सत्यमेव जयते

भादूविप्रा
TRAI

ANNUAL REPORT
2023-24

TELECOM REGULATORY AUTHORITY OF INDIA

Telecom Regulatory Authority of India

(IS/ISO 9001: 2015 Certified Organisation)

Annual Report
2023-24

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Letter of Transmittal

To the Central Government through Hon'ble Minister of Communications

It is my privilege to forward the 27th Annual Report for the year 2023-24 of the Telecom Regulatory Authority of India to be laid before both the 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.

(ANIL KUMAR LAHOTI)
CHAIRPERSON

Dated: 16th December, 2024

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OVERVIEW OF THE TELECOM AND BROADCASTING SECTORS

OVERVIEW

TRAI has completed a successful journey of almost three decades of regulating the Telecom and Broadcasting sectors in India. Fulfilling its mission of nurturing these sectors in the country in a fair and transparent manner, TRAI has played an important role in shaping India's telecommunications and broadcasting sectors and contributing to the country's global position in terms of maturity of the regulatory environment.

TRAI aims at creating a symphony between a fair and seamless policy environment, while maintaining a competitive edge for all.

The remarkable growth seen by both the sectors, not only in terms of subscriptions and geographical reach but also the quality of service being offered to the consumers is a clear testament to the initiatives taken by TRAI. By keeping pace with the rapid changes in these fields and areas anticipating the impact of various developments and coming up with timely solutions, TRAI has promoted orderly growth in the sectors.

India has followed a robust policy of attracting investments in the Telecommunications sector by fostering competition, easy entry of new players and technology neutral policies. TRAI has also followed a policy of forbearance and light-touch regulations.

TRAI's contributions in the Telecom and Broadcasting sectors have been on various levels, ranging from recommendations to the government on key issues like licensing, spectrum valuation and competition to regulations on tariff, quality of service and consumer protection. TRAI maintains a strong focus throughout the consultation process on transparency, multiplicity of perspective and harmonisation of stakeholders' interests, which are the cornerstones of a good regulatory system.

The demand for digital connectivity has increased manifold in recent years. Digital connectivity plays a vital role in the way we connect in our everyday lives. The internet has become ingrained into the daily lives of the people across the world. From obtaining information on markets or health, to making mobile payments, the Internet has made each task much easier. Fast and reliable mobile broadband connectivity is essential for achieving the United Nations' Sustainable Development Goals and for adopting innovation and economic growth.

India is home to the world's second largest pool of 825 million mobile broadband users, and each mobile data user consumes more than 17 GB of data per month on an average. The mobile industry has been instrumental in extending internet connectivity to people around the world. Mobile ownership and internet usage are expected to continue growing in the future, as mobile technologies are becoming more affordable and accessible than ever before. This upward trend in mobile internet adoption is particularly visible in developing digital markets where mobile networks are the primary means of internet access.

India is moving towards digital transformation with the objective of reimagining and re-inventing every single element of governance. Digital India is an umbrella programme that covers multiple government ministries and departments. Fast and reliable mobile communication technologies are helping the Government in realising the objectives of Digital India programme.

The future of telecom looks promising with the evolution of 5G mobile technology. With the rolling out of 5G services in the country, the opportunities for applications in various sectors of the economy such as agriculture, transportation, healthcare, and industrial automation have expanded greatly.

5G service was launched in India on 1st October 2022. In 18 months of its launch, i.e., as on 31st March 2024, more than 4,38,000 sites covering more than 700 districts were installed. 5G network has been rolled out in all 28 States and 8 Union Territories, making it as one of the fastest 5G roll outs in the world.

The initiatives by the Government cover a range of factors from building 5G infrastructure and bringing the ecosystem together for effective R&D to increase investments in 5G. Sectors such as healthcare, energy & utilities, manufacturing, and retail are expected to benefit the most from large-scale 5G adoption.

The year 2023-24 proved to be yet another dynamic and bustling period for the broadcasting and cable services industry as well. India's media and entertainment sectors hold a significant place in our country's narrative. The television broadcasting sector has emerged as a vital player in fostering India's economic growth. One of the defining characteristics of the Indian Broadcasting and Cable TV market is its sheer size. India's media and entertainment (M&E) sector grew over 8 per cent in 2023, which includes 70 per cent of growth stemmed from new media.

During the year, many consultation processes were initiated on a wide range of subjects such as Connectivity to Access Service VNOs From More Than one NSO; Assignment of Additional Spectrum to Indian Railways for its Safety and Security Applications; Digital Transformation through 5G Ecosystem; Draft Telecommunication Mobile Number Portability (Ninth Amendment) Regulations, 2023; Open and De-licensed use of Unused or Limited Used Spectrum Bands for Demand Generation for Limited Period in Tera Hertz Range; Regulation on Rating Framework for Digital Connectivity in Buildings or Areas; Assignment of Spectrum in E&V Bands, and Spectrum for Microwave Access (MWA) & Microwave Backbone (MWB); Encouraging R&D in Telecom, Broadcasting, and IT (ICT) Sectors; Digital Inclusion in the Era of Emerging Technologies; Inputs for Formulation of "National Broadcasting Policy"; Review of Terms and Conditions of PMRTS and CMRTS Licenses; Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband Services (Wireless and Wireline); Review of Regulatory Framework for Broadcasting and Cable services; Data Communication Services Between Aircraft and Ground Stations Provided by Organizations Other Than Airports Authority of India; The Telecommunication Consumers Education and Protection Fund (Sixth Amendment) Regulations, 2023; Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services; Encouraging Innovative

Technologies, Services, Use Cases, and Business Models through Regulatory Sandbox in Digital Communication Sector; Definition of International Traffic; Issues Related to Low Power Small Range FM Radio Broadcasting; and Assignment of Spectrum for Space-based Communication Services.

Alongside, TRAI HQ and the Regional offices organised several seminars, and special Consumer Outreach Programmes in the year. Special Consumer Outreach Programmes (COPs) were organized by TRAI through its Regional Offices for various underprivileged/ marginalized sections of society viz. farmers, fisherman, specially abled persons (*Divyang*), self-employed rural women, weavers and students from tribal areas, women working in Anganwadis etc.

The Consumer Outreach Programmes conducted by TRAI have also helped in creating awareness among subscribers about their rights and responsibilities, thereby empowering them to make informed decisions regarding their telecom services.

TRAI organized a 5-day International training programme on "Capacity Building and Sharing of Best Practices in Policy, Regulation and Development" from 4th to 8th March 2024 in New Delhi India. This international training programme was attended by delegates from ASEAN member countries Brunei, Cambodia, Indonesia, Lao PDR, Myanmar, Malaysia, Philippines, and Thailand. This capacity building project was organised as a part of ASEAN-India Digital WORK PLAN 2023 under India- ASEAN Digital Dialogue.

Also, The Telecom Regulatory Authority of India (TRAI) and International Telecommunication Union (ITU) jointly organized a workshop on "Cost Models for Data Services and International Connectivity" on 4th October 2023, followed by the first meeting of the ITU-T Focus Group for the same. The speakers at the workshop included eminent experts representing leading regulatory organizations, government ministries, experts from ITU (International Telecommunication Union), World bank, industry leaders, leading service providers from India and abroad.

TRAI has actively engaged with other sector regulators for collaborative handling of cross sectoral issues and challenges posed by the technological advances in Information and Communication technology. The 24th Annual General Body Meeting of Forum of Indian Regulators FOIR deliberated on faster adoption of 5G and associated technologies in different vertical sectors represented in FOIR. Encouraged by the success of the working group on "Cross Sector Collaborative Regulation between TRAI and Electricity Regulators" towards deployment of 5G infrastructure, TRAI proposed formation of another working group to study and give recommendations on faster adoption of 5G and associated technologies in different vertical sectors represented in FOIR. In view of the immense potential and likely contribution of 5G, FOIR agreed to set up a group to study the opportunities and challenges associated with adoption of 5G and related technologies such as AIML/IOT/M2M/AR/ VR/Industry 4.0 etc. in different sectors represented in FOIR viz. Industries, ports, airports, power sector, petroleum & natural gas, Real Estate, Food industry, etc. for sector specific applications as well as common applications in Data analytics, office management, MIS etc. for the regulators.

TRAI has taken an initiative and formed a Joint Committee of Regulators (JCoR) with Members from RBI, SEBI, MoCA, IRDAI, PFRDA and MeitY. Periodic meetings of the JCoR were held during the year 2023-24 wherein DoT and MHA representatives joined as special guests. The JCoR serves as a collaborative platform to examine regulatory implications in the digital age and work collaboratively on regulatory frameworks. The committee made potential collaborative efforts and strategies to address UCC and fraud through telecom resources.

Some of the significant developments pertaining to the Telecommunications and Broadcasting sectors during the year 2023-24 are briefly cited below:

I. TELECOM SECTOR

The Indian Telecom sector is at the forefront of major transformation, driven by rapid technological advancements and significant shifts in market dynamics. The sector has dissolved distances, bringing the nation closer through better connectivity, creating new ways in which people interact with each other and socialize. The frantic pace of growth of the Telecom sector has been matched by its contribution to the overall economic growth of the country. With an increasing number of subscribers, the Indian Telecom sector has become one of the largest and most competitive markets in the world. TRAI plays a critical and decisive role in the shaping of the regulatory framework governing the Telecom sector in India.

India has made a remarkable journey in digital transformation over the years and is the second-largest telecom market in the world in terms of telecom subscribers. Digitalisation of the economy and society has become irrevocable and has penetrated every sector of the economy and human life deeply. Digitalisation helps in staying connected across distances and at any time for accessing information, receiving basic services including healthcare, working or studying from home, financial transactions, staying in touch with friends and family, entertainment, etc.

The Telecom industry has transitioned from different generations of mobile technologies in the last few decades and has pivoted from voice to content, content to commerce and industrial applications. 5G technology holds the potential to enable unprecedented degrees of flexibility, productivity, and efficiency in various industry verticals. The potential of 5G, combined with artificial intelligence (AI), AR/VR, smart platforms and IoT, can deliver enormous value to consumers, organizations and society at large. It will also pave the way for developing services for making smart cities, autonomous vehicles, smart factories, etc.

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 “Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh”, “Methodology of applying Spectrum Usage Charges (SUC) under the weighted average methods of SUC assessment, in cases of Spectrum Sharing”, “Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India”, “Leveraging Artificial Intelligence and Big Data in Telecommunication Sector", "Introduction of Digital Connectivity Infrastructure Provider (DCIP) Authorization under Unified License (UL)", "Auction of spectrum in the frequency bands identified for International Mobile Telecommunications (IMT)", "Rationalization of Entry Fee and Bank Guarantees", "Promoting Networking and Telecom Equipment manufacturing (NATEM) in India", "Improving Telecom Infrastructure in Northeastern States of India", "Improving Backhaul Telecom Infrastructure in far-flung areas of Himachal Pradesh", "Introduction of Calling Name Presentation (CNAP) Service in Indian Telecommunication Network", and "Usage of Embedded SIM for Machine-to-Machine (M2M) Communications". Response of TRAI to DoT's back references received on Telecom Recommendations and Amendments to the various Telecom Regulations were also issued during this period.

At the end of the financial year 2023-24, the overall telecom subscriber base reached 1199.28 million in comparison to the subscriber base of 1172.34 million as on 31st March 2023 registering an increase of 26.94 million subscribers during the financial year 2023-24. The wireless subscriber base was 1165.49 million at the end of 31st March 2024 in comparison to the subscriber base of 1143.93 million as on 31st March 2023 registering an increase of 21.56 million subscribers during the financial year 2023-24. The total wireline subscriber base as on 31st March 2024 stood at 33.79 million as compared to 28.41 million subscribers on 31st March 2023, registering an increase of 18.94% during the year 2023-24. Out of 33.79 million wireline subscribers, 30.92 million are urban subscribers and 2.88 million are rural subscribers.

The Internet subscriber base in the country as on 31st March 2024 stood at 954.403 million as compared to 881.255 million as on 31st March 2023. The total broadband subscriber base of the country as on 31st March 2024 is 924.066 million whereas it was 846.569 million as on 31st March 2023.

II. BROADCASTING SECTOR

The year 2023-24 proved to be yet another dynamic and bustling period for the broadcasting and cable services industry. India's media and entertainment sectors hold a significant place in our country's narrative. The television broadcasting sector has emerged as a vital player in fostering India's economic growth.

The demographic dividend comprising of more than half of youth population in the country offers huge opportunity for information and entertainment services making the Indian M&E sector a sunrise sector of Indian economy. It has seen spectacular growth over the years. As per the industry reports[1], Indian M&E sector grew 8.1% in 2023 to reach ₹ 2.32 trillion from ₹ 2.14 trillion in 2022 and is expected to reach ₹ 3.08 trillion in 2026 with a CAGR of 10%. Television is one of the largest and fastest growing segments of M&E sector. It represents around 30% of the total Media and entertainment revenue. Even though television remains the largest segment, digital media has seen phenomenal growth with a 38% growth in digital subscriptions in 2023.

[1] FICCI EY Report (March 2024) titled "#Reinvent -India's media & entertainment sector is innovating for the future"

TRAI is taking various measures to ensure transparency, non-discrimination and equity across the TV Broadcasting & distribution value chain; increase efficiency and trust and reduce disputes amongst stakeholders across the value chain. A business-friendly environment is a pre-requisite for the growth of any sector. An enabling business environment makes the country a favourite business destination. It not only leads to employment generation but also helps in the growth and development of a country. TRAI is committed to creating an enabling ecosystem for the investment and growth of the broadcasting sector.

During the year, a consultation paper on "Review of Regulatory Framework for Broadcasting and Cable Services" was issued on 8th August 2023. The consultation paper included various issues relating to Tariff, Interconnection, Quality of Service as well as financial disincentives.

During the year 2023-24, several key recommendations were sent to the Government. The recommendations were made on: a) Ease of Doing Business in Telecom and Broadcasting Sector; b) License Fee and Policy Matters of DTH Services; c) Issues related to FM Radio Broadcasting; and d) Issues related to Low Power Small Range FM Radio Broadcasting. The gist of these recommendations is discussed in Part II relating to review of working and operations of TRAI. In addition, TRAI has undertaken steps to improve regulatory compliance. During the period 2023-24, a total of 820 audits of Digital Addressable Systems (433-DPO caused & 387-broadcasters caused) have been conducted by 52 auditors empanelled by TRAI and Broadcast Engineering Consultants India Limited (BECIL).

Other significant developments of the Broadcasting sector are as given below:

i. The broadcasting sector consists of Television and Radio Services. The Television services are delivered through cable TV services, Direct-To-Home (DTH) Service, Headend in the Sky (HITS) services and Internet Protocol television (IPTV) services. As per an industry report[1], the TV universe consists of approximately 62 million cable TV households, 2 million HITS subscribers. In addition, as reported by the pay DTH operators to TRAI, there were 61.97 million[2] pay DTH total active subscribers as on 31st March 2024. Further, reported subscriber base by the IPTV operators was 0.5 million[2] as on 31st March 2024.

ii. The TV broadcasting sector encompasses approximately 333 broadcasters providing 922 private satellite TV channels as on 31st March 2024[3]. These television channels include 258 SD pay TV channels and 103 HD Pay TV channels provided by 41 television broadcasters. Further, there were 880 Multi System Operators (MSOs)[4], 1 HITS operator[2], 4 pay DTH operators and 33 IPTV operators[2]. Further, as per the information provided by MIB, there were 81,706 cable operators registered in the country.

iii. Prasar Bharati, is the Public Service Broadcaster in India which operates radio network- All India Radio (Akashvani) & Television Network (Doordarshan). Prasar Bharati also

[1] FICCI EY Report (March 2024) titled "#Reinvent -India's media & entertainment sector is innovating for the future"
[2] As reported to TRAI
[3] https://new.broadcastseva.gov.in/digigov-portal-web-app/
[4] https://www.mib.gov.in/all_broadcasting_documents

operates DD Free dish, the only Free-to-Air (FTA) DTH Service which is the largest distributed DTH platform in India. DD Free Dish reaches millions of people especially in rural, remote, inaccessible and border areas having low income and is used as a tool not only for entertainment but also for promoting education, health, and agriculture. As per industry estimates, there were around 45 million DD Free Dish households[1].

iv. The revenue of Indian television industry stands at ₹ 69,600 crore[1] in the year 2023 as compared to ₹ 70,900 crore[1] in the year 2022, thereby registering a decline of around 1.8%. Subscription revenue accounts for a major share of the overall industry revenue. Subscription revenue has increased from ₹ 39,200 crore[1] in the year 2022 to ₹ 39,900 crore[1] in the year 2023. Further, advertisement revenue has decreased from ₹ 31,800 crore[2] in the year 2022 to ₹ 29,700[1] crore in the year 2023.

v. As reported by private FM Radio broadcasters to TRAI, there were 388 private FM radio stations operational as on 31st March 2024, besides the radio channels operated by 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 605-permission issued as on 31st March 2024 for the setup of such stations, 494 community radio stations became operational. The reported advertisement revenue by the private FM Radio broadcasters has increased from ₹ 1547.13 crore[3] in year 2022-23 to ₹ 1775.79 crore[3] in the year 2023-24.

III. OTHER ADMINISTRATIVE INITIATIVES

Since its inception in 1997, Telecom Regulatory Authority of India (TRAI) has operated from rented premises. In November 2020, the Government of India, through the Department of Telecommunications (DoT), granted approval for the procurement of office space for TRAI in the NBCC Commercial Complex, which is being developed as the World Trade Center (WTC) in Nauroji Nagar, New Delhi.

In February 2021, NBCC (India) Limited allocated a total of 115,982 sq. ft. of super built-up area (85,545 sq. ft. of carpet area) to TRAI in Tower-F, spanning from the 4th to 7th floors of the World Trade Center (WTC), Nauroji Nagar, New Delhi.

An MoU/Agreement was signed in November 2022 between TRAI and NBCC Services Ltd. (a wholly-owned subsidiary of Navratna CPSE NBCC (INDIA) Ltd.) for the planning, designing, and interior fit-out/ renovations/furnishing works of TRAI's new office space. TRAI HQ office is scheduled to be shifted in the new office premises by the end of May 2024.

In view of the expanding scope of work assigned to the Telecom Regulatory Authority of India, due to changing technology landscape and the challenges posed by technological disruptions in Telecom & Broadcasting Sectors, restructuring of TRAI has been proposed and a proposal in this regard has been sent to the Department of Telecommunications vide letter dated 10th March 2023 for seeking approval of MoF/Cabinet in respect of creation of additional posts for TRAI HQ and TRAI Regional Offices as part of restructuring.

[1] FICCI EY Report (March 2024) titled "#Reinvent -India's media & entertainment sector is innovating for the future"
[2] https://new.broadcastseva.gov.in/digigov-portal-web-app/
[3] As reported to TRAI

PART - I
POLICIES AND PROGRAMMES

(A) REVIEW OF GENERAL ENVIRONMENT IN THE TELECOM SECTOR

1.1 At the end of the financial year 2023-24 the overall telecom subscriber base reached 1199.28 million in comparison to the subscriber base of 1172.34 million as on 31st March 2023 registering an increase of 26.94 million subscribers during the financial year 2023-24. The overall subscriber base and tele-density is shown in **Table-1**.

Table-1: Overall Subscriber base and Tele-density

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1165.49	33.79	1199.28
Urban Telephone Subscribers (Million)	634.47	30.92	665.38
Rural Telephone Subscribers (Million)	531.02	2.88	533.90
Overall Tele-density (%)	83.27%	2.41%	85.69%
Urban Tele-density (%)	127.51%	6.21%	133.72%
Rural Tele-density (%)	58.87%	0.32%	59.19%
Share of Urban Subscribers	54.44%	91.49%	55.48%
Share of Rural Subscribers	45.56%	8.51%	44.52%
No. of Internet Subscribers (Million)	914.13	40.27	954.40
No. of Broadband Subscribers (Million)	884.01	40.06	924.07

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 1165.49 million at the end of 31st March 2024 in comparison to the subscriber base of 1143.93 million as on 31st March 2023 registering an increase of 21.56 million subscribers during the financial year 2023-24. The status of wireless subscriber base during the last five years is depicted in the **Figure-1.**

Figure-1: Wireless Subscriber Base for the last five years since March 2020

(In million)

(b) Mobile Number Portability

1.1.2 During the financial year 2023-24, 142.82 million subscribers have submitted their porting requests to different service providers for availing MNP facility. With this, the cumulative number of Mobile Number Portability requests since January 2011, increased from 819.70 million at the end of March 2023 to 962.52 million at the end of March 2024. The service area-wise cumulative porting request at the end of March 2024 is depicted in **Table-2**.

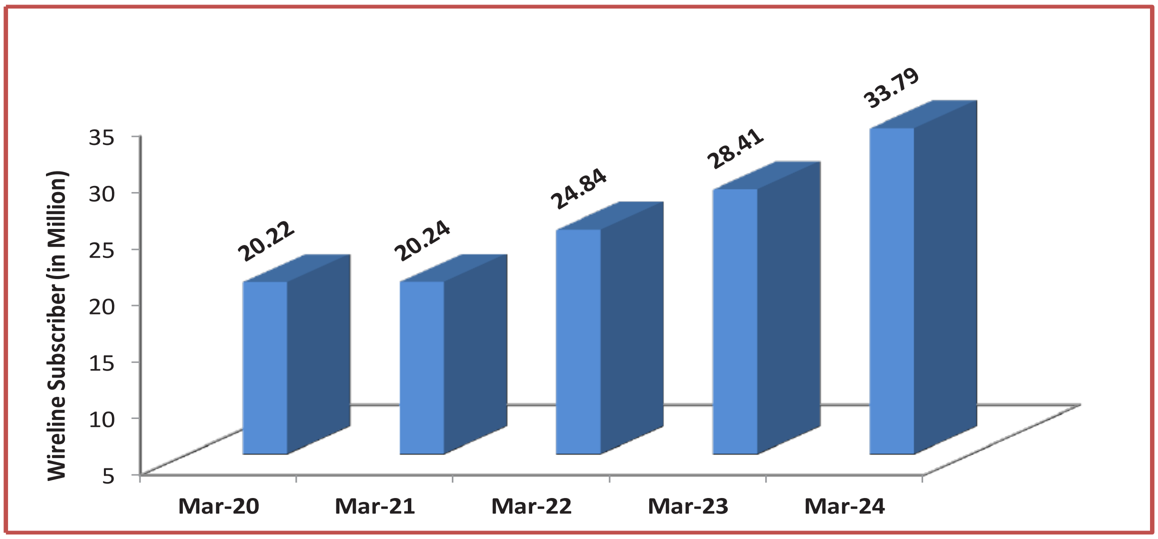
Table-2: Service Area-wise Cumulative Porting requests at the end of March 2024

Cumulative MNP Requests (Service Area-wise) at the end of March 2024				
	Service Area	MNP requests processed by		Total Number of Porting Requests
		Zone-I	Zone-II	
ZONE- I	Delhi	43,723,156	2,532,223	46,255,379
	Gujarat	64,343,692	1,331,441	65,675,133
	Haryana	29,807,599	728,877	30,536,476
	Himachal Pradesh	4,032,746	94,896	4,127,642
	Jammu & Kashmir	2,293,301	163,254	2,456,555
	Maharashtra	76,591,747	2,419,973	79,011,720
	Mumbai	31,909,631	1,211,730	33,121,361
	Punjab	30,729,658	1,644,014	32,373,672
	Rajasthan	65,330,041	806,032	66,136,073
	Uttar Pradesh (East)	88,805,296	1,416,072	90,221,368
	Uttar Pradesh (West)	68,012,753	759,639	68,772,392
ZONE-II	Andhra Pradesh	924,606	64,144,337	65,068,943
	Assam	315,938	6,588,991	6,904,929
	Bihar	3,538,285	49,624,539	53,162,824
	Karnataka	1,539,203	65,231,828	66,771,031
	Kerala	411,069	23,047,122	23,458,191
	Kolkata	347,244	17,556,466	17,903,710
	Madhya Pradesh	1,982,908	72,401,760	74,384,668
	North-East	57,361	2,144,910	2,202,271
	Odisha	318,473	16,722,872	17,041,345
	Tamil Nadu	629,490	61,370,651	62,000,141
	West Bengal	1,136,845	53,803,385	54,940,230
	Total	**516,781,042**	**445,745,012**	**962,526,054**
	Total (Zone-I + Zone – II)			

(c) Wireline Services

1.1.3 The total wireline subscriber base as on 31st March 2024 stood at 33.79 million as compared to 28.41 million subscribers on 31st March 2023, registering an increase of 18.94% during the year 2023-24. Out of 33.79 million wireline subscribers, 30.92 million are urban subscribers and 2.88 million are rural subscriber. The wireline subscriber base for the last five years is depicted in **Figure–2.**

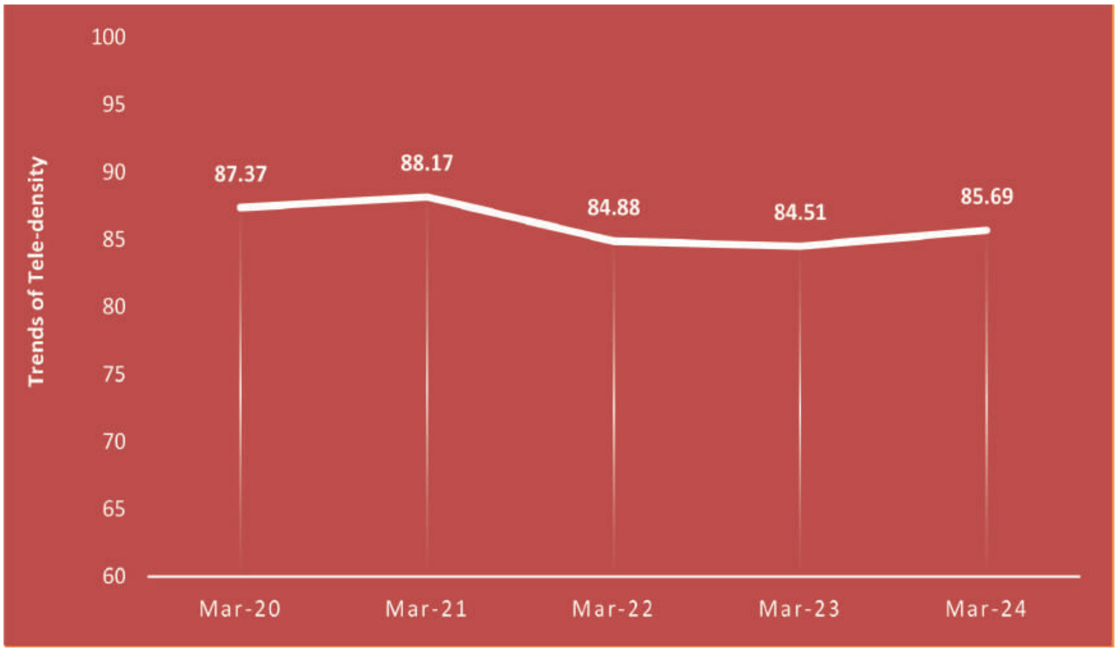
Figure-2: Wireline Subscribers for the last five financial years



(d) Tele-density

1.1.4 The tele-density at the end of March 2024 was 85.69% as compared to 84.51% at the end of previous year recording an increase of 0.0139%. The trend of tele-density since March 2020 is depicted in **Figure-3**.

Figure-3: Trend of Tele-density



(e) Internet and Broadband subscribers

1.1.5 The Internet subscriber base in the country as on 31st March 2024 stood at 954.403 million as compared to 881.255 million as on 31st March 2023. The total broadband subscriber base of the country as on 31st March 2024 is 924.066 million whereas it was 846.569 million as on 31st March 2023.

The details of subscription as reported by the service providers in the country as on 31st March 2024 are indicated in **Table-3.**

Table-3: Internet Subscribers

[In Million]

Segment			Category	Internet Subscribers		% Growth
				Mar-23	Mar-24	
A.	**Wired**		Broadband	33.491	40.055	19.60%
			Narrowband	0.450	0.22	-52.13%
			Total	**33.941**	**40.271**	**18.65%**
B.	**Wireless**	Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)	Broadband	1.093	0.790	-27.74%
			Narrowband	0.008	0.003	-55.65%
			Total	**1.101**	**0.793**	**-27.93%**
		Mobile Wireless (Phone + Dongle)	Broadband	811.985	883.221	8.77%
			Narrowband	34.228	30.119	-12.00%
			Total	**846.213**	**913.340**	**7.93%**
Total Internet Subscribers			Broadband	846.569	924.066	9.15%
			Narrowband	34.686	30.338	-12.53%
			Total	**881.255**	**954.403**	**8.30%**

#Source: Provided by TSPs.

(f) The Indian Telecom Services Performance Indicators

1.1.6 TRAI has been bringing out a monthly press release on Telecom Subscription Data. The 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 31st March 2024, are given at **Table-4.**

Table-4: Highlights of Telecom Subscription Data as on 31st March 2024

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Broadband Subscribers (Million)	**884.01**	**40.06**	**924.07**
Urban Telephone Subscribers (Million)	**634.47**	**30.92**	**665.38**
Net Addition in March 2024 (Million)	-1.64	0.62	-1.02
Monthly Growth Rate	-0.26%	2.06%	-0.15%
Rural Telephone Subscribers (Million)	**531.02**	**2.88**	**533.90**
Net Addition in March 2024 (Million)	2.49	0.06	2.55
Monthly Growth Rate	0.47%	2.21%	0.48%
Total Telephone Subscribers (Million)	**1165.49**	**33.79**	**1199.28**
Net Addition in March 2024 (Million)	0.85	0.69	1.54
Monthly Growth Rate	0.07%	2.07%	0.13%
Overall Tele-density (%)	**83.27%**	**2.41%**	**85.69%**

Urban Tele-density (%)	127.51%	6.21%	133.72%
Rural Tele-density (%)	58.87%	0.32%	59.19%
Share of Urban Subscribers	54.44%	91.49%	55.48%
Share of Rural Subscribers	45.56%	8.51%	44.52%

❖ Number of active wireless subscribers (on the date of peak VLR) in March 2024 was 1057.71 million.

1.1.7 TRAI publishes 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–5.**

Table-5: Performance Indicator (Data as on 31st March 2024)

Telecom Subscribers (Wireless+Wireline)	
Total Subscribers	1,199.28 million
% change over the previous quarter	0.75%
Urban Subscribers	665.38 million
Rural Subscribers	533.90 million
Market share of Private Operators	91.70%
Market share of PSU Operators	8.30%
Tele-density	85.69%
Urban Tele-density	133.72%
Rural Tele-density	59.10%
Wireless Subscribers	
Total Wireless Subscribers	1,165.49 million
% change over the previous quarter	0.60%
Urban Subscribers	634.47 million
Rural Subscribers	531.02 million
Market share of Private Operators	92.26%
Market share of PSU Operators	7.74%
Tele-density	83.27%
Urban Tele-density	127.51%
Rural Tele-density	58.87%
Total Wireless Data Usage during the quarter	52,636 PB
Number of Public Mobile Radio Trunk Services (PMRTS)	65,880
Number of Very Small Aperture Terminals (VSAT)	2,53,250
Wireline Subscribers	
Total Wireline Subscribers	33.79 million
% change over the previous quarter	6.12%
Urban Subscribers	30.92 million
Rural Subscribers	2.88 million

Market share of PSU Operators	27.58%
Market share of Private Operators	72.42%
Tele-density	2.41%
Rural Tele-density	0.32%
Urban Tele-density	6.21%
No. of Village Public Telephones (VPT)	68,606
No. of Public Call Office (PCO)	20,652
Telecom Financial Data	
Gross Revenue (GR) during the quarter	₹ 87,926/- crore
% change in GR over the previous quarter	4.05%
Applicable Gross Revenue (ApGR) during quarter	₹ 83,945/- crore
% change in ApGR over the previous quarter	3.51%
Adjusted Gross Revenue (AGR) during the quarter	₹ 70,462/- crore
% change in AGR over the previous quarter	3.87%
Share of Public sector undertakings in Access AGR	3.80%
Internet/Broadband Subscribers	
Total Internet Subscribers	954.40 million
% change over previous quarter	1.95%
Narrowband subscribers	30.34 million
Broadband subscribers	924.07 million
Wired Internet Subscribers	40.27 million
Wireless Internet Subscribers	914.13 million
Urban Internet Subscribers	556.05 million
Rural Internet Subscribers	398.35 million
Total Internet Subscribers per 100 population	68.19
Urban Internet Subscribers per 100 population	111.75
Rural Internet Subscribers per 100 population	44.16
Total Outgoing Minutes of Usage for Internet Telephony	93.47 million
No. of Public Wi-Fi Hotspots	1,65,147
Aggregate Data Consumed (GB)	41,11,451
Broadcasting & Cable Services	
Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking only/both uplinking and downlinking	922
Number of Pay TV Channels as reported by broadcasters	361
Number of private FM Radio Stations (excluding All India Radio)	388
Number of total active subscribers with pay DTH operators	61.97 million
Number of Operational Community Radio Stations	494
Number of pay DTH Operators	4

Revenue & Usage Parameters	
Monthly ARPU of Wireless Service	₹ 153.54
Minutes of Usage (MOU) per subscriber per month - Wireless Service	995
Wireless Data Usage	
Average Wireless Data Usage per wireless data subscriber per month	20.27 GB
Average revenue realization per GB for wireless data usage during the quarter	₹ 8.74

(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 the 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 31st March 2024, the Wireless rural subscribers increased from 516.38 million as on 31st March 2023 to 531.02 million at the end of 31st March 2024. The share of rural wireless subscribers during the financial year 2023-24 is 45.57% of total wireless subscribers. The rural wireless subscriber base since March 2020 is indicated in **Figure-4.** The service provider-wise rural wireless subscriber base and their market shares are shown in **Table-6** and **Figure-5.**

Figure-4: Rural Wireless Subscriber Base since March 2020

[In Million]

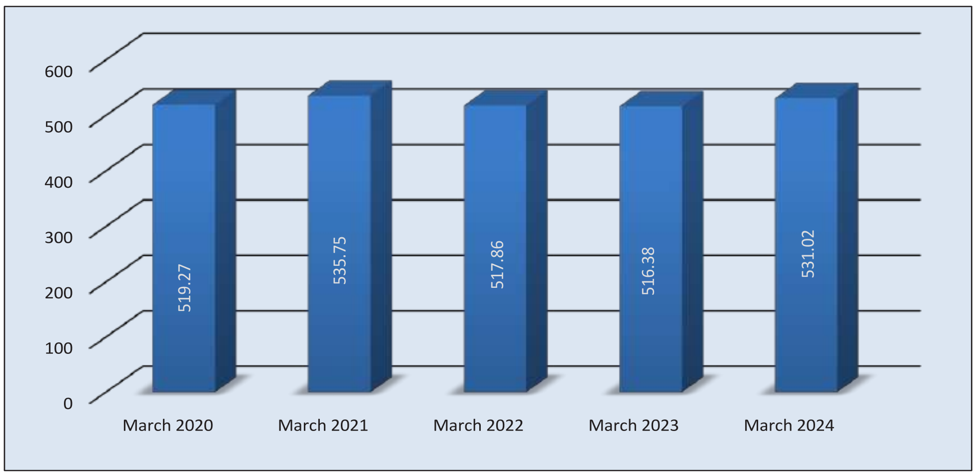


Table-6: Service Provider-wise Rural Wireless Subscribers and Market Share

S. No.	Wireless Group	Subscribers as on (in million)		Rural Subscribers as on (in million)		Market Share of Rural Subscribers as on	
		March 2023	March 2024	March 2023	March 2024	March 2023	March 2024
1.	Reliance Jio	430.23	469.73	188.67	207.09	36.54%	39.00%
2.	Bharti Airtel	370.91	385.76	179.79	188.85	34.82%	35.56%
3.	Vodafone Idea Ltd	236.75	219.82	115.37	107.30	22.34%	20.21%
4.	BSNL (@)	103.68	88.25	32.52	27.75	6.30%	5.23%
5.	MTNL	2.35	1.93	0.04	0.04	0.01%	0.01%
6.	RCL (&)	0.0027	0.000	0	0	0.00%	0%
	Total	**1143.93**	**1165.49**	**516.38**	**531.02**	**100.00**	**100.00**

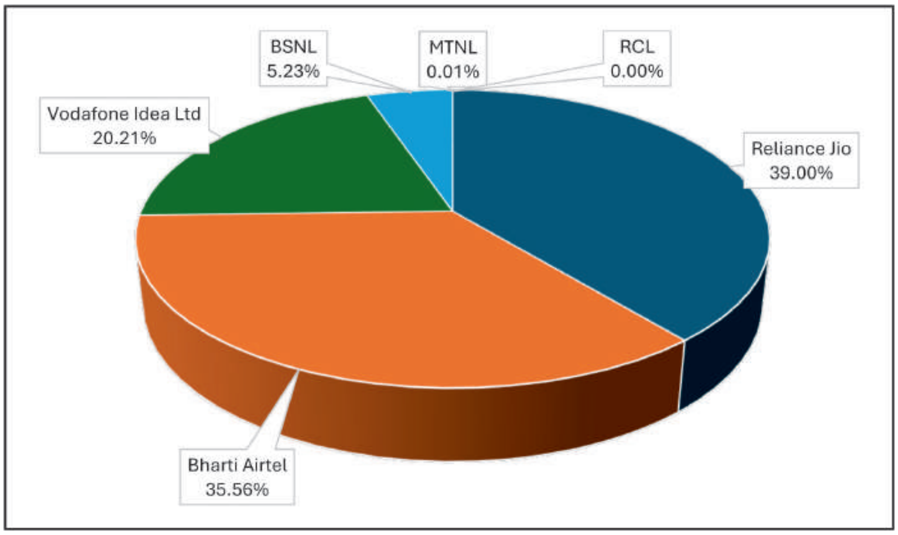
Source: As provided by TSPs

Note:

(@) The wireless subscriber base figures reported by BSNL's VNOs are included in the wireless subscriber base of BSNL.

(&) 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 31st March 2024



1.2.1.2 Wireline Services

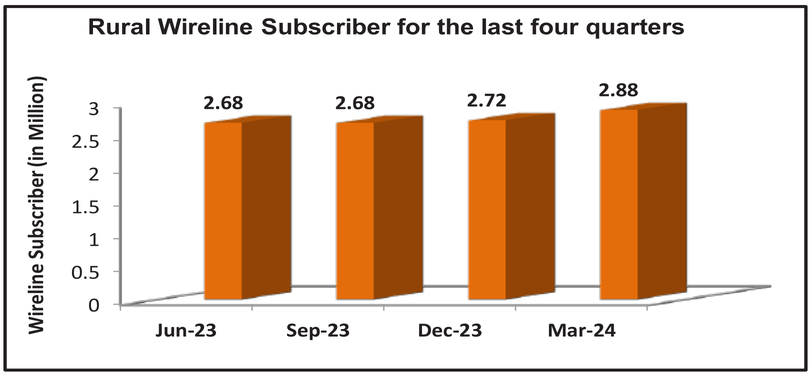
As on 31st March 2024 the rural wireline subscriber base stood at 2.88 (28,75,867) million as compared to 2.25 (22,47,975) million at the end of 31st March 2023, registering an increase of 27.93% over the year. The service provider-wise wireline subscriber base and their market share are shown in **Table-7.**

Table-7: Service Provider-wise Rural Wireline Subscriber Base and Market Share

S. No.	Name of the Service Provider	Total Wireline Subscribers		Rural Wireline Subscribers		Market Share of Rural Wireline Subscribers (in %)	
		Mar-23	Mar-24	Mar-23	Mar-24	Mar-23	Mar-24
1	BSNL	71,05,823	64,99,472	20,34,776	21,03,569	90.52%	73.15%
2	MTNL	23,12,553	21,77,547	34	32	0.00%	0.00%
3	Bharti Airtel Ltd	71,47,472	87,77,711		2,478	0	0.09%
4	Quadrant Televentures Ltd.	3,37,922	4,11,487	19,442	16,553	0.86%	0.58%
5	Tata Teleservices Ltd.	15,41,152	22,86,004	24,831	7,553	1.10%	0.26%
6	Reliance Communications Ltd.	1,45,706	1,27,285	362	355	0.02%	0.01%
7	Vodafone Idea Ltd.	7,03,179	7,81,857			0	0.00%
8	Reliance Jio Infocomm Ltd.	91,15,969	1,20,32,750	1,68,530	2,69,068	7.50%	9.36%
9	Andhra Pradesh State FiberNet Ltd		6,43,593		4,76,259	0.00%	16.56%
10	V-CON Mobile & Infra Pvt. Ltd.		53,308			0.00%	0.00%
	Total	**2,84,09,776**	**3,37,91,014**	**22,47,975**	**28,75,867**	**100%**	**100%**

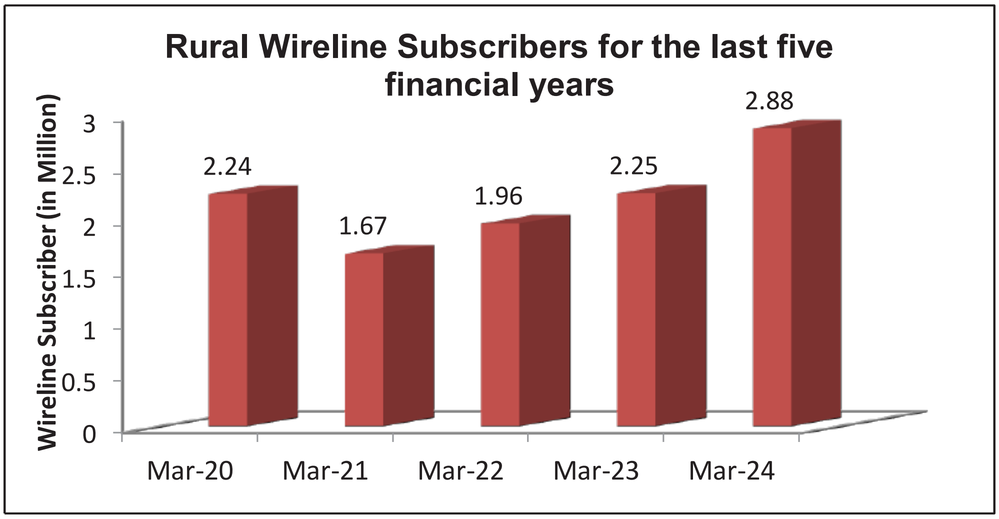
(ii) The status of Rural wireline subscribers for the last four quarters are depicted in **Figure-6**.

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.**

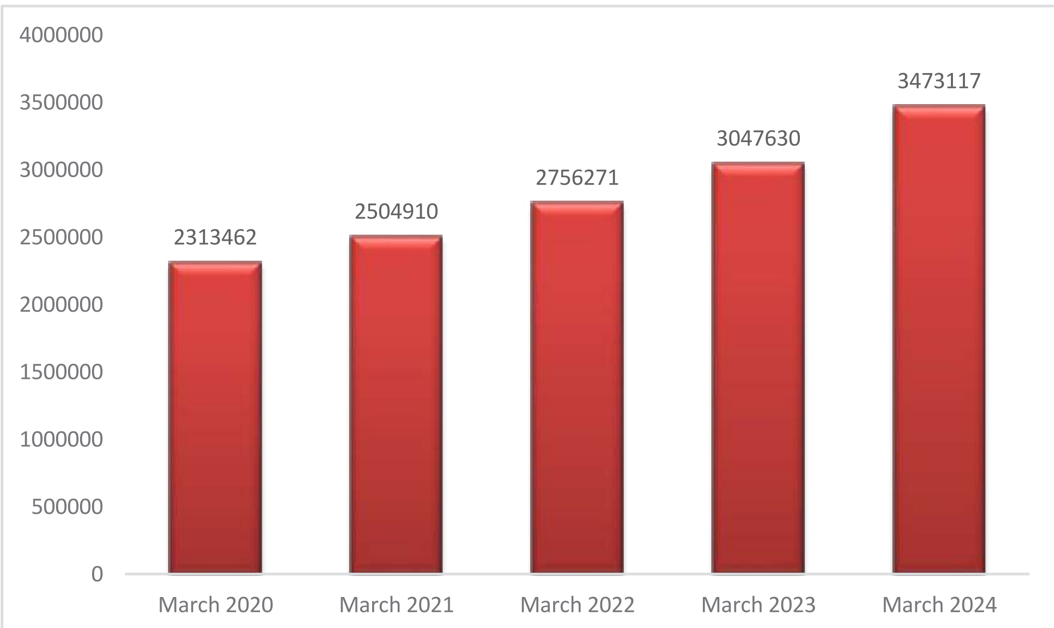
Figure-7: Bar chart showing Rural Wireline Subscribers during 2020-2024



1.2.2 Expansion of Telephone Network

There has been a substantial expansion of telecom networks in the country, which can be seen by the increasing number of Base Stations installed by the telecom service providers. During the financial year 2022-23, a few Telecom Service Providers launched 5G networks in the country. The yearly growth of total number of base stations (which include 2G BTSs, 3G Nodes B, 4G eNodes B and 5G gNodes B) from March 2020 to March 2024, can been seen in the **Figure-8.**

Figure-8: BTS installed



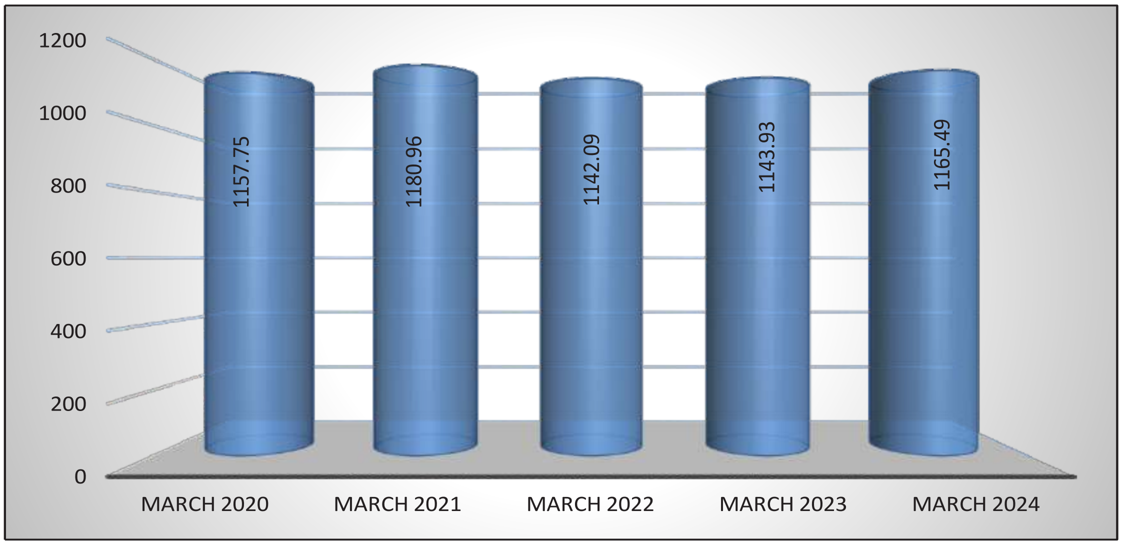
Note: 5G services commenced in October 2022.

