>IV. Expenditure on Fixed Assets &amp; Capital Work-in-progress</b>		
a) Earmarked/ Endow Funds			a) Purchase of Fixed Assets		
b) Own Funds (On Investment in Mutual Funds)			b) Expenditure on Capital Work-in-progress		
<b>IV. Interest Received</b>			<b>V. Refund of surplus money/ Loans</b>		
a) On Bank Deposits	11,885,381.00	5,184,262.00	a) The Government of India		
b) Loans, Advances etc.			b) The State Government		
c) Miscellaneous	14,764,425.00	10,891,658.06	c) Other providers of funds		
d) interest on savings	179,844.00	176,948.00	<b>VI. Finance Charges (Interest)</b>		
<b>V. Other Income (Specify)</b>			<b>VII. Other Payments (Specify)</b>		
To Miscellaneous Income (Finance Charge)	-	188,763.00	Final Payments	5,729,327.00	34,846,870.00
<b>VI. Amount Borrowed</b>			Advances and Withdrawals	5,310,000.00	4,956,199.00
<b>VII. Any other Receipts (Give Details)</b>			Transfer of Balances	440,226.00	
Fees			<b>VIII. Closing Balances</b>		
Capital Fund			a) Cash in hand		
Sales of Assets			b) Bank Balances		
Sale of Assets			i) In current accounts		
Contribution from Members	38,356,765.00	37,987,081.00	ii) In deposit accounts		
Contribution from TRAI	10,924,029.00	9,909,214.00	iii) Savings accounts	4,583,363.29	5,014,663.09
Transfer of Balances	-	440,226.00			
Repayment of Advances	973,650.00	642,450.00			
Maturity of FDs/ Encashment of Mutual Funds	98,900,000.00	33,302,274.00			
<b>TOTAL</b>	<b>180,998,757.09</b>	<b>108,597,366.99</b>		<b>180,998,757.09</b>	<b>108,597,366.99</b>
Sd/-	Sd/-	Sd/-	Sd/-	Sd/-	Sd/-
Meetu Gulati	Reshma S. Usmani	Sonia Madan	Mayur Gupta	Manish Jain	Vandana Sethi
Dy. Advisor (F&EA)	Asstt. (QoS)	Dy. Advisor (NSL-II)	Jt. Advisor (F&EA)	Jt. Advisor (HR)	Advisor (Admin)
Secretary (CPF)	Trustee	Trustee	Ex-Officio Trustee	Ex-Officio Trustee	Ex-Officio President

## SCHEDULE 24 - SIGNIFICANT ACCOUNTING POLICIES

### 1 Accounting Conventions:

- i) The financial statements have been prepared in the “Uniform Format of Accounts” as approved by the Controller General of Accounts vide their letter No. F.No.19(1)/Misc./2005/TA/450-490 dated 23.07.2007.
- ii) Accounts have been prepared on accrual basis for the current year i.e., 2021-22. There is no change in Method of Accounting from the preceding year.
- iii) Investments depicted in Schedule 10 (Investments - Others) are carried at cost.

## SCHEDULE 25 - CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS

### Contingent Liabilities:

- 1 Claims against the Entity not acknowledged as debts NIL

### Notes on Accounts

- 1 Investments have been made on the pattern prescribed in the Notification of Ministry of Finance (Department of Financial Services) dated 2<sup>nd</sup> March, 2015 effective from 1<sup>st</sup> April, 2015.
- 2 Investments depicted in Schedule 10 (Investments - Others) include investment in Government Securities amounting to ₹ 18,15,00,000.00 and Others (FDs in Banks/ PSUs) amounting to ₹ 16,51,00,000.00.
- 3 The withdrawal/ advances sanctioned during the year amounts to ₹ 53,10,000.00. Interest paid to members amounts to ₹ 2,16,55,485.00 and Refund of the advances amounts to Rs. 9,73,650.00.
- 4 Provisions depicted in last financial year in Schedule 7 (Current Liabilities and Provisions) have been made to Shri Om Prakash Giri, Ex-Driver and TRAI Main account @ ₹ 3,06,919/- and ₹ 1,33,307/- as the subscription available in his CPF account along with interest and an amount of dues payable to TRAI by Shri Om Prakash Giri, Ex-Driver respectively.
- 5 Corresponding figures for the previous year have been re-grouped/ re-arranged wherever necessary.

Sd/-  
Meetu Gulati  
Dy. Advisor (F&EA)  
Secretary (CPF)

Sd/-  
Reshma S. Usmani  
Asstt. (QoS)  
Trustee

Sd/-  
Sonia Madan  
Dy. Advisor (NSL-II)  
Trustee

Sd/-  
Mayur Gupta  
Jt. Advisor (F&EA)  
Ex-Officio Trustee

Sd/-  
Manish Jain  
Jt. Advisor (HR)  
Ex-Officio Trustee

Sd/-  
Vandana Sethi  
Advisor (Admin)  
Ex-Officio President





सत्यमेव जयते

TELECOM REGULATORY AUTHORITY OF INDIA