



ANNUAL REPORT 2020-21



Telecom Regulatory Authority of India

(IS/ISO 9001:2015 Certified Organisation)

Annual Report 2020-21

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LETTER OF TRANSMITTAL

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

It is my privilege to forward the 24th Annual Report for the year 2020-21 of the Telecom Regulatory Authority of India to be laid before both Houses of Parliament. Included in this report is the information required to be forwarded to the Central Government under the provisions of the Telecom Regulatory Authority of India Act, 1997, as amended by TRAI (Amendment) Act, 2000.

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

(DR.P.D. VAGHELA)

CHAIRPERSON

Dated: December, 2021



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OVERVIEW OF TELECOM AND BROADCASTING SECTORS

OVERVIEW

The year 2020-21 has been a very challenging year for the overall economic activity of the country in general and telecommunication services sector in particular, due to the unprecedented pandemic situation. However, during these challenging times, the telecommunication sector continued to provide seamless connectivity for the smooth functioning of many activities and services such as 'Work from Home/work from anywhere/ study from home', banking, education, entertainment etc.. The network capacities were enhanced overnight. As a result, the nation kept its march ahead with the people being able to contribute to the work from home. With audience confined to home, the television broadcasting sector also observed a spike in viewership. Broadcasters opened their repositories and identified their most popular shows of bygone era to meet the challenge posed by the content production coming to halt The ingenuity of those responsible for the Telecom and the Broadcasting sector made sure that most citizens were in front of their screens, either for WFH meetings or the Television.

TRAI continued its endeavour to enable the growth of the two sectors. As the advertising revenue dipped, the Authority, carried out a deeper analysis of the broadcasting sector. As an immediate measure, the Authority reiterated its recommendations to the Government for 'Infrastructure Sharing' and for 'Grant of infrastructure status' for the television broadcasting sector. The Authority granted additional time to the service provider for submitting time-bound reports and compliances. The years 2020-21 has also seen further consolidation in the telecom sector. TRAI has been facilitating fair and transparent tariffs with light touch regulations.

The mission of the Telecom Regulatory Authority of India (TRAI) is to create and nurture conditions for the growth of the telecommunication and broadcasting sectors 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. The pandemic has brought generational change in the telecom networks. Future networks will have increased focus on seamless and high-speed connectivity for residential areas. Better data connectivity no longer remains the requirement of few high-end residential areas. Data usage for education, learnings and for creative fields like music, art etc. has been on the rise. Smart phone usage is rising even among the rural areas. Data demand is increasing exponentially. TRAI has a mandate to enable the sector by providing timely recommendations. The Authority's recommendations on Public wi-fi and the 'PM WANI' program will ensure wider availability of internet connectivity for masses. 5G will enable the networks further to fulfil the increasing appetite of data for Indian consumers.

During the financial year, 2020-21, a number of initiatives were taken by the Authority for the betterment of telecommunications, broadcasting and cable sectors. The various measures taken by the Authority during this period helped in promoting the growth and development of the telecom and broadcasting services. These measures have resulted in the overall benefits to the consumers in terms of choice of services, affordable tariffs, improvement of quality of services, etc. The emergence of new services, healthy investments in the sectors and the rapid development of technology have also helped the sectors to grow. Data usage by wireless subscribers has also seen an unprecedented increase. TRAI on its part has continued to initiate consultation on important technological and policy measures. Telecom and Broadcasting sector are technology driven. Increasing dependence on cloud-based platform, exponential growth in usage of fintech for



transactions, ever-rising Mobile Apps and facilities to enabling users are presenting newer challenges on data privacy, data localisation and data security.

TRAI has taken up studies and consultation in these emerging topics with the purpose of enabling the adaption of such technologies without compromising on safeguards. During the year The Authority made recommendations on "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality". TRAI has proposed a Multi-Stakeholders Body to ensure fair & transparent Traffic Management Practices. The recommendations foster the vision to encourage light touch regulations with involvement of stakeholders in oversight and decision making. Similar enabling approach has been adopted in the recommendations on 'Review of Terms and Conditions for Registration of Other Service Providers (OSPs)'. TRAI recommendations paved the way for minimalistic oversight on other service providers. These recommendations enabled the Government in easing out conditions and enabled 'WFH' based working and agent at home be treated as Extended Agent Position of the call centre. A detailed study was undertaken on urban infrastructure. After the detailed study, the White Paper on 'Smart Cities in India: Framework for ICT Infrastructure' was published. Call drop has been one issue that causes unease amongst telecom users. The Authority undertook a detailed study on the issues. The TRAI team identified the Delhi Airport as a focus area as there were reports of poor user experience. The Authority jointly hosted a global conference to deliberate on the root cause of the poor network quality in civic centres, airports and other places frequented by large crowds. TRAI issued a monograph on 'Quest for a good quality network inside Multi-Storey Residential Apartments' - Reimagining ways to improve quality' wherein the Authority has identified certain reasons that cause network quality to suffer. TRAI expects that relevant authorities will take appropriate steps for revision of national building code. The code once revised would include specific measures that every building must take for quality telecom coverage.

The telecom sector has emerged as the key enabler of Digital India with various new services/applications like digital payments, Aadhar, e-governance, e-commerce, e-health, eeducation, and e-trade. Telecom services are the backbone for enabling these applications and for various important service sectors of the economy like banking, health, education, and many other services, which boost the overall economic growth of the country. With the increased availability of smartphones at much more affordable prices, the mobile phone has become more than a communication device, and services are becoming increasingly linked through mobile, the Internet and other digital modes of delivery. The growth of 4G services gave an impetus to the advent of the data revolution, which used these services. With the advent of 5G technologies, the future of telecom landscape looks promising, and the evolution of 5G would bring various new applications/technologies like artificial intelligence, quantum computing, virtual reality, etc., to the fore. 5G will generate data at unprecedented velocity and at an immense volume. This fast data will fuel a wide range of data-driven services and digital business models. 5G will unleash new business opportunities, and bring substantial benefits through increased productivity, improvement in service delivery, optimum use of scarce resources, as well as the creation of new jobs.

During the year, while discharging various recommendatory and regulatory functions, the Authority addressed several issues and challenges that are being faced by the telecom sector. Recommendations were made to the Government on key issues on subjects like "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality", "Cloud Services",

"Regulatory Framework for Over-The-Top (OTT) Communication Services", "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing", "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT CUG Service Authorization", "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services", "Network Testing Before Commercial Launch of Services for Wireline Access Services" besides replying to the reference backs received from DoT on the earlier Recommendations of TRAI. Amendments to the various telecom Regulations were also issued during this period.

For the Broadcasting sector, several key Recommendations were shared with the Government on diverse topics. Recommendations on 'Interoperability of Set-Top Box (STB)' are to promote re-use of STB in cases, where a consumer migrates from one service provider to another. The Authority's consultation on 'Review of Television Audience Measurement and Rating System in India' was well timed. The recent findings over manipulation of ratings exemplify broad concerns highlighted by TRAI in its recommendations. The Authority has explicitly mentioned that the current sample size is grossly inadequate and prone to malfeasance. The recommendations on 'Reserve Price for Auction of FM Radio channels' are a result of detailed deliberations.

The significant developments relating to Telecommunication and Broadcasting sector during the year 2020–21 are briefly mentioned below:

I. TELECOM SECTOR

The Indian telecom sector is the second largest in the world in terms of the number of subscribers. The sector has witnessed exponential growth over the last few years as a result of many factors such as affordable tariffs, wider service availability, rolling out of new facilities and services such as 3G and 4G, evolving consumption patterns of subscribers, and conducive regulatory environment.

At the end of March, 2021, the subscriber base was 1201.20 million, out of which 1180.96 million were wireless subscribers. During the year, wireless subscriber base recorded an increase of 23.21 million, with the overall tele-density of 88.17% at the end of March, 2021. During the year 2020-21, 89.33 million subscribers submitted their porting requests for availing Mobile Number Portability (MNP) facility. With this, the cumulative MNP requests increased from 487.33 million at the end of March, 2020 to 576.66 million at the end of March, 2021, which shows that subscribers are exercising their preferences of service providers. The Internet subscriber base in the country as on 31st March, 2021 stood at 825.30 million as compared to 743.19 million as on 31st March, 2020. The total broadband subscriber base in the country has increased from 687.44 at the end of 31st March, 2020 to 778.09 at the end of March, 2021.