1.2.2.1 Wireless Services

The Wireless Subscriber base was 1143.93 million as on 31st March 2023 in comparison to the subscriber base of 1165.49 million as on 31st March 2024. The subscriber base increased by 21.56 million subscribers during the financial year 2023-24. The trend of subscriber base from March 2020 to March 2024 is depicted in **Figure-9.**

Figure-9: Wireless Subscriber base

(In Million)



The subscriber base of individual wireless service providers from 2019-20 to 2023-24 along with their percentage growth over the financial year 2022-23 is given in **Table-8**. The market share of different mobile operators as on 31st March 2024 is displayed in **Figure-10.**

Table-8: Subscriber Base of Wireless Services from 2019-20 to 2023-24

(In Million)

Service Providers	2019-20	2020-21	2021-22	2022-23	2023-24	%age growth/ reduction over FY 2022-23
Reliance JIO	387.52	422.92	403.99	430.23	469.73	9.18
Bharti Airtel	327.81($)	352.39	360.33	370.91	385.76	4.00
Vodafone Idea	319.17(^)	283.71	260.77	236.75	219.82	-7.15
BSNL	119.87(~)	118.63(~)	113.74	103.68	88.25	-14.88
MTNL	3.36	3.3	3.25	2.35	1.93	-17.87
Reliance Communications/ Reliance Telecom (#)	0.0178	0.01	0.0033	0.0027	0	0.00
Total	**1157.11**	**1180.96**	**1142.09**	**1143.93**	**1165.49**	**1.88**

Source: Service Providers

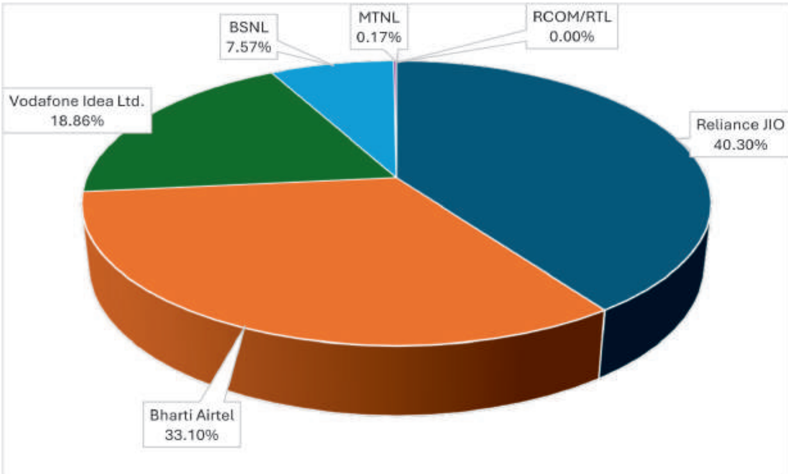
($) M/s Telenor and M/s Tata Teleservices Ltd have merged with M/s Bharti Airtel w.e.f 14th May 2018 and 6th February 2020 respectively.

(^) M/s Vodafone and M/s Idea Cellular merged their commercial service w.e.f 31st August 2018.

(~) The wireless subscriber base figures reported by BSNL's VNOs are included in the wireless subscriber base of BSNL.

(#) 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 31st March 2024)

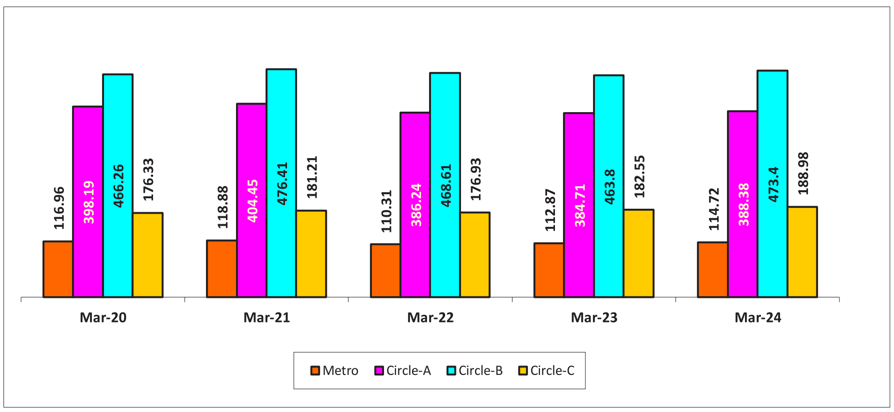


In terms of subscriber base of wireless services, M/s Reliance Jio Infocomm Ltd was the largest service provider with 469.73 million subscribers; followed by M/s Bharti Airtel Ltd, M/s Vodafone Idea Ltd, M/s BSNL and M/s MTNL with 385.76 million, 219.82 million, 88.25 million, and 1.93 million respectively.

The subscriber base for Wireless services in different categories of service areas for the period March 2020 to March 2024 is indicated graphically in **Figure-11.**

Figure-11: Circle-Category wise subscriber base for Wireless Services from March 2020 to March 2024

(In Million)



The list of service providers in various service areas is given in **Table-9** and **Table-10.**

Table-9: Wireless Service Providers as on 31st March 2024

S. No	Service Providers	Licensed Service Area
1	Bharti Airtel Group	All India
2	BSNL	All India except Delhi & Mumbai
3	MTNL	Delhi, Mumbai
4	Reliance Communications Ltd.	All India (except Assam & North-East)
5	Reliance Jio Infocomm Ltd.	All India
6	Vodafone Idea Ltd.	All India

Source: DoT Website.

Table-10: UL (Virtual Network Operators) (VNO) Licensees with access service authorization providing wireless services as on 31st March 2024

S. No	Service Providers	Licensed Service Area
1	AdPAY Mobile Payment India Pvt. Ltd.	Tamil Nadu
2	Surftelecom Pvt Ltd.	Tamil Nadu

Source: As reported by service provider

1.2.2.2 Wireline Services

The Service Provider wise break-up in terms of rural and urban subscribers of wireline subscribers of 33.79 million as on 31st March 2024, is shown in **Table-11** below. The incumbents BSNL, MTNL and APSFL have 19.23%, 6.44% and 1.90% market share respectively in the wireline subscriber base, while all the seven private operators together have 72.42% share. The share of private operators has increased from 66.85% as on 31st March 2023 to 72.42% as on 31st March 2024, registering an increase of 5.57%.

Table-11: Wireline Subscriber Base of Service Providers as on 31st March 2024

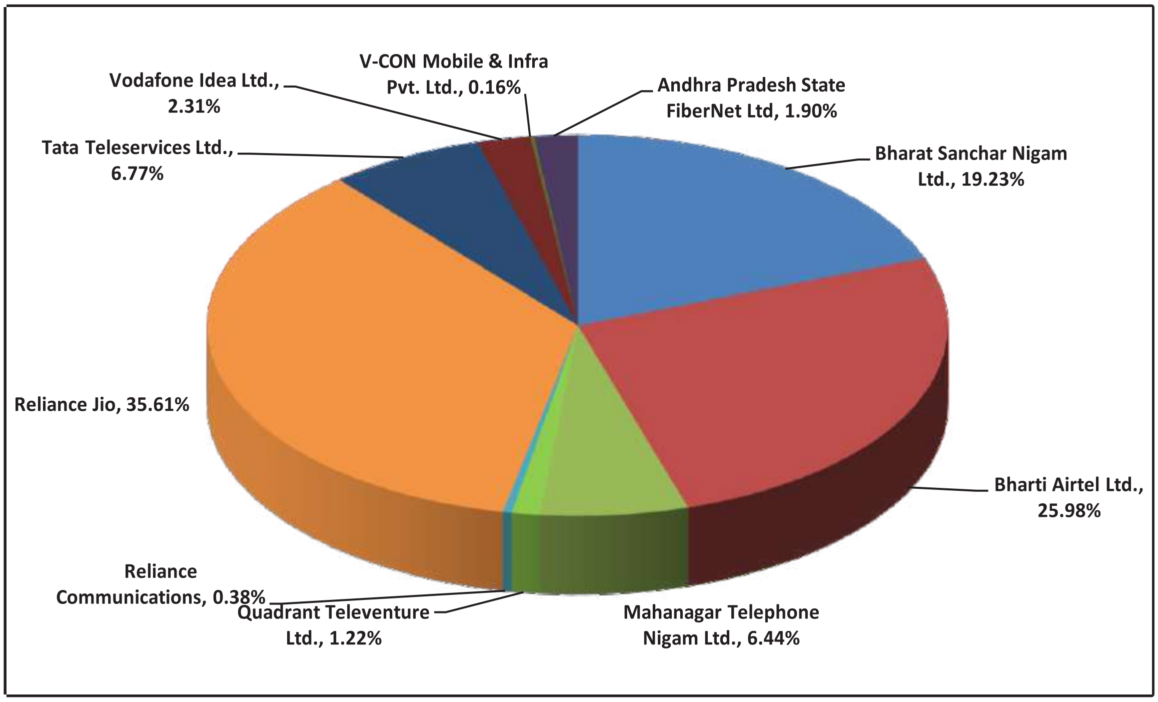
S. No.	Name of Service Providers	Urban	Rural	# Total Subscribers (Wireline)	Market Share (In %)
1	Andhra Pradesh State FiberNet Ltd	1,67,334	4,76,259	6,43,593	1.90
2	Bharti Airtel Ltd.	87,75,233	2,478	87,77,711	25.98
3	Bharat Sanchar Nigam Ltd.	43,95,903	21,03,569	64,99,472	19.23
4	Mahanagar Telephone Nigam Ltd.	21,77,515	32	21,77,547	6.44
5	Quadrant Televenture Ltd.	3,94,934	16,553	4,11,487	1.22
6	Reliance Communications	1,26,930	355	1,27,285	0.38
7	Reliance Jio Infocomm Ltd.	1,17,63,682	2,69,068	1,20,32,750	35.61
8	Tata Teleservices Ltd.	22,78,451	7,553	22,86,004	6.77
9	Vodafone Idea Ltd.	7,81,857		7,81,857	2.31
10	V-CON Mobile & Infra Pvt. Ltd.	53,308		53,308	0.16
	Total	**3,09,15,147**	**28,75,867**	**3,37,91,014**	**100.00**

#Source: Data Provided by TSPs.

1.2.2.3 Share of Service Providers in Wireline Subscribers

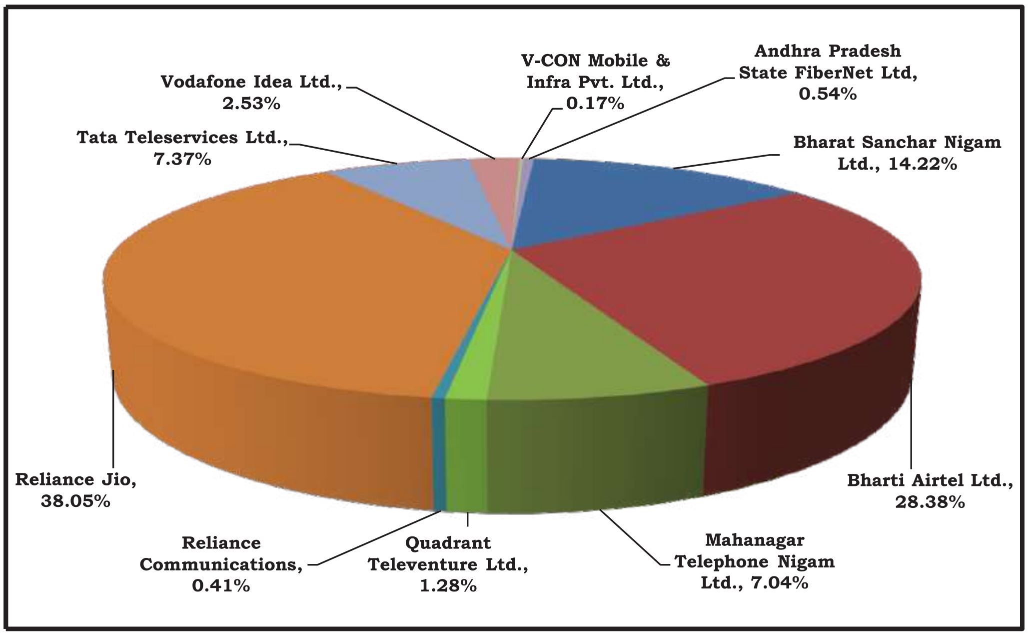
(i) As on 31st March 2024, 27.58% of total wireline subscribers are connected to the networks of BSNL, MTNL & APSFL and the remaining wireline connections are provided by different private service provider. The market share of different service providers in total wireline subscriber base is shown in the **Figure–12.**

Figure - 12: Composition of share of Service Providers



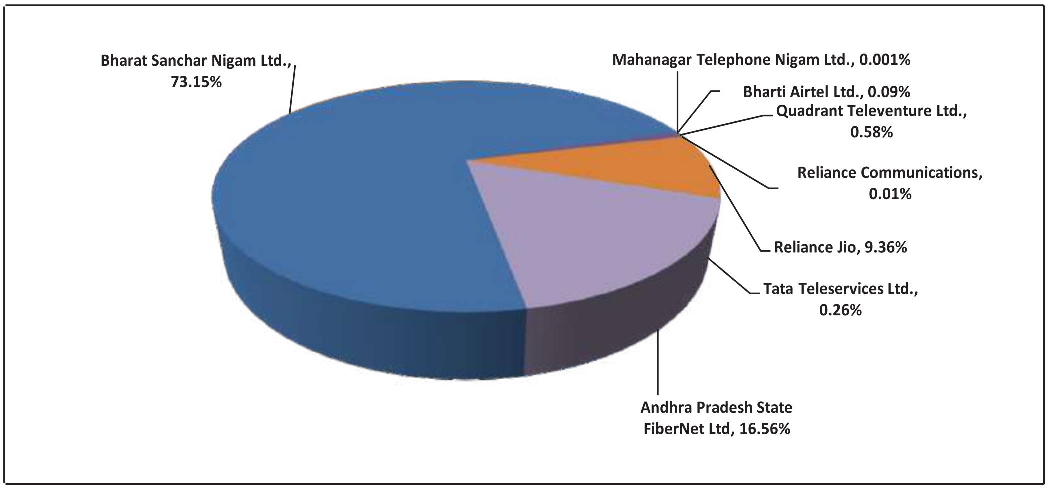
(ii) As on 31st March 2024, the total Urban wireline subscribers were 30.92 million, out of which about 21.80% were provided by BSNL, MTNL & APSFL. The market share of different wireline service providers in urban areas is depicted in the **Figure-13.**

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



(iii) As on 31st March 2024, the total Rural wireline subscribers were 2.88 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 31st March 2024, the total number of PCOs is 0.021 million as compared to 0.042 million as on 31st March 2023. The number of PCOs provided by BSNL, MTNL and Private Operators is indicated in **Table-12.**

Table-12: Public Call Offices in India

S. No.	Name of the Service Provider	As on 31st March, 2023	As on 31st March, 2024
1	BSNL	32,301	15,411
2	MTNL	9,492	4,957
3	Quadrant	342	284
	Total	**42,135**	**20,652**

1.2.2.5 Village Public Telephones (VPTs)

As on 31st March 2024, the total number of Village Public Telephones (VPTs) provided by the service providers were 0.69 lakh. **Table-13** below provides the number of VPTs functioning in the country.

Table-13: Village Public Telephones in India

S. No.	Name of the Service Provider	As on 31st March 2023	As on 31st March 2024
1	BSNL	68,606	68,606
	Total	**68,606**	**68,606**

1.2.2.6 Equipped Switching Capacity

As on 31st March 2024, the service provider-wise total equipped switching capacity and working connections are shown in **Table-14.**

Table-14: Service Provider wise Equipped switching capacity

S. No.	Name of the Service Provider	Service Area	as on 31st March 2024	
			# Equipped Switching Capacity (Number of Lines)	# Working Connection
1.	Andhra Pradesh State FiberNet Ltd	Andhra Pradesh	17,00,000	6,43,593
2.	Bharti Airtel Ltd.	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal.	1,48,99,916	87,77,711
3.	Bharat Sanchar Nigam Ltd.	All India except Delhi & Mumbai	1,32,72,937	64,99,472
4.	Mahanagar Telephone Nigam Ltd.	Delhi & Mumbai	43,88,107	21,77,547
5.	Quadrant Televentures Ltd.	Punjab	3,88,000	4,11,487
6.	Reliance Communications Ltd	Andhra Pradesh, Bihar, Delhi, Gujarat, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal	7,68,000	1,27,285

7.	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 (including Chennai), UP-East, UP-West and West Bengal.	2,39,28,000	1,20,32,750
8.	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 (including Chennai), UP-East, UP-West and West Bengal.	42,02,559	22,86,004
9.	Vodafone Idea 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 (including Chennai), UP-East, UP-West and West Bengal.	9,41,000	7,81,857
10.	V-CON Mobile & Infra Pvt. Ltd.	Punjab	50,000	53,308

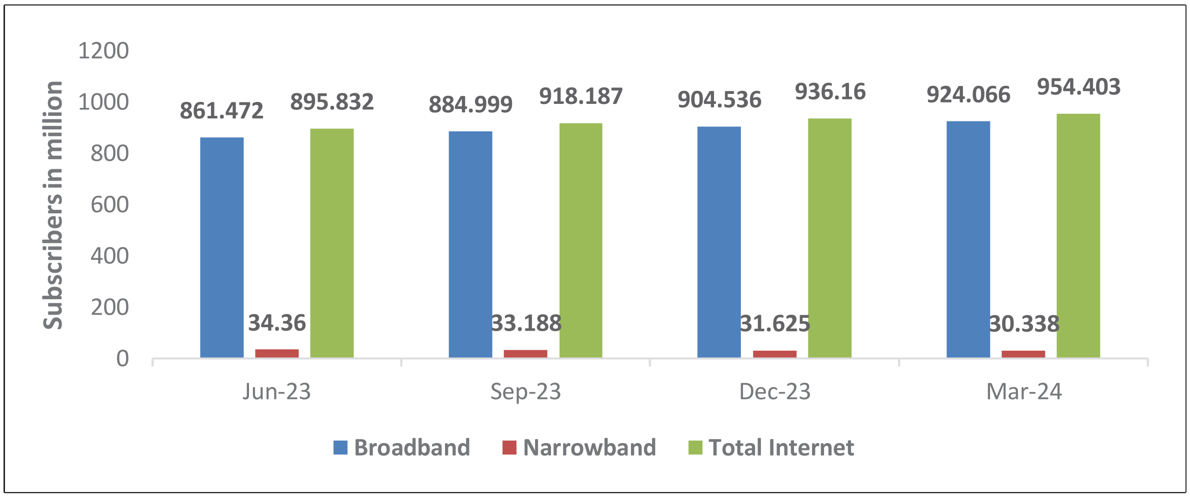
#Source: Data Provided by TSPs.

1.2.2.7 Internet and Broadband Subscribers

The Internet subscriber base in the country as on 31st March 2024 has witnessed 8.30% growth in reference to March 2023. The total broadband subscriber base in the country as on 31st March 2024 has grown by 9.15% as compared to 31st March 2023 whereas Narrowband segment has declined by (-) 12.53% in last one year.

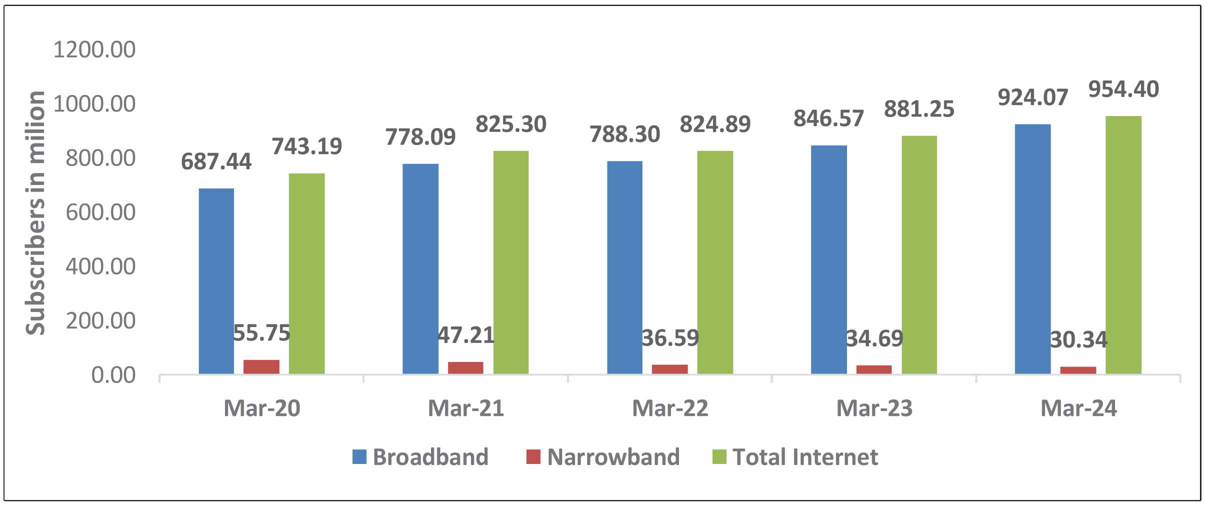
1.2.2.8 Quarter-wise Internet/Broadband subscription performance during FY 2023-24 is depicted in **Figure–15**.

Figure-15: Quarter-wise Internet and Broadband Subscribers



1.2.2.9 The expansion of Internet (Broadband + Narrowband) service in the country during the last five years is depicted in **Figure–16.**

Figure-16: Internet subscribers for the last five financial years



1.2.2.10 Public Mobile Radio Trunking Services (PMRTS)

The subscriber base of PMRTS decreased from 67,820 at the end of 31st March 2023 to 65,880 at the end of 31st March 2024 registering a decrease of 1,940 subscribers during the financial year 2023-24 at the rate of 2.86%. The PMRTS subscriber base, service provider-wise is indicated in the **Table-15**.

Table-15: PMRTS Subscriber base - Service Provider wise

S. No.	Service Provider	Subscriber base ending	
		March 2023	March 2024
1	Airtalk Solutions & Services Pvt. Ltd.	785	1,310
2	Arya Omnitalk Radio Trunking Services Pvt. Ltd.	55,506	53,076
3	Bhilwara Telenet Services Pvt. Ltd.	883	823
4	Inative Networks Pvt. Ltd.	1,820	1,820
5	Procall Ltd.	4,246	4,320
6	QuickCall	1,836	1,982
7	Smartalk Pvt Ltd.	1,691	1,403
8	Wiwanet Solutions Pvt. Ltd	1,053	1,146
	Grand Total	**67,820**	**65,880**

1.2.2.11 Very Small Aperture Terminal (VSAT) CUG Service

The total number of VSAT subscribers decreased marginally from 2,56,170 at the end of 31st March 2023 to 2,53,250 at the end of 31st March 2024. Net decrease of VSAT subscribers during the financial year 2023-24 was 2,920 at the decline rate of 1.14%. The VSAT subscriber base, service provider-wise is depicted in **Table-16.**

Table-16: VSAT (CUG) Service Providers currently providing service and their Subscriber base

S. No.	Name of the Service Provider	Subscriber base ending	
		March 2023	March 2024
1.	Hughes Communications Ltd.	1,76,150	1,79,732
2.	Nelco Ltd.	70,750	65,484
3.	BSNL	6,556	5,333
4.	Infotel Satcom	2,707	2,694
5.	Cloudcast Digital Ltd.	7	7
	TOTAL	**2,56,170**	**2,53,250**

M/s Hughes Communications Ltd. is the market leader with a market share of 70.97% followed by M/s Nelco Ltd. with 25.86% and M/s BSNL with 2.11%.

1.2.3 Entry of private sector in both basic and value-added service

1.2.3.1 The list of service providers in various service areas are depicted in **Table-17** & **Table-18.**

Table-17: UL Virtual Network Operators Licensees with access service authorization providing wireless services as on 31st March 2024

S. No	Service Providers	Licensed Service Area
1	AdPAY Mobile Payment India Pvt. Ltd.	Tamil Nadu
2	Surftelecom Pvt Ltd	Tamil Nadu

Source: As reported by Service Provider

Table-18: Number of UL/ UASL/UL(VNO) licensees as on 30th June 2023

Sl. No.	Type of Licence	Total No. of Licensees as on 30th June 2023*	No. of Licensees added during FY 2023-24 (Upto 30th June 2023*)
1	UL	43	01
2	UASL	06	0
3	UL(VNO)	199	04

* Data obtained from DoT website.

1.2.4 Technical compatibility and effective interconnection with service providers

1.2.4.1 Interconnection is an important factor of telecommunication services as subscribers of telecommunication services cannot communicate with each other or connect with services they require unless necessary interconnection arrangements are in place. Ensuring an effective and expeditious interconnection plays an important role in the growth of the telecommunication services sector. During the financial year i.e., 2020-21, the Authority notified the "Telecommunication Interconnection (Second Amendment) Regulations, 2020" on dated 10th July 2020, thereby setting the guidelines for making the interconnection easier between any two Public Switched Telephone Network (commonly referred to as the Fixed Line Networks), and between Public 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. Empanelment of Application Service Provider for providing ICT based solutions to TRAI:

IT Division has empanelled 10 Application Service Providers for providing various ICT based solutions to TRAI thereby catering to the needs of various divisions of TRAI.

ii. Redevelopment of TRAI Website:

To revamp the existing TRAI Website with latest security features, dynamic Content Management System (CMS), social media integration and further improving the accessibility features from different platforms and to ensure compliance to latest security guidelines, the work order has been awarded to one of the TRAI empanelled application service providers.

iii. Comprehensive IT Ecosystem for Data Reporting, Analytics and process automation:

NICSI empanelled agency has been engaged for Stage-I i.e. DPR (Detailed Project Report) preparation. The DPR will cover As-Is-To-Be processes, roadmap for integration of various existing/new processes/portals/data, analytics, security, framework, protocol for data submission by stakeholders, etc., which will form the basis for development of the ecosystem.

iv. SPARROW:

With effect from 1st June 2023 TRAI has implemented an IT application for automating Annual Performance Appraisal activities, an application named as SPARROW (Smart Performance Appraisal Report Recording Online Window) developed by NIC. A total of 220 users accounts have been created on SPARROW for the year 2023-24.

v. Reporting Automation:

Data reporting to TRAI by various stakeholders in compliance of Regulation/Directions is a regular activity. A system to collect data online from stakeholders is in place. The system has been updated to ease data submission by including new reports, UI changes and security enhancements. Various reports of NSL/BB&PA divisions have been updated and new reports for CA division has been developed.

vi. Cloud Management and Maintenance of Apps & Portals:

TRAI has implemented various portals and apps. The portals and back-ends services are hosted on Cloud. Maintenance of all the portals/Apps are being done covering functionality updations, system patches, etc. Security audits through CERT-IN vendors are being carried out regularly. The necessary actions have been taken to secure them from cyber attack based on alerts received from NIC, CERT-IN and other organizations.

vii. Infrastructure Upgradation:

a. To strengthen the infrastructure, TRAI has implemented Endpoint Security Solution for protection against threats, including viruses, worms, spyware and other malware etc. It combines security, performance, management, and compliance capabilities, making it easier for the administrator to manage entire endpoints in TRAI.

b. IT Division has procured 104 desktops for various divisions of TRAI, for efficient working.

c. The IT team along with consultant has finalized IT infrastructure requirement for new building covering endpoint network (wired/wireless), security, storage, redundance etc. This will enable TRAI to create a state-of-the-art IT infrastructure which will be future ready.

d. For the smooth functioning of all the services in TRAI, the timely monitoring of various licenses i.e. Tableau, Adobe Acrobat, MS Office 365, SSL Certificate etc. are being carried out and upon expiry of the same, the necessary renewal is being carried out.

1.2.6. Implementation of National Telecom Policy

1.2.6.1 The National Digital Communications Policy (NDCP)- 2018 seeks unlocking of the transformative power of digital communications networks for achieving the goal of digital empowerment. NDCP-2018 motivates towards harnessing the power of emerging digital technologies, including 5G, AI, Internet of Things (loT), Cloud and BD to catalyse the fourth industrial revolution. In order to create a roadmap for AI, emerging technology and its use in the communication sector, vide letter dated 6th June 2019, Department of Telecommunication (DoT) sought recommendation of TRAI on the provision no. 2.2(g) of NDCP-2018 i.e. "Leveraging Artificial/intelligence and Big Data in a synchronised and effective manner to enhance the overall quality of service, spectrum management, network security and reliability". TRAI issued Consultation Paper (CP) on "Leveraging Artificial Intelligence and Big Data in telecommunication sector" on 5th August 2022. In the Consultation Paper (CP), wide ranging issues covering all sectors were included.

Based on the comments of the stakeholders, discussion during the Open House Discussion and analysis thereof, the Authority gave its recommendations dated 20th July 2023 on "Leveraging Artificial Intelligence and Big Data in Telecommunication Sector". In view of the impact of AI in all sectors, the framework which has to be suggested for telecom cannot be treated in isolation and hence a common framework covering all the sectors has been suggested in the recommendations. Details of the recommendations are covered in Part II of the report.

1.2.6.2 National Digital Communications Policy 2018 (NDCP-2018) envisages to maximise India's contributions to Global Value Chains, by focusing on domestic production, increasing exports and reducing the import burden in respect of networking and telecommunications equipment, called as NATE in short. Under Digital India program, electronics manufacturing is one of the key thrust areas. Further, National Policy on Electronics, 2019 (NPE) also envisages to strengthen India's linkages with the global trade, integration with global value chains, and build facilitative programs and incentive framework to boosts exports based on Indian Electronics System Design and Manufacturing (ESDM).

In accordance with the objectives of NDCP-2018 and basis reference received from Department of Telecommunications (DoT) on certain aspects of manufacturing of NATE, Telecom Regulatory Authority of India (TRAI) visited the topic in totality and issued the recommendations dated 22nd September 2023 on "Promoting Networking and Telecom Equipment Manufacturing (NATEM) in India". The objective of these recommendations is to move forward from the concept of 'increasing domestic production' and to focus on 'local value addition in global value chains'. Some of the focus areas covered in the recommendations include:

(i) facilitate local value addition in participation with cross country value chains;

(ii) due emphasis on "Telecom software" as a separate product line in accordance with contemporary softwarization of network elements in New Generation Networks;

(iii) facilitating exports from India

(iv) nurturing entrepreneurship by promoting Micro, Small and Medium Enterprises (MSMEs) and Start-ups.

(v) promote a robust component ecosystem in India

Details of the recommendations are covered in Part II of the report.

1.2.7 Quality of Service (QoS)

1.2.7.1 During the year 2023-24, the focus of monitoring of Quality of Service and disseminating information on QoS has 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), Universal Service Obligation is defined as access to telegraph services to people in rural and remote areas at affordable and reasonable prices. In order to provide financial support for the provision of telecom services in commercially unviable rural and remote areas of the country, Universal Service Obligation Fund (USOF) was established on 1st April 2002 vide Indian Telegraph (Amendment) Act 2003.

Since then, the Government has launched many schemes using Universal Service Obligation Fund (USOF) for proliferation of the broadband and improving internet access to common people. The Authority has also been working towards enhancement of telecom connectivity/ infrastructure in the remote and far-flung area of the country. In this regard, TRAI, during the period has issued recommendations on "Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh" on 24th April 2023. It has been recommended that 3 uncovered villages of Ladakh are to be included by USOF under the 20% expansion provision of 'Saturation of 4G mobile services' project. The CAPEX and OPEX expenditure for upgrading the existing non-4G based cellular mobile infrastructure at 19 villages of Ladakh is to be incurred by USOF under the provisions of 20% additional scope that exists in USOF sponsored "Saturation Of 4G Mobile Services in Uncovered Villages Across the Country" to upgrade this cellular infrastructure to 4G based service. Further, TRAI has also issued recommendations on "Improving Telecom Infrastructure in Northeastern State of India" on 22nd September 2023. In its recommendations, it has been recommended that DoT/USOF should provide CAPEX subsidy on viability gap funds (VGF) model for OFC connectivity to all BHQ, which have no OFC connectivity. The Authority has also issued recommendations dated 29th September 2023 on 'Improving Backhaul Telecom Infrastructure in far-flung areas of Himachal Pradesh' in which, a block headquarter each in Chamba and Lahaul & Spiti districts respectively have been recommended to be connected over OFC using USOF.

(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 are delivered through cable TV services, Direct-To-Home (DTH) Service, Headend in the Sky (HITS) services and Internet Protocol television (IPTV) services. As per an industry report, the TV universe consists of approximately 62 million cable TV households, 2 million HITS subscribers. In addition, as reported by the pay DTH operators to TRAI, there were 61.97 million pay DTH total active subscribers as on 31st March 2024. Further, reported subscriber base by the IPTV Operators was 0.5 million as on 31st March 2024.

(ii) The TV broadcasting sector encompasses approximately 333 broadcasters providing 922 private satellite TV channels as on 31st March 2024. These television channels include 258 SD pay TV channels and 103 HD Pay TV channels provided by 41 television broadcasters. Further, there were 880 Multi System Operators (MSOs), 1 HITS operator, 4 pay DTH operators and 33 IPTV operators. Further, as per the information provided by MIB, there were 81,706 cable operators registered in the country.

(iii) The revenue of Indian television industry stands at ₹ 69,600 crore in the year 2023 as compared to ₹ 70,900 crore in the year 2022, thereby registering a decline of around 1.8%. Subscription revenue accounts for a major share of the overall industry revenue. The Subscription revenue has increased from ₹ 39,200 crore in the year 2022 to ₹ 39,900 crore in the year 2023. Further, advertisement revenue has decreased from ₹ 31,800 crore in the year 2022 to ₹ 29,700 crore in the year 2023.

(iv) As reported by the private FM Radio broadcasters to TRAI, there were 388 private FM radio stations operational as on 31st March 2024, besides the radio channels operated by 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 605 permission issued as on 31st March 2024 for the setup of such stations, 494 community radio stations became operational. The reported advertisement revenue by the private FM Radio broadcasters has increased from ₹ 1547.13 crore in year 2022-23 to ₹ 1775.79 crore in the year 2023-24.

1.3 The sector comprises of cable TV services, DTH services, HITS services, IPTV services, and radio broadcasting services. 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 reached 922 at the end of March 2024. **Figure-17** depicts year wise total number of TV channels during last five years. The number of Standard Definition (SD) pay TV channels has grown from 235 at the end of March 2020 to 258 at the end of March 2024. **Figure-18** depicts year wise total number of SD Pay TV channels during last five years. **Figure-19** depicts the year wise number of HD channels reported during last five years. At the end of March 2024, there were a total of 103 operational HD channels. A list of broadcasters & their Pay TV channels (SD & HD) is at **Annexure-I** as a part of this report.

Figure-17: Number of satellite TV channels in India

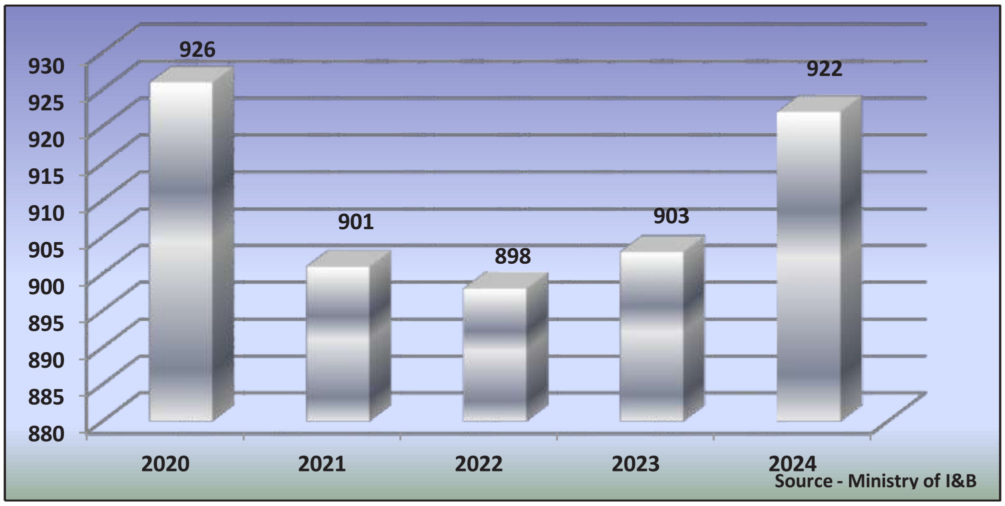


Figure-18: Numbers of SD satellite pay TV channels

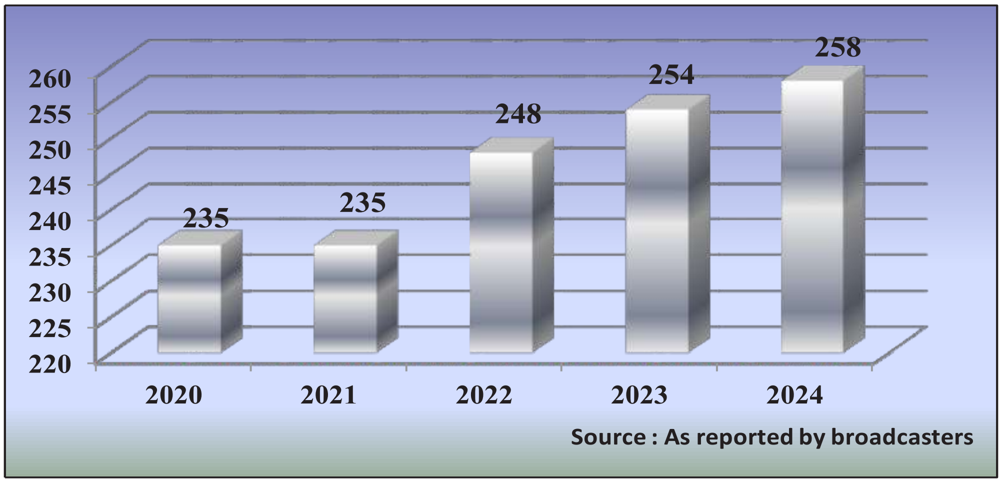
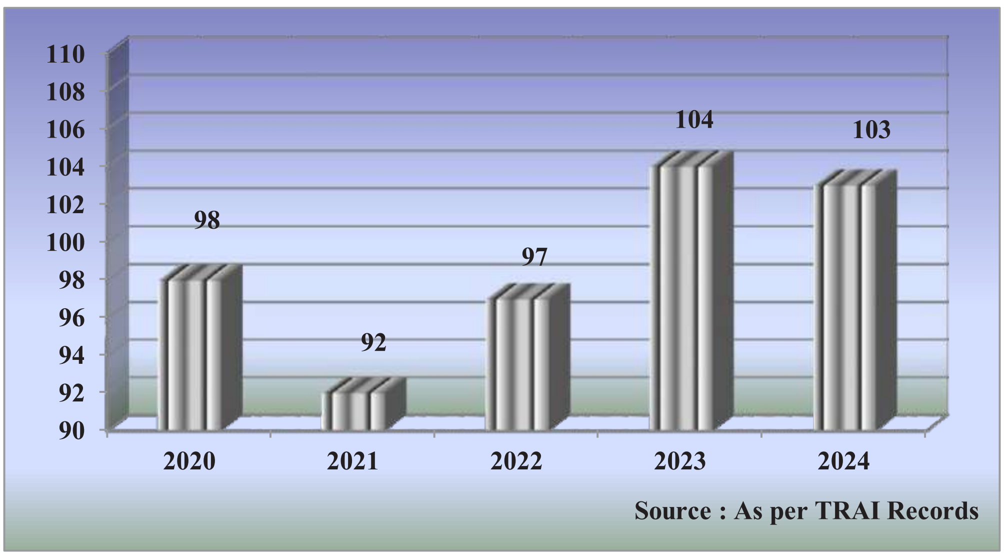


Figure-19: Number of HD satellite pay TV channels

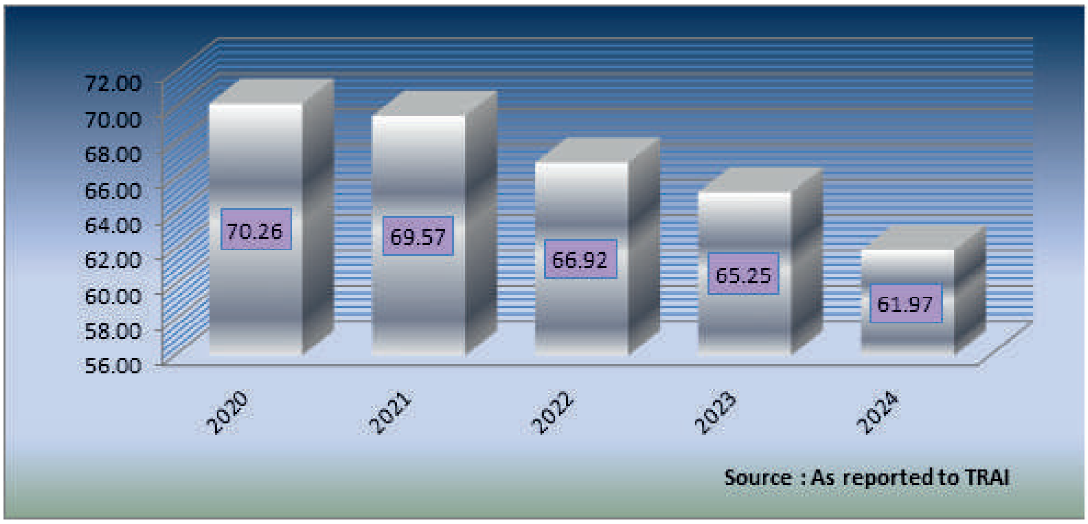


1.3.2 DTH services

As reported by the pay DTH operators to TRAI, pay DTH attained total active subscriber base of around 61.97 million at the end of March 2024. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). At the end of March 2024, there were 4 pay DTH service providers catering to this subscriber base. A list of pay DTH operators is placed at **Annexure II.** Yearly growth of the sector in terms of its net active subscriber base is depicted in **Figure-20.**

Figure-20: 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 have continued to add several innovative offerings and value-added services (VAS) such as movie-on-demand, gaming, shopping, education etc.

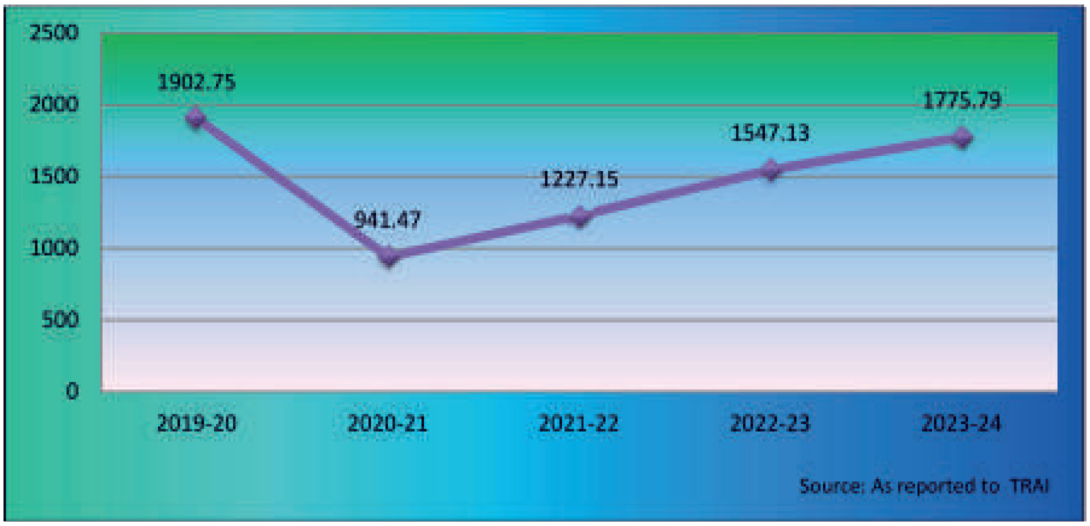
1.3.3 FM Radio

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 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 were 388 private FM radio stations operational as on 31st March 2024, besides the radio channels operated by the public service broadcaster- All India Radio (AIR).

As on 31st March 2024, as per the reporting done by private FM radio broadcasters to TRAI, there were 388 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 ₹ 1775.79 crore in the year 2023-24. The year wise total advertisement revenue of private FM Radio stations is depicted in **Figure-21.**

Figure-21 : FM Radio Advertisement Revenue

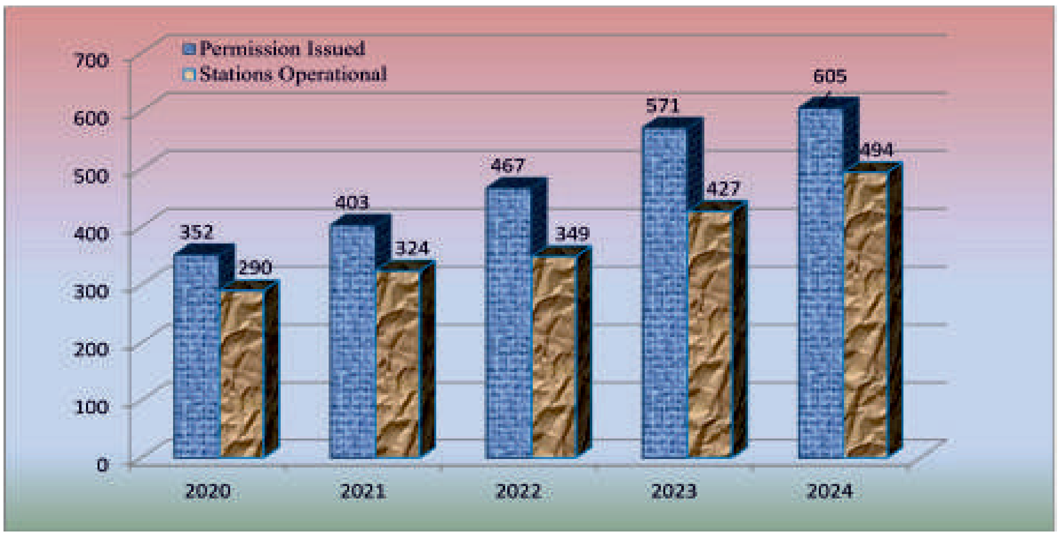
(₹ in crore)



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 help them realize local aspirations. CRS are set up in non-profit community-based organizations, apart from educational institutes, under its ambit. This includes civil society and voluntary organisations, State Agriculture Universities (SAU), Indian Council of Agricultural Research (ICAR) institutions, Krishi Vigyan Kendras, registered societies and autonomous bodies and public trusts registered under Societies Act or any other such act relevant for the purpose. As on 31st March 2024, 494 community radio stations were operational. The annual growth in the number of community radio stations is depicted in **Figure-22.**

Figure-22: Number of Community Radio Stations



Overall status of the Broadcasting and Cable Services Sector in the country is placed in the **Table-19**.

Table-19: Overall status of the Broadcasting and Cable services sector

(as on 31st March 2024)

Number of Broadcasters permitted by MIB (approximately)	333
Number of Multi System Operators registered with MIB	880
Number of Local Cable operators (as per MIB)	81,706
Number of pay DTH Operators	4
Number of satellite TV Channels registered with MIB	922
Number of SD Pay TV Channels	258
Number of HD TV Channels	103
Number of FM Radio Stations (excluding All India Radio)	388
Number of Operational Community Radio Stations	494

Annexure - I

List of pay TV channels as on 31st March 2024

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

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
		36	TLC	SD
		37	EUROSPORT HD	HD
		38	EUROSPORT	SD
9	Disney Broadcasting (India) Limited	39	Disney Junior	SD
		40	Super Hangama (Marvel HQ)	SD
		41	Disney International HD	HD
		42	Hungama TV	SD
		43	The Disney Channel	SD
		44	Bindass	SD
		45	Disney Channel HD	HD
10	Eenadu Televisoin Private Limited	46	ETV Telegu	SD
		47	ETV Andhra Pradesh	SD
		48	ETV - Telangana	SD
		49	ETV Cinema	SD
		50	ETV Life	SD
		51	ETV Plus	SD
		52	ETV Abhiruchi	SD
		53	ETV HD	HD
		54	ETV Plus HD	HD
		55	ETV Cinema HD	HD
		56	ETV Balbharat Hindi	SD
		57	ETV Balbharat English	SD
		58	ETV Balbharat HD	HD
		59	ETV Balbarid SD	SD
11	IN 10 Media Private Limited	60	EPIC TV	SD
		61	Filamchi	SD
		62	Gubbare	SD
		63	Showbox	SD
		64	Ishara TV	SD
12	Information TV Private Limited	65	India News	SD
13	Fame Media Private Limited	66	4tv News	SD
14	Greycells18 Media Limited	67	Topper TV	SD
15	IBN Lokmat News Private Ltd	68	News 18 Lokmat	SD
16	Lifestyle and Media Broadcasting Limited	69	Good Times	SD
17	Mavis Satcom Limited	70	J Movies	SD
		71	Jaya Max	SD
		72	Jaya Plus	SD
		73	Jaya TV HD	HD

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
18	MSM Worldwide Factual Media Private Limited	74	SONY BBC EARTH	SD
		75	SONY BBC EARTH HD	HD
19	Media Worldwide Limited	76	Travel XP	SD
		77	WOMAN	SD
20	New Delhi Television Limited	78	NDTV 24*7	SD
		79	NDTV India	SD
		80	NDTV Profit	SD
21	NGC Network (India) Pvt Limited	81	Star Life	SD
		82	National Geographic Channel (NGC)	SD
		83	Star Life HD	HD
		84	Nat Geo Wild	SD
		85	National Geographic HD	HD
		86	Nat Geo Wild HD	HD
22	Polimer Media Private Limited	87	Jothi TV	SD
23	Tarang Broadcastting Company Limited	88	Prarthana	SD
		89	Tarang	SD
		90	Tarang Music	SD
		91	Alankar	SD
24	Odisha Television Limited	92	Tarang HD	HD
25	Raj Television Network Limited	93	Raj Digital Plus	SD
		94	Raj Musix	SD
		95	Raj News	SD
		96	Raj TV	SD
		97	Raj Nagaichuvai	SD
		98	Raj Pariwar	SD
26	Silverstar Communications Limited	99	Mega 24	SD
		100	Mega Musiq	SD
		101	Mega TV	SD
27	Culver Max Entertainment Private Limited	102	Sony YAY!	SD
		103	SONY MAX	SD
		104	SONY SAB	SD
		105	SONY ENTERTAINMENT CHANNEL (SET)	SD
		106	SONY PIX	SD
		107	SONY MAX 2	SD
		108	SONY PAL	SD

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
		109	SONY ENTERTAINMENT CHANNEL HD	HD
		110	PIX HD	HD
		111	MAX HD	HD
		112	SONY Sports Ten 2 HD	HD
		113	SONY Sports Ten 3 HD	HD
		114	SONY Sports Ten 2	SD
		115	SONY Sports Ten 1	SD
		116	SONY Sports Ten 3	SD
		117	SONY Sports Ten 1 HD	HD
		118	SONY Wah	SD
		119	SAB HD	HD
		120	SONY Sports Ten 4	SD
		121	SONY Sports Ten 4 HD	HD
		122	SONY Sports Ten 5	SD
		123	SONY Sports Ten 5 HD	HD
28	Star India Private Limited	124	Star Sports 3	SD
		125	Star Sports 1 Tamil	SD
		126	Star Sports Select 2	SD
		127	Star Bharat	SD
		128	Star Gold 2 (Movies OK)	SD
		129	Star Sports 1 Hindi	SD
		130	Star Gold	SD
		131	Star Jalsha	SD
		132	Star Movies	SD
		133	Star Gold Select	SD
		134	Star Plus	SD
		135	Star Pravah	SD
		136	Star Sports 1	SD
		137	Star Sports 2	SD
		138	Jalsha Movies	SD
		139	Star Sports HD 2	HD
		140	Star Sports HD 1	HD
		141	Star Bharat HD	HD
		142	Star Gold HD	HD
		143	Star Movies HD	HD
		144	Star Plus HD	HD
		145	Star Sports 1 HD Hindi	HD

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
		146	Star Sports Select 1	SD
		147	Star Movies Select HD	HD
		148	Star Sports First	SD
		149	MAA Gold	SD
		150	MAA Movies	SD
		151	MAA Music	SD
		152	MAA TV	SD
		153	Star Pravah HD	HD
		154	Star Jalsha HD	HD
		155	Jalsha Movies HD	HD
		156	Star Sports Select HD 1	HD
		157	Star Sports Select HD 2	HD
		158	MAA HD	HD
		159	Star Gold Select HD	HD
		160	MAA Movies HD	HD
		161	Star Sport 1 Telugu	SD
		162	Star Sport 1 Kannada	SD
		163	Star Utsav	SD
		164	Star Utsav Movies	SD
		165	Star Gold Romance	SD
		166	Star Gold Thrills	SD
		167	Pravah Pictures	SD
		168	Star Kiran	SD
		169	Star Movies Select	SD
		170	Star Gold 2 HD	HD
		171	Star Sports 1Tamil HD	HD
		172	Star Sports 1Telugu HD	HD
		173	Star Kiran HD	HD
		174	Pravah Pictures HD	HD
		175	Vijay TV	SD
		176	Vijay Super	SD
		177	Vijay HD	HD
		178	Vijay Takkar (Vijay Music)	SD
		179	Asianet	SD
		180	Asianet Plus	SD
		181	Asianet Movies	SD
		182	Suvarna Plus	SD
		183	Star Suvarna HD	HD
		184	Asianet HD	HD

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
		185	Star Suvarna	SD
		186	Vijay Super HD	HD
		187	Asianet Movies HD	HD
29	SUN TV Network Limited	188	Adithya TV	SD
		189	Chintu TV	SD
		190	Chutti TV	SD
		191	Gemini Comedy	SD
		192	Gemini Life	SD
		193	Gemini Movies	SD
		194	Gemini Music	SD
		195	Gemini TV	SD
		196	KTV	SD
		197	Surya Movies	SD
		198	Kushi TV	SD
		199	SUN Life	SD
		200	Sun Music	SD
		201	Sun News	SD
		202	Surya Music	SD
		203	SUN TV	SD
		204	Surya Comedy	SD
		205	Surya TV	SD
		206	Udaya Comedy	SD
		207	Udaya Movies	SD
		208	Udaya Music	SD
		209	Udaya TV	SD
		210	Kochu TV	SD
		211	Sun TV HD	HD
		212	KTV HD	HD
		213	Sun Music HD	HD
		214	Gemini TV HD	HD
		215	Gemini Music HD	HD
		216	Gemini Movies HD	HD
		217	Surya TV HD	HD
		218	Udaya TV HD	HD
30	Suryansh Broadcasting Private Limited	219	Flowers	SD
31	Warner Media India Private Limited	220	Cartoon Network	SD
		221	CNN International	SD
		222	POGO	SD
		223	Cartoon Network HD+	HD

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
32	TV 18 Broadcast Limited	224	CNN News 18	SD
		225	CNBC Bajaar	SD
		226	CNBC TV 18 Prime HD	HD
		227	CNBC Awaaz	SD
		228	News 18 Tamil Nadu	SD
		229	News 18 Kerala	SD
		230	News 18 Assam / North East	SD
		231	News 18 India	SD
		232	CNBC TV 18	SD
		233	News 18 Bihar / Jharkhand	SD
		234	News 18 Madhya Pradesh/ Chattisgarh	SD
		235	News 18 Rajasthan	SD
		236	News 18 Uttar Pradesh/ Uttaranchal	SD
		237	News 18 Jammu/Kashmir/ Ladakh/Himachal	SD
		238	News 18 Kannada	SD
		239	News 18 Bangla	SD
		240	News 18 Punjab / Haryana	SD
		241	News 18 Gujarati	SD
		242	News 18 Odia	SD
33	TV Today Network Limited	243	Aaj Tak	SD
		244	India Today	SD
		245	AAJ Tak HD	HD
		246	Good News Today	SD
34	Viacom 18 Media Private Limited	247	Colors	SD
		248	Comedy Central (HD)	HD
		249	MTV	SD
		250	NICK	SD
		251	NICK JR	SD
		252	SONIC	SD
		253	VH 1 (HD Distribution)	HD
		254	Colors Infinity HD	HD
		255	Colors Infinity	SD
		256	Colors HD	HD
		257	NICKS HD+	HD
		258	Colors Cineplex	SD

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
		259	MTV Beats	SD
		260	Colors Kannada HD	HD
		261	Colors Marathi HD	HD
		262	Colors Bangla HD	HD
		263	Colors Super	SD
		264	Colors Cineplex Bollywood	SD
		265	Sports18 1	SD
		266	Sports 18 1 HD	HD
		267	Sports 18 2	SD
		268	Sports 18 3	SD
		269	Colors Bangla	SD
		270	Colors Gujarati	SD
		271	Colors Kannada	SD
		272	Colors Marathi	SD
		273	Colors Odia	SD
		274	MTV Beats HD	HD
		275	Colors Tamil	SD
		276	Colors Cineplex HD	HD
		277	VH 1	SD
		278	Colors Tamil HD	HD
		279	MTV HD	HD
		280	Colors Rishtey	SD
		281	Colors Kannada Cinema	SD
		282	Colors Gujarati Cinema	SD
		283	Comedy Central	SD
		284	Colors Bangla Cinema	SD
		285	Colors Cineplex Superhit	SD
35	Zee Akaash News Private Limited	286	Zee 24 Ghanta	SD
36	Zee Entertainment Enterprises Limited	287	Zee Bollywood	SD
		288	Action Cinema	SD
		289	Zee Bangla Cinema	SD
		290	Zee Café HD	HD
		291	Zee Café	SD
		292	Zee Cinema	SD
		293	Zee Talkies	SD
		294	Zee TV	SD
		295	Zing	SD

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
		296	& Picture	SD
		297	Zee Bangla	SD
		298	Zee Marathi	SD
		299	ZEE ZEST HD	HD
		300	Zee Zest	SD
		301	Zee TV HD	HD
		302	Zee Cinema HD	HD
		303	& TV	SD
		304	& TV HD	HD
		305	Zee Kannada	SD
		306	Zee Telugu	SD
		307	& Pictures HD	HD
		308	Zee Cinemalu	SD
		309	Zee Yuva	SD
		310	Zee Marathi HD	HD
		311	& Prive HD	HD
		312	Zee Bangla HD	HD
		313	Zee Tamil HD	HD
		314	Zee Cinemalu HD	HD
		315	Zee Telugu HD	HD
		316	Zee Tamil	SD
		317	Zee Kannada HD	HD
		318	Zee Anmol Cinema	SD
		319	& Flix HD	HD
		320	& Flix	SD
		321	Zee Keralam HD	HD
		322	Zee Keralam	SD
		323	Zee Anmol	SD
		324	Big Magic	SD
		325	Zee Ganga	SD
		326	Zee Classic	SD
		327	&Xplore HD	HD
		328	ZEE Sarthak	SD
		329	Zee Talkies HD	HD
		330	Zee Punjabi	SD
		331	Zee Thirai	SD
		332	Zee Picchar	SD
		333	Zee Thirai HD	HD
		334	Zee Picchar HD	HD

S. No.	Name of the broadcaster	S. No.	Name of channel	Declared as SD or HD
		335	Zee Biskope	SD
37	Zee Media Corporation Limited	336	Zee 24 Taas	SD
		337	Zee Delhi NCR Haryan (Zee Odisha)	SD
		338	Zee Business	SD
		339	Zee Punjab Haryana Himachal	SD
		340	Zee Madhya Pradesh Chattisgarh	SD
		341	Salaam TV	SD
		342	Zee 24 Kalak	SD
		343	WION	SD
		344	Zee Uttar Pradesh Uttrakhand	SD
		345	Zee Bharat	SD
		346	Zee Bihar Jharkhand	SD
		347	Zee News	SD
		348	Zee Rajasthan News	SD
		349	Zee News HD	HD
		350	Zee Kannada News	SD
		351	Zee Telugu News	SD
38	Zoom Entertainment Network Limited	352	Movies Now	SD
39	Sidharth Broadcasting Private Limited	353	Sidharth TV	SD
40	Sarthak Music Private Limited	354	Sidharth Bhakti	SD
		355	Jay Jagannath	SD
		356	Sidharth Gold	SD
41	Kalaignar TV Pvt Limited	357	Kalaignar TV	SD
		358	Kalaignar Isai Aruvi	SD
		359	Kalaignar Siripolli	SD
		360	Kalaignar Murasu	SD
		361	Kalaignar Seithigal	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 during 2023-24. 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 endeavours 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 inconsistent 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 robust practice of consultation process, which allows participation of all the stakeholders and the general public and ensures transparency while framing recommendations. 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 transparent 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 Communications or Ministry of Information & Broadcasting in the case of Broadcasting and Cable Services. Recommendations made to the Government during 2023-24 are given below.

2.5.1 TELECOM SECTOR

S. No.	List of Recommendations & Responses to Back References
1	Recommendations dated 24th April 2023 on "Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh".
2	TRAI's Response dated 2nd May 2023 to DoT back reference dated 27th January 2023 on Recommendations on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average methods of SUC assessment, in cases of Spectrum Sharing".
3	Recommendations dated 19th June 2023 on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India".
4	Recommendations dated 20th July 2023 on "Leveraging Artificial Intelligence and Big Data in Telecommunication Sector".
5	Recommendations dated 8th August 2023 on "Introduction of Digital Connectivity Infrastructure Provider (DCIP) Authorization under Unified License (UL)".
6	TRAI's Response dated 1st September 2023 to DoT back reference dated 2nd August 2023 on Recommendations on "Auction of spectrum in the frequency bands identified for International Mobile Telecommunications (IMT)".
7	Recommendations dated 19th September 2023 on "Rationalization of Entry Fee and Bank Guarantees".
8	Recommendation dated 22nd September 2023 on "Promoting Networking and Telecom Equipment manufacturing (NATEM) in India".
9	Recommendations dated 22nd September 2023 on "Improving Telecom Infrastructure in Northeastern States of India".
10	Recommendations dated 29th September 2023 on "Improving Backhaul Telecom Infrastructure in far-flung areas of Himachal Pradesh".
11	TRAI's Response dated 29th September 2023 to DoT back reference dated 13th April 2023 on TRAI's Recommendations dated 14th September 2020 on "Cloud Services".
12	Recommendations dated 23rd February 2024 on "Introduction of Calling Name Presentation (CNAP) Service in Indian Telecommunication Network".
13	Recommendation dated 21st March 2024 on "Usage of Embedded SIM for Machine-to-Machine (M2M) Communications".

RECOMMENDATIONS & RESPONSES TO BACK REFERENCES

2.5.1.1 Recommendations dated 24th April 2023 on "Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh"

The Authority took note of some media reports which highlighted the demand of people of Ladakh residing near the Line of Actual Control (LAC) for high-speed internet. It was reported that the people who live along the LAC, face difficulty in obtaining digital financial services and pursuing online education. It was also reported that there aren't many cell towers in the Union Territory (UT) of Ladakh's outlying regions and network issues are a regular problem for people who live close to the Line of Control (LoC) and the LAC.

The current state of mobile network coverage and backhaul infrastructure layout data in the UT of Ladakh, as well as information on ongoing USOF-sponsored telecom projects being carried out in the afore-mentioned UT, were obtained by TRAI from operating TSPs as well as USOF. Information on the availability of optical ground wire (OPGW) infrastructure in the state from Power Distribution Company was also collected.

Based on the analysis of this data and ongoing efforts under the Government sponsored Universal Service Obligation Fund (USOF) schemes that are under implementation, TRAI formulated recommendations for enhancing telecom coverage and backhaul infrastructure in the far-flung areas of Ladakh.

The salient points of these recommendations are as follows: -

a) There are three villages in Ladakh which neither have any coverage nor were included in the ongoing schemes. During discussions with the Authority, BSNL indicated that these villages will be included under 'Saturation of 4G mobile services' project. However, USOF must ensure inclusion of the three uncovered villages of Ladakh, under 'Saturation of 4G mobile services' project.

b) There are 19 villages in Ladakh which neither have 4G coverage nor are they included in the ongoing schemes for providing 4G coverage. The CAPEX and OPEX expenditure to be incurred for upgrading the existing non-4G based cellular mobile infrastructure at these 19 villages should be funded by Government through USOF. In 12 out of these 19 villages, the Authority recommended that the VSAT connectivity provided under BharatNet can also double as backhaul for 4G connectivity. In the remaining 7 uncovered villages, VSAT connectivity on shared basis should be considered till connectivity on OFC media is extended to these villages.

c) All operating TSPs in UT of Ladakh must provide fair and non-discriminatory access to their spare backhaul transmission media resource capacity via lease/ rent or on mutually agreeable terms and conditions, to other TSP/ ISP. A committee of TERM field unit of J&K and representative(s) of all TSPs should be formed at the earliest to help resource pooling across TSPs. A second level Committee at the DoT headquarters should be formed to periodically review and resolve any impediment being experienced by any affected entity.

d) The Authority recommended that charges paid by lessee (a TSP) to any lessor TSP for use of spare backhaul media transmission resource capacity should be reduced from the Gross Revenues of the lessor to arrive at Applicable Gross Revenue (ApGR).

e) There is one Block Headquarter (Rupshu) which has no optical fibre connectivity. USOF should fund the backhaul connectivity on optical fiber from Rupshu Block Headquarters to Nyoma/ Chumathang.

f) Licensed TSPs should maintain a waiting list of service demand. DoT should establish a mechanism to obtain, examine and analyze the data on waitlist from all TSPs.

g) DoT may take up the case with concerned authorities for not levying RoW charges to TSPs/IP-Is for connecting administrative setup in remote and hilly areas in Ladakh. RoW rules should be aligned to ROW Rules 2016.

h) DoT should plan for a VSAT based alternate communication overlay in all border areas of strategic importance in the country, including Ladakh, which should co-exist as backup communication medium in all such areas along with terrestrial connectivity. This will ensure continuity of crucial communication services during occurrence of natural calamity and/ or critical situations triggered due to border conflicts in such areas.

i) TRAI has made recommendations to the Government on improving telecom connectivity/infrastructure in far-flung areas of Himachal Pradesh, many of which are valid for Ladakh also. Recommendations for providing electricity to telecom sites as a priority at Utility/Industrial tariff, waiving off last mile installation charges for extending electric connection to telecom sites etc should be mutatis mutandis made applicable to Ladakh also.

j) DoT should take up with the MNRE and the Ladakh UT Administration for coming up with a scheme to fund installation of solar panels at important strategic telecom sites in remote hilly areas.

k) DoT should take up with the Ladakh UT Administration, NHAI and BRO that all road construction, road widening, or other related works should be undertaken with prior coordination involving TSPs, and the liability of Contractor for making the damages good to the TSPs should be included ab-initio in the contracts. DoT should also explore the possibility of constructing utility ducts in all future road widening and new road construction projects, and any ban on giving RoW permissions to utility service providers during Defect Liability Period.

l) DoT should do a site-wise analysis of all such sites that are being run by BSNL or any other TSP on VSAT in remote and hilly areas in Ladakh. For all such sites that are being run to serve strategic or service delivery needs of the Government, the entire operational costs of running these sites should be borne by the Government.

The recommendations on "Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh" are available on TRAI's website (www.trai.gov.in).

2.5.1.2 TRAI's Response dated 2nd May 2023 to DoT back reference dated 27th January 2023 on Recommendations on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average methods of SUC assessment, in cases of Spectrum Sharing"

Department of Telecommunications (DoT), through its letter dated 27th January 2023, referred back a recommendation of TRAI on "Methodology of Applying Spectrum Usage Charges (SUC) under the Weighted Average Method of SUC assessment, in cases of Spectrum Sharing" for reconsideration of TRAI under Section 11 of the TRAI Act, 1997 (as amended).

After examination, TRAI finalized its response to the back-reference and sent it to the Government on 2nd May 2023. The views given by the Authority are available on TRAI's website (www.trai.gov.in).

2.5.1.3 Recommendations dated 19th June 2023 on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India"

The Department of Telecommunication (DoT) vide its letter No. 10- 54/ 2010-CS-III (Pt.) dated 12th August 2022 sought the recommendations of TRAI on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India" with the existing UL-ILD/ Standalone ILD License under section 11(l)(a) of TRAI Act, 1997.

The Authority, suo-moto, identified certain other issues related to submarine cables such as (i) Indian Flagged vessel for submarine cable operation and maintenance (ii) Domestic submarine cable between two or more cities on the coastline of India (iii) Stub-cables — new concept of placing pre-laid 'dark fiber" from the Cable Landing Station(CLS) through Beach Manhole (BMH) into the territorial waters for upcoming new cables (iv) Terrestrial connectivity between different located Cable Landing Stations.

Pursuant to the above reference and certain other issues as mentioned above, TRAI issued a consultation paper on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India" on 23rd December 2022 for seeking comments and counter-comments from the stakeholders. Subsequently, an Open House Discussion was also held on 19th April 2023 through video conference.

After considering the comments/inputs received from the stakeholders during consultation process and further analysis of the issues, Authority finalized its Recommendations and sent it to the Government on 19th June 2023 as following:

CHANGES REQUIRED IN LICENSING/REGULATORY REGIME IN VIEW OF THE NEW GENERATION SUBMARINE CABLE SYSTEM

(i) There can be two categories of Cable Landing Station (CLS) locations – (a) Main CLS and (b) CLS Point of Presence (CLS-PoPs). The Owner of the Main CLS would seek all the permissions/clearances related to the SMC landing in their CLS in India. The owners of CLS-PoPs will not be required to seek such permissions/clearances. However, owner of CLS-PoP owners will be required to fulfil all security and regulatory/ license obligation including establishment of LIM facility. They will also be required to inform Licensor/TRAI about all CLS-PoP locations and their owners.

(ii) ILD / ISP Category 'A' (with International Internet Gateway) licensees will be allowed to get access and extend their owned or leased dark fiber pair(s) in the submarine cable from the main CLS to their respective CLS-PoP location. However, owners of CLS-PoPs will be required to fulfil all other security and regulatory/ license obligation including reporting requirements and establishment of LIM facility.

(iii) The revised detailed guidelines and applications for setting up main CLS and CLS-PoPs for submarine cable landing in India under respective ILD and ISP License / authorization, be issued.

OWNERSHIP OF SUBMARINE CABLE LAYING IN INDIA

(iv) ILD or ISP Category 'A' authorization (with International Internet Gateway) Licensee who applies for seeking permissions for establishing main Cable Landing Stations (CLS) should submit an undertaking that they own and control the asset in Indian Territorial Waters (ITW) and at CLS. Such undertaking should be backed by either proof of ownership of the submarine cable (SMC) assets as well as the assets at CLS OR by a signed agreement with SCM owner/consortium to this effect.

INDIAN FLAGGED VESSEL FOR SUBMARINE CABLE OPERATION AND MAINTENANCE

(v) DoT should constitute a committee comprising government representatives (from DoT, Ministry of Shipping, Shipyards at Kochi/Visakhapatnam/Mumbai, MHA, Department of Revenues (MoF)) and major ILDOs having stake in SMC to study and recommend the different financial viability models for Indian Flagged Repair Vessels including possible incentives from Government.

(vi) As a stop gap arrangement, SMC ship repair operators active in Indian Sub continental region may also be approached by this Committee to persuade them to relocate and reflag their repair vessels at suitable Indian ports as per requirement.

(vii) Cable Depot should be identified in both west and east coastline for storing submarine cable and the necessary equipment/ kit for carrying out cable repairs.

(viii) The Committee proposed above should also be entrusted with the task of suggesting ways and means to facilitate and incentivize (same status of SEZs and Land) for setting up of these 'Cable Depots'.

(ix) The crew members in the survey/repair vessel for submarine laying and repair work having valid work permit of India may be exempted from obtaining clearances repeatedly during permit period.

DOMESTIC SUBMARINE CABLE

(x) Domestic submarine cables connecting two or more cities on the Indian coastline and to set up CLS for such cables be allowed under NLD License with following conditions –

a) Domestic traffic through submarine cables will be allowed.

b) Wherever required, Domestic Submarine cable may be permitted to go beyond ITW or EEZ of India for techno- commercial benefits.

c) Equal access to facilities at the Cable Landing Stations (CLS) including landing facilities for submarine cables of other NLD license operators on the basis of non-discrimination shall be mandatory.

d) Access/ Co-location at the CLS shall be governed by the orders/regulations/ directions issued by TRAI from time to time.

(xi) Domestic and international submarine cables can terminate at the same CLS but with each cable having its own separate network element/ equipment.

(xii) The requirement of necessary LIM should be based on the nature of traffic carried, being NLD or ILD and owners of CLS should maintain physical separation for terminating domestic and international traffic.

(xiii) International Submarine Cable should be allowed to carry domestic traffic on dedicated fiber pairs that are provisioned between two Indian cities. Licensee should ensure that such traffic is not transited/ routed through any other country outside India.

TERRESTRIAL LINK BETWEEN TWO DIFFERENT CABLE LANDING STATIONS

(xiv) ILD and NLD licenses should explicitly mention that terrestrial connectivity between different CLSs is permitted.

(xv) ILD license should explicitly clarify that transit international traffic not meant to be terminated in India will be permitted to be transited to other submarine cables through terrestrial as well as submarine cable links.

STUB-CABLE (pre-laid dark fiber Submarine cable)

(xvi) ILD / ISP Category 'A' license/authorization should be to allow, with prior-permission of licensor, to lay stub-cable and terminate them either in their existing CLS or establish new CLS for such stub-cable with following conditions-

a) The stub cables can be laid up to any distance within EEZ.

b) The owner of Stub-cable must disclose the details of used and unused dark fiber pairs to licensor/ TRAI annually and seek prior approval from licensor for using/ sharing these dark fibers to other ILDOs.

c) The owner of stub must provide access of stub-fiber pair(s) on fair and non-discriminatory basis.

d) The owner of stub will be allowed, with prior permission of licensor, to transfer the ownership of stub, if required, to other eligible seeker ILDOs/ ISPs who will be responsible for the LIM and other applicable regulatory compliances.

OTHER ISSUES

(xvii) 'Essential Services' status be accorded to CLS and Submarine Cables operation and maintenance services. Also, these critical communication infrastructure may be notified as Critical Information Infrastructure (CII) under National Critical Information Infrastructure Protection Centre (NCIIPC).

(xviii) Exemption of custom duty and GST on the goods and items required for CLS, and submarine operation and maintenance.

(xix) Requirement of a bond by Cable ship repair vessels for availing Customs duty exemptions may be done away with.

(xx) The clearances related to Environmental Impact Assessment (EIA) and Coastal Region Zone (CRZ) required for SMC and CLS may also be made online as a part of Saral Sanchar portal.

(xxi) In place of mandatory presence of DoT officials onboard, DoT may pursue it with the MoD that survey data be collected under supervision of MoD and Indian representatives/ responsible Licensee officials, who shall ensure appropriate safeguards.

(xxii) Submarine cable and CLS being a critical asset, a section should be added in the Indian Telecommunication Bill, 2022 to promote, protect and prioritize 'Cable Landing Station' and 'submarine cable' in India.

The recommendations on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India" have been placed on TRAI's website www.trai.gov.in .

2.5.1.4 Recommendations dated 20th July 2023 on "Leveraging Artificial Intelligence and Big Data in Telecommunication Sector"

The National Digital Communications Policy (NDCP)- 2018 seeks unlocking of the transformative power of digital communications networks for achieving the goal of digital empowerment. NDCP-2018 motivates towards harnessing the power of emerging digital technologies, including 5G, AI, Internet of Things (loT), Cloud and BD to catalyse the fourth industrial revolution. In order to create a roadmap for AI, emerging technology and its use in the communication sector, vide letter dated 6th June 2019, Department of Telecommunication (DoT) sought recommendation of TRAI on the provision no. 2.2(g) of NDCP-2018 i. e. "Leveraging Artificial/intelligence and Big Data in a synchronised and effective manner to enhance the overall quality of service, spectrum management, network security and reliability".

The impact of AI is not limited to only telecom sector. AI has the potential to impact a wide range of sectors including healthcare, finance, transportation, education, agriculture and many others. Therefore, it is important to take a holistic approach for examining the impact of AI across all sectors rather than focusing only on telecom. As AI technology is still evolving, it took time to examine and bring out the multiple aspects of AI/ML in the telecommunication and other sectors by studying various international practices which are also in the nascent stage. TRAI issued Consultation Paper (CP) on "Leveraging Artificial Intelligence and Big Data in telecommunication sector" on 5th August 2022. In the Consultation Paper (CP), wide ranging issues covering all sectors were included.

Based on the comments of the stakeholders, discussion during the Open House Discussion and analysis thereof, the Authority gave its recommendations dated 20th July 2023. In view of the impact of AI in all sectors, the framework which has to be suggested for telecom cannot be treated in isolation and hence a common framework covering all the sectors has been suggested in the recommendations.

A copy of the recommendations is available on the website of TRAI (www.trai.gov.in).

2.5.1.5 Recommendations dated 8th August 2023 on "Introduction of Digital Connectivity Infrastructure Provider (DCIP) Authorization under Unified License (UL)"

TRAI received a reference from DoT seeking recommendations on creation of a new category license that may be permitted to establish, maintain, and work on all equipment for wireline access, radio access and transmission links, except the core equipment and holding of spectrum. Accordingly, TRAI on 9th February 2023 issued a Consultation Paper on "Introduction of Digital Connectivity Infrastructure Provider Authorization under Unified License (UL)". Subsequently, an Open House Discussion (OHD) was also held on 20th June 2023 through video conference.

After considering the comments/inputs received from the stakeholders during consultation process and further analysis of the issues, Authority finalized the Recommendations on "Introduction of Digital Connectivity Infrastructure Provider Authorization under Unified License (UL)" and sent it to the Government on 8th August 2023.

The salient features of the recommendations are as follows:

(i) The Authority recommended the creation of a new category of License that allows for creation of both active as well as passive digital connectivity infrastructure. This DCIP license should not be standalone license, but an authorization under Unified License. This license authorization should be called as 'Digital Connectivity Infrastructure Provider (DCIP) License'. There should not be any license fee appliable to DCIP authorization.

(ii) The scope of the proposed DCIP authorization includes to own, establish, maintain, and work all such apparatus, appliance, instrument, equipment, and system which are required for establishing all Wireline Access Network, Radio Access Network (RAN), Wi-Fi systems, and Transmission Links. However, it shall not include spectrum and core network elements such as Switch, MSC, HLR, IN etc. The scope of the DCIP license also includes Right of Way, Duct Space, Dark Fiber, Poles, Tower, Feeder cable, Antenna, Base Station, In-Building Solution (IBS), Distributed Antenna System (DAS), etc. within any part of India. The scope of DCIP authorization does not include provisioning of end-to-end bandwidth using transmission systems to any customer or for its own use. However, DCIP will be allowed to install wired transmission link (but not wireless) to connect to its own BBU (Baseband Unit)/RU (Radio unit)/Antenna.

(iii) Entry fee for DCIP authorization should be kept at ₹ 2 lakh and application processing fee at ₹ 15,000. The penalty for violation be kept at the level that is prescribed for ISP Category 'B' Authorization. No Performance Bank Guarantee (PBG) be imposed on DCIPs. An amendment should be made in Unified License to ensure that various License conditions applicable on hirer (hirer of service obtains and utilizes DCI from DCIPs), including the operating and security conditions are not breached due to use of DCI of DCIP.

(iv) To keep the authorization light touch under UL several conditions of Part-I of Unified license have been exempted from applicability to DCIP Authorization.

(v) For ensuring compliance of the security conditions, QoS, interconnection, non-discrimination etc. of the license, Principal -agent relationship between DCIP and licensed entities have been used for self- regulation whereby DCIPs have been obligated to install DCI items, equipment, and systems in such a way that the Hirer of their infrastructure is able to fulfill the Licensing conditions including technical, operating, Quality of Service (QoS) and security conditions, when riding on their DCI items, equipment, and systems; subject to such other directions as Licensor or TRAI may give from time to time. DCIPs have also been obligated to ensure that they enter into a formal written agreement with eligible entities before providing access to DCI items, equipment, and systems to them on lease/rent/sell basis. These agreements should invariably contain clauses obligating DCIPs to ensure that Hirer of their DCI items, equipment, and systems is able to fulfill the Licensing conditions including technical, operating, QoS and security conditions, when riding on their DCI.

(vi) The DCIP Licensees have been allowed to share all infrastructure owned, established, and operated by them under the scope of their Authorization with other Licensees under UL (excluding DCIPs) and also with ISPs (not in UL), subject to condition that only such infrastructure will be shared that is allowed to be established by other licensee in its own license. To that effect, the provisions of this clause will have overriding effect on Clause 33 of Part-I of the UL.

(vii) It has been recommended that the DCIP Licensees shall provide DCI items, equipment, and systems on lease/rent/sale basis to any entity (excluding other DCIPs) having a valid license under section 4 of Telegraph Act 1885, and entities notified by the Government for this purpose. DCIP licensees who are also licensed under the Electricity Act are proposed to be allowed to offer such infrastructure (that are permitted under the scope of this authorization) on access rights basis. The Authority also recommended that DoT should add a similar clause in the IP-I registration agreement.

(viii) It has also been recommended that DCIP Licensee should be eligible to apply for and issue of licence under the Indian Wireless Telegraphy Act, 1933 to possess such wireless telegraphy apparatus (without assignment of any spectrum) that is permitted under the scope of DCIP authorization. However, the DCIP authorization holder should not be eligible to apply for and assignment of any kind of licensed spectrum.

(ix) The Authority had earlier, vide its recommendations on "Use of street furniture for small cell and aerial fiber deployment" dated 29th November 2022 had recommended that enabling provisions or suitable terms and conditions be introduced in all telecom licenses and IP-I registration agreement prohibiting the TSPs/IP-I providers from entering into any exclusive contract or right of way(s) with infrastructure owners/CAAs (Controlling Administrative Authorities) or any other authority. The Authority has reiterated its recommendation. In line with the same, in the DCIP authorization, it has been recommended that the DCIPs should be forbidden from entering into legally binding contractual agreements conferring indefeasible Right of Use (IRU) of its DCI to specific eligible entity(ies), which may lead to the exclusion of others. The Authority has also recommended that a similar clause may likewise be introduced in IP-I registration.

The recommendations on "Introduction of Digital Connectivity Infrastructure Provider Authorization under Unified License (UL)" have been placed on TRAI's website (www.trai.gov.in).

2.5.1.6 TRAI's Response dated 1st September 2023 to DoT back reference dated 2nd August 2023 on Recommendations on "Auction of spectrum in the frequency bands identified for International Mobile Telecommunications (IMT)"

Earlier, in response to Department of Telecommunications' (DoT) reference dated 13th September 2021, TRAI provided its recommendations dated 11th April 2022 on various issues involved in the auction of spectrum in the 600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz and 26 GHz bands; based on TRAI's recommendations dated 11th April 2022 and its subsequent response dated 9th May 2022 on DoT's back reference, the Government conducted auction of spectrum in the above frequency bands during July-August 2022.

Through a letter dated 2nd August 2023, DoT mentioned developments that took place after the completion of spectrum auctions during July-August 2022. DoT also decided to make available new frequency bands viz. 37-37.5 GHz, 37.5-40 GHz, and 42.5-43.5 GHz for IMT, which can be made available for bidding in the next auction. DoT also provided LSA-wise quantum of spectrum available with the Government for auction of spectrum and details of administratively assigned spectrum which will be expiring in the year 2024, which may also be included in the next auction. In this background DoT requested TRAI to -

a) provide recommendations on applicable reserve price, band plan, block size, quantum of spectrum to be auctioned and associated conditions for auction of spectrum in 600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz, 26 GHz, 37- 37.5 GHz, 37.5- 40 GHz and 42.5-43.5 GHz bands for IMT.

b) provide 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 NFAP/Radio Regulations of the ITU.

TRAI in its response dated 1st September 2023 mentioned the following -

1. In view of the earlier response of TRAI dated 9th May 2022 to the DoT's back-reference dated 29th April 2022 and in the absence of full and reasoned justification by DoT for seeking fresh reserve prices from the Authority for the existing bands, recommendations at para 6.42 (II) of the TRAI's recommendations dated 11th April 2022 are applicable for all bands and for all LSAs referred through Annexure-II and Annexure-III of the DoT's letter dated 2nd August 2023 except for the new referred bands viz. 37-37.5 GHz, 37.5-40 GHz and 42.5-43.5 GHz. Therefore, for the existing bands viz. 600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz, and 26 GHz, auction may be conducted as per the recommendations at para 6.42 (II) of the TRAI's Recommendations dated 11th April 2022.

2. With regard to band plan, block size, and associated conditions for auction of spectrum in the existing bands viz. 600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz, and 26 GHz bands for IMT, it may be noted that the previous recommendations for auction of spectrum in these bands were made on 11th April 2022, based on which the auction was conducted during July-August 2022. The Authority is of the view that in such a short span of time since the previous recommendations, no technological developments or market changes have occurred that warrant any change in the band plan, block size, and associated conditions for auction of spectrum in the existing bands. The Authority also notes the changes made by the Government in the roll-out obligations in the Auctions of 2022. As regards the quantum of spectrum to be auctioned, the Authority maintains its position that all available spectrum should be put to auction.

3. In light of the above, the Authority reiterates its recommendation at para 6.42 (II) of the Recommendations on "Auction of Spectrum in frequency bands identified for IMT/5G" dated 11th April 2022 on the reserve price. All available spectrum in the existing bands viz. 600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 3100 MHz, 2300 MHz, 2500 MHz, 3300 MHz, and 26 GHz in the referred LSAs may be put to auction with the same band plan, block size and associated conditions.

4. As per para 6.42 (III) of the TRAI's Recommendations dated 11th April 2022 the Authority will initiate a consultation process for providing recommendations for the new referred bands viz. 37- 37.5 GHz, 37.5- 40 GHz, and 42.5-43.5 GHz.

5. The Government may put to auction the spectrum in the existing bands viz. 600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz, and 26 GHz without waiting for the Authority's recommendations for the new bands viz. 37-37.5 GHz, 37.5-40 GHz, and 42.5-43.5 GHz.

A copy of the recommendations is available on the website of TRAI (www.trai.gov.in).

2.5.1.7 Recommendations dated 19th September 2023 on "Rationalization of Entry Fee and Bank Guarantees"

Department of Telecommunication (DoT), vide letter no. 20-577/2016-AS-I Vol. III dated 3rd March 2022, sent a reference to TRAI seeking, inter alia, the rationalization of Entry Fees and Bank Guarantees of the various licenses operating in the telecom sector.

Based on the reference, a Consultation paper on "Rationalization of Entry Fee and Bank Guarantees" was issued by TRAI on 26th July 2022. Written comments and counter-comments on the Consultation Paper were invited from the stakeholders by 23rd August and 6th September 2022 respectively. An Open House Discussion was also convened on the issues raised in the Consultation Paper on 9th December 2022 through video conferencing.

Vide recommendations dated 19th September 2023, TRAI made recommendations to the Government for reducing the entry fees across various license authorizations and the merging of bank guarantees. It is hoped that the reductions in entry fee will lead to new players entering the market, increased investments and enhanced competition in the telecom sector. The merging of bank guarantees will encourage ease of doing business and enable licensees to make investments in the sector thereby ushering the growth in the sector. Both these measures will enhance consumer welfare and improve the quality of service.

The Authority has also recommended no entry fee at the time of renewal of license. Such a move will ease the financial burden on existing, as well as new entrants, and will be beneficial for UL (VNO) licensees especially.

The salient features of the recommendations are as follows: -

i. The entry fee should be reduced from the present levels for Unified License (UL) as well as Unified License (Virtual Network Operator) (UL (VNO)) licenses.

ii. No entry fee for M2M ("A"/ "B"/ "C"), Audio conferencing/ Audiotext/ Voice mail service, ISP "C" recommended.

iii. Entry fee for following UL authorizations should be rationalized: (a) Access service: from ₹ 1 crore to ₹ 50 Lakh for each telecom circle/ metro area; from ₹ 0.5 crore to ₹ 25 lakh for J&K and Northeast each. (b) NLD and ILD: from ₹ 2.5 crore to ₹ 50 lakh. (c) PMRTS: from ₹ 50 thousand to ₹ 20 thousand for each telecom circle/ metro area. (d) VSAT: from ₹ 30 lakh to ₹ 10 lakh. (e) ISP "B": from ₹ 2 lakh to ₹ 50 thousand for each telecom circle and ₹ 25 thousand for J&K and North-East each. (f) ISP "A": from ₹ 30 lakh to ₹ 10 lakh.

iv. The entry fee for UL (VNO) authorizations should be half of the respective UL authorizations.

v. There should be no entry fee at the time of renewal of licenses.

vi. For Unified License, Financial Bank Guarantee (FBG) and Performance Bank Guarantee (PBG) should be merged into a single Bank Guarantee for securitizing the dues, to cover the violation of license conditions and to ensure the performance under license agreement.

vii. Similarly, for Mobile Number Portability license, FBG and PBG should be merged into a single Bank Guarantee.

viii. For enhancing the ease of doing business, the process for submission of electronic bank guarantee (eBG) should be adopted.

A copy of the recommendations is available on the website of TRAI (www.trai.gov.in).

2.5.1.8 Recommendation dated 22nd September 2023 on "Promoting Networking and Telecom Equipment manufacturing (NATEM) in India"

Under Digital India program, electronics manufacturing is one of the key thrust areas. Further, National Digital Communications Policy 2018 (NDCP-2018) envisages to maximise India's contributions to Global Value Chains, by focusing on domestic production, increasing exports and reducing the import burden in respect of networking and telecommunications equipment, called as NATE in short. National Policy on Electronics, 2019 (NPE) also envisages to strengthen India's linkages with the global trade, integration with global value chains, and build facilitative programs and incentive framework to boosts exports based on Indian Electronics System Design and Manufacturing (ESDM). Given fast-paced roll-out of advanced communications technologies as well as likely proliferation of data centres, edge data centres, IoT-based networks in Smart cities, the scope of indigenous equipment manufacturing has adopted the contemporary outlook.

In accordance with the objectives of NDCP-2018 and basis reference received from Department of Telecommunications (DoT) on certain aspects of manufacturing of NATE, Telecom Regulatory Authority of India (TRAI) has visited the topic in totality and has issued the recommendations dated 22nd September 2023 on "Promoting Networking and Telecom Equipment Manufacturing (NATEM) in India". Before issuing these recommendations, TRAI undertook extensive consultation with stakeholders including Manufacturers, Service Providers, and Government Departments/ agencies involved.

The objective of these recommendations is to move forward from the concept of 'increasing domestic production' and to focus on 'local value addition in global value chains'. Some of the focus areas covered in the recommendations include:

(i) facilitate local value addition in participation with cross country value chains;

(ii) due emphasis on "Telecom software" as a separate product line in accordance with contemporary softwarization of network elements in New Generation Networks;

(iii) facilitating exports from India;

(iv) nurturing entrepreneurship by promoting Micro, Small and Medium Enterprises (MSMEs) and Start-ups; and

(v) promote a robust component ecosystem in India.