To ensure transparency while proposing any change in the existing regulatory framework, TRAI follows a transparent consultation process, and gives opportunity to the stakeholders to deliberate and offer their views on the proposed regulatory framework. As part of this critical exercise, which ensures that robust regulation emerges from the consultative process, TRAI issued various important consultation papers inviting written comments/counter-comments from the stakeholders during the year. This included Consultation Papers on "Review of Regulatory Framework for Interconnection", "Allotment of Spectrum to Indian Railways for Public Safety and Security Services", "Review of Scope of Infrastructure Providers Category-I (IP-I) Registration", "Duration of Alert for Called Party", "Review of Interconnection Usage Charges", "Reforming the



Guidelines for Transfer/Merger of Telecom Licenses", "Developing a Unified Numbering Plan for Fixed Line and Mobile Services", "Issues Related to Interconnection Regulation", "Cloud Services", "Transparency in Publication of Tariff Offers", "Tariff Issues in Telecom Services", "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net-Neutrality", and "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT Service Authorization", etc.

An important aspect of TRAI's functions as mandated under the TRAI Act is to make recommendations to the Government, on diverse subjects including market structure, entry of new operators in the sector, the licensing framework, management of scarce resources such as spectrum, consumer safety, and security. While exercising this mandate, several significant policy recommendations were made during the year which include recommendations on "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality", "Cloud Services", "Regulatory Framework for Over-The-Top (OTT) Communication Services".

In order to manage the ever-increasing population in the cities, it is important that infrastructure in the cities is upgraded and managed by using Information and Communication Technologies (ICT) to make them sustainable in the long run. A White Paper on Smart Cities in India: Framework for ICT Infrastructure issued on 22^{nd} September, 2020 highlights the Role of digital technologies for smart cities, discusses the key smart solutions, deliberates the need of Global Standardization and connectivity related aspects specific to smart cities, and tries to identify the framework for ICT Infrastructure for the success of Smart Cities Mission in India.

TRAI QoS Monograph - Quest for a good quality network inside Multi-Storey Residential Apartments "Reimagining ways to improve quality" issued on 22^{nd} September, 2020 suggests a blended approach in improving the network, i.e., both general interventions and solutions that are specific to a user's requirement. It also advocates the involvement of users in defining and achieving the optimum outcomes for themselves.

II. BROADCASTING SECTOR

The broadcasting sector consists of Television and Radio Services. The Television services comprises of cable TV services, DTH services, HITS services, IPTV services in addition to a terrestrial TV network of Doordarshan. As per an industry report, in the year 2020, there are estimated 210.2¹ million TV households in India wherein the estimated share of Cable TV households, pay DTH households, Free DTH households and terrestrial TV households is 48%, 32%, 19% & 1% respectively¹.

The TV broadcasting sector encompasses 350 broadcasters⁴, out of which, 40 are pay broadcasters³ at the end of March, 2021. Further, there were 1724 (1722 Regular & 02 Provisional) Multi System Operators (MSOs)⁵ registered with Ministry of Information and Broadcasting (MIB), an estimated 1,40,000 cable operators³, 1 HITS operator³, 4 pay DTH operators³ and few IPTV operators³, at the end of March, 2021, in addition to the public service broadcaster - Doordarshan, providing a free-to-air DTH service in India.

 $^{^{\}scriptscriptstyle 1} https://barcindia.co.in/whitepaper/barc-india-tv-universe-estimates-2020.pdf$

FICCI EY Report (March 2021) titled "Playing by new rules -India's Media & Entertainment sector reboots in 2020"

³ As reported to TRAI

http://broadcastseva.gov.in/webpage-User-tvchannels

⁵ MIB website https://digitalindiamib.com/



At present, there are 901 private satellite TV channels³ permitted by MIB at the end of March, 2021, out of which, 235 are SD pay TV channels³ and 92 are HD Pay TV channels³.

India's television industry stands at $\stackrel{?}{\stackrel{?}{\sim}} 68,500^{\circ}$ crores in the year 2020 as compared to $\stackrel{?}{\stackrel{?}{\sim}} 78,800^{\circ}$ crore in the year 2019, thereby registering a decline of around 13%. Subscription revenues account for a major share of the overall industry revenue. Subscription revenues has fallen from $\stackrel{?}{\stackrel{?}{\sim}} 46,800^{\circ}$ crores in the year 2019 to $\stackrel{?}{\stackrel{?}{\sim}} 43,400^{\circ}$ crore in the year 2020. On a similar note, advertisement revenue during the year 2020 was $\stackrel{?}{\stackrel{?}{\sim}} 25,100^{\circ}$ crore as compared to $\stackrel{?}{\stackrel{?}{\sim}} 32,000^{\circ}$ crore in the year 2019.

As reported by the private FM Radio broadcasters, there were 366^3 private FM radio stations operational at the end of March, 2021, besides the public service broadcaster- All India Radio (AIR). As regards Community Radio Stations, reported by the Ministry of Information and Broadcasting (MIB), out of the 403^3 licenses issued at the end of March, 2021 for the setup of such stations, 324^3 community radio stations have become operational. The reported advertisement revenues by the private FM Radio broadcasters have fallen from $\ref{1902.75}$ crore³ in year 2019-20 to $\ref{941.47}$ crores³ in the year 2020-21.

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

Over the last few years, TRAI has sent a number of recommendations to DoT and MIB on important issues concerning growth of telecommunications services and Broadcasting and Cable Services in the country; either on reference from the DoT/MIB or suo moto. During this year, TRAI has worked with both DoT and MIB and as a result of the concerted efforts and review meetings held at PMO level, a number of these recommendations have been accepted during the period. However, many of the important recommendations are still pending for decision/implementation by DoT and MIB which if implemented would have significant positive impact on the Telecommunication and Broadcasting Sector. The details of these recommendations have been made available in the relevant chapters. It is felt that a periodic review of the implementation status of all recommendations of TRAI should be done at the highest level. With an objective to put in place a mechanism whereby there is a periodic review of implementation of pending recommendations of TRAI in DoT/MIB and to create central repository for real-time tracking of status of all recommendations, TRAI has developed a Recommendation Status Portal which can be accessed jointly by TRAI, DoT and MIB. The details of this portal have also been provided in the report.

IV. OTHER ADMINISTRATIVE INITIATIVES

By the persistent efforts of the Authority, the Medical facility which is governed by the Schedule II of TRAI (Salary, Allowance and other conditions of service of the officers and employees) Rules, 2002 has been extended to entire TRAI Cadre officials (both serving and retired officers and employees) as Department of Telecommunications (DoT) has notified "Telecom Regulatory Authority of India (Salary, Allowances and other conditions of Service of the officers and employees) (Amendment) Rules, 2020" in the Gazette of India on 22nd December, 2020 which enables both serving and retired, the officers and employees of the Authority, entitled for existing medical facilities.

¹ https://barcindia.co.in/whitepaper/barc-india-tv-universe-estimates-2020.pdf

² FICCI EY Report (March 2021) titled "Playing by new rules -India's Media & Entertainment sector reboots in 2020"

As reported to TRA

http://broadcastseva.gov.in/webpage-User-tvchannels

MIB website https://digitalindiamib.com/



Further, TRAI has shifted to E-Office with effect from 1st January, 2021. With the adoption of E-Office, TRAI has moved to paperless office, wherein all file work is handled through electronic mode. This adoption of E-office shall ensure greater accountability and transparency in administration, reduce costs incurred in storage and preservation of physical files, facilitate officers to clear files from "anywhere and anytime" thereby by improving efficiency of file disposal.

Since its inception in 1997, TRAI has been operating from rented premises. Presently, TRAI's office is situated in a building owned by MTNL on rental basis. The Authority has been approaching the Government regularly for owning the office premises as TRAI is an eligible office for office accommodation from Government pool. As a result of persistent efforts of the Authority, the Government of India (GoI) through Department of Telecommunication (DoT) has approved the proposal for procurement of built-up Office Space for TRAI in upcoming World Trade Centre (WTC), Nauroji Nagar, New Delhi. TRAI has been allotted an area of 1,15,982 Sq. Ft. in the project under construction and is expected to shift to its own building towards the end of the year 2022.



PART - I

POLICIES AND PROGRAMMES

(A) REVIEW OF GENERAL ENVIRONMENT IN THE TELECOM SECTOR

1.1 At the end of the financial year 2020-21 the overall telecom subscriber base reached 1201.20 million in comparison to the subscriber base of 1177.97 million as on 31st March, 2020 registering an increase of 23.23 million subscribers during the financial year 2020-21. The overall subscriber base and tele-density is depicted in **Table-1**.