Main recommendations: 'Promoting Networking and Telecom Equipment Manufacturing in India'

1) Production Linked Incentive (PLI) Scheme

a) In context of PLI Scheme, it is recommended that the Scheme should imbibe local value addition norms in its future-format and higher incentives proportionate to value-addition should be available.

b) There should be a concurrent PLI-Scheme focusing over components and sub-assembly manufacturing to facilitate collaborated manufacturing activities on the lines of Component Champion Incentive Scheme to boost domestic manufacturing of Advanced Automotive Technology (AAT) products. A detailed product list that can be made part of the concurrent PLI Scheme has also been recommended. Basic eligibility, minimum new domestic investment criteria and the incentive-structure to be adopted for concurrent PLI Scheme has also been recommended.

c) Under the Design-led PLI Scheme, in addition to already announced 1% additional benefit, another slab of additional 2% benefit be introduced for such product lines that yield minimum local value-addition of 75% wherein the components (other than semiconductor components and Bare PCBs of more than 8 layers) by value terms, used in the manufacturing of the specific end products must be manufactured in India.

d) Since some of the product categories like customer premises, IOTs, sensors and enterprise segment equipment may not require large manufacturing facilities, it has been recommended that applicable thresholds relating to turnover and committed investment by a PLI beneficiary should apply differentially in accordance with type of NATE products to make the scheme more inclusive. Accordingly, different slabs have been recommended.

2) Preferential Market Access (PMA)/ Preference to Make in India (PMI)

a) It has been recommended that Government should follow a nudge approach and Telecom Service Providers (TSPs) should be incentivised to deploy indigenously manufactured equipment by reducing their Applicable Gross Revenues on annual net basis, by an amount equivalent to the aggregate certified value of indigenous NATE deployed in respective telecom networks during a financial year. This shall widen market access for indigenous manufacturers.

b) To further widen this access, it has been recommended that PMA/PMI should apply to all public procurements funded fully or partially by the Central Government under (a) USOF projects, (b) Participating State Government & bodies under their respective control, and (c) External Development projects aided by India.

c) Certain measures have been suggested to enhance transparency in public procurement, check on deviations, online portal for mapping standard operating process for handling PMA/PMI related grievance and time-bound grievance handling.

3) **Catering to Financing requirements**

a) Keeping in view, various relative cost disability faced by the industry, it has been recommended that a dedicated master fund, NATEDF i.e. Networking and Telecommunications Equipment Development fund on the lines of Electronics Development Fund (EDF) should be established. NATEDF should be managed and administered by a subsidiary of a bank. It shall cater to financing requirements of the industry players including venture capital funding, interest subvention and financial assistance to Micro, Small & Medium Enterprises (MSMEs) to bridge current gaps.

b) On the lines of Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS), a new scheme with specific provision to extend financial support to the industry towards procurement of fixed assets, plant & machinery, for new production units or capacity augmentation of the existing units has also been recommended. The salient features of the recommended scheme include extending one-time support up to 25% of the overall Capital expenses towards establishment of 'Plant & Machinery' for undertaking domestic production of telecom & networking equipment/ components. Slab-wise thresholds depending upon the type of manufacturing entity to avail scheme benefits have been recommended. In line with the central theme of maximizing local value addition, it has been recommended that the priority-list for selection of eligible applications should be based on entity's self-declaration regarding estimated increase in value addition within its scope of manufacturing activities. To ensure that the entire scheme's budget outgo is not cornered by few big NATE manufacturers, it has been recommended that at least one fourth of the scheme outgo should be to support applicant beneficiaries that are drawn from such MSME entities where eligible planned investment during the entire tenure of the Scheme does not exceed ₹ 50 Crore.

4) **Tax relief as part of Fiscal incentives**

a) To spur innovation and to encourage industry's drive towards beneficially owned resident Intellectual Property Rights (IPRs), lower corporate income tax @15 % has also been recommended. This would apply if the enterprise were continuously engaged in R&D driven manufacturing and attains half of its turnover based on IPRs owned. The objective, conditions and benefits of this scheme have been provided in detail as part of the recommendations.

5) **Promoting Entrepreneurship - Startups and MSEs**

a) It has been recommended that NATEDF should provide venture capital funding in Public-Private Partnership mode to promising Start-ups in need of Accelerator support. For the same, at least 15% of NATEDF's total pool of ₹ 10,000 crore should be earmarked as Committed Public fund for Daughter fund(s) for innovation practice. The Target Corpus, in Public Private Partnership ratio of 1:1, should be kept around ₹ 3,000 Crore. Only Securities & Exchange Board of India (SEBI) registered Venture Capital fund should be entitled to participate. Venture Capital, both in equity and soft loan mode should be made available to an eligible Startup, subject to maximum of ₹ 20 Crore during its entire innovation cycle.

b) DoT should completely exempt MSE / Start-ups from paying renewal fees under Voluntary Certification Scheme.

c) DCIS sponsored Ignition Grants for project-support should be enhanced from current cap of ₹ 40 Lakh to ₹ 1 Crore for an eligible beneficiary.

d) MSEs/ Start-ups should be provided with full reimbursement of membership fees towards Telecom Standards Development Organisation (TSDO) and others. Participating MSEs/Start-ups in standard setting forum, convened by relevant national Standard Setting Organisations (SSO) or international SSOs, should be provided appropriate support including financial assistance against actual expenses. The fund-support of about ₹ 50 Crore and ₹ 100 Crore should be earmarked for reimbursement of membership fees and participation expenses respectively, to be administered by Telecom Standards Development Society, India (TSDSI) through an online portal. TSDSI should facilitate participating MSEs/ Start-ups by providing an online portal where all eligible reimbursements are to be settled within 90 days once submitted through the portal.

e) It has also been recommended that a dedicated Daughter fund for Interest Rate Subvention under NATEDF should be constituted. The maximum of subvention should be kept as 4% in case of MSMEs for a tenure of five years. The maximum lending at reduced rates for Plant & Machinery should be capped to ₹ 25 Crore per entity.

f) Start-ups & MSEs should be provided with opportunities towards standard setting processes and reaching out to potential markets drawing support from Market Access Initiative (MAI).

g) To orient the students and make them aware towards various opportunities extended by Central/State Government & Industry in NATEM sector and for promoting entrepreneurs, it has been recommended that DoT should take-up with All India Council of Technical Education (AICTE) to introduce an elementary compulsory course (of minor-credit value) for final-year curriculum of graduating courses in technological fields. The course should cover information on such policies as well as on schemes to support the Startup ecosystem. Content support for the recommended course should be extended by Telecom Centres of Excellence (TCoEs).

6) Telecom Products Development Clusters (TPDCs)

a) Due emphasis on optimal use of resources has been given, therefore, it is recommended that Telecom Products Development Clusters (TPDCs) should be established within the approved Electronics Manufacturing Clusters (EMCs) or nearby with host of common facilities.

b) The facilities extended in any given EMC should be extended to the corresponding TPDC on mutatis mutandis basis. In addition, following benefits should also be extended to TPDCs:

- Provision of Power and water at reduced rates
- Waiver of Electricity Duty

- Reimbursement of stamp duty, conversion fee, transfer duty and registration fee
- Providing free Right of Way for Telecom Service/ Infrastructure including Indoor Building Solutions (IBS)
- Time-bound single window clearance for Central and State level compliances
- State of the art testing labs with plug-n-play facilities and infra-support for R&D centre.

7) Support required for exporters of indigenous equipment

a) To facilitate trade, recommendations have been made to resolve identified issues and by extending benefits of the Advance Authorization and EPCG schemes for the exporter-manufacturers of NATE and Common Facility Centres in EPCs. An enterprise engaged in manufacturing of NATE products and has met export volume of US $ 15 million should be granted Self Ratification benefit under Advanced Authorisation Scheme (AAS) on deemed basis.

b) Institutional authority to certify 'origin' of NATE products manufactured in India has been also recommended. DoT should notify Telecom Engineering Centre (TEC) as authority for certifying 'origin' (preferential and non-preferential) of domestic NATE products meant for exports, at the earliest.

c) Pre-shipment and post-shipment credit facilities through NATEDF have also been recommended.

8) Trade facilitating measures affecting sectoral competitiveness

a) DoT should take-up, the need for adopting 12-digit HS Code across all sectors, with the Ministry of Commerce and DGFT.

b) Automation tools based on Artificial Intelligence & Machine Language (AI/ ML) should be developed to facilitate faster and more accurate procedural controls to serve end-to-end shipments.

c) Centralised portal for filing online Grievances against misdeclaration of HS Code should be made available to trade community on immediate basis. This portal should facilitate online handling of grievances by making access available to the relevant Ministries so that appropriate remedial actions be decided and enforced.

d) DoT should constitute a committee including representatives from M/o Commerce, DGFT for periodic update of HS Codes/ National Tariff Lines that have relevance to NATE.

e) DoT should constitute a committee to identify industrial inputs (raw materials, components and industrial consumables) which are not sufficiently available in the domestic market and recommend rational duties to sustain domestic NATE manufacturing. This Committee should also identify industrial finished supplies which are sufficiently available in the domestic market and recommend duties including safeguard provisions to counter trade anomalies.

9) **Treating 'Telecom Software' as a separate product category**

a) To leverage upon open-architecture of New Generation Networks, it is recommended to identify telecom software as an independent functional deliverable.

b) A dedicated fund, Telecom Software Development Fund with initial committed corpus of ₹ 1000 crore should be established under Public Private Partnership mode with Target corpus of minimum ₹ 3000 crore by seeking participation from SEBI registered Venture Capital Funds.

c) Appropriate policy, in consultation with Department of Financial Services, should be adopted to promote the use of beneficially owned intangible assets such as Telecom software and related IPRs as collateral to secure financial support from the nationalized banks/financial institution against capital requirements of enterprises. Software valuation norms based on residing Intellectual Property Rights (IPRs) should also be specified on priority to facilitate funding/ credit facility.

d) TEC should be tasked to finalize testing/ certification norms for Telecom software products for publications at the earliest and facilities for the same be established/ earmarked.

e) DoT notified list of eligible telecom products under PPP-MII Order should be appropriately extended to include relevant telecom software on the lines of entries in Table-A & C against SDN Software controllers, NVF and CNF Software.

f) Commercially accepted telecom software products should be brought in scope of DoT notified design-led PLI Scheme, where local content, as per invoice value, is not below 50%. Priority may be given to providers of telecom software with higher local content (if it becomes necessary while selecting beneficiaries).

g) The scope of Digital Communication Innovation Square (DCIS) Scheme should be modified to include Telecom software as independent deliverable. Fund for DCIS's remaining tenure should be appropriately augmented so that at least 25% of overall grant is towards software innovations.

10) **Developing skillset for NATEM in India**

a) Government should identify top 10 AICTE affiliated advanced technical institutions that are offering advanced courses in electronics design, fabless products design & VLSI engineering and offer one time grant for resource mobilization to these institutes. This grant should be minimum ₹ 20 crore per eligible institution for 5 year period and should be subject to certified completion of post-graduation or Doctoral fellowship course by minimum 40 students each year in electronics design, fabless products design & VLSI engineering.

11) **Institutional arrangements at Government/Department level for promoting NATEM**

a) The Authority has also re-iterated its earlier recommendation of 2018 that "the progress of indigenous telecommunication equipment manufacturing in the country should be monitored in Department of Telecommunications (DoT) at least at the level of Member, Telecom Commission. For time bound progress, a dedicated unit in DoT should be made responsible for facilitation and monitoring of telecommunication equipment design, development, and manufacturing in the country".

b) On lines of the Technology Development Board (TDB), working under the Chairmanship of Secretary, Department of Science and Technology, Government of India, a multidisciplinary Telecommunication Equipment Development Board (TEDB) should be constituted in the DoT, for faster and coordinated decisions relating to funding of incentives for design, development and manufacturing of telecommunication equipment in the country. It should be responsible for facilitating innovation, R&D, testing and certification and manufacturing in the telecom sector in the country.

c) This board would be responsible for administration and disbursal of funds from TTDF and from TRDF (If TRDF is created in line with TRAI's earlier recommendation of 2018). Immediate corrective action may be taken to withdraw any such related responsibility from C-DOT to avoid conflict of interest.

A copy of the recommendations is available on the website of TRAI (www.trai.gov.in).

2.5.1.9 Recommendations dated 22nd September 2023 on "Improving Telecom Infrastructure in Northeastern States of India".

TRAI has been consistently working on improving telecom infrastructure in remote, hilly and high-altitude terrain areas of the country.

Although a number of initiatives have been taken by the Government of India to improve telecom connectivity in the northeastern states, there is still a lack of high-speed mobile-based internet and fixed broadband connectivity, mainly due to the inadequate transmission bandwidth (OFC/Microwave/Satellite).

The Authority, Suo-moto, held extensive consultations and interactions (including meetings, progress reviews, field visits, etc.) with major stakeholders such as TSPs (i.e., Airtel, RJIL, VIL), Infrastructure Providers, Telecom PSUs (i.e., BSNL, RailTel, PGCIL), State Government departments, DoT field units, USOF, Gram Panchayat Administrations, and Common Service Centres (CSCs) in Arunachal Pradesh, Assam, Sikkim, and Tripura. These consultations aimed to assess the current status of telecom infrastructure, issues in its deployment, and the policy measures required for further improvement to provide seamless connectivity to all the residents of the Northeastern States.

The Authority formulated these recommendations to enhance telecom infrastructure in the NER, bridge the digital divide, unlock economic potential, fuel socio-economic growth, overcome geographical challenges, foster collaboration, and ensure national security. These recommendations will greatly strengthen the region's telecom backbone, enabling seamless communication, efficient surveillance, and effective border coordination.

The salient features of the recommendations are as follows: -

(i) Engage with respective state governments of Northeastern (NE) States including Sikkim to:

a. Harmonize their respective state RoW policy in line with "The Indian Telegraph Right of Way Rules, 2016" and its amendments thereon at the earliest.

b. Implement exemption of Right-of-Way (RoW) Charges in Rural, Tribal and Hilly Regions for a duration of five years.

c. Implement waiver of the additional 25% 'Tribal Development Charges' being imposed upon TSPs wherever applicable in the NE states including Sikkim.

d. Facilitate creation of enabling provisions in their policy to expedite accord of environmental clearance to TSPs for installing Mobile towers and DG sets for tower locations.

(ii) State Governments of NER including Sikkim should:

a. Provide electricity to telecom sites as a priority (within 15 days of connections request) at Utility/Industrial tariff.

b. Waiving off or subsidizing last mile installation charges for extending electricity connection to telecom sites in remote and hilly areas.

c. Respective State Electricity Regulatory Commissions (SERCs) to spell out utility tariffs which should be lower than the Industrial tariff. Telecom Service/ Infrastructure Providers should be subjected to such utility tariffs only.

(iii) USOF should continue to provide full reimbursement support for installing solar backup at such USOF funded sites that do not have any power connectivity and are running on DG sets only.

(iv) MNRE and concerned State Government should come up with a scheme (in line with Central Financial Assistance for RWA/GHS under Roof Top Solar Program Phase-II) to fund installation of renewable energy sources at all important (existing and new) strategic telecom sites in remote hilly areas immediately.

(v) DoT/USOF should immediately provide CAPEX subsidy on viability gap funding (VGF) model through competitive bidding process for OFC backbone connectivity on ring topology (of commensurate bandwidth with add-drop facility at each BHQ) from DHQ or State Capital to all the 119 BHQ which have no OFC connectivity.

(vi) USOF to fund the operation and upkeep of network so created initially for 5 years on SLA model, beyond which a decision can be taken for further continuation of operational subsidy depending on uptake of services in these BHQs.

(vii) Encourage consortium of IP-I, proposed DCIPs (refer TRAI Recommendations on Introduction of Digital Connectivity Infrastructure Provider (DCIP) Authorization under Unified License (UL)' dated 8th August 2023) and TSPs to participate in the bidding process.

(viii) DoT field units should be entrusted with the task of project monitoring for timely completion of the projects.

(ix) To make the 4G saturation project more impactful, the Authority recommends that:

a. In the first phase, in consultation with respective state governments of NER including Sikkim, priority should be given to all such uncovered/non-4G villages which have Schools, Health Centres, Police Stations, Post Offices, Ration Shops, Anganwadi Centres, etc. irrespective of the population of the village.

b. Next priority shall be given to all other villages with populations of 250 or more, and all the locations planned for improvement in highway 4G coverage.

(x) DoT/USOF should get survey done of all villages in NE states including Sikkim and additional sites should be planned and installed in such villages which have partial coverage or where part of village falls in shadow zones.

(xi) DoT must engage with the Department of Expenditure to extend the execution timeline for projects proposed by states under the 'Special Assistance to States for Capital Investment for FY 2022-23' scheme especially Part V which involves the scope of extending last mile connectivity using OFC. The proposed extension should be a minimum of 2-3 years, aligning with the timelines provided for similar USO funded projects.

(xii) The Authority recommends that:

a. Centre should provide budgetary assistance in the form of grant to the states (including those in NER) only for the purpose of assisting certain village level government institutions in obtaining a BharatNet connection, procuring digital communication devices, and covering the monthly usage charges for connectivity.

b. The grant should be divided in proportion of 25:75 wherein the 25% of the grant should be used by these institutions for procuring terminal end digital communication devices and 75% of the grant should be utilized for paying the cost of connectivity and monthly usage charges thereof to BSNL.

c. For each State BSNL should raise a consolidated monthly bill to the State Government. BSNL should raise bill only for such connections where there is an incremental meter reading or data has been used during the month. The payment from State Government to BSNL should be centralized and should not be delayed on account of verification. Any verification, if required should be done post-facto or through a centralized online mechanism. DoT may consider the above in other states as well for utilization of BharatNet project. The percentage of grants to be given to other states may be appropriately decided by DoT.

(xiii) DoT should take up with Ministry of Defence (MoD) for allocation of one/two pair of OFC of NFS network to BSNL for extending telecom coverage (including broadband services) to the villages located in far-flung or border areas of the NE states under BharatNet project. In case the same is not feasible, MoD may be approached to allocate suitable bandwidth on its existing functional OFC to extend the telecom coverage to such villages.

(xiv) Immediate formation of a District Level Committees as already recommended vide 'Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed' dated 31st August 2021. Online meetings of these Committees should be held every month to monitor and evaluate the progress of telecom infrastructure deployment.

(xv) In line with recommendations made earlier vide "Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh" dated 24th April 2023, the Authority recommends that-

a. All operating TSPs in NER including Sikkim having their backhaul transmission media must provide, on fair and non-discriminatory terms and conditions, access to their spare backhaul transmission media resource capacity via lease/ rent or on mutually agreeable terms and conditions, to any eligible licensed TSP/ ISP including implementing agencies of ongoing and futuristic USOF projects, who seeks access to such resource.

b. A committee headed by a Senior officer from DoT field unit of the respective state/ LSA level, and also involving suitable representative(s) of all operating TSPs of the NER LSAs including Sikkim be formed at the earliest to help resource pooling across TSPs for optical fibre-based ring formation, and to periodically review and resolve such representations at state/LSA level.

(xvi) Earlier recommendation made vide 'Use of Street Furniture for Small Cell and Aerial Fibre Deployment' dated 29th November 2022 is reiterated stating that the charges paid by lessee (a TSP) to any lessor TSP for use of spare backhaul media transmission resource capacity of the latter, should be reduced from the Gross Revenues of the lessor TSP to arrive at Applicable Gross Revenue (AGR) of such Lessor TSP.

(xvii) Considering the analysis made on the provision of satellite backhaul to mobile tower sites in remote and difficult to access locations in NE states including Sikkim, the Authority makes the following recommendations:

a. In lines with its earlier recommendations on "Improving Telecom Connectivity/ Infrastructure in far-flung areas of Himachal Pradesh" dated 12th December 2022 DoT should do a site-wise analysis of all such sites that are being run by any TSP on VSAT in remote and hilly areas of NER. The entire operational costs of running the sites that serve strategic or service delivery needs of the govt. should be borne by the govt.

b. 100% reimbursement on account of the satellite link charges shall be made by USOF/DoT to BSNL against 4G Saturation Project for all the links for the entire duration of the maintenance agreement i.e., for five years in place of the present formula-based duration as made in the agreement.

c. Subsidies on account of the satellite links shall be given by USOF/DoT to TSPs against the 4G coverage Project for the entire duration of the maintenance agreement i.e., for five years in place of two years as made in the agreement.

(xviii) Earlier recommendation made vide "Improving Telecom Services in the Northeastern States: An Investment Plan" dated 26th September 2013 is reiterated, which states that "USOF/DoT should ensure compliance to stringent timelines in USO funded projects.

USOF should built in severe penalty clauses for delays in its agreements with the agencies implementing the project. At the same time, USOF should also incentivize executing agencies in case the work is completed before the stipulated timeframe".

(xix) DoT should provide connectivity and 4G coverage at forward post locations of SSB/ ITBP/Army/BSF on priority. The same has been communicated to DoT vide its DO letter No. G-17/(41)/2023-NSl-I dated 14th July 2023.

(xx) DoT should initiate actions on priority on all the points related to Sikkim, as mentioned in TRAI's DO Letter No. M-5/9/(4)/2021-QoS dated 7th October 2022, as these points mentioned are also equally relevant for all other NE states and therefore should also be implemented for all NE states at the earliest.

The recommendations on "Improving Telecom Infrastructure in Northeastern States of India" have been placed on TRAI's website (www.trai.gov.in).

2.5.1.10 Recommendations dated 29th September 2023 on "Improving Backhaul Telecom Infrastructure in far-flung areas of Himachal Pradesh".

TRAI has been continuously endeavouring towards improving backhaul and access telecom infrastructure especially in remote, hilly, and high-altitude terrain areas of the country from time to time. The Authority in its earlier recommendation on "Improving Telecom Connectivity and Infrastructure in Far-Flung areas of Himachal Pradesh" dated 12th December 2022 had highlighted the need for a comprehensive investment plan for the core transmission backhaul network, covering all tehsils/ talukas in four identified districts (Chamba, Kullu, Lahaul & Spiti, and Mandi), and also stated that a separate recommendation will be released addressing the issue. These four districts are relatively remote and underdeveloped compared to other parts of the state, leading to a lack of proper telecom and backhaul infrastructure.

Accordingly, with an aim to establish a robust, sustainable, and resilient backhaul telecom network, the Authority suo-moto had finalized the recommendations on 'Improving Backhaul Telecom Infrastructure in far-flung areas of Himachal Pradesh'.

The salient features of the recommendations are as follows: -

(i) A separate dedicated amount be set aside either out of USOF or from separate budgetary support from Central Government to cater for rolling out of high speed 4G/5G based cellular mobile coverage (including backhaul) at forward border area locations of strategic importance having significant troops deployment in HP as well as other states. The fund should also cater to operating expenditure of such sites.

(ii) USOF through BSNL should undertake a ground survey and fund the roll-out of OFC backhaul connectivity from Tissa Block Headquarter to Udaipur via Pangi Block Headquarter.

(iii) DoT/ USOF must re-engage with MoD to obtain one pair of OFC on lease for a period of five years (on mutually agreeable terms and conditions) from any of the captive OFC media network (also a national asset) of the latter, to secure a readily laid out OFC media resource for rolling out 4G/ 5G based cellular mobile services and high- speed internet connectivity in pan-India forward locations adjoining border areas using funds set aside either out of USOF or from separate budgetary support from Central

Government as proposed in paragraph 2.28 of chapter 2. Further a clause must be introduced in the contract document stating that it should be mandatorily incumbent upon the USOF nominated implementing agency to roll out its own OFC fibre within five years of contract allotment, to completely release the OFC media leased from Armed Forces in a functional state of reuse.

(iv) BSNL should engage with operating IP-1 in the region of Chamba and Lahaul & Spiti districts respectively for the utilization of readily available dark fibres. These dark fibres will facilitate the transition of BSNL's operations in block headquarters of Bharmour, Mehla, Tissa, Salooni, and Spiti (Kaza) respectively, from radio/satellite-based medium to a linear optical fibre-based transmission backhaul. This strategic approach will not only enhance BSNL's existing bandwidth capacity for the backhaul infrastructure but will also lead to significant savings in operational expenditure (OPEX) by eliminating the need for bearing high VSAT bandwidth charges.

(v) DoT must engage with the Government of HP to harmonize its Right of Way policy of 2021 with the Indian Telegraph Right of Way Rules, 2016 Amendment dated 17th August 2022 in which, a provision at paragraph 6 (3) of Part II (Charges for restoration) also mandates telecom licensee(s) to furnish an undertaking supported by a Performance Bank Guarantee (amounting to 20% of the restoration charges for immovable properties) to bear the responsibility for promptly restoring any damages incurred during laying out of any underground telegraph infrastructure.

(vi) DoT should issue a revised amendment to its OM No. F.No.19-1/2019-SU-I dated 12th October 2020, applicable to all Ministries/Departments of the Government of India, Central Public Sector Undertakings, Autonomous Bodies, etc., under the central government, incorporating the following provision:

a. In cases where there is non-existence of BSNL/MTNL network coverage or unavailability of capacity/network infrastructure for internet/broadband, landline and leased line requirements at any of the Pan-India location(s), BSNL/MTNL shall grant the 'No Objection Certificate' (NoC) to the concerned ministry/Government Department within 30 days from the date of receipt of the application or from date of receipt of clarification on any observation of BSNL/MTNL, whichever is later, failing which the NOC will be presumed to have been granted.

(vii) On lines of its earlier recommendations on "Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh" dated 24th April 2023 it has been recommended that:

a. All TSPs operating in Lahaul & Spiti, Chamba, Mandi, and Kullu districts of HP, must grant access to their spare backhaul transmission resource capacity to any eligible licensed TSP/ISP, including implementing agencies of ongoing and future USOF projects. This access should be provided on fair and non-discriminatory terms and conditions, either through lease/rent or on mutually agreed terms.

b. To facilitate resource pooling and the formation of optical fiber-based self-healing rings, the Authority recommends formation of a committee at the earliest. This committee should be headed by a senior officer from the Telecom Enforcement, Resource and Monitoring (TERM) field unit of Himachal Pradesh at the LSA level. It should also include suitable representatives from all TSPs operating in the LSA. The committee's role inter-alia will be to periodically review and resolve representations related to resource sharing and pooling at the LSA Level.

c. In case any affected entity faces obstacles or issues, a second-level committee should be established at the DoT headquarters. This committee will review all such cases periodically and provide resolutions through intervention at higher levels, if necessary.

(viii) In line with its earlier recommendations on 'Use of Street Furniture for Small Cell and Aerial Fibre Deployment' dated 29th November 2022 the Authority has recommended that the charges paid by lessee (a TSP) to any lessor TSP for the use of spare backhaul media transmission resource capacity of the latter, should be omitted from the Gross Revenues of the lessor TSP to arrive at Applicable Gross Revenue (ApGR) of such Lessor TSP. The required modification may also be carried out in UL, NLD and ISP licenses.

The recommendations on "Improving Backhaul Telecom Infrastructure in far-flung areas of Himachal Pradesh" have been placed on TRAI's website (www.trai.gov.in).

2.5.1.11 TRAI's Response dated 29th September 2023 to DoT back reference dated 13th April 2023 on TRAI's Recommendations dated 14th September 2020 on "Cloud Services"

Department of Telecommunication (DoT) through its letter No. 4-41/Cloud Services/ 2021-NT dated 13th April 2023, referred back TRAI's recommendations dated 14th September 2020 on "Cloud Services" for reconsideration. TRAI, after due deliberations, finalized its response to the back reference and sent them to DoT on 29th September 2023.

The views given by the Authority have been placed on TRAI's website (www.trai.gov.in).

2.5.1.12 Recommendations dated 23rd February 2024 on "Introduction of Calling Name Presentation (CNAP) Service in Indian Telecommunication Network"

Department of Telecommunications (DoT) through a reference dated 21th March.2022 requested the Authority to provide its recommendations under Section 11(1)(a) of TRAI Act, 1997 (as amended) on introducing the Calling Name Presentation (CNAP) facility in the Indian Telecommunication Network. TRAI issued a Consultation Paper on "Introduction of Calling Name Presentation (CNAP) in Telecommunication Networks" on 29th November 2022 for soliciting comments and counter comments of stakeholders. An Open House Discussion on the Consultation Paper was held on 9th March 2023, through virtual mode.

Based on the comments/ inputs received from stakeholders and on its own analysis, TRAI sent its Recommendations on "Introduction of Calling Name Presentation (CNAP) Service in Indian Telecommunication Network" to the Government on 23rd February 2024. The salient features of the Recommendations are as follows:

a. Calling Name Presentation (CNAP) Supplementary Service should be introduced in the Indian telecommunication network.

b. Calling Line Identification (CLI) should be redefined as identity of the calling/originating subscriber in terms of telephone number assigned as per E.164 of 1TU Recommendation/IP Address and the Calling name (CNAM) or any other identification as may be prescribed by the Licensor from time to time.

c. All access service providers should provide Calling Name Presentation (CNAP) supplementary service to their telephone subscribers upon their request.

d. The name identity information provided by the telephone subscriber in the Customer Application Form (CAF) should be used for the purpose of CNAP.

e. A technical model for implementation of CNAP in Indian telecommunication network has been outlined.

f. After acceptance of the recommendations, Government should issue appropriate instructions for making CNAP feature available in all devices sold in India after a suitable cut-off date.

g. The subscriber entities holding bulk connections and business connections should be given the facility of presenting their 'preferred name' in place of the name appearing in the Customer Application Form (CAF).

h. The 'preferred name' could be the 'trademark name' registered with the Ministry of Corporate Affairs, or the 'trade name' registered with the GST Council, or any other such unique name duly registered with the Government, provided that the subscriber entity is able to present the necessary documents to prove the ownership of such name.

A copy of the Consultation Paper and recommendations are available on the TRAI website (www.trai.gov.in).

2.5.1.13 Recommendation dated 21st March 2024 on "Usage of Embedded SIM for Machine-to-Machine (M2M) Communications"

Department of Telecommunication (DoT) through their letter dated 9th November 2021 have sought TRAI's recommendations, under TRAI Act, 1997, for holistic deployment of e-SIM in Indian Telecom network including implementation mechanism under different profile - configurations and switch over of profiles by TSPs. TRAI issued a Consultation Paper on "Embedded SIM for M2M Communications" on 25th July 2022 for soliciting comments/counter comments from stakeholders. After following the due consultation process, TRAI sent its Recommendations on "Usage of Embedded SIM for Machine-to-Machine (M2M) Communications" to the Government on 21st March 2024.

These recommendations are aimed at streamlining the regulatory landscape of M2M embedded SIM (eSIM) in India. Through these Recommendations, the Authority has laid emphasis on ensuring security by way of proper Know Your Customer (KYC), which is essential for ensuring network security, mitigating fraud risks, and enhancing the overall integrity of the M2M eSIM ecosystem. The Authority has also recommended a framework for profile switching of eSIMs and swapping of SM-SR. This will provide significant flexibility to the M2M eSIM users and will promote healthy competition in the sector.

The salient features of these Recommendations are as follows:

a. All communication profiles on any M2M eSIM fitted in an imported device on international roaming in India should be mandatorily converted/ reconfigured into communication profiles of Indian telecom service providers (TSPs) within a period of six months from the date of activation of international roaming on such M2M eSIM or on change of ownership of the device, whichever is earlier.

b. Unified Access Service License holder, Unified License (Access Service Authorization) holder, Unified License (Machine-to-Machine Authorization) holder, Unified License for VNO (Access Service Authorization) holder, Unified License for VNO (Machine-to Machine Authorization) holder and the companies holding M2M Service Providers (M2MSP) Registration with a specific permission to own and manage Subscription Manager-Secure Routing (SM-SR) in India should be permitted to own and manage SM-SRs in the country.

c. For installation of profiles of Indian TSPs on M2M eSIMs fitted in the devices imported in India, the concerned Original Equipment Manufacturer (OEM) and M2MSP should be given the flexibility to choose between (i) profile download from the Subscription Manager-Data Preparation (SM-DP) of the Indian TSP to the M2M eSIMs through the existing (foreign) SM-SR, or (ii) profile download from the SM-DP of the Indian TSP to the M2M eSIMs through the new (Indian) SM-SR, after SM-SR switch from foreign to Indian.

d. The M2MSP registrant/ telecommunication service licensee, whose SM-SR controls M2M eSIMs in India, should not refuse integration of its SM-SR with the SM-DP of the licensed telecom service provider, whose profiles are to be added in such M2M eSIMs, upon the request of the concerned OEM/ M2MSP. The integration should be carried out as per GSMA's specifications and should be completed within three months from the date of receipt of formal request from the concerned OEM/ M2MSP.

e. The M2MSP registrant/ telecommunication service licensee, whose SM-SR controls M2M eSIMs in India, should mandatorily facilitate switching of its SM-SR with the SM-SR of another entity, eligible to hold SM-SR in India, upon the request of the concerned OEM/ M2MSP. Such SM-SR switching should be carried out as per the GSMA's specifications and should be completed within a period of six months from the date of receipt of formal request from the concerned OEM/ M2MSP.

f. Keeping in view the challenges in its implementation, the use of 901.XX IMSI series allocated by International Telecommunication Union (ITU) to Indian entities should not be permitted for providing M2M services in India, at this stage.

A copy of the Consultation Paper and recommendations are available on the TRAI website (www.trai.gov.in).

2.5.2 BROADCASTING SECTOR

S. No.	List of Recommendations & Responses to Back References
1	Recommendations dated 2nd May 2023 on "Ease of Doing Business in Telecom and Broadcasting Sector".
2	TRAI's response dated 27th June 2023 to back reference dated 27th April 2023 received from MIB on TRAI's Recommendations dated 29th December 2022 on "Renewal of Multi-System Operators (MSOs) Registration".
3	Recommendations dated 21st August 2023 on "License Fee and Policy Matters of DTH Services".
4	Recommendations dated 5th September 2023 on "Issues related to FM Radio Broadcasting".
5	Recommendations dated 21st September 2023 on "Low Power Small Range FM Radio Broadcasting".

RECOMMENDATIONS & RESPONSES TO BACK REFERENCES

2.5.2.1 Recommendations dated 2nd May 2023 on "Ease of Doing Business in Telecom and Broadcasting Sector"

Recommendations on "Ease of Doing Business (EoDB) in Telecom & Broadcasting sector" were released on 2nd May 2023. TRAI as a sectoral regulator has suo-moto taken up this consultation process to holistically review the existing processes of telecom and broadcasting sector. TRAI recognizes the need for having a single window system including analyzing the application form, compliance, information submission, and payment processes throughout license lifecycles for achieving end-to-end inter-departmental online process. The objective is to identify and remove redundant processes and streamline the requirements.

The recommendations highlighted a collaborative approach involving various ministries and departments such as Department of Telecommunications, Ministry of Information & Broadcasting, Department of Space, Ministry of Electronics and Information Technology and Ministry of Power. This has led to the identification of unnecessary requirements and the implementation of significant reforms. TRAI also recommended the establishment of a standing committee. This committee would continually review existing compliances, involve stakeholders to identify obstacles, and periodically introduce reforms to foster growth in the technology-intensive telecommunications and broadcasting sectors.

The complete recommendation is available on TRAI's website (www.trai.gov.in).

2.5.2.2 TRAI's response dated 27th June 2023 to back reference dated 27th April 2023 received from MIB on TRAI's Recommendations dated 29th December 2022 on "Renewal of Multi-System Operators (MSOs) Registration"

Ministry of Information and Broadcasting (MIB) vide its reference dated 27th April 2023 referred back certain recommendations of TRAI on "Renewal of Multi-System Operators (MSO) Registration" dated 29th December 2022 for reconsideration of these recommendations in accordance with the provisions of Section 11 of TRAI Act, 1997.

TRAI, after due deliberations, finalized its response to the back reference and sent to MIB on 27th June 2023.

The views given by the Authority have been placed on TRAI's website (www.trai.gov.in).

2.5.2.3 Recommendations dated 21st August 2023 on "License Fee and Policy Matters of DTH Services"

TRAI on 21st August 2023, released the Recommendations on "License Fee and Policy Matters of DTH Services". Through these recommendations, TRAI provided the revised definition of Gross Revenue, Applicable Gross Revenue and Adjusted Gross Revenue and the revised format of Form-D.

TRAI has further recommended that DTH Licensee should pay an annual license fee (LF) equivalent to 3% of AGR. LF for DTH Licensees should be brought down to zero in the next three years and should not be charged any LF after the end of the financial year 2026-2027.

Accordingly, TRAI also recommended rationalizing the Bank Guarantee amount deposited by the DTH players to the Licensor.

The complete recommendation is available on TRAI's website (www.trai.gov.in).

2.5.2.4 Recommendations dated 5th September 2023 on "Issues related to FM Radio Broadcasting"

TRAI on 5th September 2023, released the Recommendations on "Issues related to FM Radio Broadcasting".

The salient features of the recommendations were:

(i) The annual license fee of an FM radio channel should be de-linked from Non-Refundable One Time Entry Fee (NOTEF).

(ii) The license fee should be calculated as 4% of the Gross Revenue (GR) of the FM radio channel during the respective financial year. GST should be excluded from Gross Revenue (GR).

(iii) The Government may take appropriate measures to provide relief to the FM radio operators to address challenges posed due to COVID-19 pandemic.

(iv) Private FM Radio Operators should be allowed to broadcast news and current affairs programs, limited to 10 minutes in each clock hour.

(v) The program code of conduct as applicable to All India Radio for news content may also be applied to Private FM Radio channels.

(vi) Functions or features pertaining to FM radio should remain enabled and activated on all mobile handsets having the necessary hardware. Built-in FM radio receiver in mobile handset must not be subjected to any form of disablement or deactivation.

(vii) A Standing Committee, headed by a senior officer of Joint Secretary or above level, to oversee and monitor the compliance by mobile phone manufacturers (or importers) may be established by MeitY. The committee should include key stakeholders such as MIB, AROI, MAIT, and ICEA.

(viii) An online grievance redressal portal should be provided for submitting information or complaints of case of any non-compliance as regards enablement of FM radio functionality in such mobile handsets that have the necessary functionality for FM receivers.

The complete recommendation is available on TRAI's website (www.trai.gov.in).

2.5.2.5 Recommendations dated 21st September 2023 on "Low Power Small Range FM Radio Broadcasting"

TRAI on 21st September 2023 released the Recommendations on "Issues related to Low Power Small Range FM Radio Broadcasting".

The salient features of the recommendations were:

(i) Introduction of a new category of service provider called 'Low Power Small Range FM Radio Broadcasting' for provision of low power small range FM Radio.

(ii) License/registration/authorization to be granted through a simple registration process via an online application portal.

(iii) Approval by Telecom Engineering Centre (TEC) for transmitting equipment for low power small range FM broadcasting.

(iv) Eligible entities to hold license/ registration/ authorization for 'Low Power Small Range FM Broadcasting'.

(v) Permission period for 'Low Power Small Range FM Radio Broadcasting' service.

(vi) No application/entry fee should be levied.

(vii) License/ Permission/ Authorization Fee of ₹ 1000/- for a permission of up to thirty days and ₹ 10,000/- per annum for a permission of five years.

(viii) WPC should conduct a thorough evaluation and reserve appropriate frequency spots for the specific needs of low-power, small-range FM broadcasting.

(ix) Frequency for low power small range FM broadcasting should be assigned administratively by WPC through online portal within two days of submitting the application.

(x) License/Registration/Authorization holders for low power small range FM broadcasting should be allowed to deploy any type of transmission technologies (analog/digital/any other).

(xi) The maximum permissible transmission range of 'Low Power Small Range Radio Broadcasting' should be 500 meters.

(xii) The licensed area of frequency assignment in case of low power small range FM be defined as location-specific based on the precise geographical coordinates such as longitude and latitude of the of the intended service location (be it a building, stadium, convention center, expo area etc.)

(xiii) Maximum permissible transmission power should be 1 watt for low power small range FM broadcasting.

The complete recommendation is available on TRAI's website (www.trai.gov.in).

2.6 During the year 2023-24, the Authority in discharge of its functions assigned under the Telecom Regulatory Authority of India Act, 1997, has framed the following Regulations in Telecom and Broadcasting sector:

2.6.1 TELCOM SECTOR

S. No.	List of Regulations
1	Telecom Regulatory Authority of India Repealing Regulations, 2023 dated 26th July 2023.
2	Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2023 dated 11th September 2023.
3	The Telecom Regulatory Authority of India (Appointment of Officers and Employees) Regulations, 2023 dated 20th October 2023.
4	Telecommunication Mobile Number Portability (Ninth Amendment) Regulations, 2024 dated 14th March 2024.

2.6.1.1 Telecom Regulatory Authority of India Repealing Regulations, 2023 dated 26th July 2023.

TRAI issued the Consultation Paper on "Telecom Regulatory Authority of India Repealing Regulations, 2023" on 3rd April 2023 for seeking the comments of the stakeholders. Based on the comments received from stakeholders and its own analysis, TRAI issued "Telecom Regulatory Authority of India Repealing Regulations, 2023 (02 of 2023)" dated 26th July 2023 to repeal the Regulation on quality of service of dial-up and leased line internet access service, 2001 (4 of 2001) with effect from date of its notification in Official Gazette.

The Regulation has been placed on TRAI's website (www.trai.gov.in).

2.6.1.2 Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2023 dated 11th September 2023

The 'Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2023 (03 of 2023)' dated 11th September 2023, were notified in the Gazette of India on 12th September 2023. The Guidelines for conducting the Audit have also been issued on 19th September 2023. The brief note on these regulations are as follows:

- Accuracy of Metering and Billing of telecom services has been a prime focus of the Regulator to protect the interest of consumers. In this regard, TRAI earlier notified the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation, 2006, on 21st March 2006.

- In the last ten years, the telecom networks and their technology have undergone significant changes, and many new services are being offered by the telecom service providers. Tariff offerings as well as the usage patterns of the services have also changed significantly.

- Considering these changes, the Authority undertook a public consultation for review of the regulation. Under the consultation process, draft regulations, and guidelines on "Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2023" were released on the TRAI website on 24th February 2023 inviting comments from the stakeholders. Subsequently Open House Discussion was also held with the stakeholders on 7th July 2023.
- Based on the comments received from the stakeholders, discussions held during the OHD, subsequent discussion with team of the service providers, interactions with empanelled auditors and analysis thereof, Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2023 (03 of 2023) were finalized and released by the Authority.
- While finalizing the regulations, the Authority has ensured balance between two key objectives i.e. (i) to protect the interests of the subscribers by ensuring that service providers maintain fairness and transparency in their Metering and Billing System(s) (ii) to reduce compliance burden on the service provider to enhance Ease of Doing Business (EODB). Accordingly, the Authority has considered the emerging trends in the industry towards implementation of single centralized or few regional billing systems in the audit methodology prescribed.
- By releasing new regulations, earlier regulations namely Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation, 2006, and its amendments issued on 25th March 2013 stand repealed.

The Regulation has been placed on TRAI's website (www.trai.gov.in).

2.6.1.3 The Telecom Regulatory Authority of India (Appointment of Officers and Employees) Regulations, 2023 dated 20th October 2023

TRAI has issued the Telecom Regulatory Authority of India (Appointment of Officers & Employees) Regulations, 2023, notified on 20th October 2023. This has been issued repealing the Telecom Regulatory Authority of India (Officers and Staff Appointment) Regulation, 2001 (2 of 2001).

2.6.1.4 Telecommunication Mobile Number Portability (Ninth Amendment) Regulations, 2024 dated 14th March 2024

Telecommunication Mobile Number Portability Regulations, 2009 (8 of 2009) issued by the Telecom Regulatory Authority of India laid down the regulatory framework for Mobile Number Portability (MNP) in the country.

In the recent past, DoT, through its various communications to TRAI, made certain suggestions in respect of regulatory framework for Mobile Number Portability. Keeping in view of the suggestion of DoT, the Authority on 27th September 2023 issued Draft Telecommunication Mobile Number Portability (Ninth amendment) Regulations, 2023, for consultation with the stakeholders. An Open House Discussion was convened with stakeholders on 22nd February 2024 through video conferencing.

After following due consultation process, TRAI on 14th March 2024 notified the Telecommunication Mobile Number Portability (Ninth Amendment) Regulations, 2024.

These amendment regulations are aimed at curbing the practice of porting mobile numbers by way of fraudulent SIM swap or replacement by unscrupulous elements. Through these amendment regulations, an additional criterion for rejection of the request for allocation of UPC has been introduced. Specifically, the UPC should not be allocated if the request for UPC has been made before the expiry of seven days from the date of SIM swap or replacement of the mobile number. These regulations come into effect from 1st July 2024.

The Telecommunication Mobile Number Portability (Ninth amendment) Regulations, 2024 are available on the TRAI's website (www.trai.gov.in.).

2.6.2 BROADCASTING SECTOR

S. No.	List of Regulations
1	The Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Fifth Amendment) Regulations, 2023 dated 14th September 2023.

2.6.2.1 The Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Fifth Amendment) Regulations, 2023 dated 14th September 2023

TRAI issued the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Fifth Amendment) Regulations, 2023 (4 of 2023) on 14th September 2023.

The main features of the amendments are as follows:

a. A new schedule X has been prescribed for Digital Rights Management (DRM) System Requirements which include:

    i. DRM requirements in so far as they relate to subscriber management systems (SMS) for IPTV services.

    ii. DRM requirements for conditional access by subscribers and encryption for IPTV services.

    iii. DRM requirements in so far as they relate to fingerprinting for IPTV services.

    iv. DRM requirements in so far as they relate to STBs/unique consumer subscription.

b. An enabling, technology neutral, light-touch regulatory regime, which facilitates growth and technological developments while protecting the consumer's interest is promoted to foster overall growth.

2.7 TARIFF ORDERS

TELECOM SECTOR

During the year 2023-24, no tariff orders were issued for the Telecom Sector.

BROADCASTING SECTOR

During the year 2023-24, no tariff orders were issued by the Authority for the Broadcasting and Cable Services Sector.