Table-1: Overall Subscriber base and Tele-density

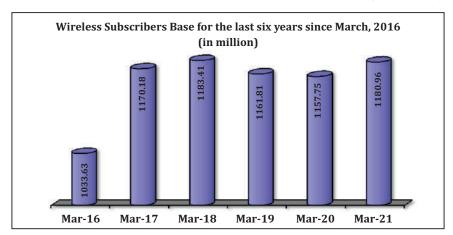
Particulars	Wireless	Wireline	Total (Wireless+Wireline
Total Subscribers (million)	1180.96	20.24	1201.20
Urban Subscribers (million)	645.20	18.57	663.77
Rural Subscribers (million)	535.75	1.67	537.42
Overall Tele-density	86.68%	1.49%	88.17%
Urban Tele-density	137.08%	3.95%	141.03%
Rural Tele-density	60.08%	0.19%	60.27%
Share of Urban Subscribers	54.63%	91.76%	55.26%
Share of Rural Subscribers	45.37%	8.24%	44.74%
No. of Internet Subscribers (Million)	799.30	25.99	825.30
No. of Broadband Subscribers (Million)	755.35	22.75	778.09

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 1180.96 million at the end of 31st March, 2021 in comparison to the subscriber base of 1157.75 million as on 31st March, 2020 registering an increase of 23.21 million subscribers during the financial year 2020-21. The status of wireless subscriber base during the last 6 years is depicted in the **Figure-1**.

Figure-1: Wireless Subscriber Base for the last six years since March, 2016 (in million)





(b) Mobile Number Portability

1.1.2 During the year 2020-21, 89.33 million subscribers have submitted their porting requests to different service providers for availing MNP facility. With this the Mobile Number Portability requests increased from 487.32 million at the end of March, 2020 to 576.66 million at the end of March, 2021. The service area wise cumulative porting request at the end of March, 2021 is depicted in **Table-2**.

Table-2: Service Area-wise cumulative Porting requests at the end of March, 2021

Cumulative MNP Requests (Service Area-wise) at the end of March, 2021					
	Service Area	MNP request	s processed by	Total Number of	
		Zone-I	Zone-II	Porting Requests	
ZONE-I	Delhi	27,719,452	919,841	28,639,293	
	Gujarat	38,154,733	430,412	38,585,145	
	Haryana	19,456,168	387,640	19,843,808	
	Himachal Pradesh	2,697,619	37,181	2,734,800	
	Jammu & Kashmir	1,278,298	38,469	1,316,767	
	Maharashtra	45,979,429	1,165,231	47,144,660	
	Mumbai	25,004,170	484,200	25,488,370	
	Punjab	20,850,520	1,126,948	21,977,468	
	Rajasthan	42,086,205	338,507	42,424,712	
	Uttar Pradesh (East)	37,510,810	423,501	37,934,311	
	Uttar Pradesh (West)	29,922,601	349,447	30,272,048	
ZONE-II	Andhra Pradesh	422,407	45,519,913	45,942,320	
	Assam	51,555	4,097,023	4,148,578	
	Bihar	1,071,057	25,302,014	26,373,071	
	Karnataka	592,149	47,462,393	48,054,542	
	Kerala	118,274	15,280,817	15,399,091	
	Kolkata	129,263	12,462,170	12,591,433	
	Madhya Pradesh	713,527	40,177,505	40,891,032	
	North East	26,233	1,537,770	1,564,003	
	Orissa	147,095	11,158,894	11,305,989	
	Tamil Nadu	276,348	44,690,266	44,966,614	
	West Bengal	321,548	28,746,529	29,068,077	
	Total	294,529,461	282,136,671	576,666,132	
	Total (Zone-1 + Zone-2)			570,000,132	

(c) Wireline Services

1.1.3 The total wireline subscriber base as on 31st March, 2021 stood at 20.24 million as compared to 20.22 million subscribers on 31st March, 2020, registering an increase of 0.11% during the year

2020-21. Out of 20.24 million wireline subscribers, 18.57 million are urban subscribers and 1.67 million are rural subscribers. The wireline subscriber base for the last five years is depicted in **Figure-2**:

Wij 15 0 Mar-17 Mar-18 Mar-19 Mar-20 Mar-21

Figure-2: Wireline subscribers during the last 5 years

(d) Tele-density

1.1.4 The tele-density at the end of 31st March, 2021 was 88.17 as compared to 87.37 at the end of previous year recording an increase of 0.92%. The trend of tele-density since March, 2017 is depicted in **Figure-3.**



Figure-3: Trend of Tele-density



(e) Internet and Broadband subscribers

1.1.5 The Internet subscriber base in the country as on $31^{\rm st}$ March, 2021 stood at 825.301 million as compared to 743.191 million as on $31^{\rm st}$ March, 2020. The total broadband subscriber base of the country as on $31^{\rm st}$ March, 2021 is 778.095 million whereas it was 687.438 million on $31^{\rm st}$ March, 2020.

The details of subscription as reported by the service providers in the country as on 31st March, 2021 are indicated in **Table-3**:

Table-3: Internet Subscribers

[Subscribers in Million]

Segment		Category	Internet Sul	oscribers	% Growth	
				March, 2020	March, 2021	
A.	Wire	ed	Broadband	19.176	22.749	18.64%
			Narrowband	3.241	3.246	0.17%
			Total	22.416	25.995	15.97%
B.		Fixed Wireless	Broadband	0.602	0.671	11.46%
	S	(Wi-Fi, Wi-Max, Radio	Narrowband	0.006	0.006	-5.11%
	Wireless	& VSAT)	Total	0.608	0.677	11.30%
	/ire	Mobile Wireless	Broadband	667.659	754.674	13.03%
	>	(Phone + Dongle)	Narrowband	52.507	43.955	-16.29%
			Total	720.166	798.629	10.90%
Tota	Total Internet Subscribers		Broadband	687.438	778.095	13.19%
			Narrowband	55.753	47.207	-15.33%
			Total	743.191	825.301	11.05%

1.1.5.2 Quarter-wise Internet/Broadband subscription as reported by the service providers for 2020-21 is at **Table-4.**

Table-4: Quarter-wise Internet/Broadband Subscriber base of 2020-21 (Subscribers in Million)

Service	March 2020	June 2020	September2020	December 2020	March 2021
Broadband	687.438	698.231	726.317	747.408	778.095
Narrowband	55.753	50.840	50.138	47.772	47.207
Total Internet	743.191	749.071	776.455	795.181	825.301

Note: The above said information is based on the data/reports received in TRAI from the respected Service Providers

(f) The Indian Telecom Services Performance Indicators

1.1.6.1 TRAI has been bringing out a monthly press release on Telecom Subscription Data. This press release includes information on total subscriber base, Tele-density, Service Provider wise market share, Mobile Number Portability (MNP) requests, Peak VLR data, Net Additions



Table-5: Highlights of Telecom Subscription Data as on 31st March, 2021

Particulars	Wireless	Wireline	Total
			(Wireless+Wireline)
Total Telephone Subscribers (Million)	1180.96	20.24	1201.20
Net Addition in March, 2021 (Million)	13.25	0.05	13.30
Monthly Growth Rate	1.13%	0.26%	1.12%
Urban Telephone Subscribers (Million)	645.20	18.57	663.77
Net Addition in March, 2021 (Million)	5.96	0.10	6.06
Monthly Growth Rate	0.93%	0.53%	0.92%
Rural Telephone Subscribers (Million)	535.75	1.67	537.42
Net Addition in March, 2021 (Million)	7.29	-0.04	7.24
Monthly Growth Rate	1.38%	-2.60%	1.37%
Overall Tele-density*(%)	86.68%	1.49%	88.17%
Urban Tele-density*(%)	137.08%	3.95%	141.03%
Rural Tele-density*(%)	60.08%	0.19%	60.27%
Share of Urban Subscribers	54.63%	91.76%	55.26%
Share of Rural Subscribers	45.37%	8.24%	44.74%
Broadband Subscribers (Million)	755.35	22.75	778.09

- ♦ In the month of March, 2021, 12.74 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 563.92 million at the end of February, 2021 to 576.67 million at the end of March, 2021, since implementation of MNP.
- Number of active wireless subscribers (on the date of peak VLR#) in March, 2021 was 993.92 million.

Note:

- Information in this Press Release is based on the data provided by the Service Providers.
- * Based on the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 2036', Ministry of Health & Family Welfare.
- # VLR is acronym of Visitor Location Register. The dates of peak VLR for various TSPs are different in different service areas.
- 1.1.6.2 TRAI has also been publishing a Quarterly Report on 'The Indian Telecom Services Performance Indicators'. This report presents the key parameters and growth trends for Telecom & Broadcasting services. A summary of the telecom service performance indicators for the above-mentioned period is illustrated in **Table 6.**



Table-6 - Performance Indicator (Data as on $31^{\rm st}$ March, 2021) (Data as on Q.E. $31^{\rm st}$ March, 2021)

Telecom Subscribers (Wireless+Wireline)	
Total Subscribers	1,201.20 Million
% change over the previous quarter	2.33%
Urban Subscribers	663.77 Million
Rural Subscribers	537.42 Million
Market share of Private Operators	89.05%
Market share of PSU Operators	10.95%
Tele-density	88.17%
Urban Tele-density	141.03%
Rural Tele-density	60.27%
Wireless Subscribers	
Total Wireless Subscribers	1,180.96 Million
% change over the previous quarter	2.36%
Urban Subscribers	645.20 Million
Rural Subscribers	535.75 Million
Market share of Private Operators	89.68%
Market share of PSU Operators	10.32%
Tele-density	86.68%
Urban Tele-density	137.08%
Rural Tele-density	60.08%
Total Wireless Data Usage during the quarter	27,799 PB
Number of Public Mobile Radio Trunk Services (PMRTS)	64,175
Number of Very Small Aperture Terminals (VSAT)	2,93,632
Wireline Subscribers	
Total Wireline Subscribers	20.24 Million
% change over the previous quarter	0.94%
Urban Subscribers	18.57 Million
Rural Subscribers	1.67 Million
Market share of PSU Operators	47.20%
Market share of Private Operators	52.80%
Tele-density	1.49%
Rural Tele-density	0.19%
Urban Tele-density	3.95%
No. of Village Public Telephones (VPT)	68,606
No. of Public Call Office (PCO)	126,108



Telecom Financial Data	
Gross Revenue (GR) during the quarter	₹ 66,784 Crore
% Change in GR over the previous quarter	-6.71%
Adjusted Gross Revenue (AGR) during the quarter	₹ 48,587 Crore
% Change in AGR over the previous quarter	2.03%
Share of Public sector undertakings in Access AGR	5.93%
Internet/Broadband Subscribers	
Total Internet Subscribers	825.30 Million
% Change over previous quarter	3.79%
Narrowband subscribers	47.21 Million
Broadband subscribers	778.09 Million
Wired Internet Subscribers	25.99 Million
Wireless Internet Subscribers	799.30 Million
Urban Internet Subscribers	502.53 Million
Rural Internet Subscribers	322.77 Million
Total Internet Subscribers per 100 population	60.73
Urban Internet Subscribers per 100 population	107.30
Rural Internet Subscribers per 100 population	36.24
Broadcasting & Cable Services	
Number of private satellite TV channels permitted by the Ministry of I&B	901
for Uplinking only/downlinking only/both Uplinking and downlinking	
Number of Pay TV Channels as reported by broadcasters	327
Number of private FM Radio Stations (excluding All India Radio)	366
Number of total active subscribers with pay DTH operators	69.57 Million
Number of Operational Community Radio Stations	324
Number of pay DTH Operators	4
Revenue & Usage Parameters	
Monthly ARPU of Wireless Service	₹103.58
Minutes of Usage (MOU) per subscriber per month - Wireless Service	818 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	174.89 Million
Wireless Data Usage	
Average Wireless Data Usage per wireless data subscriber per month	12.33 GB
Average revenue realization per subscriber per GB wireless data	₹ 10.77
during the quarter	



(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 following key policies and programmes of TRAI in respect of telecom sector is provided below:
 - (a) Rural Telephone Network;
 - (b) Expansion of Telephone Network;
 - (c) Entry of private sector in both basic and value-added service;
 - (d) Technical compatibility and effective interconnection between service providers;
 - (e) Telecommunication technology;
 - (f) Implementation of National Telecom Policy;
 - (g) Quality of Service; and
 - (h) Universal Service Obligation

1.2.1 Rural Telephone Network

Wireless

1.2.1.1 As on 31st March, 2021, the Wireless rural [Mobile and WLL (F)] subscribers increased from 519.27 million as on 31st March, 2020 to 535.75 million at the end of 31st March, 2021. The share of rural subscribers is now 45.37% of total wireless subscribers. The rural wireless subscriber base since March, 2016 is indicated in **Figure-4**. The service provider wise rural wireless subscriber base & their market shares are shown in **Table-7** and **Figure-5**.

Figure-4: Rural Wireless Subscriber Base since March, 2016

(in million)

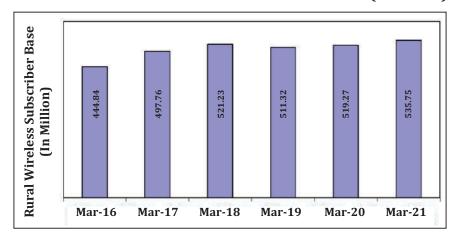


Table-7: Service Provider-wise Rural Wireless Subscribers and Market Share

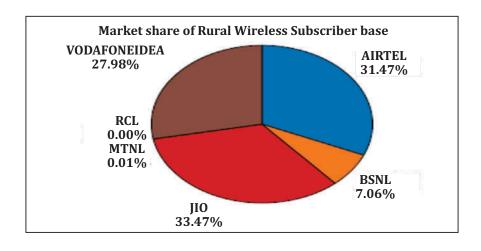
	Wireless Group	Subscribers as on (in million)		Rural Subscribers as on (in million)		Market Sha Subscribers	
		March 2021	March 2020	March 2021	March 2020	March 2021	March 2020
1.	RJIL	422.92	387.52	179.31	160.94	33.47%	29.98%
2.	Bharti Airtel	352.39	327.81	168.63	153.18	31.47%	28.67%
3.	Vodafone	283.71*	319.17	149.93*	167.02	27.98%*	33.98%
	Idea						
4.	BSNL	118.63(@)	119.87	37.84	38.09	7.06%	7.36%
5.	MTNL	3.30	3.36	0.05	0.05	0.01%	0.01%
6.	RCL&	0.01	0.0178	0.00	0.00	0.00	
7.	Tata^					-	
	Total	1180.96	1157.75	535.75	519.28	100.00	100.00

Source: As provided by TSPs

Note:

- (*) M/s Vodafone and M/s Idea Cellular merged their commercial service w.e.f 31st August, 2018.
- (@) The HLR figure reported by M/s BSNL VNO's for Tamil Nadu Circle is included with BSNL GSM in Tamil Nadu Circle.
- (&) M/s RCL/RTL have stopped providing retail services, however, are continuing to provide B2B services.
- (^) M/s TATA have merged with M/s Bharti Airtel w.e.f 6th February, 2020.

Figure-5: Market share of Rural Wireless Subscriber base as on 31st March, 2021(in %)





Wireline Services

1.2.1.2 As on 31st March, 2021 the rural wireline subscriber base stood at 1.67 million as compared to 2.24 million at the end of 31st March, 2020, registering a decline of 25.45% over the year. The service provider-wise wireline subscriber base and their market share are shown in **Table-8**.

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

Sl.	Name of	Total Wireli	1e	Rural Wireli	ne	Market Shar	e of
No.	the	Subscribers		Subscribers	Subscribers		ne
	Service						(in%)
	Provider	Mar-20	Mar-21	Mar-20	Mar-21	Mar-20	Mar-21
1	BSNL	87,27,103	66,49,439	21,58,197	15,75,018	96.21%	94.44%
2	MTNL	30,93,800	29,03,589	-	-	-	-
3	Bharti	43,92,581	47,78,290	-	-	-	-
	Airtel Ltd						
4	Quadrant	1,82,269	2,16,428	35,478	28,107	1.58%	1.68%
	Televentures						
	Ltd.						
5	Tata	17,70,108	16,26,525	45,723	40,146	2.04%	2.41%
	Teleservices						
	Ltd.						
6	Reliance	5,05,605	2,10,328	945	180	0.04%	0.01%
	Communi-						
	cations Ltd.						
7	Vodafone	4,55,944	5,21,357	-	-	-	
	Idea Ltd						
8	Reliance Jio	10,90,677	33,33,713	2,838	24,292	0.13%	1.46%
	Infocomm						
	Ltd.						
Total		2,02,18,087	2,02,39,669	22,43,181	1,667,743	100.00%	100.00%

(ii) The status of Rural wireline subscribers for last four quarters is depicted in Figure-6

Jun-20

Rural Milline Superipers (in Million) 1.5 2 2 1.98 1.81 1.67 2 1.67 2 1.05 2 1.98 1.81 1.67 2

Sep-20

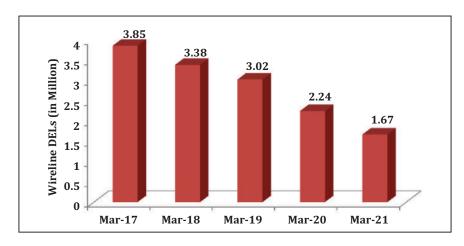
Dec-20

Mar-21

Figure-6: Bar chart showing Rural wireline subscribers

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

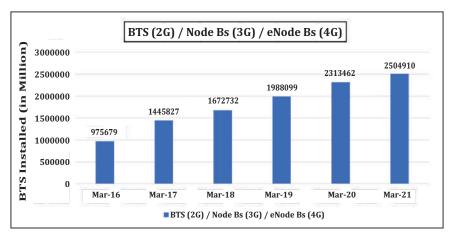
Figure-7: Bar Chart showing Rural wireline subscribers during 2017-2021



1.2.2 Expansion of Telephone Network

There has been a substantial expansion in telecom networks in the country during the last six years, which is reflected in increasing number of Base Transceiver Stations (BTS) installed by the telecom service providers. The yearly trend of total number of BTS, which includes 2G, 3G and 4G BTS, from March, 2016 to March, 2021, can been seen in the **Figure-8**. During the last financial year 2020-21, the number of BTS have increased from 2313462 to 2504910, i.e the telecom networks have expanded at a rate of 8.3%.