2.8 DIRECTIONS

TRAI issued the following Directions and Order to the Service Providers during the year 2023-24 for compliance of its Order/Regulations: -

TELECOM SECTOR

S. No.	List of Directions
1	Direction dated 12th May 2023 issued to all Access Providers regarding measures to curb misuse of Headers and Content Templates under Telecom Commercial Communication Customer Preference Regulation, 2018.
2	Direction dated 2nd June 2023 issued to all Access Providers regarding implementation of Digital Consent Acquisition (DCA) under Telecom Commercial Communication Customer Preference Regulation, 2018.
3	Direction dated 13th June 2023 and 19th July 2023 issued to all Access Providers regarding Implementation of UCC Detect System Under Telecom Commercial Communications Customer Preference Regulations, 2018.

2.8.1 Direction dated 12th May 2023 issued to all Access Providers regarding "measures to curb misuse of Headers and Content Templates under Telecom Commercial Communication Customer Preference Regulation, 2018"

Before sending bulk commercial messages, Principal Entities (PEs) are required to get content templates registered with the Access Providers. These templates typically have fixed and variable components. It has been observed that at times variable parts of the message template are misused and the promotional content is being passed in the variable portions of content templates. Therefore, the Authority on 12th May 2023 issued following direction to all the Access Providers-

- Use of more than three variable parts in the contents shall be permitted only with proper justification and additional checks.
- Each variable part needs to be pre-tagged for the purpose it is proposed to be used.
- Minimum thirty percentage of message should comprise of fixed part.
- Only whitelisted URLs/ Apks/ OTT links/ call back numbers shall be allowed in the content template.

2.8.2 Direction dated 2nd June 2023 issued to all Telecom Service Providers regarding implementation of Digital Consent Acquisition under Telecom Commercial Communications Customer Preference Regulations, 2018 (6 of 2018)

In the prevalent system, the consent is obtained and maintained by the Principal Entities (PEs). Therefore, it is not possible for the Access Providers to check veracity of consents. Moreover, there is no mechanism for revocation of the consent. It gives rise to many complaints from the subscribers. Therefore, the Authority on 2nd June 2023 issued direction to all Access Providers to develop and deploy the Digital Consent Acquisition (DCA) facility and onboard PEs on this system in phased manner. This will enable the acquisition of the consent and its recording on DLT platform by Access Provider after verification of the subscriber through OTP. It will also provide a mechanism for revocation of consent by the subscriber.

2.8.3 Direction dated 13th June 2023 and 19th July 2023, issued to all Telecom Service Providers regarding implementation of UCC Detect System under Telecom Commercial Communications Customer Preference Regulations, 2018

The Authority on 13th June 2023 issued direction to all Access Providers to deploy Artificial Intelligence and Machine Learning based UCC Detect system which is capable of evolving constantly to deal with new signatures, new patterns and new techniques used by Unregistered Telemarketers (UTM). Any sender of commercial communication who is not registered for the purpose of telemarketing with the access provider are called Unregistered Telemarketers (UTMs). UCC Detect System is meant to detect UTMs who send Unsolicited Commercial Communications in bulk and not complying with the provisions of the regulations.

Further, to put in place adequate and effective checks to ensure that unauthorized use of AI/ML based UCC Detect systems does not take place and utmost care and precaution is taken in the use of systems to ensure the safety and security of the customer data, the Authority on 19th July 2023 issued Direction to all Access Providers to take specific measures for the same.

BROADCASTING SECTOR

During the year 2023-24, no directions were issued for broadcasting sector.

2.9 CONSULTATION PAPERS

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

2.9.1 TELECOM SECTOR

Sl. No.	List of Consultation Papers
1	Consultation Paper dated 3rd April 2023 on "Draft Telecom Regulatory Authority of India Repealing Regulations, 2023".
2	Consultation Paper dated 6th April 2023 on "Assignment of Spectrum for Space-based Communication Services".
3	Consultation Paper dated 2nd May 2023 on "Definition of International Traffic".
4	Consultation Paper dated 19th June 2023 on "Encouraging Innovative Technologies, Services, Use Cases, and Business Models through Models through Regulatory sandbox in Digital Communication Sector".
5	Consultation Paper dated 7th July 2023 on "Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services".
6	Consultation Paper dated 24th July 2023 on "Draft The Telecommunication Consumers Education and Protection Fund (Sixth Amendment) Regulation, 2023".
7	Supplementary Consultation Paper dated 3rd August 2023 on "Data Communication Services Between Aircraft and Ground Stations Provided by Organizations Other Than Airports Authority of India".
8	Consultation Paper dated 18th August 2023 on "Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband Services (Wireless and Wireline)".

9	Consultation Paper dated 29th August 2023 on "Review of Terms and Conditions of PMRTS and CMRTS Licenses".
10	Consultation Paper dated 14th September 2023 on "Draft Registration of Consumer organisations (Amendment) Regulations, 2023".
11	Consultation Paper dated 14th September 2023 on "Digital Inclusion in the Era of Emerging Technologies".
12	Consultation Paper dated 22nd September 2023 on "Encouraging R&D in Telecom, Broadcasting, and IT (ICT) Sectors".
13	Consultation Paper dated 27th September 2023 on "Draft Telecommunication Mobile Number portability (Ninth Amendment) Regulation, 2023".
14	Consultation Paper dated 27th September 2023 on "Open and De-licensed use of Unused or Limited Used Spectrum Bands for Demand Generation for Limited Period in Tera Hertz Range".
15	Consultation Paper dated 27th September 2023 on "Assignment of Spectrum in E&V Bands, and Spectrum for Microwave Access (MWA) & Microwave Backbone (MWB)".
16	Consultation Paper dated 27th September 2023 on "Regulation on Rating Framework for Digital Connectivity in Buildings or Areas".
17	Consultation Paper dated 29th September 2023 on "Digital Transformation through 5G Ecosystem".
18	Consultation Paper dated 7th February 2024 on "Assignment of Additional Spectrum to Indian Railways for its Safety and Security Applications".
19	Consultation Paper dated 23rd February 2024 on "Connectivity to Access Service VNOs From More Than one NSO".

2.9.1.1 Consultation Paper dated 3rd April 2023 on "Draft Telecom Regulatory Authority of India Repealing Regulations, 2023"

TRAI notified the regulation on quality of service of dial-up and leased line internet access service, 2001 (4 of 2001) on 10th December 2001. This regulation is applicable to all the Basic Service Operators and Internet Service Providers including the incumbent operators viz. BSNL, MTNL and VSNL. The purpose of laying down Quality of Service Parameters was to ensure customer satisfaction by laying down norms of network performance, which the service provider is required to achieve by proper dimensioning of his network; measure the Quality of Service from time to time and to compare that with the specified norms so as to monitor the level of performance, provided by various service providers and to protect the interests of subscribers of the Internet services.

It has been noticed that these regulations were issued when the dial up service was the only service available for accessing low speed internet. With the passage of time, the telecommunication networks both wireline as well as wireless have evolved to offer high speed broadband service on xDSL, FTTH, LTE etc, technologies. Whereas the leased line access services are generally offered by Internet Gateway Service Providers (1GSPs) holding an ISP licence to enterprises, is a Service Level Agreement (SLA) based service. Being SLA based service, the agreement among the contracting parties has sufficient provisions to safeguard concerns regarding service quality. Hence, the regulation on quality of service of dial-up and leased line internet access service, 2001, appears to be no more relevant in the present context.

In this regard, a Consultation Paper on "Draft Telecom Regulatory Authority of India Repealing Regulations, 2023", was released on 3rd April 2023, for the Comments of stakeholders.

The Consultation Paper is available on TRAI's website (www.trai.gov.in).

2.9.1.2 Consultation Paper dated 6th April 2023 on "Assignment of Spectrum for Space-based Communication Services"

Earlier, the Department of Telecommunications (DoT), through its letter dated 13th September 2021, requested TRAI to provide recommendations on "Auction of spectrum in the frequencies identified for International Mobile Telecommunications (IMT)/ 5G". Through the said letter, TRAI was also requested to provide recommendations, inter-alia, on appropriate frequency bands, band plan, block size, applicable reserve price, quantum of spectrum to be auctioned and associated conditions for auction of spectrum for space-based communication services.

In this regard, TRAI through letters dated 27th September 2021 and 23rd November 2021, sought information/ clarifications in respect of space-based communication services from DoT. In response, DoT through the letter dated 27th November 2021 informed, inter-alia, that the information in respect of space-based communication services sought by TRAI will take some time; therefore, to avoid delay in 5G roll-out, TRAI may go ahead with consultation/ recommendations on issues excluding space-based communication services referred in DoT's reference dated 13th September 2021 and 23rd September 2021. DoT also mentioned that the issues related to space-based communication services may be taken up separately on receipt of information from DoT. Subsequently, TRAI gave its recommendations to the Government on 'Auction of Spectrum in frequency bands identified for IMT/5G' on 11th April 2022.

Thereafter, DoT through letter dated 16th August 2022 provided information with respect to space-based communication services sought by TRAI through the letters dated 27th September 2021 and 23rd November 2021. While providing the requisite information, DoT requested TRAI to provide recommendations on certain additional issues, as mentioned below:

(a) TRAI, through consultations, may assess the demand for space-based communication services and accordingly provide recommendations on the quantum of spectrum in each band required to be put to auction.

(b) It is envisaged to auction the Space Spectrum on exclusive basis. TRAI may explore feasibility and procedure of sharing auctioned spectrum among multiple service licensees. TRAI may provide recommendations on sharing of auctioned frequency bands between satellite networks and terrestrial networks also, the criteria for sharing and appropriate interference mitigation techniques for sharing and coexistence.

(c) In frequency bands 27.5-28.5 GHz (identified for IMT) and 28.5-29.5 GHz (being studied for Captive Non-Public Networks), TRAI may recommend mechanism for sharing of auctioned frequency bands in which both IMT/ CNPN and satellite-based services (both user terminal and Gateways) can be provided in a flexible manner.

(d) Since the service providers may require spectrum both in user link as well as in feeder link, TRAI may take inputs from the stakeholders and recommend the appropriate auction methodology so that the successful bidder gets spectrum for user link (shared with IMT in flexible) as well as feeder link.

(e) In addition, TRAI is requested to provide any other recommendations as 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.

Subsequently, TRAI, through the letter dated 19th October 2022 to DoT, sought further information/ clarifications, wherein DoT was requested, inter-alia, to clarify that for which kind of licensed services, spectrum for space-based communication has been envisaged to be granted through Auction. In response, DoT, through the letter dated 16th December 2022, conveyed that TRAI may provide suitable recommendations for each of the space-based communication services after detailed examination. Hence, considering all the spectrum bands relevant for space-based communication services as indicated by DoT, TRAI issued a Consultation Paper on "Assignment of Spectrum for Space-based Communication Services" was released on 6th April 2023 seeking written comments/ counter comments from stakeholders. In this consultation paper, specific issues have been raised for consideration of stakeholders.

The Consultation Paper is available on TRAI's website (www.trai.gov.in).

2.9.1.3 Consultation Paper dated 2nd May 2023 on "Definition of International Traffic"

Department of Telecommunications (DoT) through a reference dated 30th August 2022 requested the Authority to provide its recommendations under Section 11(1)(a) of TRAI Act, 1997 (as amended) on definition of International SMS and Domestic SMS.

The load carried on a telecommunication network is called traffic, or more specifically 'telecommunication traffic'. Telecommunication traffic comprises of several types of traffic such as voice call, SMS, etc. Further, telecommunication traffic comprises domestic traffic (i.e., traffic within the country), and international traffic. In the Indian context, domestic traffic comprises intra-circle traffic and inter-circle traffic which have been specifically defined in the Unified License. As intra-circle traffic and inter-circle traffic are the only two components of domestic traffic, the term 'domestic traffic' has been defined implicitly in the Unified License. The Authority noted that the term 'international traffic' has not been defined in the Unified License and that 'international SMS' is a type of 'international traffic'. Therefore, the Authority is of the view that instead of defining international SMS in the Unified License Agreement, it would be appropriate to define the term 'international traffic', instead.

In this regard, a Consultation Paper on 'Definition of International Traffic' seeking inputs from stakeholders was released on 2nd May 2023. The consultation paper can be seen on TRAI's website (www.trai.gov.in).

2.9.1.4 Consultation Paper dated 19th June 2023 on "Encouraging Innovative Technologies, Services, Use Cases, and Business Models through Regulatory sandbox in Digital Communication Sector"

The Authority on 19th June, 2023 issued a Consultation Paper on "Encouraging Innovative Technologies, Services, Use Cases, and Business Models through Regulatory Sandbox in Digital Communication Sector" for seeking stakeholder's feedback on a proposed draft sandbox framework which includes information on the goal and scope of the framework, participant eligibility requirements, prerequisites for applicants, supporting materials needed with applications, application evaluation criteria, application and approval process, waivers or modifications to the rules, validity period, revocation of permission, reporting, oversight body, and funding of innovation for societal growth.

The consultation paper can be seen on TRAI's website (www.trai.gov.in).

2.9.1.5 Consultation Paper dated 7th July 2023 on "Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services"

Department of Telecommunications (DoT), through a letter dated 7th September 2022, requested TRAI to reconsider its recommendations on Regulatory Framework for Over-The-Top (OTT) Communication Services dated 14th September 2020 and suggest a suitable regulatory mechanism for OTTs, including issues relating to 'selective banning of OTT services' as part of its recommendations.

Through the letter dated 7th September 2022, DoT has also mentioned that "in view of the humongous growth of OTT services in the recent past and these services having reached a matured stage, there is a need to holistically look into the various aspects of these services including regulatory, economic, security, privacy, and safety aspects. This is also in keeping with para 2.2 of the National Digital Communications Policy-2018 which mentions the policy goal for "Ensuring a holistic and harmonized approach for harnessing Emerging Technologies". It has been mentioned therein that a policy framework for 'Over the Top' services will be developed".

In response to the DoT letter dated 7th September 2022, TRAI through its letter dated 1st November 2022 conveyed to DoT that "the Authority is of the view that a fresh consultation process may be initiated to frame suitable regulatory framework for OTT".

In this regard, a Consultation Paper on "Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services", was released on 7th July 2023 seeking input from stakeholders.

The consultation paper can be seen on TRAI's website (www.trai.gov.in).

2.9.1.6 Consultation Paper dated 24th July 2023 on "Draft The Telecommunication Consumers Education and Protection Fund (Sixth Amendment) Regulation, 2023"

A consultation paper on "The Telecommunication Consumers Education and Protection Fund (Sixth Amendment) Regulations, 2023 was issued on 24th July 2023. The last date for comments was 14th August 2023.

The consultation paper can be seen on TRAI's website (www.trai.gov.in).

2.9.1.7 Supplementary Consultation Paper dated 3rd August 2023 on "Data Communication Services Between Aircraft and Ground Stations Provided by Organizations Other Than Airports Authority of India"

Department of Telecommunication (DoT) through its letter dated 12th April 2022 stated, inter-alia, that VHF data link services consist of the data for the tracking the aircraft for safety of flights; the Ministry of communications has made frequency assignments to M/s Société International de Telecommunications Aeronautiques, (SITA) and M/s Bird Consultancy Services (BCS) to operate VHF Data Communication Link between aircraft and ground stations. Considering that VHF Data Link Services to provide Aircraft Communication Addressing and Reporting (ACAR) service can be beneficial to track aircrafts on a real-time basis and help investigations/ search and rescue operations in the unfortunate event of aviation disaster, DoT requested TRAI under the terms of clause 11(1)(a) of TRAI Act, 1997 to provide recommendations on the following:

i. An appropriate mechanism to regulate the services provided by these organizations:

ii. The manner in which the frequency assignment should be made to these organizations, in light of the supreme Court judgment made in the 2G case in 2012 - to assign radio frequencies only through auction.

With respect to the DoT's reference dated 12th April 2022, the Authority issued a Consultation Paper on 'Data Communication Services between Aircraft and Ground Stations for services provided by organizations other than Airport Authority of India' dated 10th December 2022, for soliciting comments of stakeholders on suitable regulatory regime for data communication services between aircraft and ground stations provided by organizations other than the Airport Authority of India. An Open House Discussion (OHD) was conducted on 10th March 2023 through video conferencing.

While examining the inputs received from stakeholders on the Consultation Paper dated 10th December 2022, it was observed that specific inputs have not been received on some of the aspects related to service license for provision of data communication services between aircraft and ground stations, methodology for spectrum assignment, and spectrum charging mechanism, which will be necessary for a comprehensive analysis of the matter and formulating the recommendations. Accordingly, the Authority has decided to issue this supplementary consultation paper to seek input from stakeholders on such aspects.

In this regard, a Supplementary Consultation Paper on "Data Communication Services Between Aircraft and Ground Stations Provide by Organizations Other Than Airports Authority of India", seeking additional inputs from stakeholders has been placed on TRAI's website (www.trai.gov.in.).

2.9.1.8 Consultation Paper dated 18th August 2023 on "Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband Services (Wireless and Wireline)"

TRAI on 18th August 2023 issued Consultation Paper on "Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband (Wireless and Wireline) Services" for seeking the comments of the stakeholders.

This consultation paper proposes to review the benchmark of various QoS parameters of Basic, Cellular, Wireless Data and Broadband (Wireline) service. Further, to simplify regulatory framework for QoS, it is proposed to have single regulation dealing with QoS standards for all voice and data services irrespective of their access medium i.e., for both wireline and wireless services. Accordingly, present three regulations are proposed to be merged into single regulation.

The Consultation paper has been placed on TRAI's website (www. trai.gov.in).

2.9.1.9 Consultation Paper dated 29th August 2023 on "Review of Terms and Conditions of PMRTS and CMRTS Licenses"

Department of Telecommunications (DoT), through its reference dated 2nd June 2022, requested TRAI to provide recommendations on the terms and conditions for issue of fresh licenses for CMRTS and PMRTS Services especially with respect to technical conditions (viz, connectivity with PSTN, internet, use of digital technology, allocation of spectrum to PMRTS, use of network slicing under 5G etc.) and financial aspects etc. TRAI was also requested to give its views on any other issues considered relevant for CMRTS and PMRTS licenses. Along with the said reference, DoT also enclosed the representations received from the PMRTS Licensees, their Association and CMRTS Licensee. In this regard, TRAI, through its various communications requested DoT to provide information on the subject matter. In response, DoT provided its inputs to TRAI.

In this regard, a Consultation Paper on "Review of Terms and Conditions of PMRTS and CMRTS Licenses", seeking input from the stakeholders has been placed on TRAI's website.

A copy of the Consultation Paper is available on the TRAI website (www.trai.gov.in).

2.9.1.10 Consultation Paper dated 14th September 2023 on "Draft Registration of Consumer organisations (Amendment) Regulations, 2023"

TRAI on 14th September 2023 issued a consultation paper on "Registration of Consumer organizations (Amendment) Regulations, 2023". Presently, the Authority, under the principal regulations, are registering consumer organisations state-wise who can assist Authority by performing the roles mentioned in the regulations. The Authority felt a need to register national level consumer organisations, having presence in multiple states! UTs having capability and experience in campaigning and conducting theme-based events by developing awareness material can provide an interface between consumers and Authority. The proposed amendment would enable the Authority to register capable consumer organisations having wider reach to work in more than five states/UTs under national level registration. It simplifies the registration process for such consumer organisations.

A copy of the Consultation Paper is available on the TRAI website (www.trai.gov.in).

2.9.1.11 Consultation Paper dated 14th September 2023 on "Digital Inclusion in the Era of Emerging Technologies"

A consultation paper on the "Digital Inclusion in the Era of Emerging Technologies" was issued on 14th September 2023. The consultation paper aims to explore and address the challenges and opportunities presented by the rapid advancement of emerging technologies, with a focus on ensuring inclusivity for all segments of society and industries particularly

Micro Small and Medium Enterprises (MSMEs). In the consultation paper, TRAI has analysed various gaps in digital inclusion present in the country such as the mobile internet usage gap, rural urban internet penetration disparities, gender gaps in internet access, etc. as well as gaps identified from some global indices. Proactively prioritizing inclusion can create an ecosystem that benefits every individual, fostering a more equitable and accessible digital economy.

A copy of the Consultation Paper is available on the TRAI website (www.trai.gov.in).

2.9.1.12 Consultation Paper dated 22nd September 2023 on "Encouraging R&D in Telecom, Broadcasting, and IT (ICT) Sectors"

In September 2021, a work order was issued to M/s Ernst & Young LLP (EY) for preparing a "Study Paper on Promoting R&D in Telecom, Broadcasting and IT Sectors". In April 2023, EY submitted the Study Paper regarding the same. In addition, an online brainstorming session was conducted, and inputs were sought from academia and industry experts from IIT Madras, IIT Kanpur and IIT Hyderabad etc.

Consequently, Consultation Paper on "Encouraging R&D in Telecom, Broadcasting and IT (ICT) Sectors" was published on TRAI's website on 22nd September 2023. The purpose of this consultation paper is to develop a comprehensive ecosystem for enhancing R&D in ICT Sector of the country, wherein there are well-established processes for generating a pool of R&D scientists/ engineers, duly supported by the Government and Private Partners for development and innovation of ICT products and services for making India Atmanirbhar and promoting exports in the ICT Sector. The Consultation Paper analyzes the important issues which require intervention in the existing R&D ecosystem in India under the three focus elements: "Education & Training System", "Science System" and "Regulatory Framework". The third focus element "Regulatory Framework" has been divided into two parts, namely, "Policies and Programs" and "IPR Framework".

The Consultation Paper is available on TRAI's Website (www.trai.gov.in).

2.9.1.13 Consultation Paper dated 27th September 2023 on "Draft Telecommunication Mobile Number Portability (Ninth Amendment) Regulation, 2023"

Telecommunication Mobile Number Portability Regulations, 2009 (8 of 2009) issued by the Telecom Regulatory Authority of India laid down the regulatory framework for Mobile Number Portability (MNP) in the country. Till date eight amendments of the Telecommunication Mobile Number Portability Regulations, 2009 have been issued.

In the recent past, DoT, through its various communications to TRAI, made certain suggestions in respect of regulatory framework for Mobile Number Portability. Keeping in view of the suggestion of DoT, the Authority decided to issue draft amendment regulations for stakeholders' comments.

In this regard, Draft Telecommunication Mobile Number Portability (Ninth amendment) Regulations, 2023 were released on 27th September 2023 seeking comments of the stakeholders.

The Draft Regulations are available on TRAI's website (www.trai.gov.in). The consultation culminated with the notification of the Telecommunication Mobile Number Portability (Ninth amendment) Regulations, 2024 dated 14th March 2024.

2.9.1.14 Consultation Paper dated 27th September 2023 on "Open and De-licensed use of Unused or Limited Used Spectrum Bands for Demand Generation for Limited Period in Tera Hertz Range"

Department of Telecommunications (DoT), through a reference dated 8th December 2022, requested TRAI to provide its recommendations under Section 11(1)(a) of TRAI Act, 1997 (as amended) on Consultation Paper on Open and De-licensed use of Unused or Limited Used Spectrum Bands for Demand Generation for Limited Period in Tera Hertz Range.

In this regard, a Consultation Paper on "Open and De-licensed use of Unused or Limited Used Spectrum Bands for Demand Generation for Limited Period in Tera Hertz Range" was released on 27th September 2023 seeking comments from stakeholders.

The Consultation Paper is available on TRAI's website (www.trai.gov.in).

2.9.1.15 Consultation Paper dated 27th September 2023 on "Assignment of Spectrum in E&V Bands, and Spectrum for Microwave Access (MWA) & Microwave Backbone (MWB)"

Department of Telecommunications (DoT), through its letter dated 12th August 2022, requested TRAI to provide recommendations under the terms of clause 11(1)(a) of TRAI Act, 1997 (as amended) on the following:

a. applicable reserve price, band plan, block size, quantum of spectrum, duration of assignment, scope of services! usages, spectrum cap, payment terms, eligibility condition, methodology of auction and other associated conditions for auction of E band spectrum for establishment of terrestrial and/ or satellite-based telecom networks;

b. applicable reserve price, band plan, block size, quantum of spectrum, duration of assignment, scope of services, usages, spectrum cap, payment terms, eligibility condition, methodology of auction and other associated conditions for auction of V band spectrum for establishment of terrestrial and/ or satellite-based telecom networks;

c. quantum of spectrum to be earmarked for non-commercial/captive/isolated use in E and V bands; and methodology of assignment, where auction is not feasible and pricing for the same;

d. feasibility, including technical parameters, for allowing low power, indoor, consumer device-to-consumer device usage on license-exempt basis, in parallel to use of the auction acquired spectrum by telecom service providers for establishment of terrestrial and! or satellite-based telecom network, in part or full V band;

e. a fresh recommendation on allocation methodology, quantum and pricing of MWA and MWB RF carriers in 6/ 7/13/15/ 18/ 21 GHz bands, for establishment of terrestrial and/ or satellite-based telecom networks as well as for non-commercial/captive/ isolated use;

f. provide any other recommendations deemed fit for the purpose mentioned under (a) to (e) above 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, a consultation paper on "Assignment of Spectrum in E&V Bands, and Spectrum for Microwave Access (MWA) & Microwave Backbone (MWB) was released on 27th September 2023 seeking inputs from stakeholders on specific issues.

The Consultation Paper is available on TRAI's website (www.trai.gov.in).

2.9.1.16 Consultation Paper dated 27th September 2023 on "Regulation on Rating Framework for Digital Connectivity in Buildings or Areas"

In accordance with the recommendation dated 20th February 2023 on "Rating of Buildings or Areas for Digital Connectivity", TRAI on 27th September 2023 released Consultation Paper on "Regulation on Rating Framework for Digital Connectivity in Buildings or Areas" seeking comments and counter comments on draft regulation for implementation of rating framework for buildings and areas for digital connectivity to improve QoS inside buildings and for seamless consumer experience.

The Consultation paper has been placed on TRAI's website (www. trai.gov.in).

2.9.1.17 Consultation Paper dated 29th September 2023 on "Digital Transformation through 5G Ecosystem"

India's launch of 5G services has set the stage for rapid growth in the country's digital economy. Unlocking the full potential of 5G will require a concerted effort to develop and deploy innovative use cases that leverage emerging technologies like IOT, AI, AR/VR/MR, and the Metaverse; to support these efforts, a forward-looking policy and regulatory framework is needed to address the challenges involved and enable the faster adoption and effective utilization of these new technologies within the 5G ecosystem, ultimately driving holistic and sustainable economic development fuelled by data-driven innovation across India's fast-growing digital landscape.

In order to identify the policy challenges and suggest the right policy framework for faster adoption and effective utilization of new technologies for a holistic and sustainable development of the economy driven by 5G ecosystem, TRAI issued a Consultation paper on "Digital Transformation through 5G Ecosystem" on 29th September 2023.

The Consultation paper has been placed on TRAI's website (www. trai.gov.in).

2.9.1.18 Consultation Paper dated 7th February 2024 on "Assignment of Additional Spectrum to Indian Railways for its Safety and Security Applications"

Department of Telecommunications (DoT) through a letter dated 26th July 2023 informed TRAI that Indian Railways has requested for an additional 5 MHz of paired spectrum in the 700 MHz band to be allocated for enhancing its safety and security systems. Through the said letter, DoT requested TRAI to examine and provide its recommendations on-

(a) Assignment of 5 MHz of additional spectrum to Indian Railways.

(b) TRAI may also consider the possibility of sharing of the spectrum between IR/ NCRTC/ RRTS/ Metro and other similar networks to ensure the efficient utilization of spectrum.

(c) Considering the different spectrum valuation methodology as recommended by TRAI for the 5 MHz of paired spectrum in the 700 MHz band, assigned to Indian Railways and for NCRTC, TRAI may examine and if found necessary recommend uniform spectrum valuation and charging methodology considering similar usage in the same spectrum band.

In this regard, a Consultation Paper on "Assignment of Additional Spectrum to Indian

Railways for its Safety and Security Applications" was released on 7th February 2024 seeking comments from stakeholders on the issues raised in the Consultation Paper.

The Consultation Paper is available on TRAI's website (www.trai.gov.in).

2.9.1.19 Consultation Paper dated 23rd February 2024 on "Connectivity to Access Service VNOs From More Than one NSO"

Department of Telecommunications (DoT), through a reference dated 7th July 2023, requested TRAI to provide its recommendations under Section 11(1)(a) of TRAI Act, 1997 (as amended) on the following issues in respect of connectivity to access service VNOs from more than one NSO:

(i) Appropriate number of network service operators (NSOs) with whom virtual network operators (VNOs) having Access Service authorization and providing wireline services can be permitted to take connectivity in a licensed service area (LSA); and

(ii) VNOs having Access Service authorization and providing both wireless and wireline services can be permitted to take connectivity from one NSO for wireless services and other NSO for wireline services in an LSA.

In this regard, a Consultation Paper on "Connectivity to Access Service VNOs From More Than one NSO" was released on 23rd February 2024 seeking comments from stakeholders on the issues raised in the Consultation Paper.

The Consultation Paper is available on TRAI's website (www.trai.gov.in).

2.9.2 BROADCASTING & CABLE TV SECTOR

S. No.	List of Consultation Papers
1	Consultation Paper dated 17th April 2023 on "Issues Related to Low Power Small Range FM Radio Broadcasting".
2	Consultation Paper dated 8th August 2023 on "Review of Regulatory Framework for Broadcasting and Cable Services".
3	Pre-Consultation Paper dated 21st September 2023 on "Inputs for Formulation of National Broadcasting Policy".

2.9.2.1 Consultation Paper dated 17th April 2023 on "Issues Related to Low Power Small Range FM Radio Broadcasting"

Ministry of Information and Broadcasting (MIB) vide its reference dated 7th March 2022 sought recommendations of the Authority, under section 11(1)(a)(i) of the TRAI Act, 1997 on the need and timing for introduction of new service provider for drive-in theatres application.

The low-power short range FM Radio broadcasting is an effective method of sound broadcasting for services that are intended for limited locations and reception areas. Some of the examples for such services include drive-in theatres, hospital radio services, amusement parks, business premises, closed communities such as residential complexes, small habitations, local events such as air shows and sports events, etc.

Accordingly, TRAI on 17th April 2023, released Consultation paper on "Issues Related to Low Power Small Range FM Radio Broadcasting" sought views of the stakeholders on the issues related to Low Power Small Range FM Radio Broadcasting. The Consultation Paper is available on TRAI's website (www.trai.gov.in).

2.9.2.2 Consultation Paper dated 8th August 2023 on "Review of Regulatory Framework for Broadcasting and Cable Services"

TRAI on 8th August 2023, issued a consultation paper on "Review of Regulatory Framework for Broadcasting and Cable services" for seeking comments of the stakeholders on issues pertaining to Tariff, Interconnection and Quality of Service of Broadcasting and Cable services. This paper primarily discussed the following issues:

(a) Issues related to Tariff for Broadcasting and Cable Services

a. Ceiling on Network Capacity Fee (NCF)

b. Network Capacity Fee for multi-TV homes

c. Ceiling of 15% on discount on sum of MRP of a-la-carte channels for fixing MRP of bouquets by DPOs

d. Number of SD channels equivalent to One HD channel

e. Mandatory FTA News Channels in all packs formed by DPOs

f. Level playing field with DD Free Dish

(b) Issues related to Interconnection for Broadcasting and Cable Service

a. Amendment to Reference Interconnection Offer

b. Listing of channels in Electronic Programme Guide (EPG)- Language genre problem in EPG

c. Revenue Share between LCO and MSO

d. Carriage Fee

e. Removal of a channel from the platform of a DPO after expiry of existing Interconnection agreement

(c) Issues related to Standards of Quality of Service (QoS) and Consumer Protection Regulations

a. Review of all prescribed charges in QoS

b. Display of prices of channels in EPG

c. Issues related to pre-paid billing cycle and review of periodicity of monthly subscription reports

d. Regulation of Platform Service Channels

e. Review of mandatory provisions of Toll-Free Number, Consumer Corner, Subscriber Corner, Establishment of Website and Manual of Practice etc.

The Consultation Paper is available on TRAI's website (www.trai.gov.in).

2.9.2.3 Pre-Consultation Paper dated 21st September 2023 on "Inputs for Formulation of National Broadcasting Policy"

The Ministry of Information and Broadcasting (MIB) vide its letter dated 13th July 2023 requested TRAI to give its considered inputs under Section 11 of the TRAI Act, 1997 for formulation of the National Broadcasting Policy. In its letter, MIB mentioned that the Broadcast Policy needs to identify the vision of a functional, vibrant and resilient broadcasting sector which can project India's diverse culture and rich heritage and help India's transition to a digital and empowered economy. In the light of the potentialities and intersection with national goals, a National Broadcasting Policy stipulating the vision, mission, strategies and the action points could set the tone for a planned development and growth of the Broadcasting sector in the country in the era of new and emerging technologies.

With this background, TRAI on 21st September 2023, released a Pre-Consultation Paper on Inputs for Formulation of "National Broadcasting Policy" seeking comments from the stakeholders to elicit the issues which are required to be considered for formulation of "National Broadcasting Policy". The Consultation Paper is available on TRAI's website (www.trai.gov.in).

REVIEW OF WORKING AND OPERATION OF THE TELECOM REGULATORY AUTHORITY OF INDIA IN TELECOM SECTOR

2.10 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 both 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:-

2.10.1 Rural Telephone Network

As on 31st March 2024, the rural wireline subscriber base stood at 2.88 (28,75,867) million as compared to 2.25 (22,47,975) million at the end of 31st March 2023, registering an increase of 27.93% over the year.

2.10.2 Expansion of Telephone Network

The total wireline subscriber base as on 31st March 2024 stood at 33.79 (3,37,91,014) million as compared to 28.41 (2,84,09,776) million subscribers on 31st March 2023, registering an increase of 18.94% during the year 2023-24. Out of 33.79 million wireline subscribers, 30.92 million are urban subscribers and 2.88 million are rural subscribers.

2.10.3 Entry of Private Sector in both basic and value-added service

The list of service providers in various service areas is given in the **Table-20**, **Table-21** and **Table-22** below:

Table-20: Wireless Service Providers as on 31st March 2024

S. No	Service Providers	Licensed Service Area
1	Bharti Airtel Group	All India
2	BSNL	All India (Except Delhi & Mumbai)
3	MTNL	Delhi and Mumbai
4	Reliance Communications Ltd.	All India (Except Assam & North East)
5	Reliance Jio Infocomm Ltd.	All India
6	Vodafone Idea Ltd.	All India

Source: DoT Website

Table-21: UL Virtual Network Operators Licensees with access service authorization providing wireless services as on 31st March 2024

S. No	Service Providers	Licensed Service Area
1	AdPAY Mobile Payment India Pvt. Ltd.	Tamil Nadu
2	Surftelecom Pvt Ltd	Tamil Nadu

Source: As reported by Service Provider

Table-22: Number of UL/ UASL/UL(VNO) licensees as on 30th June 2023

S. No.	Type of Licence	Total No. of Licensees as on 30th June 2023*	No. of Licensees added during FY 2023-24 (Up to 30th June 2023)*
1	UL	43	01
2	UASL	06	0
3	UL(VNO)	199	04

** Data obtained from DoT website*

2.10.4 Technical Compatibility and effective interconnection with service providers

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

The synopsis of the above amendments to the "Telecommunication Interconnection Regulations, 2018", is as follows:

i) Within a service area, the location of POI, for calls between PSTN and PSTN or between PSTN and NLD network, shall be at such place as may be mutually agreed between the interconnection provider and the interconnection seeker.

ii) In case the interconnection provider and the interconnection seeker fail to agree, the location of POI, for calls between PSTN and PSTN, or between PSTN and NLD network, shall be at LDCC. In such a case, the carriage charge for carriage of calls from LDCC to SDCC and vice versa, as applicable shall be paid by the interconnection seeker to the interconnection provider.

iii) The existing POIs at the SDCC level, for calls between PSTN and PSTN, or between PSTN and NLD network, shall remain in operation for a period of at least five years or till such time the interconnected service providers mutually decide to close such POIs, whichever is earlier.

iv) The existing POI at the SDCC level, for calls between PSTN and PSTN, or between PSTN and NLD network, can be closed if the services of either of the interconnected service providers are discontinued in that SDCA.

2.10.5 Telecommunication Technology

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

i. Empanelment of Application Service Provider for providing ICT based solutions to TRAI:

IT Division has empanelled 10 Application Service Providers for providing various ICT based solutions to TRAI thereby catering to the needs of various divisions of TRAI.

ii. Redevelopment of TRAI Website:

To revamp the existing TRAI website with latest security features, dynamic Content Management System (CMS), social media integration and further improving the accessibility features from different platforms and to ensure compliance to latest security guidelines, the work order has been awarded to one of the TRAI empanelled application service providers.

iii. Comprehensive IT Ecosystem for Data Reporting, Analytics and process automation:

NICSI empanelled agency has been engaged for Stage-I i.e. DPR (Detailed Project Report) preparation. The DPR will cover As-Is-To-Be processes, roadmap for integration of various existing/new processes/portals/data, analytics, security, framework, protocol for data submission by stakeholders, etc., which will form the basis for development of the ecosystem.

iv. SPARROW:

With effect from 1st June 2023 TRAI has implemented an IT application for automating Annual Performance Appraisal activities, an application named as SPARROW (Smart Performance Appraisal Report Recording Online Window) developed by NIC. A total of 220 users accounts have been created on SPARROW for the year 2023-24.

v. Reporting Automation:

Data reporting to TRAI by various stakeholders in compliance of Regulation/ Directions is a regular activity. A system to collect data online from stakeholders is in place. The system has been updated to ease data submission by including new reports, UI changes and security enhancements. Various reports of NSL/BB&PA divisions have been updated and new reports for CA division has been developed.

vi. Cloud Management and Maintenance of Apps & Portals:

TRAI has implemented various portals and apps. The portal and backend services are hosted on Cloud. Maintenance of all the portals/Apps are being done covering functionality updations, system patches, etc. Security audits through CERT-IN vendors are being carried out regularly. The necessary actions have been taken to secure them from cyber attack on the basis of alerts received from NIC, CERT-IN and other organizations.

vii. Infrastructure Upgradation:

a. To strengthen the infrastructure, TRAI has implemented Endpoint Security Solution for protection against threats, including viruses, worms, spyware and other malware, etc. It combines security, performance, management, and compliance capabilities, making it easier for the administrator to manage entire endpoints in TRAI.

b. IT Division has procured 104 desktops for various divisions of TRAI, for efficient working.

c. IT team along with consultant has finalized IT infrastructure requirement for new building covering endpoint network (wired/wireless), security, storage, redundance etc. This will enable TRAI to create state of the art IT infrastructure which will be future ready.

d. For smooth functioning of all the services in TRAI, the timely monitoring of various licenses i.e. Tableau, Adobe Acrobat, MS Office 365, SSL Certificate etc. are being carried out and upon expiry of the same, the necessary renewal is being carried out.

2.10.6 Implementation of National Telecom Policy

2.10.6.1 The National Digital Communications Policy (NDCP)-2018 seeks unlocking of the transformative power of digital communications networks for achieving the goal of digital empowerment. NDCP-2018 motivates towards harnessing the power of emerging digital technologies, including 5G, AI, Internet of Things (loT), Cloud and BD to catalyse the fourth industrial revolution. In order to create a roadmap for AI, emerging technology and its use in the communication sector, vide letter dated 6th June 2019, Department of Telecommunication (DoT) sought recommendation of TRAI on the provision no. 2.2(g) of NDCP-2018 i. e. "Leveraging Artificial/intelligence and Big Data in a synchronised and effective manner to enhance the overall quality of service, spectrum management, network security and reliability". TRAI issued Consultation Paper (CP) on "Leveraging Artificial Intelligence and Big Data in telecommunication sector" on 5th August 2022. In the Consultation Paper (CP), wide ranging issues covering all sectors were included.

Based on the comments of the stakeholders, discussion during the Open House Discussion and analysis thereof, the Authority gave its recommendations dated 20th July 2023 on "Leveraging Artificial Intelligence and Big Data in Telecommunication Sector". In view of the impact of AI in all sectors, the framework which has to be suggested for telecom cannot be treated in isolation and hence a common framework covering all the sectors has been suggested in the recommendations. Details of the recommendations are covered in Part II of the report.

2.10.6.2 National Digital Communications Policy 2018 (NDCP-2018) envisages to maximise India's contributions to Global Value Chains, by focusing on domestic production, increasing exports and reducing the import burden in respect of networking and telecommunications equipment, called as NATE in short. Under *Digital India* program, electronics manufacturing is one of the key thrust areas. Further, National Policy on Electronics, 2019 (NPE) also envisages to strengthen India's linkages with the global trade, integration with global value chains, and build facilitative programs and incentive framework to boosts exports based on Indian Electronics System Design and Manufacturing (ESDM).

In accordance with the objectives of NDCP-2018 and basis reference received from Department of Telecommunications (DoT) on certain aspects of manufacturing of NATE, Telecom Regulatory Authority of India (TRAI) visited the topic in totality and issued the recommendations dated 22nd September 2023 on "Promoting Networking and Telecom Equipment Manufacturing (NATEM) in India". The objective of these recommendations is to move forward from the concept of 'increasing domestic production' and to focus on 'local value addition in global value chains'. Some of the focus areas covered in the recommendations include:

(i) facilitate local value addition in participation with cross country value chains;

(ii) due emphasis on "Telecom software" as a separate product line in accordance with contemporary softwarization of network elements in New Generation Networks;

(iii) facilitating exports from India;

(iv) nurturing entrepreneurship by promoting Micro, Small and Medium Enterprises (MSMEs) and Start-ups; and

(v) promote a robust component ecosystem in India.

Details of the recommendations are covered in Part II of the report.

2.10.7 Quality of Service (QoS)

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

a) The Standards of Quality of Service of Basic Telephone Service (wireline) and Cellular Mobile Telephone Service Regulations, 2009.

b) The Quality of Service of Broadband Service Regulations, 2006.

c) The Standards of Quality of Service for Wireless Data Services Regulations, 2012.

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

For ensuring compliance with the Quality of Service benchmarks and to protect the interests of the consumers, TRAI had prescribed the system of imposing financial disincentives for non-compliance with the prescribed benchmarks, delay in submission of compliance reports and false reporting. Based on compliance reports, wherever non-compliance with the benchmarks is observed, the explanation of the service provider is called for and after 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.

For delay in submission of compliance report, financial disincentives of ₹ 5,000/- per day and for false reporting, financial disincentive is ₹ 10,00,000/- per parameter is prescribed for cellular, Basic (Wireline) and Broadband (Wireline) services. The details of financial disincentives for non-compliance are as given below:

Cellular Services

i. For parameters other than Network_QSD (90,90) and Network_QTD (97,90):

a) Not exceeding Rupees one lakh per parameter for first non-compliance with the benchmark in a quarter,

b) 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;

c) 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.

ii. For parameters other than Network_QSD (90,90) and Network_QTD (97,90):

a. Network_QSD (90,90)

Value of Network_QSD (90,90) in quarterly report	Amount of Financial Disincentives in rupees
More than 2% but not exceeding 4%	not exceeding One lakh
More than 4% but not exceeding 6%	not exceeding Two lakh
More than 6% but not exceeding 8%	not exceeding Three lakh
More than 8% but not exceeding 10%	not exceeding Four lakh
More than 10%	not exceeding Five lakh

b. Network_QTD (97,90)

Value of Network_QTD (97,90) in quarterly report	Amount of Financial Disincentives in rupees
More than 3% but not exceeding 5%	not exceeding One lakh
More than 5% but not exceeding 7%	not exceeding Two lakh
More than 7% but not exceeding 9%	not exceeding Three lakh
More than 9% but not exceeding 11%	not exceeding Four lakh
More than 11%	not exceeding Five lakh

c. Non-compliance with the benchmark of the same parameter consecutively in two or more subsequent quarters, an amount not exceeding one and half times of financial disincentive payable, for the consecutive contravention and not exceeding twice the financial disincentive liable to be paid as specified in the table above for each consecutive contravention occurring thereafter.

d. The total amount payable as financial disincentives for parameter Network_QSD (90,90) and Network_QTD (97,90) shall not exceed rupees ten lakh, in a quarter.

Basic Services (Wireline)

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

Broadband Wireline Services

For non-compliance with the benchmarks, for the first instance, the financial disincentive is ₹ 50,000/- per parameter and for second or subsequent such contravention, the financial disincentive is ₹ 1,00,000/- per parameter for each contravention.

The total financial disincentive imposed by TRAI during the financial year 2023-24 is ₹ 2,69,80,000/-. The total amount of financial disincentive received during the financial year 2023-24 on account of QoS regulations violations is ₹ 2,24,85,000/-.

In addition to the above, the amount overcharged by TSPs and not refunded by them during the stipulated time period of 60 days, as per metering and billing regulation, financial disincentive is imposed. The total financial disincentive imposed and received by TRAI during the Financial Year 2023-24 is ₹ 2,30,244/-.

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 to address 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.

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 or through its officers on 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.

Unsolicited Commercial Communications (UCC)

To curb the Unsolicited Commercial Communications (UCC), Telecom Regulatory Authority of India (TRAI) notified Telecom Commercial Communication Customers Preference Regulation, 2018 (TCCCPR-2018) to deal with unsolicited commercial communication (UCC). The TCCCPR-2018 regulations were followed by a number of directions on implementation of provisions of the regulations.

TCCCPR-2018 provides for registration of Principal Entities (PEs), an individual, business or legal entity that sends commercial communication with the Access Providers. The entities who facilitate PEs to connect with Access Providers and may execute functionalities as provided under the regulations are called Registered Telemarketers (RTMs). PEs can send their commercial communications by engaging Registered Telemarketers (RTM) or directly through the ecosystem developed and established by the Access Providers for the purpose. PEs and RTMs can get registered with any of the Access Providers and can have connectivity with any of the Access Providers to send commercial communications.

PEs are required to get content templates registered with the Access Providers. Any commercial communication coming via RTM route is subjected to scrubbing against the content template registered by the system at Access Provider end and, if it fails, then it is not allowed to go forward.

To avoid the inconvenience caused by UCC, a telecom subscriber can opt to block all commercial communications or can selectively block commercial communications as per preference categories. As per these regulations, every Access Provider shall ensure that no commercial communication is made to any Recipient, except as per the preferences or digitally registered consents registered in accordance with these regulations.

TCCCPR-2018 was the first of a kind in the world that mandated the use of a RegTech blockchain/distributed ledgers in addressing the Unsolicited Commercial Communication (UCC) problem. With the onboarding of processes on DLT platform, now preference registration is near real-time. Time required for all the activities such as registration of Principal Entities, Header, Content Template, Complaint Resolution, etc. has significantly reduced.

In case a subscriber receives UCC, then he/ she can lodge a complaint by sending SMS or making a voice call at 1909 or through TRAI/ Access Provider's App.

As per TCCCPR-2018 regulations, if Access Provider fails to curb UCC, Financial Disincentives for not controlling the Unsolicited Commercial Communications (UCC) from RTMs by the access provider in each License Service Area for one calendar month is as given below:

	Value of "Counts of UCC for RTMs for one calendar month"	Amount of 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

The total amount payable as financial disincentives under the regulation shall not exceed rupees fifty lakh per calendar month.

A sender of commercial communication, not registered for the purpose of telemarketing with the Access Provider is Unregistered Telemarketers (UTMs). In the case of UTMs, Access Providers are required to act against UTMs by giving a warning, putting them under Usage Cap or disconnecting services for repeat violations. Usage Cap means a limit put on a telephone number for making a maximum of 20 outgoing voice calls per day and a maximum of 20 outgoing messages per day. Following provisions are made in the Regulations for action against UTMs-

(a) On the first instance of violation- Warning shall be issued and during investigation temporary usage cap will be imposed.

(b) On second instance of violation- Usage Cap for a period of six months.

(c) On third and subsequent instances of violations- All Telecom resources of the sender shall be disconnected for a period up to two years and Originating Access Provider (OAP) shall put the sender under blacklist category, during which period no new telecom resource shall be provided by any other service provider.

2.10.8 Universal Service Obligation

The Authority has been working towards enhancement of telecom connectivity/ infrastructure in the remote and far-flung area of the country. In this regard, TRAI has issued recommendations on "Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh" on 24th April 2023. It has been recommended that three uncovered villages of Ladakh are to be included using USOF under the 20% expansion provision of ongoing 'Saturation of 4G mobile services' project. The CAPEX and OPEX expenditure for upgrading the existing non-4G based cellular mobile infrastructure at 19 villages of Ladakh is also to be incurred using USOF under the provisions of 20% additional scope that exists in USOF sponsored "Saturation Of 4G Mobile Services in Uncovered Villages Across the Country" to upgrade this cellular infrastructure to 4G based service. Further, TRAI has also issued recommendations on "Improving Telecom Infrastructure in Northeastern State of India" on 22nd September 2023. In its recommendations, it has been recommended that DoT/USOF should provide CAPEX subsidy on viability gap funds (VGF) model for OFC connectivity to all BHQ, which have no OFC connectivity. The Authority has also issued recommendations dated 29th September 2023 on 'Improving Backhaul Telecom Infrastructure in far-flung areas of Himachal Pradesh' in which, a block headquarter each in Chamba and Lahaul & Spiti districts respectively have been recommended to be connected over OFC using USOF.

2.11. Broadcasting Sector

2.11.1 Letter dated 24th April 2023 issued to MIB to examine the cases of non-compliance of TRAI's regulation/orders etc.

TRAI issued a letter dated 24th April 2023 to MIB to examine the cases of non-compliance of TRAI's regulation/order etc by the following two MSOs and take appropriate action including cancellation of their registration:

(i) Alwar Telelink Pvt Ltd, Alwar

(ii) Gentle Entertainment Pvt Ltd, Raipur

2.11.2 Letter dated 15th June 2023 issued to MIB to examine the cases of non-compliance of TRAI's regulation/orders etc.

TRAI issued a letter dated 15th June 2023 to MIB to examine the cases of non-compliance of TRAI's regulation/order etc by the following three MSOs and take appropriate action including cancellation of their registration:

(i) Good Media News Pvt Ltd, Shimla

(ii) GTPL Chelikam Network (India) Pvt Ltd, Tirupati

(iii) City Television Network, Katni

2.11.3 Letter dated 8th August 2023 issued to MIB to examine the cases of non-compliance of TRAI's regulation/orders etc.

TRAI issued a letter dated 8th August 2023 to MIB to examine the cases of non-compliance of TRAI's regulation/order etc by the following four MSOs and take appropriate action including cancellation of their registration:

(i) Digital Entertainment Pvt Ltd, Srinagar (J&K)

(ii) Manakula Vinyagar Digital Network, Pondicherry

(iii) Aadhar Digital Vision Pvt Ltd, Chennai

(iv) Sristi, Tripura

2.11.4 Letter dated 21st September 2023 issued to MIB to examine the cases of non-compliance of TRAI's regulation/orders etc.

TRAI issued a letter dated 21st September 2023 to MIB to examine the cases of non-compliance of TRAI's regulation/order etc by the following two MSOs and take appropriate action including cancellation of their registration:

(i) Channel Nine Net, Dharwad

(ii) Multicity Digital Consortium Pvt Ltd, Coimbatore

2.11.5 Letter dated 23rd November 2023 issued to all the MSOs to comply with terms of MSO's registration

TRAI issued a letter to all the MSOs on 23rd November 2023 to comply with terms of MSO's registration, MIB guidelines dated 29th December 2021 and provisions of regulation 15(1) of the Interconnection Regulation 2017 related to mandatory DAS audits every calendar year, independently/separately for all their JV/subsidiary MSOs, if any, having separate MSO registration issued by MIB.

2.11.6 Letter dated 12th March 2024 issued to MIB to examine the cases of non-compliance of TRAI's regulation/orders etc.

TRAI issued a letter dated 12th March 2024 to MIB to examine the cases of non-compliance of TRAI's regulation/order etc by the following two MSOs and take appropriate action including cancellation of their registration:

(i) DVR City Digital, Kurnool

(ii) Vaadi Television, Srinagar (J&K)

2.11.7 Show Cause notices (SCN) to Service Providers

➢ TRAI issued Show Cause Notices dated 24th April 2023 to the following two MSOs for violation of provisions of regulation 18 of the Interconnection Regulation related to placement of TV channel at unique LCN:

   (a) M/s V K Digital Network Pvt Ltd

   (b) M/s Thamizhaga Cable Communication Pvt Ltd (TCCL)

- TRAI issued Show Cause Notices dated 27th April 2023 to the following four MSOs for non-compliance of provisions of regulation 15(1) of the Interconnection Regulation related to mandatory DAS audits for the years 2020, 2021 & 2022:

  (a) Sri Sai Communications, Siddipet, Medak, Telangana

  (b) AJK T.V., Nellithope, Pondicherry

  (c) Sahoo Cable TV, Dhenkanal (Odisha)

  (d) Apna Cable Network Pvt Ltd, Bhilai, Chhattisgarh

- TRAI issued Show Cause Notices dated 27th April 2023 to the following six MSOs for non-compliance of provisions of regulation 15(1) of the Interconnection Regulation related to mandatory DAS audits for the year 2021 & 2022:

  (a) ACN Digital Pvt Ltd, A. B. Road, Indore (M.P.)

  (b) Subhodaya Digital Entertainment Pvt Ltd, Hyderabad

  (c) Aurangabad Satellite Cable Service Centre, Murshidabad, W.B.

  (d) Mahathi Warangal Communications & Cable TV Network, Warangal (A.P.)

  (e) Garuda Digital Netcom Pvt Ltd, Dharmapuri, Tamil Nadu

  (f) Skyvision Master Channel, Yanam, Andhra Pradesh

- TRAI issued Show Cause Notices dated 27th April 2023 to the following 27 MSOs for non-compliance of provisions of regulation 15(1) of the Interconnection Regulation related to mandatory DAS audits for the year 2022:

  (a) Fastway Transmissions Pvt. Ltd., Ludhiana, Punjab

  (b) Thamizhaga Cable TV Communication Pvt. Ltd., Chennai

  (c) Indusind Media & Communication Limited, Andheri, Mumbai

  (d) Asianet Digital Network Pvt Ltd, Kazahakuttom, Thiruvananthpuram

  (e) Fastway Media Cable Network Pvt. Ltd, Janakpuri, New Delhi

  (f) Bhima Riddhi Infotainment Pvt. Ltd, Kolhapur, Maharashtra

  (g) Cable Combine Communication Pvt.Ltd., Siliguri, West Bengal

  (h) Hathway Sukhamrit Cable & Datacom Pvt Ltd, Santacruz (W), Mumbai

  (i) JAK Communication Private Limited, Anna Nagar East, Chennai

  (j) Akshaya Diginet Cable Vision Pvt. Ltd., Mugappair East, Chennai

  (k) Jagsumi Perspectives Private Limited, Janakpuri, New Delhi

  (l) Meghbela Cable & Broadband Services Pvt Ltd, B.T. Road, Kolkata

  (m) Grand Vision, Raipur, Chhattisgarh

(n) Bhoomika Digital Cable Services Pvt. Ltd., Kaloor, Kochi, Kerala

(o) Multi Star Digital LLP, Tanjavur, Tamil Nadu

(p) Eastern Media Ltd., Rasulgarh, Bhuvneshwar

(q) Arohon Cable TV Network Limited, 24 Paragana, West Bengal

(r) Satlinks, Shoranur, Palakkad, Kerala

(s) CCN Digital Private Limited, Krishna Nagar, Delhi

(t) Shimla Satellite Cable Pvt. Ltd., Kalini, Shimla

(u) Machillipatnam Communication Pvt Ltd, Machillipatnam, A.P

(v) Malanad Communication Pvt. Ltd., Wayanad, Kerala

(w) Nova Digital & Broadband Pvt. Ltd., Krishna Nagar, Mathura, U.P.

(x) Kozhikode Cable Communication Ltd, Chalappuram, Calicut (Kerala)

(y) Blue Sky Network, Dehradun, Uttarakhand

(z) Information Service Television Network, BT Road, Imphal, Manipur

(aa) Reachnet Cable Services Pvt. Ltd, AJC Bose Road, Kolkata

➢ TRAI issued Show Cause Notices dated 22nd June 2023 to the following 20 MSOs for non-compliance of provisions of regulation 15(1) of the Interconnection Regulation related to mandatory DAS audits for the years 2020, 2021 & 2022:

(a) T.A. Digital Cable Network, Hyderabad

(b) Paavani Digital Communications, Jagtial, Telangana

(c) Chelikam Networks (India) Pvt. Ltd., Tirupati

(d) Krishna Teja Digital Entertainment Pvt Ltd, Tirupati

(e) Kollam Internet Cable Distribution Pvt Ltd, Trivandrum

(f) Hathway Rajesh Multichannel Pvt Ltd, Mumbai

(g) Nandyal Digital TV Communications, Nandyal

(h) Shekhawati Cable Networks Pvt. Ltd., Churu

(i) Pearl Mittas Network, Chittoor

(j) Krishna Teja Digital Cable Network, Chittoor

(k) MK Media Services, Bijapur

(l) Sikkim Digital Network, Gangtok

(m) Ram Net Com, Kurnool

(n) Sri Maruthi Digital Network, Khammam

(o) Senthil Cable Network, Tanjavur

(p) Vaadi Television, Srinagar (J&K)

(q) DVR Siti Digital, Kurnool

(r) Cablecast New Media Pvt. Ltd., Chennai

(s) Yes India Digital Network Pvt. Ltd., Ananthpuram

(t) Novabase Digital Entertainment Pvt. Ltd., Delhi

- TRAI issued Show Cause Notices dated 22nd June 2023 to the following six MSOs for non-compliance of provisions of regulation 15(1) of the Interconnection Regulation related to mandatory DAS audits for the years 2021 & 2022:

(a) Divya Digital Network Pvt. Ltd., Vijayawada

(b) Sri Sai Digital Communications, Nellore

(c) Home Television Network Pvt. Ltd., Jaipur

(d) Palamoor Digital Media Pvt. Ltd., Ghanpur

(e) ABS Digital Cable Pvt. Ltd., Andheri, Mumbai

(f) Jai SD Networks, Coimbatore

- TRAI issued Show Cause Notices dated 22nd June 2023 to the following 17 MSOs for non-compliance of provisions of regulation 15(1) of the Interconnection Regulation related to mandatory DAS audits for the year 2022:

(a) Yes Digital Solution LLP, Mallapuram

(b) Sree Cable TV Network, Kurnool

(c) Uttaranchal Cable Network, Dehradun

(d) Yuvaraj Cable, West Godavari

(e) Navya Cable Network Pvt. Ltd., Chirala, A.P.

(f) Broadways, Kangra, Himachal Pradesh

(g) Brambhani Traders, Medinipur, West Bengal

(h) Guild Digital Network Pvt. Ltd., Madurai

(i) Digimedia Cable Networks LLP, Trivandrum

(j) TTV Cable Network, Angul

(k) Digital Cable TV Network, Balasore

(l) Aristo Telemedia Pvt. Ltd., Chennai

(m) Lucky Cable Network, Daman

(n) Sahoo Cable Network, Jagatsinghpur

(o) V.B. Digital Distribution Cable Network, Lucknow

(p) Rajasthan Infotech Media Services Pvt. Ltd., Jaipur

(q) Sattyam Tori Pvt Ltd, Murshidabad

- TRAI issued Show Cause Notice dated 4th September 2023 to M/s Xestion Advisor Pvt Ltd, the empanelled auditor of TRAI to carry out audit of Digital Addressable System, for non-compliance of the terms and conditions of the EoI for empanelment, terms of offer letter of empanelment and provisions of DAS Audit Manual 2019.

2.11.8 Orders issued to service providers for contravention of provisions of the Interconnection Regulation 2017, as amended, related to mandatory annual audit of their Digital Addressable Systems

- TRAI issued orders of financial disincentive dated 5th April 2023 to the following two multi system operators (MSOs) for non-compliance of provisions of regulation 15(1) of the Interconnection Regulation 2017, as amended, related to mandatory annual audit of their Digital Addressable Systems for the calendar years 2020, 2021 & 2022:

(a) M/s Manakula Vinayagar Digital Network, Pondicherry

(b) M/s Aadhar Digital Vision Pvt Ltd, Chennai

- TRAI issued orders of financial disincentive dated 12th May 2023 to the following three multi system operators (MSOs) for non-compliance of provisions of regulation 15(1) of the Interconnection Regulation 2017, as amended, related to mandatory annual audit of their Digital Addressable Systems for the calendar years 2020, 2021 & 2022:

(a) M/s Multicity Digital Consortium Pvt Ltd, Coimbatore

(b) M/s Channel Nine Net, Dharwad

(c) M/s Sristi, Tripura

- TRAI issued order on 9th August 2023 to Distribution Platform Operators (DPOs) for deploying Conditional Access System (CAS) and Subscriber Management Systems (SMS) under provisions of regulation 4A of the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017.

2.12 Other Activities

2.12.1 Open House Discussion (OHD)

Open House Discussions (OHD) held during 2023-24 (All OHDs held through Video conferencing)

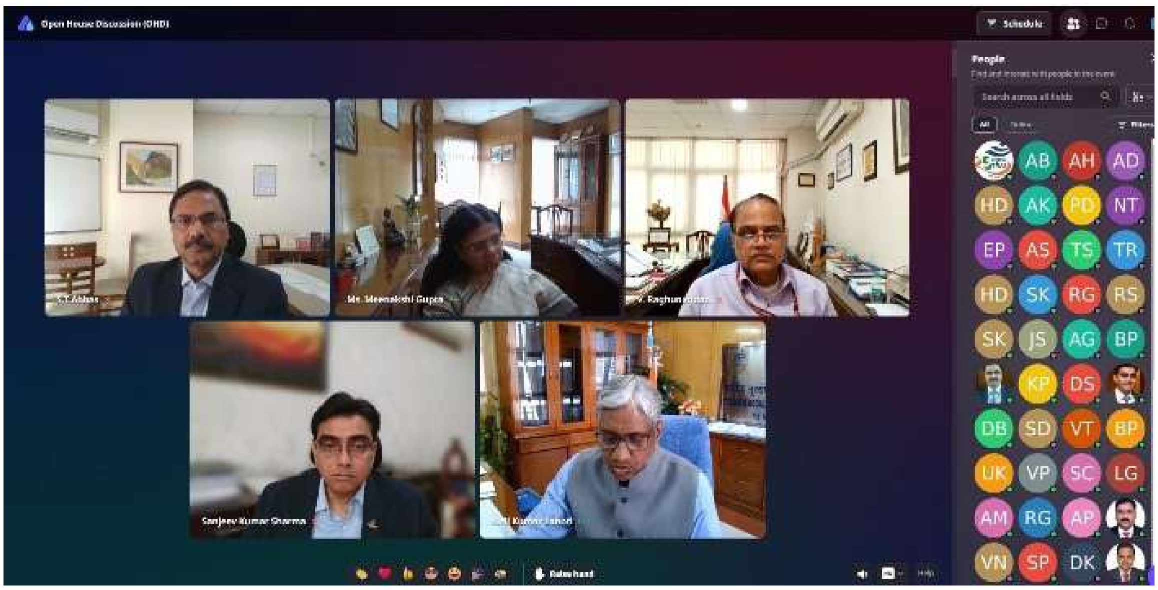
S. No.	Subject	Date of OHD
1.	Consultation Paper on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India".	19.04.2023
2.	Consultation Paper on "License Fee and Policy Matters of DTH Services".	20.04.2023
3.	Consultation Paper on "Issues related to FM Radio Broadcasting".	26.04.2023
4.	Consultation Paper on "Introduction of Digital Connectivity Infrastructure Provider (DCIP) Authorization under Unified License (UL)".	20.06.2023
5.	Draft Regulation on Review of The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2023.	07.07.2023
6.	Consultation Paper on "Assignment of Spectrum for Space-based Communication Services".	14.07.2023
7.	Consultation Paper on "Issues Related to Low Power Small Range FM Radio Broadcasting".	19.07.2023
8.	Consultation Paper on "Regulating Converged Digital Technologies and Services - Enabling Convergence of Carriage of Broadcasting and Telecommunication services".	23.08.2023
9.	Consultation Paper on "Definition of International Traffic".	24.08.2023
10.	Draft Telecommunication Mobile Number Portability (Ninth Amendment) Regulations, 2023.	22.02.2024
11.	Consultation Paper on "Open and De-licensed use of Unused or Limited Used Spectrum Bands for Demand Generation for Limited Period in Tera Hertz Range".	08.03.2024
12.	Consultation Paper on "Encouraging Innovative Technologies, Services, Use Cases, and Business Models through Regulatory Sandbox in Digital Communication Sector".	18.03.2024
13.	Consultation Paper on "Review of Terms and Conditions of PMRTS and CMRTS Licenses".	19.03.2024

- Open House Discussion (OHD) on Consultation Paper on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India" held on 19th April 2023.

- Open House Discussions (OHDs) through video conferencing on the Consultation Paper on "Draft Telecommunication Mobile Number Portability (Ninth Amendment) Regulations, 2023" held on 22nd February 2024.

➢ **Open House Discussions (OHDs) through video conference on the Consultation Paper on "Open and De-licensed use of Unused or Limited Used Spectrum Bands for Demand Generation for Limited Period in Tera Hertz Range" held on 8th March 2024.**

➢ **Open House Discussion (OHD) on "Regulating "Encouraging Innovative Technologies, Services, Use Cases, and Business Models through Regulatory Sandbox in Digital Communication Sector" held on 18th March 2024.**



➢ **Open House Discussions (OHDs) on "Review of Terms and Conditions of PMRTS and CMRTS Licenses" held on 19th March 2024.**

2.12.2 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 Organisations (COs). The registered COs act as interlocutors between consumers, Telecom Service Providers & TRAI and assist TRAI in consumer education. TRAI is also constantly working to enhance 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.

To enhance consumer education and awareness, TRAI organizes Consumer Outreach Programmes across the length and breadth of the country. These COPs also provide a platform for consumers to raise their local issues with TRAI and telecom service providers. During the Year 2023-24, TRAI organized 91 Consumer Outreach Programmes through offline/ online platform catering to different places all over the country. List of COPs organized is as at Annexure I.

With regards to Regional Workshop for the Capacity building of COs, total five workshops were conducted during financial year 2023-24 at Srinagar (Jammu and Kashmir), West Bengal, Thiruvananthapuram (Kerala), Tirupati (Andhra Pradesh) and Mount Abu (Rajasthan).

2.12.3 Registration of Consumer Organizations (COs)

Consumer Organizations registered with TRAI coordinate and assist TRAI in dissemination of information about TRAI's activities to consumers through consumers awareness programs in their areas. They also participate in consumer outreach programs conducted by TRAI. These COs are also members of the Advisory Committee to the Appellate Authorities of TSPs. A review of the performance of COs whose tenure was due for renewal w.e.f. 1st April 2024 was carried out. As of now the total number of 68 COs are registered in TRAI.

During the financial year 2023-24, a total of 385 Consumer Awareness Programmes were approved to be conducted by the COs registered with TRAI with financial support from TRAI out of which 346 programs have been conducted by COs.

2.12.4 Consumer Education Literature and Media Campaigns

- **Newsletter to registered Consumer Organizations:**

  During the financial year 2023-24, a total of 12 monthly Newsletters were published.

- **Consumer Handbook on Telecommunication / Information Material:**

  During the financial year, educational material in the form of pamphlets was designed and printed for MNP, UCC, Complaint Redressal, Tower Fraud and Key Contact Number. The Quarterly Newsletter for the period ending June 2023 was also printed on a pilot basis with the approval of Competent Authority.

- **Committee on Utilization of Telecommunication Consumer Education and Protection Fund (CUTCEF) Meeting:**

  1. On 31st October 2023, a meeting of CUTCEF was held to consider and approve the accounts of Telecommunication Consumers Education and Protection Fund (TCEPF) for the financial year 2022-23 and to review the progress of consumer awareness activities for the financial year 2023-24.

  2. Another CUTCEF meeting was held on 31st January 2024 to finalize the consumer awareness activities to be carried out during FY 2024-25. Approved minutes of meeting have been sent to CUTCEF members and ROs.

2.12.5 Seminars 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 with the opportunity to update themselves on the developments in telecom and broadcasting space. A total of 12 Seminars were organized by TRAI during the financial year 2023-24. The details of the same are as follows:

S. No.	Topics	Place	Date
1	Digital Inclusion: empowering people digitally	Leh Ladakh (UT)	12.05.2023
2	Transforming the future of Communications by Regional Office, Bengaluru	Bengaluru (Karnataka)	09.08.2023
3	MSMEs (i.e. Micro, Small and Medium Enterprises) Leveraging Emerging Technologies by TRAI HQ, Delhi	Delhi	25.08.2023
4	Artificial Intelligence and Machine Learning (AIML) and 5G by TRAI Regional Office, Kolkata	Patna (Bihar)	09.10.2023
5	Technology Trends in IoT and its applications by TRAI Regional Office, Jaipur	Chandigarh (UT)	17.10.2023

S. No.	Topics	Place	Date
6	Digital Inclusion Ubiquitous Access to Information Communication Technology by TRAI Regional Office, Bhopal	Raipur (Chhattisgarh)	21.11.2023
7	Emerging Cyber Security Threats – Mitigation Strategies by TRAI Regional Office, Bengaluru	Mysuru (Karnataka)	05.12.2023
8	5G Mobile Technology, Deployment challenges, use cases and Network Security by TRAI Regional	Chennai (Tamil Nadu)	04.01.2024
9	Cyber Security and Emerging Threats in Cyber Space by TRAI Regional Office, Jaipur	Gandhinagar (Gujarat)	10.01.2024
10	Digital Inclusion: Universal Access to Information and Communication Technology by TRAI Regional Office, Kolkata	Siliguri (West Bengal)	12.01.2024
11	Digital Economy - Trends and Developments by TRAI Regional Office, Bhopal	Lucknow (Uttar Pradesh)	12.02.2024
12	Artificial Intelligence and Machine Learning (AI and ML) Use cases in Telecom and Agriculture by TRAI Regional Office, Hyderabad	Hyderabad (Telangana)	22.02.2024

2.12.6 Redressal of Consumer Grievances

The TRAI Act, 1997, does not envisage the handling of individual consumer complaints by TRAI. However, complaints received in TRAI are forwarded to concerned service providers for taking appropriate action. During the period from 1st April 2023 to 31st March 2024, TRAI received 44734 complaints related to Telecom services and 5627 complaints related to Broadcasting and Cable TV services. All these complaints were forwarded to concerned service providers for appropriate action.

2.12.7 Conference/ Seminar / Workshop

❖ **Seminar on Wi-Fi and IEEE Standards held on 6th July 2023**

The TRAI Centre of Studies and Research organized a seminar on “Wi-Fi and IEEE Standard” on 6th July 2023 at TRAI Hq. for TRAI officers. The seminar was conducted by the Speakers of IEEE International.

❖ **Workshop on cloud computing on 24th July 2023**

The TRAI Centre of Studies and Research organized a workshop on “Cloud Computing” on 24th July 2023 at TRAI Hq. for TRAI officers. The workshop was conducted by Amazon Web Service.

❖ **Digital Telco Summit 2023 held on 18th August 2023 at ITC Maurya, New Delhi**

Building a Converged Network in collaboration with ET Telecom the TRAI Centre of Studies and Research was organized “Digital Telco Summit 2023” on 18th August 2023 at ITC Maurya, New Delhi, under the chairmanship of Dr. P.D. Vaghela, Former Chairman TRAI.

2.12.8 MoU

- **MoU with C-DOT signed on 25th July 2023**

  An MoU was signed between TRAI and C-DOT India for cooperation in the areas of Telecom and Broadcasting technologies on 25th July 2023 in the presence of Dr. P.D. Vaghela, Former Chairman TRAI, and Shri K. Rajaraman, Former Chairman of DCC and Secretary (Telecom).

2.12.9 White Paper issued on 25th September 2023 on "6 Ghz Band"

TRAI on 25th September 2023 released a white paper on "6 GHz band". The evolution of wireless communication technologies has played a pivotal role in shaping the way we connect, communicate and interact with the world around us. As our reliance on wireless devices and networks continues to grow, the need for spectrum resources capable of delivering higher data rates, increased capacity and enhanced performance becomes paramount. With the proliferation of bandwidth-intensive applications such as virtual reality, augmented reality, high-definition video streaming and cloud- based services, the existing spectrum bands are likely to become more and more congested. 6 GHz band presents a unique opportunity to address this concern and unlock a wealth of benefits for the service providers as well as the consumers. This white paper explores the technical aspects and regulatory considerations associated with the 6 GHz bands. It delves into the intricacies of utilizing this frequency range for various wireless communication technologies, including Wi-Fi, Cellular networks and other emerging wireless standards.

2.13 INTERNATIONAL RELATIONS

TRAI is a Sector Member of International Telecommunications Union (ITU) and has been actively involved in ITU related activities. TRAI participates in the activities of many international organizations such as APT, SATRC, ASEAN, GSMA, BRICS etc., thus getting opportunities to engage with other international regulators. The following paragraphs provide a brief on various international relations activities during 2023-24.

2.13.1 Bi-lateral Agreements signed by TRAI

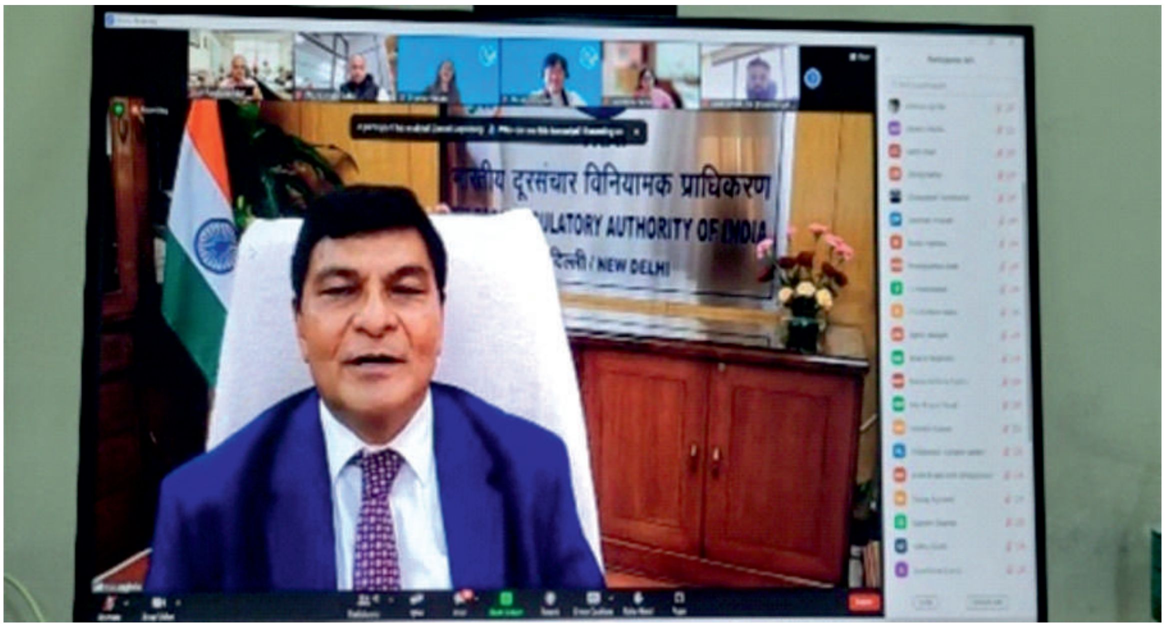
For further strengthening the existing friendly relations and to boost cooperation between TRAI and other International Regulators, TRAI has signed a number of bi-lateral agreements in the forms of Letter of Intent (LoI) and Memorandum of Understanding (MoU). These agreements provide a platform for bi-lateral engagements in the areas of mutual interest through the exchange of ideas, information, and experience sharing, which are mutually beneficial.

During this year, TRAI signed a Letter of Intent (LoI) with the South African Regulator ICASA (Independent Communications Authority of South Africa). The LoI was signed by Mr. Anil Kumar Lahoti, Chairman TRAI and Ms Yolisa Kedama, Acting Chairperson, ICASA on 27th February 2024 on the sidelines of GSMA MWC 24 (Mobile World Congress) at Barcelona, Spain.

Signing of Letter of Intent by Mr. Anil Kumar Lahoti, Chairman TRAI and Ms. Yolisa Kedama, Acting Chairperson, ICASA in the presence of the officers of TRAI and ICASA.

2.13.2 Events hosted by TRAI

A. ITU and TRAI jointly hosted Informal Meeting with Regulators on "Validation of ICT resilience and affordability Checklist" held on 29th August 2023.



Dr. P.D. Vaghela, Former Chairman, TRAI delivered the Keynote speech.

B. ITU Workshop and Focus Group meeting on Cost Models for Data Services and International Internet Connectivity held from 4th to 6th October 2023.

Telecom Regulatory Authority of India hosted ITU Workshop and Focus Group (FG) meeting on Cost Models for Data Services and International Internet Connectivity from 4th-6th October 2023 at Hotel Lalit, New Delhi. Total 48-50 International/domestic participants attended the workshop & meeting. Ms. Meenakshi Gupta, Acting Chairperson delivered the inaugural address and Mr. Siezo Onoe, Director (TSB), ITU addressed the gathering through online mode.

C. TRAI-ASEAN program on Capacity Building & Sharing of Best Practices in Policy, Regulation and Development held from 4th to 8th March 2024.

Telecom Regulatory Authority of India hosted a five-day training programme on Capacity Building & Sharing of Best Practices in Policy, Regulation and Development for middle level officers from ASEAN countries from 4th to 8th March 2024 at New Delhi. The project objectives were to train the participants to study and understand the regulatory challenges that exist in the telecom sector in their respective countries. The telecom/ICT growth in Southeast-Asia region has been diverse and each nation has a uniqueness in terms of market, subscribers' base, level of new telecom services penetration etc.

International delegates from ASEAN countries Lao PDR, Thailand, Cambodia, Myanmar, Indonesia, Philippines, Malaysia and Brunei Darussalam attended the capacity building program. Domestic participants from TRAI and Department of Telecommunications also attended the training.

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Inaugural session of ASEAN program on Capacity Building & Sharing of Best Practices in Policy, Regulation and Development

2.13.3 Bi-lateral Visits by International Organizations/Regulators

(i) A delegation headed by Mr. Seizo Onoe, Director, TSB, ITU visited TRAI on 9th May 2023 and held bilateral discussions with Dr. P.D. Vaghela, former Chairman-TRAI. Ms. Atsuko Okuda, Regional Director- ITU and other senior officers from TRAI were present at the meeting.

(ii) A delegation headed by Prof. John Nkoma, Board Chairperson, Universal Communications Service Access Fund (UCSAF) Govt. of Tanzania visited TRAI on 6th July 2023 as a part of their study tour and held bilateral discussions with Dr. P.D. Vaghela, Former Chairman, TRAI.

(iii) A 20-member delegation led by Mohamed Fazeen, Vice President, Maldives Broadcasting Commission (Broadcom), Maldives visited TRAI on 10th August 2023 and held a bilateral meeting with Dr. P.D. Vaghela, Former Chairman-TRAI and senior officers of TRAI.

(iv) A delegation headed by Mr. Jason Oxman, President and Chief Executive Officer of the Information Technology Industry Council (ITI), US visited TRAI and had bilateral meeting with Dr. P.D. Vaghela, Former Chairman-TRAI on 23rd August 2023.

(v) A delegation from Nigerian Communications Commission (NCC), Nigeria visited TRAI on 30th & 31st October 2023 and held discussions with officers of TRAI, as part of their Bench-marking Exercise Visit to India.

(vi) A delegation headed by Mr. Brendan Carr, Commissioner, Federal Communications Commission (FCC), US visited TRAI on 22nd February 2024 and held bilateral discussions with Mr. Anil Kumar Lahoti, Chairman-TRAI.

(vii) Mr. Julian Gorman, Head of Asia Pacific, GSMA had visited TRAI and met with Mr. Anil Kumar Lahoti, Chairman, TRAI on 12th March 2024. Various bi-lateral issues were discussed during the meeting.

2.13.4 Participation of Authority in International Events

(i) ITU Global Symposium for Regulators was held in Egypt from 5th to 8th June 2023.

Former Chairman's Address at the ITU Global Symposium for Regulators

(ii) Conference on 'Broadband for All' was held on 27th – 28th June 2023 at Stockholm, Sweden.

Ms. Meenakshi Gupta, Former Member, TRAI delivers Keynote Address at Broadband for All

(iii) GSMA Mobile 360 APAC and Policy Leaders Forum 2023 was held at Seoul, Republic of Korea on 7th & 8th September 2023.

Former Chairman's Keynote at 360 APAC and Policy Leaders Forum 2023

Former Chairman participated as a Speaker at the Spectrum Roundtable Session of GSMA M360 APAC and Policy Leaders Forum, 2023

(iv) ITU Regional Development Forum for Asia Pacific was held from 13th to 15th September 2023, Geneva.

Former Chairman delivered keynote virtually at ITU event

(v) AVIA Policy Roundtable and OTT Summit was held on 4th & 5th December 2023 at Singapore.

Member/Acting Chairperson participated in the Policy Roundtable

Member/Acting Chairperson delivered Keynote in the OTT Summit

(vi) GSMA Ministerial Programme, Mobile World Congress 2024 was held from 26th to 28th February 2024 at Barcelona, Spain.

Chairman TRAI as a Panellist at the GSMA Ministerial Programme, Mobile World Congress

Former Member, TRAI participated in Women Leaders' Roundtable at GSMA MWC 2024

2.13.5 Participation of Officers in Important International Platforms

Officers of TRAI participated in several international events such as - Global Annual Conference on 'Broadband for All' on 27th & 28th June, 2023 at Stockholm, Sweden; ITU Global Symposium for Regulators at Egypt from 5th to 8th June, 2023; GSMA Mobile 360 APAC and Policy Leaders Forum 2023 at Seoul, Republic of Korea on 7th & 8th September, 2023; ITU Regional Development Forum for Asia Pacific from 13th to 15th September, 2023; and GSMA Ministerial Programme Mobile World Congress from 26th to 28th February, 2024 at Barcelona, Spain.

2.13.6 Bi-lateral Meetings held during International Visits of Authority

I. Few Bi-lateral meetings were held by Authority-TRAI on the sidelines of 'ITU Global Symposium for Regulators at Egypt from 5th to 8th June 2023

i) Bi-lateral Meeting with Ms. Doreen Bogdan Martin, Secretary General ITU (International Telecommunications Union)

ii) Bi-lateral Meeting with Eng. Hossam El-Gamal, Executive President, National Telecom Regulatory Authority-Egypt

iii) **Bi-lateral Meeting with Mr Dan Sjöblom, Director General, Swedish Post and Telecom Authority, Sweden**

iv) **Bi-lateral meeting with H.E. Hiroshi YOSHIDA, Vice Minister, M/o Internal Affairs and Communications, Japan**

II. **Bi-lateral meetings were held by Authority-TRAI on the sidelines of GSMA Mobile 360 APAC and Policy Leaders Forum 2023 at Seoul, Republic of Korea on 7th & 8th September 2023.**

i) **Bi-lateral meeting with Professor (Clinical) Sarana Boonbaichaiyapruck, Chairperson - NBTC, Thailand**

ii) **Bi-lateral meeting with Mr. John Giusti, Chief Regulatory Officer, GSMA.**

III. Bi-lateral meetings were held by Authority-TRAI on the sidelines of AVIA Policy Roundtable and OTT Summit on 4th & 5th December 2023 at Singapore.

i) Bi-lateral Meeting with Ms Aileen Chia, Deputy Chief Executive, Connectivity Development & Regulation of IMDA (Infocom Media Development Authority), the Singapore Regulator.

IV. Bi-lateral Meeting with Mr. Mohamad Salim Fateh Din, Chairman, Malaysian Communications and Multimedia Commission (MCMC), Malaysia on the sidelines of GSMA Mobile World Congress 2024 at Barcelona, Spain from 26th to 28th February 2024.

2.14 Administrative and Legal issues under consideration of DoT

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. In order to ensure effective discharge of its functions under TRAI Act, 1997, the Authority has, sent various proposals for amendment in the TRAI Act, 1997 to DoT. The last such proposal was sent on 5^{th} July 2023.

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

(ii) Restructuring of TRAI and its Regional Offices

In view of the expanding scope of work assigned to the Telecom Regulatory Authority of India, due to changing technology landscape and the challenges posed by technological disruptions in Telecom & Broadcasting Sectors, restructuring of TRAI has been proposed and a proposal in this regard has been sent to the Department of Telecommunications vide letter dated 10^{th} March 2023 for seeking approval of MoF/Cabinet in respect of creation of additional posts for TRAI HQ and TRAI Regional Offices as part of restructuring. The matter is under consideration in DoT and to be taken up with MoF.

Annexure – I

List of COPs (Offline/Online) during the period 1st April 2023 to 31st March 2024

S. No.	PLACE OF COPs	Date
1	Rajasthan (Online)	25.04.2023
2	Shillong, Meghalaya	28.06.2023
3	Narmadapuram (Madhya Pradesh)	28.06.2023
4	Kudal (Sindhudurg)	05.07.2023
5	Dausa (Rajasthan)	06.07.2023
6	(nearby Ooty) Tamil Nadu	06.07.2023
7	Aizawl (Mizoram)	13.07.2023
8	Jalandhar (Punjab)	26.07.2023
9	Papum Pare (Arunachal Pradesh)	26.07.2023
10	Agra (UP)	27.07.2023
11	Gadag-Betageri (Karnataka)	27.07.2023
12	Fingeshwar (Chhattisgarh)	03.08.2023
13	Chota Udaipur (Gujrat)	11.08.2023
14	Alipurduar (West Bengal)	13.08.2023
15	Khammam (Telangana)	17.08.2023
16	Mumbai (Maharashtra)	18.08.2023
17	Mandla (MP)	23.08.2023
18	Kakinada (Andhra Pradesh)	24.08.2023
19	Karnal (Haryana)	24.08.2023
20	Vodlemol Cacora (Goa)	31.08.2023
21	Madhubani (Bihar)	05.09.2023
22	Mananthavady (Kerala)	08.09.2023
23	Etawah (Uttar Pradesh)	14.09.2023
24	Pushkar (Rajasthan)	20.09.2023
25	Dhamtari (Chhattisgarh)	25.09.2023
26	Daman and Diu	26.09.2023
27	Mangalore (Karnataka)	26.09.2023
28	Bhubaneswar (Odisha)	27.09.2023
29	Puducherry (TN)	11.10.2023
30	Chikkamagaluru (Karnataka)	27.10.2023
31	Jangaon (Telangana)	31.10.2023
32	Cachar (Assam)	01.11.2023
33	Katra (J&K)	03.11.2023
34	Jaisalmer (Rajasthan)	03.11.2023
35	Garhwal (Uttarakhand)	03.11.2023
36	Joshimath (Uttarakhand)	04.11.2023
37	Sanganer, Jaipur (Rajasthan)	04.11.2023

38	Vijayawada (AP)	09.11.2023
39	Sangareddy (Telangana)	17.11.2023
40	Dharamsala (HP)	17.11.2023
41	Tarn-Taran (Punjab)	23.11.2023
42	Nashik (Maharashtra)	23.11.2023
43	Rajgir (Bihar)	24.11.2023
44	Chittoor (Andhra Pradesh)	24.11.2023
45	Anand (Gujarat)	29.11.2023
46	Ghatshila (Jharkhand)	30.11.2023
47	Ghaziabad (Uttar Pradesh)	06.12.2023
48	Chhindwara (MP)	07.12.2023
49	Pernem (Goa)	12.12.2023
50	Vellore (Tamil Nadu)	14.12.2023
51	Gomati (Tripura)	15.12.2023
52	Botad (Gujarat)	19.12.2023
53	Prayagra (Uttar Pradesh)	20.12.2023
54	Varanasi (Uttar Pradesh)	21.12.2023
55	Vizianagaram (Andhra Pradesh)	22.12.2023
56	Mahaveer Nagar (Raipur)	26.12.2023
57	Kaithal (Haryana)	27.12.2023
58	Purulia (West Bengal)	29.12.2023
59	Palayam (Thiruvananthapuram)	11.01.2024
60	Lucknow (Uttar Pradesh)	16.01.2024
61	Bilaspur (Chhattisgarh)	23.01.2024
62	Karwar (Karnataka)	23.01.2024
63	Kurnool (Andhra Pradesh)	23.01.2024
64	Medininagar (Jharkhand)	24.01.2024
65	Amreli (Gujarat)	24.01.2024
66	Panaji (Goa)	25.01.2024
67	Nizamabad (Telangana)	30.01.2024
68	Wardha (Maharashtra)	06.02.2024
69	South Andaman (A&N Islands)	08.02.2024
70	Gurugram (Haryana)	08.02.2024
71	Suryapet (Telangana)	09.02.2024
72	Palghar (Maharashtra)	13.02.2024
73	Yamuna Nagar (Haryana)	16.02.2024
74	Waghai (Gujarat)	20.02.2024
75	Ujire (Karnataka)	20.02.2024
76	Sikkim	21.02.2024
77	Rajahmundry (Andhra Pradesh)	27.02.2024

78	Rangareddy (Telangana)	29.02.2024
79	Rishikesh (Uttarakhand)	05.03.2024
80	Vidisha (Madhya Pradesh)	06.03.2024
81	Kohima (Nagaland)	06.03.2024
82	Dungarpur (Rajasthan)	07.03.2024
83	Roorkee (Uttarakhand)	07.03.2024
84	Faridabad (Haryana)	11.03.2024
85	Bidar (Karnataka)	13.03.2024
86	Mathura (UP)	15.03.2024
87	Karauli (Rajasthan)	21.03.2024
88	Majuli (Assam)	21.03.2024
89	Cuttack (Odisha)	21.03.2024
90	Khasa Cantt (Punjab)	22.03.2024
91	Chengalpattu (Tamil Nadu)	28.03.2024

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 telecommunications 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 the 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 the 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 message 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. Details of action taken by TRAI in Telecom Sector and Broadcasting & Cable Sector during 2023-24 are discussed in the following paragraphs.

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 2023-24 are given below: -

(i) TRAI's Response dated 2nd May 2023 to DoT back reference dated 27th January 2023 on Recommendations on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average methods of SUC assessment, in cases of Spectrum Sharing".

(ii) Recommendations dated 2nd May 2023 on "Ease of Doing Business in Telecom and Broadcasting Sector".

(iii) Recommendations dated 19th June 2023 on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India".

(iv) TRAI's response dated 27th June 2023 to MIB back reference on TRAI's Recommendations on "Renewal of Multi-System Operators (MSOs) Registration" dated 29th December 2022.

(v) Recommendations dated 8th August 2023 on "Introduction of Digital Connectivity Infrastructure Provider (DCIP) Authorization under Unified License (UL)".

(vi) Recommendations dated 21st August 2023 on "License Fee and Policy Matters of DTH Services".

(vii) TRAI's Response dated 1st September 2023 to DoT back reference dated 2nd August 2023 on Recommendations on "Auction of spectrum in the frequency bands identified for International Mobile Telecommunications (IMT)".

(viii) Recommendations dated 5th September 2023 on "Issues related to FM Radio Broadcasting".

(ix) Recommendations dated 21st September 2023 on "Issues related to Low Power Small Range FM Radio Broadcasting".

(x) Recommendations dated 22nd September 2023 on "Promoting Networking and Telecom Equipment manufacturing (NATEM) in India".

(xi) Recommendations dated 23rd February 2024 on "Introduction of Calling Name Presentation (CNAP) Service in Indian Telecommunication Network".

(xii) Recommendation dated 21st March 2024 on "Usage of Embedded SIM for Machine-to-Machine (M2M) Communications".

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 has notified "The Telecommunication Interconnection Regulations, 2018", which makes the interconnection among networks of Telecom Service Providers easier. To ensure that interconnections are provided in a timely manner, TRAI has imposed financial disincentives on defaulting Service providers.

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 are central to efficient and seamless connectivity between various networks.

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 5th 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**

Other steps taken to protect the interest of the Consumers of Telecommunications services are given in the following paragraphs:

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 2023-24 have been detailed in the Part-II of the report. Additionally, other steps taken to protect the interests of the consumers of Telecommunications Services are given in the following paragraphs.