Figure-8: BTS installed (in million)



Wireless Services

1.2.2.1 The Wireless Subscriber base is 1180.96 million as on 31st March, 2021 in comparison to the subscriber base of 1157.75 million as on 31st March, 2020. The subscriber base increased by



23.21 million subscribers during the financial year 2020-21. The trend of subscriber base from March 2015 to March, 2021 is depicted in **Figure-9**.

Figure-9: Subscriber base of wireless Operators

Mar-12 Mar-16 Mar-17 Mar-18 Mar-19 Mar-20 Mar-21 Mar-19 Mar-19 Mar-20 Mar-21

The subscriber base of individual wireless service providers from 2016-17 to 2020-21 along with their percentage growth over the financial year 2018-19 is given in the **Table-9**.

The market share of different mobile operators as on 31st March 2021 is displayed in **Figure-10**.

Table-9: Subscriber Base of Wireless Services from 2016-17 to 2020-21 (Subscriber base in million)

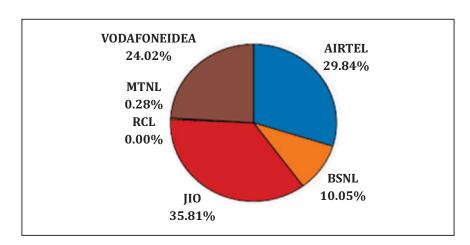
Service Providers	2016-17	2017-18	2018-19	2019-20	2020-21	%age growth/ reduction over FY 2019-20
Reliance JIO (*)	108.68	186.56	306.72	387.52	422.92	9.14%
Bharti	273.65	304.19	325.18	327.81(\$)	352.39	7.50%
Vodafone	209.06	222.70	394.84(^)	319.17(^)	283.71(^)	-11.11%
Idea	195.37	211.21				
BSNL	100.99	111.68	115.74(~)	119.87(~)	118.63(~)	-1.03%
MTNL	3.63	3.56	3.45	3.36	3.30	-1.79%
RCOM/RTL(#)	83.50	0.19	0.02	0.0178	0.01	-43.82%
Aircel(+)	90.90	74.15				-
Tata	48.99	31.19	15.85			
Telenor	50.49	37.98	0.00(\$)			
Sistema(&)	4.91	-	-			
Videocon(@)	-	-	-			
Quadrant(@)	-	-	-			
Total	1170.18	1183.41	1161.81	1157.75	1180.96	2.00%
Source: Service P	roviders					

- (*) M/s Reliance Jio Infocomm Ltd launched their commercial services in 2016-17.
- (\$) M/s Telenor and M/s TATA 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 subscriber base of M/s BSNL includes subscribers of VNO service providers also.
- (@) M/s Videocon and M/s Quadrant discontinued its services in 2016-17.
- (&) The services of M/s Sistema Shyam Ltd. have been taken over by M/s RCOM/RTL in 2017-18.
- (+) M/s Aircel has stopped providing commercial services since April, 2018 as it has filed insolvency in the NCLT.

Figure-10: Market Share of Wireless Service Providers (as on 31st March, 2021)

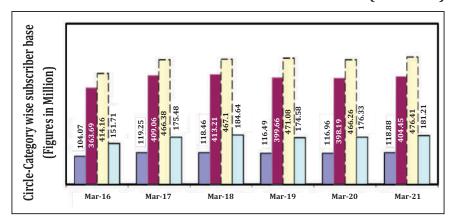


In terms of subscriber base, M/s Reliance Jio Infocom Ltd was the largest service provider with 422.92 million subscribers; followed by M/s Bharti Airtel Ltd, M/s VodafoneIdea Ltd and M/s BSNL with 352.39 million, 283.71 million and 118.63 million respectively.

The subscriber base for Wireless services in different categories of service areas for the period March, 2016 to March, 2021 is indicated graphically in **Figure-11**.

Figure-11 : Circle-Category wise subscriber base for Wireless Services from March, 2016 to March, 2021







The list of service providers those have been licensed to provide Wireless Access Service in various service areas is given in **Table-10**.

Table-10: Wireless Service Providers as on 31st March, 2021

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

Source: DoT Website.

UL (Virtual Network Operators) (VNO) Access Services licensees who are providing services as on 31st March, 2021

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

Source: As reported by TSP

Wireline Services

1.2.2.2 The Service Provider wise break-up of wireline subscribers of 20.24 million as on 31st March, 2021, is shown in **Table-11** and the break-up in terms of rural and urban subscriber is shown in **Table-12**. The incumbents BSNL and MTNL have 32.85% and 14.35% market share respectively in the wireline subscriber base, while all the six private operators together have 52.80% share. The share of private operators has increased from 41.53% as on 31st March, 2020 to 52.80% as on 31st March, 2021, registering an increase of 11.27%.



Sl. No.	Name of the Service Provider	Area of Operation	Subscriber Base (Wireline)
1	BSNL	All India except Delhi & Mumbai	6,649,439
2	MTNL	Delhi & Mumbai	2,903,589
3	Bharti Airtel Ltd	Andhra Pradesh (excluding Telangana), Delhi, Gujarat,	4,778,290
		Haryana, Karnataka, Kerala, Kolkata, Madhya Pradesh	
		(excluding Chhattisgarh), Chhattisgarh, Maharashtra	
		(excluding Mumbai), Mumbai, Punjab, Rajasthan,	
		Tamil Nadu (excluding Chennai), Chennai, UP-East	
		and UP-West (excluding Uttarakhand).	
4	Quadrant	Punjab	216,428
	Televentures Ltd.		
5	Reliance	Andhra Pradesh (excluding Telangana), Telangana,	210,328
	Communications	Bihar (Excluding Jharkhand), Jharkhand, Delhi,	
	Ltd.	Gujarat, Haryana, Himachal Pradesh, Karnataka,	
		Kerala, Kolkata, Madhya Pradesh (excluding	
		Chhattisgarh), Chhattisgarh, Maharashtra (Excluding	
		Mumbai & Goa) Goa, Mumbai, Orissa, Punjab,	
		Rajasthan, Tamil Nadu (excluding Chennai), Chennai,	
		UP-East, UP-West (Excluding Uttarakhand),	
		Uttarakhand and West Bengal (Excluding Andaman	
		& Nicobar and Sikkim)	
6	Reliance Jio	Andhra Pradesh (excluding Telangana), Telangana,	3,333,713
		Bihar (Excluding Jharkhand), Jharkhand, Delhi,	
		Gujarat, Haryana, Himachal Pradesh, Jammu &	
		Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh	
		(Excluding Chhattisgarh), Chhattisgarh, Maharashtra	
		(Excluding Mumbai & Goa), Goa, Mumbai, Assam,	
		Arunachal Pradesh, Manipur, Meghalaya, Mizoram,	
		Nagaland, Tripura, Orissa, Punjab, Rajasthan, Tamil	
		Nadu (Excluding Chennai), Chennai, UP-East,	
		UP-West (Excluding Uttarakhand), Uttarakhand and	
		West Bengal (Excluding Andaman & Nicobar	
_	_	and Sikkim)	
7	Tata	Andhra Pradesh (Excluding Telangana), Telangana,	1,626,525
	Teleservices	Bihar (Excluding Jharkhand), Jharkhand, Delhi,	
	Ltd.	Gujarat, Haryana, Himachal Pradesh, Karnataka,	
		Kerala, Kolkata, Maharashtra (excluding Mumbai &	
		Goa), Goa, Mumbai, Madhya Pradesh (Excluding	
		Chhattisgarh), Chhattisgarh, Orissa, Punjab,	
		Rajasthan, Tamil Nadu (Excluding Chennai), Chennai,	
		UP-East, UP-West (Excluding Uttarakhand),	
		Uttarakhand and West Bengal (Excluding Andaman	
		& Nicobar and Sikkim)	



8	Vodafone Idea	Andhra Pradesh (Excluding Telangana), Telangana,	521,357
	Ltd.	Assam, Bihar (Excluding Jharkhand), Jharkhand,	
		Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka,	
		Kerala, Kolkata, Madhya Pradesh (Excluding	
		Chhattisgarh), Chhattisgarh, Maharashtra (Excluding	
		Mumbai & Goa), Goa, Mumbai, Meghalaya, Orissa,	
		Punjab, Rajasthan, Tamil Nadu (Excluding Chennai),	
		Chennai, UP-East, UP-West (Excluding Uttarakhand),	
		Uttarakhand and West Bengal (Excluding Andaman	
		& Nicobar and Sikkim)	
	TOTAL		20,239,669

Source: As per data furnished by the TSPs.