3.7.1 Steps taken to protect the Interest of the Consumers of Telecommunication Services

3.7.1.1 Auditing of Metering and Billing System

In order to protect the interest of consumers of telecommunication services, TRAI released Regulations on Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2023 (03 of 2023) dated 11th September 2023. The Regulation mandates the audit of Billing and Charging System on an annual basis through an auditor empanelled by TRAI. Further, TRAI has also issued the guidelines for conducting the audit on 19th September 2023.

The regulation also provides that the service providers have to take corrective action in case of observation of instances of overcharging and arrange to refund the overcharged amount to the affected subscribers. The Regulation also provides that the service providers have to take corrective action on the inadequacies, if any, pointed out by the auditor and submit an Action Taken Report to TRAI. The regulation also has the provision for imposition of financial disincentives in case of non-compliance of the provisions of the regulations.

3.7.1.2 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 19th 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.

Financial Disincentives for not controlling the Unsolicited Commercial Communications (UCC) from RTMs by the access provider in each License Service Area for one calendar month is as given below:

	Value of "Counts of UCC for RTMs for one calendar month"	Amount of 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 one hundred
(c)	More than one thousand	Maximum financial disincentives at (b) plus Rupees ten thousand per count exceeding one thousand

The total amount payable as financial disincentives under the regulation shall not exceed ₹ 50 lakh per calendar month.

The performance of the service providers is evaluated every Quarter based on the compliance reports submitted by service providers.

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

3.7.1.3 TRAI DND App

This Mobile Application facilitates customers to register their Do-not-Disturb (DND) preference and complaints with any Service Provider though one common mode. It assists the subscribers in reporting their complaints and updates about action taken on complaints within the App.

3.7.1.4 Complaint Handling

In case a subscriber receives unsolicited communication, he may make a complaint with its Access Provider. Various modes of registration of the complaint such as sending SMS to short code 1909, calling on 1909 and through mobile app has been prescribed. Access Providers are required to make the Customer Complaint Registration Facility (CCRF) available on 24 hours x 7-day basis throughout the year.

3.7.1.5 Header Information portal

The Header Information Portal facilitates customers to know about 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.

3.7.1.6 Portal for Exemption from SMS Termination Charges up to 5 paisa to Government organizations for sending SMS of public interest

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 Exemption from SMS Termination Charges up to 5 paisa.

3.7.2 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 the 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 the 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 17th 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 (ILDOs), 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 1st 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 Authority has also been working towards enhancement of telecom connectivity/ infrastructure in the remote and far-flung area of the country. TRAI from time to time evaluates and proposes suitable measures for USOF funded Schemes. In this regard, TRAI has issued recommendations on "Improving Telecom Coverage and Backhaul Infrastructure in far-flung areas of Ladakh" on 24th April 2023. It has been recommended that three uncovered villages of Ladakh are to be included by USOF under the 20% expansion provision of 'Saturation of 4G mobile services' project. The CAPEX and OPEX expenditure for upgrading the existing non-4G based cellular mobile infrastructure at 19 villages of Ladakh is to be incurred by USOF under the provisions of 20% additional scope that exists in USOF sponsored "Saturation Of 4G Mobile Services in Uncovered Villages Across the Country" to upgrade this cellular infrastructure to 4G based service. Further, TRAI has also issued recommendations on "Improving Telecom Infrastructure in Northeastern State of India" on 22nd September 2023. In its recommendations, it has been recommended that DoT/USOF should provide CAPEX subsidy on viability gap funds (VGF) model for OFC connectivity to all BHQ, which have no OFC connectivity. The Authority has also issued recommendations dated 29th September 2023 on "Improving Backhaul Telecom Infrastructure in far-flung areas of Himachal Pradesh" in which, a block headquarter each in Chamba and Lahaul & Spiti districts respectively have been recommended to be connected over OFC using USOF.

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

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 22nd September 2023 "Promoting Networking and Telecom Equipment Manufacturing (NATEM) in India".

b) Recommendations dated 20th July 2023 on "Leveraging Artificial Intelligence and Big Data in Telecommunication Sector".

Details of these recommendations 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 8th 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 6th October, 2006. The quarterly reports submitted by Broadband service providers are analyzed for assessing their performance with regard to the QoS benchmark.

3.12.3 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.

3.12.4 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 22nd 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 22nd April 2020 for its consideration.

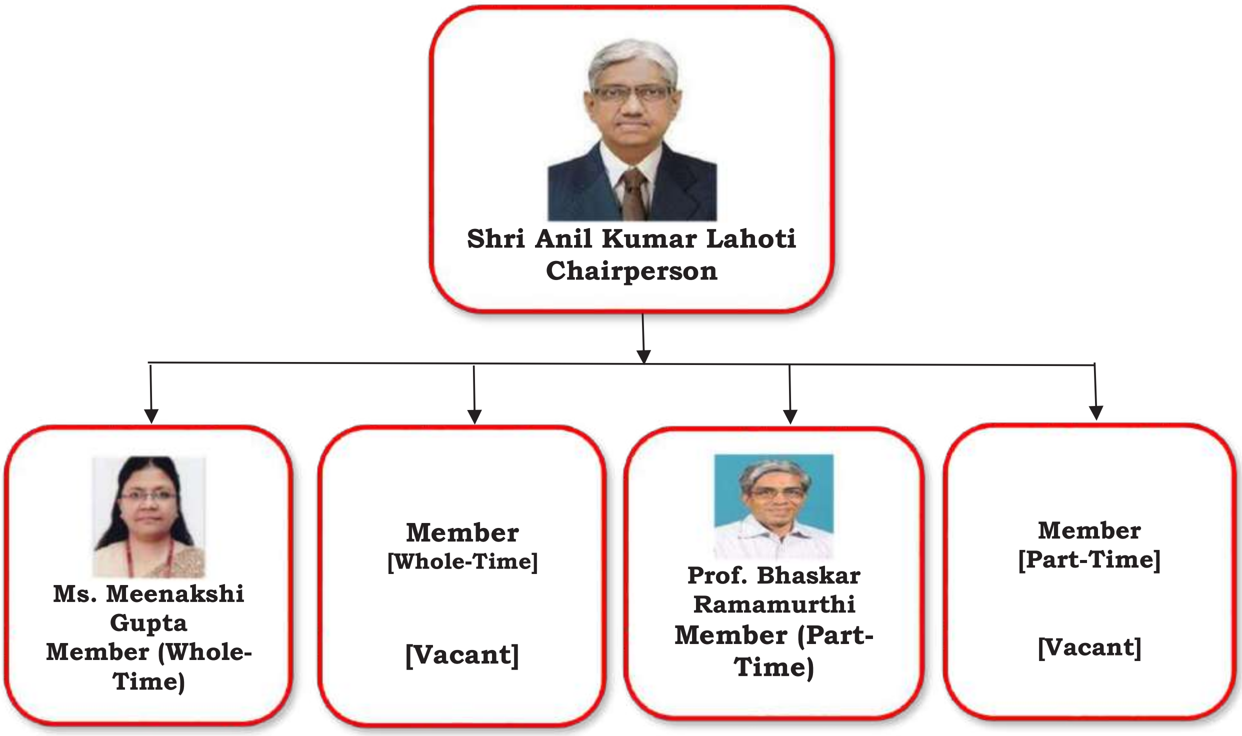
PART - IV
ORGANISATIONAL MATTERS OF TELECOM REGULATORY AUTHORITY OF INDIA AND FINANCIAL PERFORMANCE

(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 28th 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 in New Delhi. The constitution of the Authority as on 31st March 2024 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) Consumer Affairs, Information Technology & Technology Development (CA, IT & TD).

(iv) Financial & Economic Analysis (F&EA);

(v) Legal;

(vi) Networks, Spectrum and Licensing (NSL); and

(vii) Quality of Service (QoS).

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

The Administration Division 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 Division has the responsibility of management and control of activities of Administration & Personnel Section (A&P), General Administration Section (GA), Coordination Section (Coord. Section), Communication & Public Relation (Comm. & PR) Section, Official Language (OL) Section, Management Representative and RTI (MR&RTI) Section, Finance section. The Division also manages a well-equipped Library. The Division handles International Relations of TRAI which include coordination with International Organizations/bodies viz., ITU, APT, SATRC, ASEAN, GSMA, BRICS 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 through Multi System Operators (MSOs) and Local Cable Operators (LCOs), 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/ digitalization 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 Consumer Affairs, Information Technology & Technology Development (CA, IT & TD) Division

CA Division is responsible for 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 division 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 organising regional workshops and seminars on relevant topics, undertaking media campaigns, developing and publishing consumer education material in Hindi, English and regional languages for enhancing consumer education etc.

The IT Division in TRAI is entrusted with two objectives i.e. IT Project Management (to promote transparency, to improve the subscriber's experience, to automate processes & interchange of information and to embrace open standards) and IT Infrastructure Management (to ensure uptime of network & hardware peripherals and third-party software licenses and upgradation). With these objectives IT division is catering various IT needs like analytics & visualization of data, implementation & maintenance of various portals & TRAI website, web applications, mobile app development, video conferencing, data storage, cloud management, SMS alerts, licenses, NICNET, internet lease lines, computer hardware assets, LAN setup of TRAI, etc.

One of the functions of Telecom Regulatory Authority of India (TRAI) is to recommend measures for the development of telecommunications technology. Accordingly, TD section is working on a consultation paper "Encouraging R&D in Telecom and Broadcasting Sectors". TD section also looks after the complaints regarding mobile towers such as installation/ removal, radiations hazard, monetary frauds, court cases etc.".

4.7 Financial & Economic Analysis (F&EA) Division

F&EA Division is primarily responsible for ensuring compliance of the provisions contained in The Telecom Tariff Orders (TTO), certain provisions contained in the Telecom Consumer Protection Regulations, 2012 (TCPR) and Directions issued by the Authority on related aspects from time to time. Further, 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 per port transaction charges for mobile portability, cost methodologies and costing for telecom services etc. The Division is also responsible for undertaking a review of financials statements, Accounting Separation Reports (ASR), Adjusted Gross Revenue (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.

4.8 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.

As on 31st March 2024, there were 458 cases pending before various Courts, the details of which are as under: -

Sl. No.	Court	Cases pending as on 31.03.2023	Cases filed during 2023-24	Cases disposed of during 2023-24	No. of Cases pending as on 31.03.2024
1	Supreme Court	171	2	12	161
2	High Courts	209	29	34	204
3	TDSAT	17	4	6	15

4	Consumer Forums	27	7	2	32
5	District Courts	35	2	3	34
6	Other Tribunals	17	2	7	12
	Total No. of cases	**476**	**46**	**64**	**458**

The details of the cases heard by various courts during the year 2023-24 are as under:

Sl. No.	Court	No. of Cases heard
1	Supreme Court	70
2	High Courts	150
3	TDSAT	14
4	Consumer Forums	36
5	District Courts	37
6	Other Tribunals	15
	Total No. of cases heard during the year 2023-24	**322**

The following are some important judgement pronounced by different Courts during the year 2023-24:

(i) Hon'ble Supreme Court of India

Order dated 30th October 2023 in the matter of Rajeswari vs. Union of India & Ors. [W.P. (C) No. 699 of 2021]

The writ petition was filed by Ms. Rajeswari, on the alleged threat of misuse of data of previous consumers by the new consumers on assignment of the same mobile number as per the policy of "recycling" of the deactivated mobile numbers. The Petitioner also alleged that upon allocation of the mobile to a new customer, he/she may be able to access the WhatsApp data of the previous customer, since the new customer will receive OTP to access WhatsApp with the same mobile number. The petitioner prayed before the Hon'ble Court to pass orders directing the Respondents to stop recycling and allocating deactivated mobile number to new customers.

The Hon'ble Supreme Court, vide order dated 30th October 2023, disposed of the present writ petition, observing that the cellular mobile telephone number once deactivated for non-usage or disconnected on the request of the subscriber, is not allocated to the new subscriber for at least a period of 90 days and that it is for the earlier subscriber to take adequate steps to ensure that privacy is maintained. The Hon'ble Court further held that the subscriber can prevent misuse of WhatsApp data by deleting the WhatsApp account attached with the previous phone number and erasing the WhatsApp data stored on the local device memory/ cloud/drive. Further, the Hon'ble Court observed that as per the information available on the WhatsApp help center to eliminate enmesh/ confusion in case of re-cycled phone numbers, they monitor account inactivity, and when an account is inactive for 45 days and then the account is activated on a different mobile device, the old account data is removed.

(ii) High Court of Delhi

Order dated 22nd December 2023 in the matter of Telecom Regulatory Authority of India vs. Kabir Shankar Bose & Ors. [LPA 721 of 2018]

TRAI preferred an appeal before the Ld. Division Bench of the Hon'ble High Court of Delhi against the judgment dated 20th November 2018 passed by the Ld. Single Judge, whereby the Ld. Single Judge dismissed the writ petition preferred by TRAI against the order dated 12th September 2018 passed by the Ld. CIC. Both the Ld. Single Judge of the Hon'ble High Court of Delhi and the Ld. CIC had held that under section 12 of TRAI Act, the Authority has power to call for any information, conduct investigations, etc. where, the Authority considers it expedient so to do, and it is the obligation on the public authority to get information from the private body and furnish the same to the RTI applicant.

The Ld. Division Bench, vide its judgment dated 22nd December 2023, allowed the appeal and set aside the impugned Judgment passed by the Ld. Single Judge and thus, the Ld. CIC, inter alia, holding that the information sought does not relate to the functions of TRAI as enumerated in section 11 of the TRAI Act as any action for interception / surveillance is undertaken in terms of section 5(2) of the Indian Telegraph Act, 1885 and rule 419(A) of the Indian Telegraph Rules, 1951. The Ld. Division Bench also held that to hold that asking for information in relation to interception or tracking or tapping of a phone would be within the power of TRAI under section 12 of the TRAI Act, 1997 would not be in conformity with the functions specified in section 11 of the TRAI Act, 1997.

(iii) High Court of Kerala

Order dated 4th April 2023 in the matter of All India Digital Cable Federation & Anr. vs. Telecom Regulatory Authority of India & Ors. [WP (C) 193 of 2023]

The writ petition has been filed by All India Digital Cable Federation (AIDCF), inter alia, seeking a declaration that the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Fourth Amendment) Regulations 2022 and the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff (Third Amendment) Order 2022 are ultra vires the provisions of the Telecom Regulatory Authority of India Act, 1997 and violates Articles 14 and 19 (1)(g) of the Constitution of India.

The Hon'ble High Court, vide Order dated 4th April 2023, dismissed the petition holding that there is no violation of the fundamental rights guaranteed under the Constitution of India and that TRAI had followed the transparency required under law substantially and effectively by holding discussion with the stakeholders. The Hon'ble Court further held that the impugned regulations and Tariff Order are made by the Authority for the purpose of protecting public interest and regulating and controlling the telecommunication services for public good. The Ld. Court also held that the petitioners have failed to establish any illegality, arbitrariness, unbridled exercise of power, malafides or any other legal infirmities of similar nature in impugned regulations and Tariff Order.

4.9 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. NSL Division also regulates Mobile Number Portability (MNP) service.

NSL division is responsible for making recommendations on matters related to license conditions of Access Service (both wired and wireless), Internet Service, 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), Virtual Network Providers (VNOs), Captive Non-Public Network (CNPN) and value-added services such as Audio Conferencing/ Audiotex/ Voice Mail etc.

The Division is also responsible for providing recommendations on matters related to introduction of new and evolving technologies and services such as space-based communication, Machine to Machine (M2M) Communication, Over-The-Top (OTT) communication etc.

NSL Division also provides recommendations on assignment of spectrum along with related conditions, efficient utilization and management of spectrum including its sharing, trading and re-farming. The matters related to cross-sector co-ordination such as, Infrastructure Sharing, Sustainable Telecommunications, Radio Communications Systems for Public Protection & Disaster Relief (PPDR) are also handled by the Division. It provides recommendations on issues related to Universal Service Obligation (USO) and all related matters. Issues like Convergence, Right of Way and Policy for using Street Furniture and Sandbox are also dealt. The NSL Division also deals with the issues related to National Numbering Plan, Intelligent Network (IN) Service, Calling Cards and Satcom Policy.

Apart from the above, the Division monitors compliance of license conditions by service providers for all types of services mentioned above and also monitors Wireline, Wireless, Internet and Broadband subscriptions in the country.

4.10 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) through telecom messages/calls, spam.

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.

4.11 TRAI Centre of Studies and Research (TRAI CSR)

TRAI has established its TRAI Centre of Studies and Research – TRAI CSR. The Centre will conceptualize, coordinate and enable technological studies in collaboration with Industry, Academia and Policy making Institutions. TRAI Centre of Studies and Research would focus on the need for sustained research to identify future trends and assess evolving policy/regulatory challenges, to enable a Cross-Industry approach in connecting various stakeholders and facilitating innovation. The Centre will endeavour towards identifying policy/ regulatory blind spots and sensitizing policy makers with the impending technological developments for advance planning and action. The Centre also aims to work in association with academic and research centres towards capacity building of user departments, thereby enabling appropriate focus on technology-based solutions.

TRAI CSR has been established with the following objectives:

(i) Study and carry out research and surveys on important sectoral issues including new technology, technological disruptions etc. and their impact on sectors, overall economy and society.

(ii) Publish the outcome of these studies/ research/surveys as expedient. Use such studies and reports in-house for policy recommendations and regulations.

(iii) Empower the stakeholders and different Ministries/Departments with regards to digital literacy and adoption of new technologies.

(iv) Collaborate with NITI Aayog, other Indian and International regulators, ITU and other international telecom organizations, departments and ministries of the Government of India, State Governments, Local self-government agencies and other organizations in India and abroad such as technology and management institutes, training institutes and centres, Standard Developing Organizations, etc.

(v) Enable relevant discourse through conferences, seminars, workshops and training programs.

4.12 Human Resources

A staff of 184 (as on 31st March 2024) 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. Wherever necessary, Consultants are engaged.

4.13 Staff strength of TRAI HQ (as on 31st March 2024)

As on 31st March 2024, the Staff strength of the TRAI (Headquarter) was as under:

<table>
<tr><th>S. No.</th><th>POSTS</th><th>SANCTIONED</th><th>WORKING</th></tr>
<tr><td>1.</td><td>SECRETARY</td><td>01</td><td>01</td></tr>
<tr><td>2.</td><td>PR. ADVISOR</td><td rowspan="2">14</td><td rowspan="2">13*</td></tr>
<tr><td>3.</td><td>ADVISOR</td></tr>
<tr><td>4.</td><td>JT. ADVISOR</td><td>25</td><td>21</td></tr>
<tr><td>5.</td><td>DY. ADVISOR</td><td>10</td><td>10</td></tr>
<tr><td>6.</td><td>SR. PR. PRIVATE SECRETARY</td><td>03</td><td>03</td></tr>
</table>

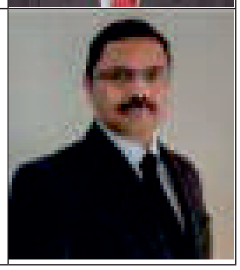
7.	SR. RESEARCH OFFICER	30#	29
8.	PRINCIPAL PRIVATE SECRETARY	05	04
9.	TECHNICAL OFFICER	22**	16
10.	SECTION OFFICER	20	16
11.	PRIVATE SECRETARY	12	10
12.	ASSISTANT	48	33
13.	PERSONAL ASSISTANT	18	06
14	JR. HINDI TRANSLATOR	01	00
15.	LDC	07	00
16.	STAFF CAR DRIVER SPECIAL GRADE	01	01
17.	STAFF CAR DRIVER GRADE-I	04	04
18.	STAFF CAR DRIVER GRADE-II	04	04
19.	STAFF CAR DRIVER ORDINARY GRADE	04	01
20.	PCMO	02	02
21.	DESPATCH RIDER	01	01
22.	MULTI TASKING STAFF	05	09
	TOTAL	237	184

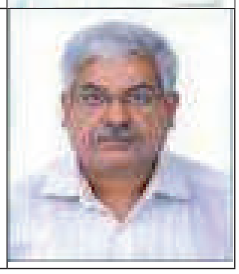
* Including two TRAI Cadre Advisors who are on deputation to other Govt. organisations.

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

** Including 5 posts of Technical Officer (Engineering).

4.14 Details of Secretary, Pr. Advisors / Advisors Level Officers in TRAI (HQ) as on 31st March 2024

Sl.No.	Name of the officer	Post held	Photograph
1	Shri V. Raghunandan	Secretary	
2	Shri S.T. Abbas	Principal Advisor (B&CS)	

3	Shri Sheo Bhadra Singh	Principal Advisor (NSL)	
4	Shri Mahendra Srivastava	Principal Advisor (QoS, CA&IT) Principal Advisor (F&EA)-I/c	
5	Smt. Vandana Sethi	Advisor (Admin. & IR)	
6	Shri Sanjeev Kumar Sharma	Advisor (BB&PA)	
7	Shri Anand Kumar Singh	Advisor (CA, IT & TD)	
8	Shri Amit Sharma	Advisor (F&EA-II) Advisor (F&EA-I) – I/c	
9	Shri Rajiv Ranjan Tiwari	Advisor (Legal)	

10	Shri Akhilesh Kumar Trivedi	Advisor (NSL-II)	
11	Shri Tejpal Singh	Advisor (QoS-I) Advisor (B&CS) – I/c	
12	Shri Jaipal Singh Tomar	Advisor (QoS-II)	

Note: Two TRAI Cadre Advisors are on deputation to other Govt. organizations.

4.15 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/three years and thereafter, if required, deputation period is extended. The Authority has constituted a cadre of officers and staff with specialized expertise and skills with the option of permanent absorption in TRAI. In the light of new regulatory challenges associated with the fast-changing technology landscape and increased workload, a proposal of restructuring and creation of additional posts has been initiated and sent to DoT for obtaining requisite approval from the Ministry of Finance.

4.16 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. The recruitment of personnel for its Secretariat by way of deputation from other Ministries/Departments/PSUs continues as one way of recruiting the personnel. TRAI has initiated the process of direct recruitment in the cadre of Assistant & Personal Assistant through open examination conducted by Staff Selection Commission (SSC).

4.17 Training

TRAI accords utmost importance to developing 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 trainings are being imparted to the 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

In selecting and designing training programmes/ workshops, TRAI's endeavour is to impart diverse skills for macro-level policy and 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.

A few TRAI officers were nominated during the year to attend International Training programmes conducted by various Institutions and International Telecommunications Union. The officers have received valuable inputs through these trainings and the inputs have enriched their skills in their respective area of regulatory work. These trainings include key aspects and Governance of Internet of Things, Big Data and Artificial Intelligence, Technical, Business and Regulatory aspects of 5G Network, ITU e-learning course on QoS Technologies and Regulation for Fixed and Mobile etc. TRAI personnel were also deputed for various domestic training programmes. A list of trainings is annexed at Annexure-I of Part-IV of this report.

TRAI also has in place a system of in-house training and workshops; wherein distinguished national and international experts are invited for interaction with its officers on the latest developments in the telecom sector. TRAI's officials participated in various such workshop-cum-training programmes, including those organised and hosted by the Authority on "Collaborative Regulations using RegTech and Technology Platforms", "South Asian Telecommunications Regulators' Council (SATRC) Working Group meeting on Spectrum", "Fostering Broadband Access and Connectivity", "South Asian Telecommunications Regulators' Council (SATRC) Workshop on Spectrum", "Broadband For All", etc.

4.18 Seminar / Workshops

In order to keep pace with the developments taking place nationally and globally, the Authority nominated members of its staff to various international/ domestic seminars, meetings and workshops which helped them to gather valuable feedback/ inputs for its own policy formulation as well to keep abreast with the latest development in the fields of technology. It has also provided opportunities to showcase important regulatory initiatives on various domestic and international platforms 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. A number of seminars were also organised by the Authority, details of which are available in Part – II of the report.

4.19 Office accommodation

Since its inception in 1997, Telecom Regulatory Authority of India (TRAI) has operated from rented premises. In November 2020, the Government of India, through the Department of Telecommunications (DoT), granted approval for the procurement of office space for TRAI in the NBCC Commercial Complex, which is being developed as the World Trade Center (WTC) in Nauroji Nagar, New Delhi.

In February 2021, NBCC (India) Limited allocated a total of 115,982 sq. ft. of super built-up area (85,545 sq. ft. of carpet area) to TRAI in Tower-F, spanning the 4th to 7th floors of the World Trade Center (WTC), Nauroji Nagar, New Delhi.

An MoU/Agreement was signed in November 2022 between TRAI and NBCC Services Ltd. (a wholly-owned subsidiary of Navratna CPSE NBCC (INDIA) Ltd.) for the planning, designing, and interior fit-out/ renovations/furnishing works of TRAI's office space on the 4th to 7th floors of Tower-F at NBCC World Trade Center, Nauroji Nagar, New Delhi – 110029. The building exterior/ interior fit-out works are nearly completed, and the site is scheduled to be handed over to TRAI by the end of May 2024.

4.20 Residential quarters for TRAI staff

In accordance with the current Government of India policy, employees joining the Authority on deputation are allowed to retain general pool accommodation, subject to payment of a Special License Fee by the Authority. The permissible duration of retention extends until the employees' superannuation or the end of their tenure with the Authority, whichever occurs earlier.

However, the Directorate of Estates (DoE) neither allocates general pool residential accommodation nor permits the retention of previously allotted accommodation for officers and staff after they are absorbed into TRAI. To address this issue, TRAI has engaged with the Directorate of Estates (DoE), Ministry of Housing and Urban Affairs, and initiated a proposal requesting an extension of the General Pool Residential Accommodation (GPRA) facility to all TRAI employees.

This extension would encompass employees appointed on deputation, through direct recruitment, or permanently absorbed into TRAI, regardless of their eligibility for GPRA before joining the Authority. The proposal seeks to amend the existing policy's scope to accommodate this change.

To provide accommodation solutions for TRAI employees, an MoU has been signed with MTNL/BSNL. Under this agreement, MTNL/BSNL will allocate a pool of residential quarters on a lease basis to TRAI, allowing the Authority to rent them to its employees as needed.

4.21 Observance of various Days / Diwas in TRAI

(i) Every year on March 8th, the world celebrates "International Women's Day" to honour the social, economic, cultural, and political achievements of women globally. In line with this objective, TRAI organized interactive sessions and talks on various issues specifically tailored for women employees to commemorate International Women's Day.

(ii) TRAI marked the 9th celebration of "International Yoga Day" on 21st June 2023. The Authority's officers and staff enthusiastically engaged in yoga sessions facilitated by experts from the Morarji Desai National Institute of Yoga, Delhi. Participation was encouraged both in physical gatherings and through hybrid modes, ensuring inclusivity and engagement across different platforms.

(iii) Vigilance Awareness Week is observed in TRAI every year, during the week in which the birthday of Sardar Vallabhbhai Patel (31st October 2023) falls in. This year Vigilance Awareness Week was observed from 30th October 2023 to 5th November 2023 with the following theme:

"भ्रष्टाचार को न कहें; राष्ट्र के प्रति प्रतिबद्ध हों"

"Say no to corruption; commit to the Nation"

TRAI observed the Vigilance Awareness Week, 2023 with the taking of the integrity pledge by all the officers and staff of TRAI on 2nd November 2023. The Integrity pledge was led by Smt. Meenakshi Gupta, Acting Chairperson, TRAI.

(iv) "The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 was notified on 9th December 2013. TRAI observes the 'Sexual Harassment at Workplace Prevention Week' to commemorate this week by the means of conducting sensitisation workshops to create awareness and sensitivity among TRAI employees.

This year a workshop was organised on 7th December 2023 on the topic "Prevention of Sexual Harassment of Women at Workplace and ensuring Gender Equality" by well-known author and speaker, Dr. Syed Mubin Zehra, Assistant Professor, Delhi University."

4.22 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.

4.23 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 2023-24 was ₹111.60 crore (including depreciation). The major heads of expenditure during the period were 'salaries', 'rent', 'professional fee' etc.

4.24 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.

4.25 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 as a part of the Capacity Building Project of TRAI. TRAI has decided to continue the 06 Regional Offices up to 31st March 2025 as a part of capacity building Project. The locations of Regional Office with the License –Service Areas covered (during 2023-24) 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

4.26 Staff strength of TRAI Regional Offices (as on 31st March 2024)

As on 31st March 2024, the Staff strength of the TRAI (Regional Offices) was as under:

S. NO.	POSTS	SANCTIONED	WORKING
1.	Advisors	06	04
2.	Jt. Advisor /Dy. Advisor	12	10
3.	Sr. Research Officer	12	09
4.	Assistant	06	05
	TOTAL	**36**	**28**

4.27 Details of Advisor level officers in TRAI Regional Offices (as on 31st March 2024)

S. No.	Location of Regional Office	Name of the Officer	Post	Photograph
1.	Bengaluru	Shri Brajendra Kumar	Advisor	
2.	Bhopal	Shri Shyam Sunder Chandak	Advisor I/c	
3.	Delhi*	Vacant	Advisor	Advisor (CA), TRAI Hqrs. – looks after the charge
4.	Hyderabad	Shri B. Praveen Kumar	Advisor	

5.	Jaipur	Shri Shyam Sunder Chandak	Advisor	
6.	Kolkata	Dr. Swadesh Kumar Samantha	Advisor	

*** Is being operated by TRAI (HQ)**

4.28 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 up to 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.

4.29 RIGHT TO INFORMATION ACT

During the financial year 2023-24, total 750 Nos of RTI applications and 60 Nos of Appeals 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.

4.30 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 further renewed in September 2021 and January 2023.

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. 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, TRAI has 32 Internal Quality Auditors (IQA) personnel for conducting internal audits. Further, the Quality Management Review meetings are taken by Secretary on quarterly basis. In addition, an annual management review meeting is also taken by the top management to ensure that the requirements of ISO 9001:2015 are met.

4.31 IMPLEMENTATION OF OFFICIAL LANGUAGE POLICY

An Official Language Section under the supervision of Secretary, TRAI is functioning in Telecom Regulatory Authority of India (TRAI) to implement the provisions of 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 the compliance of 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 communiques, 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 in every quarter. In these meetings, special emphasis is given on 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 12th May 2023, 28th July 2023, 30th October 2023 and 13th February 2024 respectively.

In compliance of the directives received from the Department of Official Language (Ministry of Home Affairs) and Department of Telecommunications, "Hindi Pakhwada 2023" was organized from 1st September 2023 to 15th September 2023, during which, various Hindi competitions such as Hindi Quiz, Songs / Poetry Recitation, Short Speech, Typing Speed, Essay Writing, Official Language and General Knowledge Quiz, Terminology and Grammar etc. as well as Hindi dictation and calligraphy competition was also organized for drivers and MTS of TRAI cadre. On the occasion of Hindi Divas, 14th September 2023, the official language message of the Honourable Minister of Home Affairs and Cooperation, Government of India was circulated in the office. The prize distribution ceremony was held on 22nd September 2023 under the chairmanship of Member, TRAI and the winners of various competitions were felicitated.

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 from the last 13 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 officials 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 in TRAI. During the period under report, four Hindi workshops were organized on 30th May 2023, 19th July 2023, 18th October 2023 and 31st January 2024 respectively.

Hindi Pakhwada - 2023, prize distribution ceremony was organized on 22nd September 2023

4.32 IMPLEMENTATION OF RESERVATION PRESCRIBED FOR RESERVED CATEGORIES

TRAI has been adhering to the provisions of reservation for eligible categories while making promotions. 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.

4.33 Collaboration with Other Regulators

With the arrival of new ICT Technologies, the regulation of ICT services is posing new challenges. The innovation in the sector is bringing new types of services. The technologies such as 5G, AI, M2M, AR/ VR, etc. will be extensively used in all sectors including, finance, health, agriculture, education, energy, etc. ICT innovations with new technologies will help in providing services efficiently in these sectors. Overlapping regulatory issues posed by these services will have cross-sectoral implications. Recognizing the importance of cross-sectoral collaborative regulation, the International Telecom Union (ITU) has been advocating the need to implement a new approach to ICT regulation, called G5 collaborative regulation. ITU has developed a G5 benchmark index to measure how countries transition to a holistic digital collaborative regulation and policy making in the digital economy. Due to the regulatory initiatives taken in India, it has been categorized as a leading nation on G5 Benchmark of collaborative regulation, which is the highest category. TRAI has taken numerous initiatives to promote cross-sectoral collaboration in the digital space at the national level some of which are mentioned in the following paras.

4.33.1 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.

At the initiative of the Authority, Forum of India Regulators (FOIR), in its 21st Annual General Body Meeting, had constituted a Working Group to submit its recommendations on "Cross Sector Collaborative Regulation between the Telecom Regulator and Electricity Regulators". The Working Group had representation from TRAI as well as from CERC, SERC, DISCOMs, Telecom Licensees and CTU. The Working group identified certain issues and made its recommendations to FOIR on following subjects:

1. Development of a centralized portal & GIS Mapping of Assets
2. Monetizing assets of power utility companies
3. Placement of telecom antennas and associated equipment on the transmission towers
4. Utilizing transmission assets such as electric substation lands & buildings
5. Deployment of small cells and aerial fibre on electric poles.

The Recommendations of the Working Group were presented in the 49th Governing Body meeting of FOIR. During the meeting, FOIR General Body decided to circulate this report to all State Electricity Regulatory Commissions (SERCs) and Joint Electricity Regulatory Commissions (JERCs) to disseminate the Recommendations among all DISCOMs under their jurisdiction as it would be infrastructure of the DISCOMs which would be used to install the 5G cells and related equipment.

In view of the immense potential and likely contribution of 5G, FOIR has set up a group to study the opportunities and challenges associated with adoption of 5G and related technologies such as AIML/IOT/M2M/AR/VR/Industry 4.0 etc. in different sectors represented in FOIR viz. Industries, ports, airports, power sector, petroleum & natural gas, Real Estate, Food industry etc for sector specific applications as well as common applications in Data analytics, office management, MIS etc. for the regulators.

4.33.2 Joint Committee of Regulators (JCoR)

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 Exchange Board of India (SEBI), Reserve Bank of India (RBI), Ministry of Consumer Affairs and TRAI are members of the committee. The focus of last few meetings was to frame joint action plan to curb unsolicited commercial communications (spams) using telecom resources. Representatives of Department of Telecommunications (DoT) and Ministry of Home Affairs (MHA) are also invited to attend the meetings.

Annexure – I

List of Trainings (Offline / Online) held during the period 1st April 2023 to 31st March 2024

S. No.	Organization	Topics of Training	Training Mode	Venue	Period	
1	IICA	Advance Professional Course in Competition Law and Market Regulations	Online	Online	May-23	Oct-23
2	NITS	Awareness Programmes / Documentation / Internal Audit	Offline	TRAI	14.06.2023	15.06.2023
3	The Art of Living	Art of Living - Meditation & Breath Workshop	Offline	TRAI	19.06.2023	23.06.2023
4	The Art of Living	Building Competencies for Personal Excellence	Offline	Bengaluru	10.07.2023	14.07.2023
5	TRAI, HQ	Orientation / Induction Training Programme	Offline	New Delhi	08.08.2023	08.08.2023
6	ITU	ITU e-learning course on QoS Technologies and Regulation for Fixed and Mobile	Online	Online	21.08.2023	28.08.2023
7	MDI	Communication Styles for Professional Success	Offline	MDI, Gurgaon	11.09.2023	13.09.2023
8	IICA	Advance Professional Course in Competition Law and Market Regulations	Online	Online	15.09.2023	15.02.2024
9	NPC	Productivity Improvement through Team Building and Effective Communication	Offline	Goa	18.09.2023	22.09.2023
10	IIM	Artificial Intelligence and Machine Learning for Business	Offline	IIM, Ahmedabad	18.09.2023	23.09.2023
11	MDI	The Art of Persuasive Communication	Offline	MDI, Gurgaon	20.09.2023	22.09.2023
12	ITU	Technical, Business and Regulatory aspects of 5G Network	Online	Online	25.09.2023	02.10.2023

13	CBC	Capacity Building Workshop on Fintech	Offline	New Delhi	26.09.2023	26.09.2023
14	IIM	Strategic Leadership and Innovation in The Digital Era	Offline	IIM, Bangalore	04.10.2023	06.10.2023
15	NPC	Advance Course on Secretarial Effectiveness and Office Management	Offline	Goa	09.10.2023	13.10.2023
16	NPC	Recruitment Rules and Reservation in Services for Government Organizations	Offline	Port Blair, A&N Islands	09.10.2023	17.10.2023
17	DoT	New Updates/ Enhancements in Features and Functionalities of GeM	Offline	Conference Hall, 13th Floor Sanchar Bhawan	11.10.2023	11.10.2023
18	NPC	Future Leadership Development Programme for Organizational Effectiveness & Productivity	Offline	Udaipur	16.10.2023	20.10.2023
19	DPIIT	Services PPI through IMF	Offline	Udyog Bhawan	01.11.2023	09.11.2023
20	FOIR	Four Month Certificate Course: "Regulatory Governance"	Online	FOIR-IICA, Manesar	04.11.2023	04.11.2023
21	FOIR	Navigating Regulatory Governance: Balancing Compliance & Innovation in a VUCA Landscape	Offline	Goa	21.11.2023	23.11.2023
22	NLU	General Legal Framework with a Focus on Telecom Sector	Offline	NLU, Delhi	04.12.2023	06.12.2023
23	ITU	Key aspects and Governance of Internet of Things, Big Data and Artificial Intelligence	Online	Online	11.12.2023	18.12.2023
24	IIM	Analytics for Leadership	Offline	IIM, Lucknow	13.12.2023	15.12.2023

25	NIELIT	Microsoft Office [Word, Excel, PowerPoint]	Offline	Inderlok, Delhi	18.12.2023	22.12.2023
26	Art of Living	Building Competencies for Personal Excellence	Offline	Bengaluru	08.01.2024	12.01.2024
27	NPC, Bengaluru	Management Development Program for Decision Making and Problem Solving	Offline	Goa	08.01.2024	12.01.2024
28	CENJOWS	Global Artificial Intelligence Summit & Awards (GAISA)2024	Offline	Manekshaw Centre, Delhi Cantt.	18.01.2024	19.01.2024
29	IIM	Finance for Non-Finance Executives	Offline	IIM, Indore	30.01.2024	02.02.2024
30	NeGD	Cyber Surakshit Bharat Training Programme	Offline	Delhi	05.02.2024	09.02.2024
31	AJNIFM	Advance MS-Excel and Data Analysis	Offline	AJNIFM, Faridabad	19.02.2024	23.02.2024
32	NPC	Effective office Administration & Financial Management	Offline	Port Blair	19.02.2024	23.02.2024
33	NTIPRIT	Cert In with Google India Pvt. Ltd. for Joint Cyber Security Training Program	Offline	Hyatt Regency, Bhikaji Cama	12.03.2024	13.03.2024
34	NPC, Gandhinagar	Systematic Problem Solving Conflict Resolution and Change Management	Offline	Gangtok, Sikkim	18.03.2024	22.03.2024
35	Dept. of Eco. Affairs	Public Private Partnership (PPP) - A Basic Perspective	Offline	AJNIFM, Faridabad, Haryana	18.03.2024	22.03.2024

B) AUDITED ACCOUNTS OF TRAI FOR THE YEAR 2023-24

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of The Telecom Regulatory Authority of India (TRAI) for the year ended 31st March 2024.

1. We have audited the attached Balance Sheet as on 31st March 2024 of the Telecom Regulatory Authority of India (TRAI), Income & Expenditure Account and Receipts & Payments Account for the year ended 2024, under Section 19(2) of the Comptroller & Auditor General's (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 about 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 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, Income & Expenditure Account and Receipts & Payments Account dealt with by this report have been drawn up in the format of Accounts approved by Government of India. Uniform format of accounts, applicable for Autonomous Bodies (ABs) under its administrative control.

   iii. In our opinion, proper books of accounts and other relevant records have been maintained as required, in so far as it appears from our examination of such books.

   iv. We further report that:

   A. Balance Sheet

   1. Fixed Assets (Schedule-8)

   Capital Work in Progress-nil

   Capital work in progress is understated by an amount of ₹ 45453.04 lakh due to non-inclusion of the amount paid to MoHUA and NSL towards purchase of office space at Nauroji Nagar Delhi from the grant received from DoT. This also resulted in understatement of the Corpus/Capital by the same amount.

This is in contravention of accrual basis of accounting.

2. Current Assets, Loans, Advances etc. (Schedule-11)

Prepayments: ₹ 12,13,618/-

The above head is understated by an amount of ₹ 751.56 lakh due to not including advance payment made for maintenance of the office space purchased at Nauroji Nagar Delhi out of the grant received from DoT for two years. This also resulted in understatement of the Corpus/Capital by the same amount.

3. Current Liabilities and Provisions (Schedule-7)

Provisions: ₹ 44,55,33,235/-

The above head is understated by an amount of ₹ 551.16 lakh due to non-provisioning of the expenditure in various heads pertaining to the year 2023-24.

This also resulted in overstatement of Income by the same amount.

B. Contingent Liabilities and Notes on Accounts (Schedule-25)

Capital Commitment

The above head is understated by an amount of ₹ 2876.29 lakh due to non-disclosure of the amount payable towards development of interior works in the newly purchased office space at Nauroji Nagar Delhi.

C. Grant –in Aid

(a) Revenue grants:

Out of the grants in aid of ₹ 126.74 crore (including the unspent balance of ₹ 14.74 crore of earlier year) received during the year, TRAI utilized a sum of ₹ 105.34 crore, leaving a balance of ₹ 21.40 crore as unutilized grant as on 31st March 2024.

(b) Capital grants:

Out of the grants in aid of ₹ 248.26 crore (including unspent balance of ₹ 46.71 crore of earlier year and sum of ₹ 1.65 Crore received as Interest on FDR of Building Account) received during the year, TRAI utilized a sum of ₹ 145.05 crore, leaving a balance of ₹ 103.17 crore, as unutilized grant as on 31st March, 2024.

Subject to our observations in the preceding paragraphs, we report that the Balance sheet and Income & Expenditure Account/Receipt & Payment 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 accounting principles generally 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 at 31st March 2024; and

b. In so far as it relates to Income & Expenditure Account of the surplus for the year ended on that date.

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

Sd/-
(Purushottam Tiwary)
Director General of Audit
(Finance & Communication)

Place: Delhi

Date: 10.12.2024

Annexure-I to Separate Audit Report (SAR) on the accounts of Telecom Regulatory Authority of India for the year ended 31st March 2024.

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 of TRAI was conducted for FY 2023-2024 and got approved by the Secretary. TRAI. Internal Audit of TRAI was constituted vide circular no.1-25/2012-A&P dated 12th July 2013 for strengthening the administrative setup for internal audit. It was decided that an independent Internal Audit Unit should function under the direct control of the Secretary, TRAI with Senior Research Officer (IA) being head of the unit.

Further, following was observed regarding main functions of Internal Audit Unit as per guidelines prescribed in the IAN No. 50/2012 vis-a-vis the actual position in TRAI:

i. IAU was to ensure checking of day to day financial transactions as well as proper implementation of Govt. Rules, including Rules of TRAI as notified by the DoT/TRAI.

However, Financial Disincentive imposed by TRAI remained to be collected fully or partially with respect to the certain financial disincentive orders issued by TRAI from time to time. It was not being pointed out by the IAU in its report. It indicates the aforesaid purpose was not being properly ensured. This point was raised during the Accounts Audit of FY 2022-23 also and accepted by management.

ii. IAU was to ensure submission of monthly Internal Audit Report to the Secretary, TRAI. The report was to contain errors in financial transactions as well as procedural deficiencies, suggestions/guidelines to remove the errors/deficiencies noticed during the course of Audit and to improve procedures.

Monthly Internal Audit Report was being submitted to the Secretary, TRAI. However, it was observed that monthly Internal Audit Report was being prepared based on limited inputs received from sections in form of MIS data.

iii. Moreover, Internal Audit of Regional offices is not being done.

This indicates inadequate internal audit system which needs to be strengthened.

2. Adequacy of Internal Control System

Internal control system is designed to provide a reasonable assurance of fulfilling accountability obligations, complying with laws and rules, orderly conduct of operations in an ethical, economical, efficient and effective manner and safeguarding of assets against losses.

The internal control system is not found adequate because of the following reasons:

i. There are weak controls over the recovery mechanism of financial disincentives imposed by TRAI vis-a-vis their recovery.

ii. Weak controls in managing GST related issues.

iii. There is no monthly budget monitoring system and without reviewing the allocation of funds for each activities, expenditure is being incurred or re-appropriation is being carried which may result in deficient economy in expenditure. Further TRAI at the close of financial year is not remitting back the unspent amount. The given practice is not in consonance with the extant rules and related guidelines and may result in deficient financial controls.

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 organization 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

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

Sd/-
(Purushottam Tiwary)
Director General of Audit
(Finance & Communication)

Place: Delhi
Date: 10.12.2024

Brief note on the Internal Control System in Telecom Regulatory Authority of India - for the year 2023-24.

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 2023-24 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 Licensing (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 constituted as per circular no.1-25/2012-A&P dated 12th July 2013 for strengthening the administrative setup for internal audit headed by Senior Research Officer (SRO) directly reporting to the secretary TRAI. The Internal Audit of TRAI was conducted for FY 2023-2024 and got approved by the Secretary, TRAI.

Further, following was observed regarding main functions of Internal Audit Unit as per guidelines prescribed in the IAN No. 50/2012 vis-a-vis the actual position in TRAI:

i. IAU was to ensure checking of day to day financial transactions as well as proper implementation of Govt. Rules including Rules of TRAI as notified by the DoT/TRAI.

   However, Financial disincentive imposed by TRAI remained to be collected fully or partially with respect to the certain financial disincentive orders issued by TRAI from time to time. It was not being pointed out by the IAU in its report. It indicates the aforesaid purpose was not being properly ensured. This point was raised during the Accounts Audit of FY 2022-23 also and accepted by management.

ii. IAU was to ensure submission of monthly Internal Audit Report to the Secretary, TRAI. The report was to contain errors in financial transactions as well as procedural deficiencies, suggestions/guidelines to remove the errors/deficiencies noticed during the course of Audit and to improve procedures.