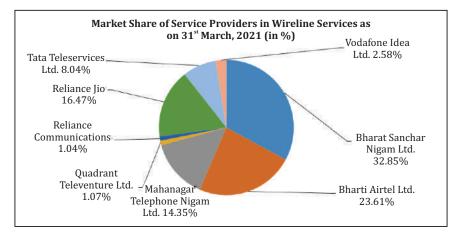
Table-12: Wireline Subscriber Base of Service Providers as on 31st March, 2021

Sl.No	Name of Service Providers	Urban	Rural	Total Subscribers
				(Wireline)
1	Bharat Sanchar Nigam Ltd.	5,074,421	1,575,018	6,649,439
2	Mahanagar Telephone Nigam Ltd.	2,903,589	0	2,903,589
3	Bharti Airtel Limited	4,778,290	0	4,778,290
4	Quadrant Televentures Ltd.	188,321	28,107	216,428
5	Reliance Communications Ltd.	210,148	180	210,328
6	Reliance Jio Infocomm Ltd.	3,309,421	24,292	3,333,713
7	Tata Teleservices Ltd.	1,586,379	40,146	1,626,525
8	Vodafone Idea Ltd.	521,357	0	521,357
	Total	18,571,926	1,667,743	20,239,669

Share of Service Providers in Wireline subscribers

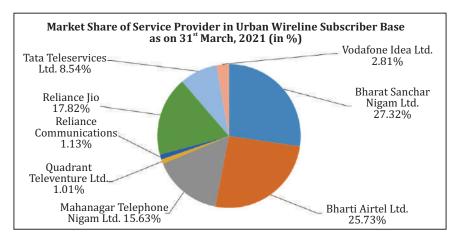
1.2.2.3 (i) As on 31st March, 2021, 47.2% of total wireline subscribers are connected to the networks of BSNL/MTNL and the remaining wireline connections are provided by different private service providers. The market share of different service provider in total wireline subscriber base is shown in the **Figure-12**.

 $Figure \hbox{-} 12: Composition of share of Service Providers \\$



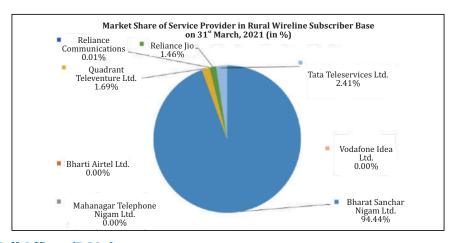
(ii) As on 31st March, 2021, the total urban wireline subscribers were 18.57 million, out of which about 42.96% are provided by BSNL/MTNL. The market share of different wireline service providers in urban areas is depicted in the **Figure-13**.

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



(iii) As on 31st March, 2021, the total rural wireline subscribers were 1.67 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



Public Call Offices (PCOs):

1.2.2.4 As on 31st March, 2021, the total number of PCOs is 1.26 million as compared to 1.78 million as on 31st March, 2020. The number of PCOs provided by BSNL, MTNL and Private Operators is indicated in **Table-13:-**

Table-13: Public Call Offices in India

S. No.	Name of the Service Provider	As on 31 st March, 2020	As on 31 st March, 2021
1	BSNL	1,05,003	68,826
2	MTNL	62,464	52,771
3	Private Operators	10,058	4,511
	Total	1,77,525	1,26,108



Village Public Telephones (VPTs):

1.2.2.5 As on 31st March, 2021, the total number of Village Public Telephones (VPTs) provided by the service providers were 0.69 lakh as against 0.68 lakh as on 31st March, 2020. **Table-14** provides the number of VPTs functioning in the country.

Table-14: Village Public Telephones in India

S. No.	Name of the Service Provider	As on 31 st March, 2020	As on 31 st March, 2021
1	BSNL	67,762	68,606
	Total	67,762	68,606

Equipped Switching Capacity:

1.2.2.6 As on 31st March, 2021, the service provider-wise total equipped switching capacity and working connections are shown in **Table-15**.

Table-15: Service Provider wise Equipped switching capacity

Sl.	Name of the	Service Area	As on 31 st March, 2021	
No.	Service Provider		Equipped	Working
			Switching	Connections
			Capacity	
			(Number of	
1	Dhouti Aintel Ltd	Andleye Dredech (evely ding Telepage)	Lines)	4 770 200
1	Bharti Airtel Ltd.	Andhra Pradesh (excluding Telangana), Delhi, Gujarat, Haryana, Karnataka,	11,094,852	4,778,290
		Kerala, Kolkata, Madhya Pradesh (excluding		
		Chhattisgarh), Chhattisgarh, Maharashtra		
		(excluding Mumbai), Mumbai, Punjab,		
		Rajasthan, Tamil Nadu (excluding Chennai),		
		Chennai, UP-East and UP-West (excluding		
		Uttarakhand).		
2	Bharat Sanchar	All India except Delhi & Mumbai	24,796,337	6,649,439
_	Nigam Ltd.		2 1,7 5 0,00 7	0,013,103
3	Mahanagar	Delhi & Mumbai	4,881,215	2,903,589
	Telephone Nigam			
	Ltd.			
4	Quadrant	Punjab	548,835	216,428
	Televentures Ltd.			
5	Reliance	Andhra Pradesh (excluding Telangana),	1,344,000	210,328
	Communications	Telangana, Bihar (Excluding Jharkhand),		
	Ltd.	Jharkhand, Delhi, Gujarat, Haryana, Himachal		
		Pradesh, Karnataka, Kerala, Kolkata, Madhya		
		Pradesh (excluding Chhattisgarh),		
		Chhattisgarh, Maharashtra (Excluding		
		Mumbai & Goa) Goa, Mumbai, Orissa, Punjab,		
		Rajasthan, Tamil Nadu (excluding Chennai),		
		Chennai, UP-East, UP-West (Excluding		
		Uttarakhand), Uttarakhand and West Bengal		
		(Excluding Andaman & Nicobar and Sikkim)		



Sl.	Name of the	Service Area	As on 31 st Marc	h, 2020
No.	Service Provider		Equipped Switching Capacity (Number of Lines)	Working Connections
6	Reliance Jio Infocomm Ltd.	Andhra Pradesh (excluding Telangana), Telangana, Bihar (Excluding Jharkhand), Jharkhand, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh (Excluding Chhattisgarh), Chhattisgarh, Maharashtra (Excluding Mumbai & Goa), Goa, Mumbai, Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, Orissa, Punjab, Rajasthan, Tamil Nadu (Excluding Chennai), Chennai, UP-East, UP-West (Excluding Uttarakhand), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim)	23,928,000	3,333,713
7	Tata Teleservices Ltd. &	Andhra Pradesh (Excluding Telangana), Telangana, Bihar (Excluding Jharkhand), Jharkhand, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Maharashtra (excluding Mumbai & Goa), Goa, Mumbai Madhya Pradesh (Excluding Chhattisgarh), Chhattisgarh, Orissa, Punjab, Rajasthan, Tamil Nadu (Excluding Chennai), Chennai, UP-East, UP-West (Excluding Uttarakhand), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim)	3,836,253	1,626,525
8	Vodafone Idea Ltd	Andhra Pradesh (Excluding Telangana), Telangana, Assam, Bihar (Excluding Jharkhand), Jharkhand, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh (Excluding Chhattisgarh), Chhattisgarh, Maharashtra (Excluding Mumbai & Goa), Goa, Mumbai Meghalaya, Orissa, Punjab, Rajasthan, Tamil Nadu (Excluding Chennai), Chennai, UP-East, UP-West (Excluding Uttarakhand), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim)	675,000	521,357

Source: As per report furnished by the Service Providers.



Internet and Broadband Subscribers

1.2.2.7 The Internet subscriber base in the country as on 31st March, 2021 stood at 825.301 million as compared to 743.191 million as on 31st March, 2020. The total broadband subscriber base of the country as on 31st March, 2021 is 778.095 million whereas it was 687.438 million on 31st March, 2020.

The details of subscription as reported by the service providers in the country as on 31st March, 2021 are indicated in **Table-16**.

Table-16: Details of Internet and Broadband Subscribers

[Subscribers in Million]

	Segme	ent	Category	Internet Subscribers		%
				March, 2020	March, 2021	Growth
A.	Wired		Broadband	19.176	22.749	18.64%
			Narrowband	3.241	3.246	0.17%
			Total	22.416	25.995	15.97%
B.		Fixed Wireless	Broadband	0.602	0.671	11.46%
	l s	(Wi-Fi, Wi-Max, Radio	Narrowband	0.006	0.006	-5.11%
	Wireless	& VSAT)	Total	0.608	0.677	11.30%
	/ire	Mobile Wireless	Broadband	667.659	754.674	13.03%
	>	(Phone + Dongle)	Narrowband	52.507	43.955	-16.29%
			Total	720.166	798.629	10.90%
	Total I	nternet Subscribers	Broadband	687.438	778.095	13.19%
			Narrowband	55.753	47.207	-15.33%
			Total	743.191	825.301	11.05%

1.2.2.8 Quarter-wise Internet/Broadband subscription as reported by the service providers for the financial year 2020-21 is at **Table-17**.

Table-17: Quarter-wise Internet/Broadband Subscribers

(Subscribers in Million)

Service	March	June	September	December	March
	2020	2020	2020	2020	2021
Broadband	687.438	698.231	726.317	747.408	778.095
Narrowband	55.753	50.840	50.138	47.772	47.207
Total Internet	743.191	749.071	776.455	795.181	825.301



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

1.2.3.1 UL (Virtual Network Operators) (VNO) Access Services licensees who are providing services as on 31st March, 2021 are depicted in **Table-18**.

Table-18: UL (Virtual Network Operators) (VNO) Access Services licensees who are providing services as on 31st March, 2021

Sl. No.	Service Providers	Service	Licensed Service Area
		Areas	
1	ADPAY Mobile Payment India Pvt. Ltd.	1	Tamil Nadu including Chennai
2	Surftelecom Pvt Ltd	22	AllIndia
	(formerly Plintron India Pvt. Ltd.)		
3	Basic and Value-added services-NLD	21	
	Licence (Before UL Regime)		
4	No. of NLD Licence (Under UL regime)	11	
5	Basic and Value-added	21	
	services-ILD Licence		
6	Basic and Value-added	06	[as on 30 th June, 2021 (under UL
	services-ILD Licence		Regime), 30 th June, 2017(NLD), as
	(Under UL Regime)		on 15 th December, 2015(ILD),
			Source: DoT]

Source: As reported by TSP

1.2.4 Technical Compatibility and effective interconnection with service providers

1.2.4.1 Under the TRAI Act, the Authority is mandated to fix the terms and conditions of interconnectivity and to ensure technical compatibility and effective interconnection between service providers. Interconnection lies at the core of the telecom business in a multi-operator environment. The terms and conditions of interconnection needs to be regulated to ensure a level playing field among service providers. During the reporting period, following Regulations were issued for effective interconnection between service providers:

"The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020" dated 17th April, 2020

1.2.4.1 The Authority 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) @ Re.0.30 has been revised to forbearance regime within a prescribed range of Re.0.35 per minute to Re.0.65 per minute. These Regulations came into force from 1st May, 2020.

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

1.2.5 Telecommunication Technology

i. Channel Selector App:

TRAI's prevailing regulations/orders for the television and broadcasting sector gave freedom to consumers to select television channels they want to watch. In order to help consumers for



selection of channels with the implementation of the new framework, TRAI has developed this Channel Selector App & launched on 25th June, 2020 for both Android & iOS platform. This App facilitates DTH/Cable subscribers to check their own subscription, know complete platform offerings provided by their DTH/Cable Operator, get optimized solution and submit modify subscription request.

ii. Portal for Exemption from SMS Termination Charges:

This Portal facilitates Government entities to online apply 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 the 5 paisa exemption.

iii. Header Information Portal:

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

iv. DND App - API Specification:

With the release of TCCCP, Regulation 2018, major changes were being done regarding the implementation of provisions of the regulation. Accordingly, DND App needed updation as per regulation. Hence, API specifications were created to securely communicate with service providers systems. With these API specifications service providers shall develop their APIs for integrating in DND App.

v. E-office:

E-Office was inaugurated by Dr P.D. Vaghela, Chairman, TRAI on $1^{\rm st}$ January, 2021. With the adoption of E-Office, TRAI has now become largely a paperless organization wherein all file work is handled through electronic file mode. This adoption of E-office shall ensure greater accountability and transparency in administration, reduce costs incurred in storage and preservation of physical files, facilitate officers to dispose off files from "anywhere and anytime" thereby by improving efficiency of file disposal, enable 24/7 access to files and important papers to senior officers, etc.

vi. Reporting Automation:

IT division has developed a Data Collection and Analytical Reports Portal, which will provide automated Data Collection, Processing and Reports Generation for various divisions in TRAI. The stakeholders, identified by concerned division, will submit the data with valid login id & password. The processed data and analytical reports are being created by using Tableau and are available in the system for the concerned division to download. Presently the NSL-II division is using the system for Performance Monitoring Report (PMR). Later on, once customization for NSL-I & QoS division is done, these divisions shall be able to use the system.

vii. Data Analytics and Cloud Services:

To create meaningful insights & information from the data collection through crowdsourcing & from respective service providers, data analysis is regularly being done using free/licensed tools & technology for internal report generations for various divisions of TRAI. Also, majority of the TRAI applications are hosted on Cloud environment thus leveraging the opportunity of savings in terms of time and infrastructure costs.

viii. Infrastructure Upgradation:

Due to COVID-19 pandemic, all official work was done online including meetings/video conferencing.

To facilitate the work following were done:

- a. 50 Mbps NICNET line was established between NIC and TRAI for securely accessing e-office & video conferencing.
- b. 16 dual band WiFi routers were installed for Sr. Officers for access to high-speed internet/broadband.
- c. 35 Webcams and Headphones were provided to Dy. Advisors and above level officers for attending to e-meetings.
- d. 20 high speed scanners & 100 DSCs were procured for implementation of e-office.

1.2.6 Implementation of National Digital Communication Policy

1.2.6.1 The National Digital Communications Policy (NDCP-2018) envisages to encourage and facilitate sharing of active infrastructure by enhancing the scope of Infrastructure Providers (IPs) and promoting and incentivizing deployment of common sharable, passive as well as active, infrastructure.

TRAI had suo-motu issued the Consultation Paper on "Review of Scope of Infrastructure Providers Category-I (IP-I) Registration" on 16th August, 2019. After due consultation process, TRAI issued Recommendations on 'Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration' dated 13th March, 2021 and sent to Secretary (Telecom), DoT for consideration.

DoT vide its letter No.10-12/2012-CS-III (Pt. II)/236 dated $18^{\rm th}$ November, 2020 informed that TRAI Recommendations on "Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration" dated $13^{\rm th}$ March, 2020 has been considered and some clarifications were sought from TRAI. After due deliberations, TRAI sent its response to Secretary, DoT vide letter No.R-16/1/(1)/2021-NSL-I dated $11^{\rm th}$ January, 2021.

DoT vide its letter dated 08th May, 2019 requested TRAI to furnish recommendations on the strategies of National Digital Communications Policy 2018 which inter alia includes "Ensuring adequate numbering resources, by developing a unified numbering plan for fixed line and mobile services." TRAI after due deliberations of Consultation process and discussions with stakeholders, had finalized its recommendations on "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services" and sent to Secretary, DoT vide letter dated 29th May, 2020.



1.2.7 Quality of Service (QoS)

1.2.7.1 During the year 2020-21, the focus of monitoring of Quality of Service and disseminating information on QoS and curbing the spam had undergone a change with more focus on technology-based solutions.

1.2.8 Universal Service Obligation

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

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

In its recommendations dated 19th December, 2016 on 'Encouraging Data usage in Rural Areas through Provisioning of Free Data', the Authority has recommended that in order to bridge the affordability gap for the persons residing in rural areas and to support Governments efforts towards cashless economy by incentivizing digital means, a scheme of providing free data of approx. 100 MB per month to rural subscribers for free may be launched and the cost of implementation of the scheme may be met from USOF.