   Monthly Internal Audit Report was being submitted to the Secretary, TRAI. However, it was observed that monthly Internal Audit Report was being prepared based on limited inputs received from sections in form of MIS data.

iii. Moreover, Internal Audit of Regional offices is not being done.

This indicates inadequate internal audit system which needs to be strengthened.

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 DDO (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 GoI'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 issued by the Govt of India from time to time.

9. Bank Balance/Bank Reconciliation

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 HBA/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 offices of the employees who took absorption.

Sd/-
(Purushottam Tiwary)
Director General of Audit
(Finance & Communication)

Place: Delhi
Date: 10.12.2024

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2024

(Amount in ₹)

INCOME	Schedule	REVENUE	
		Current Year 2023-24	Previous Year 2022-23
Income from Sales/Services	12		
Grants/ Subsidies	13	112,00,00,000	97,18,00,000
Fee/ Subscriptions	14	-	-
Income from Investments (Income on Invest from earmarked /endow. Funds transferred to Funds	15	0	-
Income for Royalty , Publication etc	16	-	-
Interest Earned	17	2,11,25,084	44,00,852
Other Income	18	6,13,219	2,79,457
Increase(decrease) in stock of Finished goods and works-in-progress	19	-	-
TOTAL (A)		**114,17,38,303**	**97,64,80,309**
EXPENDITURE			
Establishment Expenses	20	57,25,59,306	53,16,80,523
Other Administrative Expenses etc	21	52,51,51,989	53,71,31,773
Expenditure on Grants, Subsidies etc	22	-	-
Interest	23	-	-
Depreciation (Net Total at the year end-corresponding to Schedule 8)		1,82,66,144	1,79,37,025
TOTAL (B)		**111,59,77,439**	**108,67,49,321**
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		**2,57,60,864**	**(11,02,69,012)**
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LABILITIES AND NOTES ON ACCOUNTS	25		

Sd/-	Sd/-	[VACANT]	Sd/-
Advisor (F&EA)	Secretary	Member	Chairperson

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
BALANCE SHEET AS AT 31st MARCH 2024

(Amount in ₹)

		REVENUE	
		Current Year 2023-24	Previous Year 2022-23
CORPUS/CAPITAL FUND	1	(12,61,70,284)	(15,19,31,148)
RESERVES AND SURPLUS	2		
EARMARKED/ENDOWMENT FUNDS	3	101,56,29,492	46,71,36,490
SECURED LOANS AND BORROWINGS	4	-	-
UNSECURED LOANS AND BORROWINGS	5	-	-
DEFERRED CREDIT LIABILITIES	6	-	-
CURRENT LIABILITIES AND PROVISIONS	7	47,40,80,878	42,70,11,627
TOTAL		**136,35,40,086**	**74,22,16,969**
ASSETS			
FIXED ASSETS	8	8,52,71,365	8,68,19,200
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9	-	-
INVESTMENTS-OTHERS	10	-	-
CURRENT ASSETS, LOANS, ADVANCES ETC	11	127,82,68,721	65,53,97,769
MISCELLANEOUS EXPENDITURE			
(to the extent not written off or adjusted)			
TOTAL		**136,35,40,086**	**74,22,16,969**
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

Sd/-	Sd/-	[VACANT]	Sd/-
Advisor (F&EA)	Secretary	Member	Chairperson

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 1 - CORPUS/CAPITAL FUND

(Amount in ₹)

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
Balance as at the beginning of the year	(15,19,31,148)	(4,16,62,136)
Add:/Less Contributions towards Corpus/ Capital Fund		
Add/(Deduct): Balance of net income/ (expenditure) transferred from the		
Income and Expenditure Account	2,57,60,864	(11,02,69,012)
BALANCE AS AT THE YEAR-END	**(12,61,70,284)**	**(15,19,31,148)**

SCHEDULE 2 - RESERVES AND SURPLUS

(Amount in ₹)

		REVENUE	
		Current Year 2023-24	Previous Year 2022-23
1.	**Capital Reserve:**	-	-
	As per last Account	-	-
	Addition during the year	-	-
	Less: Deductions during the year	-	-
2.	**Revaluation Reserve:**	-	-
	As per last Account	-	-
	Addition during the year	-	-
	Less: Deductions during the year	-	-
3.	**Special Reserve:**	-	-
	As per last Account	-	-
	Addition during the year	-	-
	Less: Deductions during the year	-	-
4.	**General Reserve:**	-	-
	As per last Account	-	-
	Addition during the year	-	-
	Less: Deductions during the year	-	-
TOTAL		-	-

Sd/-
Consultant (F&FA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024
SCHEDULE-3-EARMARKED/ENDOWMENT FUNDS

(Amount in ₹)

	FUND-WISE BREAKUP				TOTAL REVENUE	
	Building fund	Fund XX	Fund YY	Fund ZZ	Current Year 2023-24	Previous Year 2022-23
a) Opening balance of the funds	46,71,36,490					
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	199,90,00,000					
TOTAL (a+b)	246,61,36,490					
c) Utilisation/exependiture towards objectives of funds						
i. Capital Expenditure						
- Fixed Assets					**NIL**	**NIL**
- Others						
Building advance NBCC	145,05,06,998					
Total						
ii. Revenue Expenditure						
- Salaries,Wages and Allowances etc						
- Rent						
- Other Administrative Expenses						
Total						
TOTAL (c)	145,05,06,998					
NET BALANCE AS AT THE YEAR-END (a+b+c)	**101,56,29,492**					

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&FA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 4 -SECURED LOANS AND BORROWINGS

(Amount in ₹)

		REVENUE	
		Current Year 2023-24	**Previous Year 2022-23**
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 5 - UNSECURED LOANS AND BORROWINGS

(Amount in ₹)

		REVENUE	
		Current Year 2023-24	**Previous Year 2022-23**
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

Sd/-
Consultant (F&EA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 6- DEFERRED CREDIT LIABILITIES

(Amount in ₹)

		REVENUE	
		Current Year 2023-24	Previous Year 2022-23
a)	Acceptances secured by hopethecation of capital equipment and other assets	-	-
b)	Others	-	-
TOTAL		-	-

Note : Amount due within one year

SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS

(Amount in ₹)

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
A. CURRENT LIABILITIES		
1) Acceptances		
2) Sundry Creditors	-	-
a) For Goods	-	-
b) Others	-	-
3) Advances Received	-	-
4) Interest accured 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)	36,62,308	12,73,442
2) For Telemarketers Registration Fees	57	2,663
3) Penalty from Telemarketers	-	-
4) Finanacial disincentive	2,48,85,278	3,48,49,557
TOTAL (A)	**2,85,47,643**	**3,61,25,662**
B. PROVISIONS		
1. For Taxation	-	-
2. Gratuity	13,04,53,912	11,77,99,638
3. Superannuation/Pension	-	-
4 Accumulated Leave Encashment	14,96,30,746	13,52,60,117
5 Trade Warranties/Claims	-	-
6 Other(Specify)	-	-
Provisions for expenses	16,54,48,577	13,78,26,210
TOTAL (B)	**44,55,33,235**	**39,08,85,965**
TOTAL (A+B)	**47,40,80,878**	**42,70,11,627**

Sd/-
Consultant (F&EA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 8 - FIXED ASSETS

(Amount in ₹)

DESCRIPTION	GROSS BLOCK				DEPRECIATION				NET BLOCK	
	Cost/valuation as at beginnning of the year	Additions during the year	Deductions during the year	Cost/ valuation at the year-ended	As at the begining of the year	Additions during the year	Deductions during the year	Total up to the year-end	As at the current year-end	As at the previous year-end
A. FIXED ASSETS:										
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 belongng to the entity	-		-	-	-	-	-	-	-	-
3. PLANT MACHINERY & EQUIPMENT	-	-	-	-	-	-	-	-		-
4. VEHICLES	72,63,697			72,63,697	46,73,332	5,18,515		51,91,847	20,71,850	25,90,365
5. FURNITURE, FIXTURES	2,98,80,687	27,272		2,99,07,959	2,58,00,862	7,52,807		2,65,53,669	33,54,290	40,79,825
6. OFFICE EQUIPMENT	4,92,76,208	18,26,649		5,11,02,857	4,29,23,819	24,76,219		4,54,00,038	57,02,819	63,52,389
7. COMPUTER/PERIPHERALS	15,16,78,337	1,46,89,914	12,65,650	16,51,02,601	8,44,91,504	1,15,41,154		9,60,32,658	6,90,69,943	6,71,86,833
8. ELECTRIC INSTALLATIONS	1,17,82,757	13,23,475		1,31,06,232	1,00,95,310	7,11,507		1,08,06,817	22,99,415	16,87,447
9. LIBRARY BOOKS	45,14,124	1,16,650		46,30,774	44,45,087	56,893		45,01,980	1,28,794	69,037
10. AUDITORUM	2,20,90,493			2,20,90,493	1,72,37,189	22,09,050		1,94,46,239	26,44,254	48,53,304
TOTAL OF CURRENT YEAR	**27,64,86,303**	**1,79,83,960**	**12,65,650**	**29,32,04,613**	**18,96,67,103**	**1,82,66,145**	**0**	**20,79,33,248**	**8,52,71,365**	**8,68,19,200**
PREVIOUS YEAR	25,62,24,256	2,04,98,047	2,36,000	27,64,86,303	17,17,44,561	1,79,37,025	14,483	18,96,67,103	8,68,19,200	8,44,79,695
B. CAPITAL WORK-IN-PROGRESS										
TOTAL										

Sd/-
Consultant (F&EA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 9 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS

(Amount in ₹)

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
1. In Governement Securities	-	-
2. Other approved Securities	-	-
3. Shares	-	-
4. Debentures and Bonds	-	-
5. Subsidiaries and Joint Ventures	-	-
6. Others (to be specified)	-	-
TOTAL	**-**	**-**

SCHEDULE 10 - INVESTMENTS OTHERS

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
1. In Governement Securities	-	-
2. Other approved Securities	-	-
3. Shares	-	-
4. Debentures and Bonds	-	-
5. Subsidiaries and Joint Ventures	-	-
6. Others (Bank FDRs)	-	-
TOTAL	**-**	**-**

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Consultant (F&EA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC

(Amount in ₹)

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
A. CURRENT ASSETS:		
1. Inventories		
a) Stores and Spares	-	-
b) Lose tools	-	-
c) Stock-in-trade	-	-
Finished Goods	-	-
Work in progress	-	-
Raw Material	-	-
2. Sundry Debtors:		
a) Debts Outstanding for a period exceeding six months	-	-
b) Others	-	-
3. Cash balances in hand (including cheques/drafts and imprest)	34,444	95,729
4. Bank Balances:		
a) With Scheduled Banks		
- On Current Accounts TRAI General fund	25,10,857	14,73,69,502
- Building Fund (For New Building of TRAI)	97,91,80,856	9,66,490
- On Current Accounts Registration Fees	57	2,056
- Penalty from Telemarketers	0	0
- On Savings Account Customer Education Fees	0	0
- On Savings Account Financial Disincentive	2,48,85,278	3,48,49,557
Fixed Deposits with Union Bank of India (MAIN ACCOUNT)	21,15,00,000	46,61,70,000
Fixed Deposits with Union Bank of India (BUILDING ACCOUNT)	5,26,80,000	
a) With non-Scheduled Banks		
- On Current Accounts	0	0
- On Deposit Accounts	0	0
- On Savings	0	0
5. Post Office-Savings Accounts	0	0
TOTAL (A)	**127,07,91,492**	**64,94,53,334**

Sd/-
Consultant (F&EA)

Contd....

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC

(Amount in ₹)

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
B. LOANS, ADVANCES AND OTHER ASSETS		
1. Loans		
a. Staff	-	-
b) Other Entities engaged in activities/ objectives similar to that of Entity	-	-
c) Others (TA, LTC and Festival Advances to Officers & Staff))	57,65,817	32,57,231
2. Advance and other amounts recoverable in cash or in kind or for value to be received:		
a) On Captial Account	-	-
b) Prepayments	12,13,618	20,97,547
c) Others	-	-
3. Income Accrued		
a) On Investments from Earmarked/ Endowment Funds	-	-
b) On Investments-Others	-	-
c) On Loans and Advances	4,97,794	5,68,698
d) Others	-	-
(includes income due unrealised Rs.)		
5. Claims Receivable	-	20,959
TOTAL (B)	**74,77,229**	**59,44,435**
TOTAL (A+B)	**127,82,68,721**	**65,53,97,769**

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Consultant (F&EA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 12 - INCOME FROM SALES/SERVICES

(Amount in ₹)

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
1. Income from Sales	-	-
a) Sale of Finished Goods	-	-
b) Sale of Raw material	-	-
c) Sale of Scraps	-	-
2. Income from Services	-	-
a) Labour and Processing Charges	-	-
b) Professional/Consultancy Services	-	-
c) Agency Commission and Brokerage	-	-
d) Maintenance Services (Equipment/Property)	-	-
e) Others (Specify)	-	-
TOTAL	-	-

SCHEDULE 13 - GRANTS/SUBSIDIES

	REVENUE	
(Irrevocable Grants & Subsidies Received)	**Current Year 2023-24**	**Previous Year 2022-23**
1) Central Government	112,00,00,000	97,18,00,000
2) State Government(s)	-	-
3) Government Agencies	-	-
4) Institutions/Welfare Bodies	-	-
5) International Organisations	-	-
6) Other (Swachh Bharat)	-	-
TOTAL	**112,00,00,000**	**97,18,00,000**

SCHEDULE 14 - FEES/SUBSCRIPTIONS

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
1. Entrance Fees	-	-
2. Annual Fees/Subscriptions	-	-
3. Seminar/Program Fees	-	-
4. Consultancy Fees	-	-
5. Others(specify)	-	-
TOTAL	-	-

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 AT 31st MARCH 2024

SCHEDULE 15 - INCOME FROM INVESTMENTS

(Amount in ₹)

	Investment from Earmarked Fund	
	REVENUE	
(Income on Invest.from Earmarked/Endowment Funds Transferred to Funds)	**Current Year 2023-24**	**Previous Year 2022-23**
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)	-	-
TOTAL	-	-

TRANSFERRED TO EARMARKED/ENDOWMENT FUNDS

SCHEDULE 16 -INCOME FROM ROYALTY, PUBLICATION ETC

	REVENUE	
	Current Year 2023-24	Previous Year 2022-23
1. Income from Royalty	-	-
2. Income from Publications	-	-
3. Misc Income	-	-
TOTAL	-	-

SCHEDULE 17 - INTEREST EARNED

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
1) On Term Deposits		
a) With Scheduled Banks	-	-
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Flexi accounts - Main Account	45,56,484	44,00,852
e) Flexi accounts - Building Fund	165,68,600	-
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	-	-
TOTAL	**2,11,25,084**	**44,00,852**

Note-Tax deducted at source to be indicated

Sd/-
Consultant (F&EA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 18-OTHER INCOME

(Amount in ₹)

		REVENUE	
		Current Year 2023-24	**Previous Year 2022-23**
1.	Profit on Sale/disposal of Assets	-	-
	a) Owned assets	4,38,933	2,72,619
	b) Assets acquired out of grants, or received free of cost	-	-
2.	Export Incentives realized	-	-
3.	Fees for Miscellaneous Services	-	-
4.	Miscellaneous Income	1,74,286	6,838
5.	Registration Fees from Telemarketers	-	-
6.	Customer Education Fees from Telemarketers	-	-
7.	Penalty from Telemarketers	-	-
8.	Financial Disincentive	-	-
TOTAL		**6,13,219**	**2,79,457**

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

		REVENUE	
		Current Year 2023-24	**Previous Year 2022-23**
a)	Closing stock		
	- Finished Goods	-	-
	- Work-in-progess	-	-
b)	Less Opening Stock		
	- Finished Goods	-	-
	- Work-in-progess	-	-
NET INCREASE/(DECREASE) [a-b]		-	-

SCHEDULE 20- ESTABLISHMENT EXPENSES

		REVENUE	
		Current Year 2023-24	**Previous Year 2022-23**
a)	Salaries and Wages	45,06,18,375	41,76,85,587
b)	Allowances and Bonus	4,48,190	4,98,565
c)	Contribution to Provident Fund	2,64,66,215	2,36,21,258
d)	Contribution to Other Fund (specify)	-	-
e)	Staff Welfare Expenses	16,50,715	12,45,119
f)	Expenses on Employees Retirement and Terminal Benefits	7,21,75,873	6,95,07,195
g)	Others (LTC, Medical to Officers & Staff and OTA to Staff)	2,11,99,938	1,91,22,799
TOTAL		**57,25,59,306**	**53,16,80,523**

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FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/ YEAR ENDED 31st MARCH 2024

SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC

(Amount in ₹)

	REVENUE	
	Current Year 2023-24	Previous Year 2022-23
a) Electricity and power	50,16,256	49,12,449
b) Insurance and bank charges	1,54,824	1,53,137
c) Repairs and maintenance	62,43,072	94,90,467
d) Rent, Rates and Taxes	33,32,88,151	32,61,58,011
e) Vehicles Running and Maintenance	17,66,393	20,19,290
f) Postage,Telephone and Communication Charges	1,84,04,784	1,00,71,632
g) Printing and Stationery	15,48,046	33,73,526
h) Travelling and Conveyance Expenses	5,03,72,402	5,35,13,154
i) Expenses on Seminar/Workshops	82,14,472	1,53,06,149
j) Subscription Expenses	68,10,212	75,64,692
k) Prior period expenses	(2,08,29,902)	33,51,173
l) Auditors Remuneration	5,50,000	2,80,000
m) Hospitality Expenses	23,66,954	7,25,512
n) Professional Charges	4,07,46,147	4,12,82,284
o) Consultation and training	64,31,916	69,69,966
p) Software development expenses	54,88,732	33,38,140
q) Advertisement and Publicity	14,67,964	9,07,109
r) Others (Payment to Security, Housekeeping etc.)	5,70,91,964	4,77,15,082
s) Short & Excess Recovery	19,602	-
TOTAL	52,51,51,989	53,71,31,773

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FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 22-EXPENDITURE ON GRANTS, SUBSIDIES ETC

(Amount in ₹)

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
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

	REVENUE	
	Current Year 2023-24	**Previous Year 2022-23**
a) On Fixed Loans	-	-
b) On Other Loans (including Bank Charges)	-	-
c) Others (specify)	-	-
TOTAL	-	-

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Consultant (F&EA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
TELECOM REGULATORY AUTHORITY OF INDIA
RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 31st March 2024

(Amount in ₹)

RECEIPTS	REVENUE Current Year 2023-24	REVENUE Previous Year 2022-23	PAYMENTS	REVENUE Current Year 2023-24	REVENUE Previous Year 2022-23
I. Opening Balance			**1. Expenses**		
a) Cash in hand	95,729	25,844	a) Establishment Expenses (corresponding to Schedule 20)	54,13,68,104	49,89,28,925
i) In current accounts		21,37,59,848	b) Administrative expenses (corrosponding to Schedule 21)	50,17,45,941	52,30,85,602
ii) In deposit accounts in building fund	9,66,490	5,42,113			
iii) In TRAI General fund	14,73,69,502				
iv) Savings accounts penality		123	**II Payments made against funds for various projects**		
v) building fund FD	46,71,70,000				
registration fees	2,056	1,310	(Name the fund or project should be shown along with		
customer education fees			the particulars of payments made for each project)		
Financial disincentive	3,48,49,557	1,13,90,037	Payments made to NBCC for Building Fund	145,05,06,998	91,04,49,420
II. Grants Received			**III. Investments and deposits made**		
a) From Government of India	112,00,00,000	97,18,00,000	a) Out of Earmarked/Endowment funds		
b) From State Government			b) Out of Own Funds(investments-Others)		
c) Grant received from DOT for Building Fund	199,90,00,000	135,60,00,000	c) Building Fund Bank Balance	97,91,80,856	9,66,490
			d) Fixed Deposit out of Building Fund	5,26,80,000	46,35,30,000
(Grants for capital & revenue exp to shown sperately)			**IV. Expenditure on Fixed Assets & Capital Work-in-progress**		
III. Income on Investments from			a) Purchase of Fixed Assets	1,67,18,310	2,02,96,520
a) Earmarked/ Endow Funds	1,65,68,600	1,84,03,798	b) Expenditure on Capital Work-in-progress		
b) Own Funds (Oth Investment)			**V. Refund of surplus money/Loans**		
IV. Interest Received			a) To the Government of India		
a) On Bank depostis	45,56,484	44,00,852	b) To the State Government		
b) Loans,Advances etc	91,863	98,907	c) To DoT for Telemarketer Registration fees	2,606	
			To DoT for Customer education fees		
			To DoT for Penality from Telemarketeres		
			To DoT for Financial Disincentive	3,48,49,557	
c) Miscellaneous			**VI. Finance Charges (Interest)**		
V Other Income (Specify)					
To Miscellaneous Income	6,13,219	2,79,457	**VII. Other Payments (Specify)**		
			Loans and advances and security deposits	25,08,587	10,23,809
VI Amount Borrowed			VIII. Closing Balances		
VII. Any other receipts (give details)			a) Cash in hand	34,444	95,729
			b) Bank Balances		
To Security Deposits	24,38,888	4,35,055	1) In current accounts - TRAI General fund	25,10,857	14,73,69,502
other advances	8,83,929		i) In current accounts - Registration fees	57	2,056
To Sale of Assets			ii) In deposit accounts trai	21,15,00,000	
Advance Against sale of Vehicle			2) Savings accounts		
To registration fees	-	746	i) customer education fees		
To customer education fees			ii) penalty from telemarketers		0
To penalty from telemarketers			iii) financial disincentive	2,48,85,278	3,48,49,556
To financial disincentive	2,48,85,278	2,34,59,519			
TOTAL	**3,81,84,91,595**	**260,05,97,609**	**TOTAL**	**381,84,91,595**	**260,05,97,609**

Sd/-	Sd/-	[VACANT]	Sd/-
Advisor (F&EA)	Secretary	Member	Chairperson

SCHEDULE 24 - SIGNIFICANT ACCOUNTING POLICIES

1 Accounting Conventions

(a) 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 23.07.2007 for Revenue Head.

(b) Accounts have been prepared on accrual basis for the current year i.e. 2023-24. There is no change in Method of Accounting from the preceding year.

(c) Provisions for all the undisputed and known liabilities have been made in the Books of Accounts.

(d) Figures have been rounded off to the nearest rupee.

(e) 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

(a) 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.6-13/2019-A&P dated 03.01.2020 to provide/write off these handsets in two years. Accordingly depreciation on Mobile Handsets have been charged off @ 50%.

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

(c) 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.

Sd/-
Consultant (F&EA)

5 Retirement Benefits

(a) Provision for Leave Salary and Pension Contribution up to 31.03.24 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.

(b) In the case of Regular employees, Provision for Leave Encashment and Gratuity for the year 2023-24 have been made on the basis of report furnished by the actuary.

6 Govt. Grant

(a) Govt. grants are accounted for on the basis of grants received during the year from the Government.

(b) The money received on account of Registration Fee, Customer Education Fee, Penality 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)

Building fund bank balance shown in Schedule-11 amounting ₹ 103.18 crore includes ₹ 56.83 crore on account of GST not provided in the books of accounts due to non receipt of clarification from the GST Council. Hence the same is shown as Contingent Liabilities.

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 exempt from tax on Wealth and Income.

4 Grants

During the financial year 23-24 a sum of ₹ 112.00 Crores have been received as govt Grant from DOT for meeting the day to day expenses of TRAI.

5 Earmarked grant

During the financial year 2023-2024, a sum of ₹ 199.90 crores have been received as Government Grants on account of Building Fund.

6 Previous year figures

Corresponding figures for the previous year have been regrouped/arranged wherever necessary.

Sd/-
Consultant (F&EA)

7 **Transactions in Foreign Currencies**

Expenditure in Foreign Currency: NIL

(a) Travel: A sum of ₹ 1,19,79,431.00 was incurred on account of Foreign Tour Expenses.

A sum of ₹ 63,98,153.00 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

8 Schedules 1 to 25 are annexed to and form an integral part of the Balance Sheet as at 31st March 2024 and the Income and Expenditure Account for the year ended on that date.

Sd/-	Sd/-	[VACANT]	Sd/-
Advisor (F&EA)	Secretary	Member	Chairperson

(C) AUDITED CONTRIBUTORY PROVIDENT FUND ACCOUNTS OF TRAI FOR THE YEAR 2023-24

Separate Audit Report on the Annual Accounts of Telecom Regulatory Authority of India-Contributory Provident Fund Account for the year ended 31st March, 2024.

1. Introduction

We have audited the attached Balance Sheet of the Telecom Regulatory Authority of India-Contributory Provident Fund Account as on 31st March 2024 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 10th 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. We further report that:

A. Balance Sheet

Current Assets, Loans, Advances etc (Schedule-11)

Bank Balances

On Deposit Accounts (Includes margin money): ₹ 23,05,00,000

TRAI-CPF earned interest of ₹189.86 lakh which was added to the cumulative Fixed Deposits by the banks as interest amount reinvested. However this amount was shown as interest accrued instead of Fixed Deposits by TRAI-CPF. This resulted in understatement of FDs and overstatement of accrued interest by the same amount.

B. Receipts and Payments Account

Opening and closing balance of Deposit Accounts was not shown in the Receipt and Payment Accounts. This is against the Uniform Format of Acccounts for the Autonomous Bodies prescribed for preparation of the Receipts and Payment Account.

C. Significant Accounting Policies (Schedule-24)

The Financial Statements of the Trust are deficient to the extent of non-disclosure of the accounting policy pertaining to Investments. This is violation of Accounting Standard 1 related to Disclosure of Accounting policies.

vi. In our opinion and to the best of 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 31st March 2024; and

b) In so far as it relates to the Income and Expenditure Account for the year ended on that date.

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

Sd/-
(Purushottam Tiwary)
Director General of Audit
(Finance & Communication)

Place: Delhi

Date: 13.11.2024

Annexure-I to Separate Audit Report

Telecom Regulatory Authority of India-Contributory Provident Fund for the year ended 31st March 2024

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 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/-
(Purushottam Tiwary)
Director General of Audit
(Finance & Communication)

Place: Delhi

Date: 13.11.2024

Brief note on the Internal Control System in Telecom Regulatory Authority of India-Contributory Provident Fund Account for the year 2023-24.

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. 26-07-2024 to 05-08-2024 of TRAI for the year 2023-24 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 5th 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 10th April 2003. The 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)	Deputy Advisor (HR)	:	Trustee (Ex-officio)
(iii)	Deputy Advisor (F&EA)	:	Trustee (Ex-officio)
(iv)	Section Officer (IT)	:	Trustee
(v)	Assistant (BB&PA)	:	Trustee

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 Unit headed by Senior Research Officer (SRO). 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 Technical 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 interest 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/-
(Purushottam Tiwary)
Director General of Audit
(Finance & Communication)

Place: Delhi
Date: 13.11.2024

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 31st MARCH 2024

(Amount in ₹)

INCOME	Schedule	Current Year 2023-24	Previous Year 2022-23
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	1,59,87,703.88	1,55,03,153.99
Income for Royalty ,Publication	16		
Interest Earned	17	1,35,69,049.00	1,00,08,080.00
Other Income	18	1,69,663.12	6,82,581.01
Increase(decrease) in stock of Finished goods and works-in-progress	19		
TOTAL (A)		**2,97,26,416.00**	**2,61,93,815.00**
EXPENDITURE			
Establishment Expenses	20		
Other Administrative Expenses etc	21	236.00	2,05,250.00
Expenditure on Grants, Subsidies etc	22		
Interest	23	2,97,26,180.00	2,59,88,565.00
Diminution Value of Investments in Mutual Funds			
Depreciation (Net Total at the year end-corresponding to Schedule 8)			
TOTAL (B)		**2,97,26,416 .00**	**2,61,93,815.00**
Balance being excess of Income over Expenditure (A-B)		-	-
Transfer to Misc Expenditure to the extent not written off - on account of Diminution Value of Investments			
Transfer to / from General Reserve		-	-
Balance being Surplus/ (Deficit) carried to Corpus/ Capital Fund			
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LABILITIES AND NOTES ON ACCOUNTS	25		

Sd/-	Sd/-	Sd/-	Sd/-	Sd/-	Sd/-
Meetu Gulati	Anil Kumar Kaushal	Raji Geojo T	Vinay Kumar Goel	R. Ramanujam	Vandana Sethi
Dy. Advisor (F&EA)	Asstt. (BB&PA)	S.O. (IT)	Dy. Advisor (HR)	Dy. Advisor (F&EA)	Advisor (Admin)
Secretary (CPF)	Trustee	Trustee	Ex-Officio Trustee	Ex-Officio Trustee	Ex-Officio President

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FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT
BALANCE SHEET AS AT 31st MARCH 2024

(Amount in ₹)

CORPUS/CAPITAL FUND AND LIABILITIES	Schedule	Current Year 2023-24	Previous Year 2022-23
TRAI - CPF MEMBERS' ACCOUNT	1	45,59,68,896.00	41,84,30,377.00
RESERVES AND SURPLUS	2	68,21,024.35	68,21,024.35
EARMARKED/ ENDOWMENT FUNDS	3		
SECURED LOANS AND BORROWINGS	4		
UNSECURED LOANS AND BORROWINGS	5		
DEFERRED CREDIT LIABILITIES	6		
CURRENT LIABILITIES AND PROVISIONS	7	-	-
TOTAL		**46,27,89,920.35**	**42,52,51,401.35**
ASSETS			
FIXED ASSETS	8		
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9		
INVESTMENTS - OTHERS	10	19,75,70,000.00	20,90,70,000.00
CURRENT ASSETS, LOANS, ADVANCES ETC	11	26,52,19,920.35	21,61,81,401.35
MISCELLANEOUS EXPENDITURE			
(to the extent not written off or adjusted)			
TOTAL		**46,27,89,920.35**	**42,52,51,401.35**
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

Sd/-	Sd/-	Sd/-	Sd/-	Sd/-	Sd/-
Meetu Gulati	Anil Kumar Kaushal	Raji Geojo T	Vinay Kumar Goel	R. Ramanujam	Vandana Sethi
Dy. Advisor (F&EA)	Asstt. (BB&PA)	S.O. (IT)	Dy. Advisor (HR)	Dy. Advisor (F&EA)	Advisor (Admin)
Secretary (CPF)	Trustee	Trustee	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
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 1 - TRAI - CPF MEMBERS' ACCOUNT

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
Balance as at the beginning of the year	41,84,30,377.00	35,38,95,741.00
Deduct: Adjustments for previous year		
Add: Contributions towards Members' Account	3,75,38,519.00	6,45,34,636.00
Add/(Deduct): Balance of net income/ (expenditure) transferred from the		
Income and Expenditure Account		
BALANCE AS AT THE YEAR-END	**45,59,68,896.00**	**41,84,30,377.00**

SCHEDULE 2 - RESERVES AND SURPLUS

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
1. Capital Reserve:		
As per last Account		
Addition during the year		
Less: Deductions during the year		
2. Revaluation Reserve:		
As per last Account		
Addition during the year		
Less: Deductions during the year		
3. Special Reserve:		
As per last Account		
Addition during the year		
Less: Deductions during the year		
4. General Reserve:		
As per last Account	68,21,024.35	68,21,024.35
Addition during the year	-	-
Less: Deductions during the year		
TOTAL	**68,21,024.35**	**68,21,024.35**

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS
THE TELECOM REGULATORY AUTHORITY OF INDIA -
CONTRIBUTORY PROVIDENT FUND ACCOUNT
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 3 - EARMARKED/ ENDOWMENT FUNDS

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
a) Opening balance of the funds		
b) Additions of the funds:		
i. Donations/grants		
ii. Income from investments made on account of funds		
iii. Other additions(sepcify nature)		
c) Utilisation/exependiture towards objectives of funds		
i. Capital Expenditure		
-Fixed Assets		
-Others		
Total		
ii. Revenue Expenditure		
- Salaries,Wages and allowances etc		
- Rent		
- Other Administrative expenses		
NET BALANCE AS AT THE YEAR-END (a+b+c)		

Notes

1) Disclosures shall be made under relevant head based on conditions attaching 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 AT 31st MARCH 2024

SCHEDULE 4 -SECURED LOANS AND BORROWINGS

(Amount in ₹)

		Current Year 2023-24	Previous Year 2022-23
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			

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 5 -UNSECURED LOANS AND BORROWINGS

(Amount in ₹)

		Current Year 2023-24	Previous Year 2022-23
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 (Specity)		
TOTAL			

Note: Amount due within one year

SCHEDULE 6 - DEFERRED CREDIT LIABILITIES

(Amount in ₹)

		Current Year 2023-24	Previous Year 2022-23
a)	Acceptances secured by hypothecation of capital equipment and other assets		
b)	Others		
	TOTAL		

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
A. CURRENT LIABILITIES		
1) Acceptances		
2) Sundry Creditors		
a) For Goods		
b) Others		
3) Advances Received		
4) Interest accured but not due on:		
a) Secured loans/borrowings		
b) Unsecured Loans/borrowings		
5) Statutory Liabilities		
a) Overdue		
b) Others		
6) Other current Liabilities		
TOTAL (A)	-	-
B. PROVISIONS		
1) For Taxation		
2) Gratuity		
3) Superannuation/Pension / Removal		
4) Accumulated Leave Encashment		
5) Trade Warranties/Claims		
6) Other (Payable to MEA/ TRAI)		
TOTAL (B)	-	-
TOTAL (A+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 AT 31st MARCH 2024

SCHEDULE 8 - FIXED ASSETS

	GROSS BLOCK				DEPRECIATION				NET BLOCK	
DESCRIPTION	Cost/ valuation as at beginnning of the year	Additions during the year	Deductions during the year	"Cost/ valuation at the year-ended"	As at the beginning of the year	On Additions during the year	On Deductions during the year	Total up to the year-end	As at the current year-end	As at the previous year-end
A. FIXED ASSETS:										
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 belongng to the entity										
3. PLANT MACHINERY & EQUIPMENT										
4. VEHICLES										
5. FURNITURE, FIXTURES										
6. OFFICER EQUIPMENT										
7. COMPUTER/PERIPHERALS										
8. ELECTRIC INSTALLATIONS										
9. LIBRARY BOOKS										
10. TUBEWELLS & W.SUPPLY										
11. OTHER FIXED ASSETS										
TOTAL OF CURRENT YEAR										
PREVIOUS YEAR										
B. CAPITAL WORK-IN-PROGRESS										
TOTAL										

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
THE TELECOM REGULATORY AUTHORITY OF INDIA -
CONTRIBUTORY PROVIDENT FUND ACCOUNT
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 9 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
1. In Government Securities		
2. Other approved Securities		
3. Shares		
4. Debentures and Bonds		
5. Subsidiaries and Joint Ventures		
6. Others (to be specified)		
TOTAL	-	-

SCHEDULE 10 - INVESTMENTS OTHERS

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
1. In Government Securities	19,75,70,000.00	20,90,70,000.00
Long - term Investments -		
Current Investments -		
2. Other Approved Securities		
3. Shares		
4. Debentures and Bonds		
5. Subsidiaries and Joint Ventures	-	
6. Others	-	
TOTAL	**19,75,70,000.00**	**20,90,70,000.00**

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)
THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH 2024

SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
A. CURRENT ASSETS:		
1. Inventories		
a) Stores and Spares		
b) Lose tools		
c) Stock-in-trade		
Finished Goods		
Work in progress		
Raw Material		
2. Sundry Debtors:		
a) Debts Outstanding for a period exceeding six months		
b) Others		
3. Cash balances in hand (including cheques/ drafts and imprest)		
4. Bank Balances:		
a) With Scheduled Banks		
- On Current Accounts		
- On Deposit Accounts (includes margin money)	23,05,00,000.00	19,53,00,000.00
- On Savings Account	4,84,599.80	9,43,504.23
b) With non Scheduled Banks		
- On Current Accounts		
- On Deposit Accounts		
- On Savings Account		
5. Post Office-Savings Accounts		
TOTAL (A)	**23,09,84,599.80**	**19,62,43,504.23**

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 AT 31st MARCH 2024

SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
B. LOANS, ADVANCES AND OTHER ASSETS		
1. Loans		
a) Staff		
b) Other Entities engaged in activities/ objectives similar to that of Entity		
c) Other (Specify)		
2. Advance and other amounts recoverable in cash or in kind or for value to be received:		
a) On Capital Account		
b) Prepayments		
c) Others - Recoverable Advances from CPF Members	18,99,447.00	
3. Income Accrued		
a) On Investments from Earmarked/ Endowment Funds		
b) On Investments - Others	3,21,72,516.43	1,94,84,035.11
c) On Loans and Advances		
d) Others		
(includes income due unrealised ₹)		
4. Claims Receivable - Recoverable from TRAI	1,63,357.12	4,53,862.01
TOTAL (B)	**3,42,35,320.55**	**1,99,37,897.12**
TOTAL (A+B)	**26,52,19,920.35**	**21,61,81,401.35**

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 31st MARCH 2024

SCHEDULE 12 - INCOME FROM SALES/SERVICES

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
1. Income from Sales		
a) Sale of Finished Goods		
b) Sale of Raw material		
c) Sale of Scraps		
2. Income from Services		
a) Labour and Processing Charges		
b) Professional/Consultancy Services		
c) Agency Commission and Brokerage		
d) Maintenance Services (Equipment/Property)		
e) Others (Specify)		
TOTAL		

SCHEDULE 13 - GRANTS/SUBSIDIES

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
(Irrevocable Grants & Subsidies Received)		
1. Central Government		
2. State Government (s)		
3. Government Agencies		
4. Institutions/Welfare Bodies		
5. International Organisations		
6. Other (Specify)		
TOTAL		

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 31st MARCH 2024

SCHEDULE 14 - FEES/SUBSCRIPTIONS

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
1. Entrance Fees		
2. Annual Fees/Subscriptions		
3. Seminar/Program Fees		
4. Consultancy Fees		
5. Others (specify)		
TOTAL		

Note: Accounting Policies towards each item are to be disclosed

SCHEDULE 15 - INCOME FROM INVESTMENTS

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
(Income on Invest. from Earmarked/ Endowment Funds Transferred to Funds)		
1. Interest		
a) On Govt Securities	1,59,87,703.88	1,55,03,153.99
b) Other Bonds/Debentures		
2. Dividends		
a) On Shares		
b) On Mutual Fund Securities		
3. Rents		
4. Others		
TOTAL	**1,59,87,703.88**	**1,55,03,153.99**
TRANSFERRED TO EARMARKED/ ENDOWMENT FUNDS		

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 31st MARCH 2024

SCHEDULE 16 -INCOME FROM ROYALTY, PUBLICATION ETC

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
1. Income from Royalty		
2. Income from Publications		
3. Others (Specify)		
TOTAL		

SCHEDULE 17 - INTEREST EARNED

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
1. On Term Deposits		
a) With Scheduled Banks	1,35,04,051.00	99,37,633.00
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
2. On Savings Account		
a) With Scheduled Banks	64,998.00	70,447.00
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		
TOTAL	**1,35,69,049.00**	**1,00,08,080.00**

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 31st MARCH 2024

SCHEDULE 18 - OTHER INCOME

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
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 - Discount Received on Govt. Securities	7,000.00	2,28,660.00
5. Other Income - Extra bank charges received	26.00	59.00
6. Shortfall recoverable from TRAI	1,62,637.12	4,53,862.01
TOTAL	**1,69,663.12**	**6,82,581.01**

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

(Amount in ₹)

	Current Year 2023-24	Previous Year 2022-23
a) Closing stock		
- Finished Goods		
- Work-in-progess		
b) Less Opening Stock		
- Finished Goods		
- Work-in-progess		
NET INCREASE/(DECREASE) [a-b]		

SCHEDULE 20- ESTABLISHMENT EXPENSES

(Amount in Rs.)

	Current Year 2023-24	Previous Year 2022-23
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		
TOTAL		

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 31st MARCH 2024

SCHEDULE 21-OTHER ADMINISTRATIVE EXPENSES ETC

(Amount in ₹)

		Current Year 2023-24	Previous Year 2022-23
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 - Premium paid on Govt. Securities	-	2,05,250.00
	DLIS		-
	Bank & Finance Charges	236.00	
TOTAL		**236.00**	**2,05,250.00**

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 31st MARCH 2024

SCHEDULE 22-EXPENDITURE ON GRANTS, SUBSIDIES ETC

(Amount in ₹)

		Current Year 2023-24	Previous Year 2022-23
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 2023-24	Previous Year 2022-23
a)	On Fixed Loans		
b)	On Other Loans(including Bank Charges)		
c)	Others (specify) - Interest Paid to Members	2,97,26,180.00	2,59,88,565.000
	FINANCE CHARGES		
TOTAL		**2,97,26,180.00**	**2,59,88,565.00**

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 2024

(Amount in ₹)

RECEIPTS	Current Year 2023-24	Previous Year 2022-23	PAYMENTS	Current Year 2023-24	Previous Year 2022-23
I. Opening Balance			**1.Expenses**		
a) Cash in hand			a) Establishment Expenses		
b) Bank Balances			b) Administrative Expenses		
i) In current accounts			c) Bank Charges	236.00	58.41
ii) In deposit accounts			d) Finance Charges		
iii) Savings accounts	9,43,504.23	45,83,363.29	e) Premium Paid to Govt. Securities	-	2,05,250.00
II. Grants Received			**II Payments made against funds for various projects**		
a) From Government of India			(Name the fund or project should be shown along with		
b) From State Government			the particulars of payments made for each project)		
c) From Other Sources (Details)					
(Grants for capital & revenue exp to shown sperately)					
III. Income on Investments from			**III. Investments and Deposits made**		
a) Earmarked/ Endow Funds			a) Out of Earmarked/ Endowment funds		
b) Own Funds (On Investment in Mutual Funds)			b) Out of Own Funds (Investments - Others)	8,26,00,000.00	6,92,70,000.00
			(Investments - Flexi Account)		
IV. Interest Received			**IV. Expenditure on Fixed Assets & Capital Work-in-progress**		
a) On Bank Deposits	7,69,914.00	3,12,979.00	a) Purchase of Fixed Assets		
b) Loans, Advances etc.			b) Expenditure on Capital Work-in-progress		
c) Miscellaneous	1,60,33,359.56	1,51,77,174.94			
d) interest on savings	64,998.00	70,447.00			
V Other Income (Specify)			**V. Refund of surplus money/ Loans**		
To Miscellaneous Income			a) The Government of India		
To Discount Received on Govt. Securities	7,000.00	2,28,660.00	b) The State Government		
To Bank Charges	26.00	117.41	c) Other providers of funds		
To Recoverable from TRAI	4,53,862.01		d) Payable to TRAI	58,200.00	
To Payable to TRAI	58,200.00				
VI Amount Borrowed					
VII. Any other Receipts (Give Details)			**VI. Finance Charges (Interest)**		
Fees					
Capital Fund			**VII. Other Payments (Specify)**		
Sales of Publication			Final Payments	2,41,13,106.00	14,43,803.00
Sale of Assets			Advances and Withdrawals	2,04,64,297.00	1,09,39,500.00
Contribution from Members	3,88,43,383.00	3,93,72,105	Transfer of Balances		
Contribution from TRAI	1,07,03,072.00	1,06,24,136.00	**VIII. Closing Balances**		
Transfer of Balances			a) Cash in hand		
Repayment of Advances	9,43,120.00	9,33,133.00	b) Bank Balances		
Maturity of FDs/ Encashment of Mutual Funds	5,89,00,000.00	1,15,00,000.00	i) In current accounts		
			ii) In deposit accounts		
			iii) Savings accounts	4,84,599.80	9,43,504.23
TOTAL	**12,77,20,438.80**	**8,28,02,115.64**	**TOTAL**	**12,77,20,438.80**	**8,28,02,115.64**

Sd/-	Sd/-	Sd/-	Sd/-	Sd/-	Sd/-
Meetu Gulati	Anil Kumar Kaushal	Raji Geojo T	Vinay Kumar Goel	R. Ramanujam	Vandana Sethi
Dy. Advisor (F&EA)	Asstt. (BB&PA)	S.O. (IT)	Dy. Advisor (HR)	Dy. Advisor (F&EA)	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., 2023-24. There is no change in Method of Accounting from the preceding year.

iii) The interest on savings bank has been accounted on actual basis.

iv) The previous year's figure have been grouped/re-grouped whereever necessary.

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 2nd March, 2015 effective from 1st April 2015.

2 Investments depicted in Schedule 10 (Investments - Others) under Government Securities amounting to ₹ 19,75,70,000.00 and Deposits shown in Schedule 11 (FDs in Banks/ PSUs) amounting to ₹ 23,05,00,000.00.

3 Total CPF Members as on 01.04.2023 were 109 and in 2023-24, two Officers retired, one Officer took VRS, The Chairman, TRAI and Member, TRAI were demitted from TRAI Office and a New Chairman, TRAI joined on 29.01.2024. Hence, 105 CPF Members as on 31.03.2024.

4 During 2023-24, received a subscription amount of ₹3,88,44,103/- and TRAI contribution of ₹ 1,07,03,072/-. The full & final payments made for ₹ 2,41,13,106/-

5 The withdrawal / advances santioned during the year amounts to ₹ 2,04,64,297.00. Interest paid to members amounts to ₹ 2,97,26,180.00 and Refund of the advances amounts to ₹ 9,43,120.00.

6 A sum of ₹ 1,62,637.12 being shortfall of expenditure over income has been included in schedule 11 & 18 as recoverable and other Income respectively.

7 Corresponding figures for the previous year have been re-grouped/ re-arranged wherever necessary.

Sd/-	Sd/-	Sd/-	Sd/-	Sd/-	Sd/-
Meetu Gulati	Anil Kumar Kaushal	Raji Geojo T	Vinay Kumar Goel	R. Ramanujam	Vandana Sethi
Dy. Advisor (F&EA)	Asstt. (BB&PA)	S.O. (IT)	Dy. Advisor (HR)	Dy. Advisor (F&EA)	Advisor (Admin)
Secretary (CPF)	Trustee	Trustee	Ex-Officio Trustee	Ex-Officio Trustee	Ex-Officio President

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TELECOM REGULATORY AUTHORITY OF INDIA