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

- i. The broadcasting sector consists of Television and Radio Services. The Television services comprises of Cable TV services, DTH services, HITS services, IPTV services in addition to a terrestrial TV network of Doordarshan. As per an industry report, in the year 2020, there are estimated 210.2¹ million TV households in India wherein the estimated share of Cable TV households, pay DTH households, Free DTH households and terrestrial TV households is 48%, 32%, 19% & 1% respectively¹.
- ii. The TV broadcasting sector encompasses 350 broadcasters⁴, out of which, 40 are pay broadcasters³ at the end of March 2021. Further, there were 1724 (1722 Regular & 02 Provisional) Multi System Operators (MSOs)⁵ registered with Ministry of Information and Broadcasting (MIB), an estimated 1,40,000 cable operators³, 1 HITS operator³, 4 pay DTH operators³ and few IPTV operators³, at the end of March, 2021, in addition to the public service broadcaster Doordarshan, providing a free-to-air DTH service in India.
- iii. At present, there are 901 private satellite TV channels³ permitted by MIB at the end of March, 2021, out of which, 235 are SD pay TV channels³ and 92 are HD Pay TV channels³.
- iv. India's television industry stands at ₹ 68,500° crores in the year 2020 as compared to ₹ 78,800° crore in the year 2019, thereby registering a decline of around 13%. Subscription revenues account for a major share of the overall industry revenue. Subscription revenues has fallen from ₹ 46,800° crores in the year 2019 to ₹ 43,400° crore in the year 2020. On a similar note, advertisement revenue during the year 2020 was ₹ 25,100° crore as compared to ₹ 32,000° crore in the year 2019.
- v. As reported by the private FM Radio broadcasters, there were 366³ private FM radio stations operational at the end of March, 2021, besides the public service broadcaster- All India Radio (AIR). As regards Community Radio Stations, reported by the Ministry of Information and Broadcasting (MIB), out of the 403³ licenses issued at the end of March, 2021 for the setup of such stations, 324³ community radio stations have become operational. The reported advertisement revenues by the private FM Radio broadcasters have fallen from ₹ 1902.75 crore³ in year 2019-20 to ₹ 941.47 crores³ in the year 2020-21.

The sector comprises of Cable TV services, DTH services, terrestrial TV services, HITS services, IPTV services, and radio broadcasting services. The FM Radio broadcasting is also the most popular and pervasive medium to provide entertainment, information and education to the masses. The present status of various services in the broadcasting sector is outlined as below:

 $^{^2} https://barcindia.co.in/whitepaper/barc-india-tv-universe-estimates-2020.pdf\\$

²FICCI EY Report (March 2021) titled "Playing by new rules -India's Media & Entertainment sector reboots in 2020"

³As reported to TRAI

thttp://broadcastseva.gov.in/webpage-User-tvchannels

MIB website https://digitalindiamib.com/



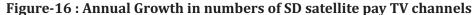
1.4 The present status of various services in the broadcasting sector is outlined as below:

Satellite TV Channels

1.4.1 The total number of Satellite TV channels permitted by the Ministry of Information and Broadcasting has increased substantially from 888 at the end of March, 2017 to 901 at the end of March, 2021. **Figure-15** depicts year-wise total number of TV channels during this period. The number of Standard Definition (SD) pay TV channels has grown from 212 at the end of March 2017 to 235 at the end of March 2021. **Figure-16** depicts year-wise total number of SD Pay TV channels during this period. **Figure-17** depicts the year-wise number of HD channels reported during this period. At the end of March, 2021, there are a total of 92 operational HD channels. A list of broadcasters & their Pay TV channels (SD & HD) is at Annexure-I as a part of this report.

Source - Ministry of I&B

Figure-15: Annual growth in number of satellite TV channels in India



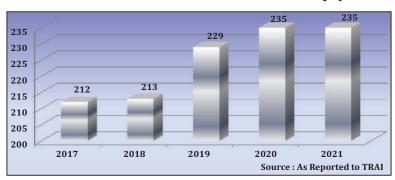
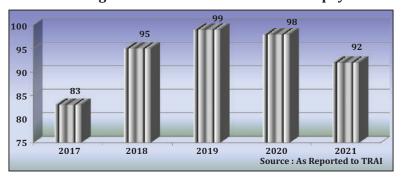


Figure-17: Annual growth in number of HD satellite pay TV channels

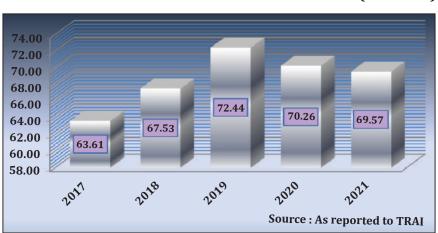




DTH Services

1.4.2 Since its introduction in the year 2003, Indian DTH service has displayed a phenomenal growth. Pay DTH has attained total active subscriber base of around 69.57 million at the end of March 2021. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). At the end of March, 2021, there are 4 pay DTH service providers catering to this subscriber base. A list of pay DTH operators is placed at Annexure-II. It is important to note that previously (upto March, 2020) the subscription figure of total active subscribers included inactive and temporarily suspended subscribers for not more than last 120 days. However as per new regulatory framework of Broadcasting and Cable TV Services, the total active subscribers include subscribers who have been inactive or temporarily suspended for not more than last 90 days. This point has been duly clarified by the Authority in the Press Release no. 86/2019 dated 8th October 2019 (https://main.trai.gov.in /sites /default /files/ PR_No. 86 of 2019.pdf). Yearly growth of the sector in terms of its net active subscriber base is depicted in Figure-18:

Figure-18: Annual growth in 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.

FM Radio

1.4.3 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 Shortwave (SW) and Medium-wave (MW) bands in the Amplitude Modulation (AM) mode and also Frequency Modulation (FM) mode. FM Radio broadcasting today, is the most popular and pervasive medium to provide entertainment, information and education to the masses. There are 366 private FM radio stations operational at the end of March, 2021, besides the terrestrial network of the public service broadcaster- All India Radio (AIR).



As the end of March, 2021, 366 FM radio stations have been made operational in 105 cities by 30 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 year wise total number of private FM radio stations is depicted in **Figure-19.** Further, the reported advertisement revenues by the private FM Radio broadcasters is ₹ 941.47 crores² in the year 2020-21. The year-wise total advertisement revenue of private FM Radio stations is depicted in **Figure-20**:

Figure-19: Annual growth in number of Private FM Radio Stations (in million)

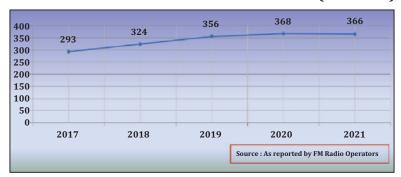
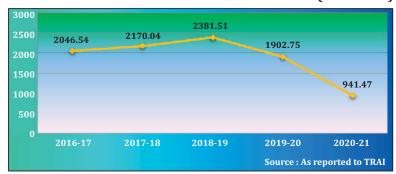


Figure-20: Annual growth in FM Radio Advertisement Revenue (in million)

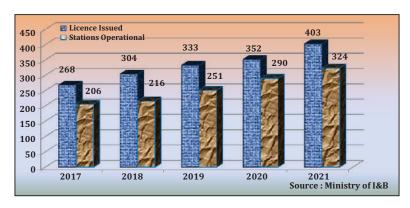


Community Radio

1.4.4. Another area of growth in the radio landscape is the expansion in the number of Community Radio Stations (CRS) in the country. There is huge latent potential in CRS, given the vast landscape of this country, linguistic diversity regional flavours and cultural variations. Community Radio broadcasting can serve as a medium for networking of small groups and communities with a specific focus on daily concerns of the common man and also help them realize local aspirations. CRS are set up in association with educational institutions and civil society organizations. At the end of March, 2021, 324 community radio stations have become operational. The annual growth in the number of community radio stations is depicted in **Figure-21**.

TRAIL

Figure-21: Annual growth in Number of Community Radio Stations



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

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

(As on 31st March, 2021)

Number of Broadcasters permitted by MIB	350
Number of Multi System Operators registered with MIB	1724
Number of Local Cable operators (estimated)	1,40,000
Number of pay DTH Operators	4
Number of satellite TV Channels registered with MIB	901
Number of SD Pay TV Channels	235
Number of HD TV Channels	92
Number of FM Radio Stations (excluding All India Radio)	366
Number of Operational Community Radio Stations	324



Performance indicators of the Broadcasting and Cable services over the four quarters of 2020-21 are given in **Table-20:** -

Table-20: Performance indicators of the Broadcasting and Cable services

Broadcasting & Cable Services				
	June, 2020	Sept., 2020	Dec., 2020	March, 2021
Total Number of Registered Channels with	909	911	907	901
I&B Ministry				
Number of SD Pay Channels (Operational)	235	231	233	235
Number of HD Pay Channels (Operational)	97	96	93	92
Total Active DTH Subscribers base*	70.58	70.70	70.99	69.57
(in Million)				
Number of Private FM Radio Stations	367	367	367	366

* As per new regulatory framework of Broadcasting and Cable TV Services, the total active subscribers are counted including only those subscribers who are inactive/ temporarily suspended for not more than last 90 days. This point has been duly clarified by the Authority in the Press Release no. 86/ 2019 dated 8th October, 2019. (https://main.trai.gov.in/sites/default/files/PR_No.86 of 2019.pdf)

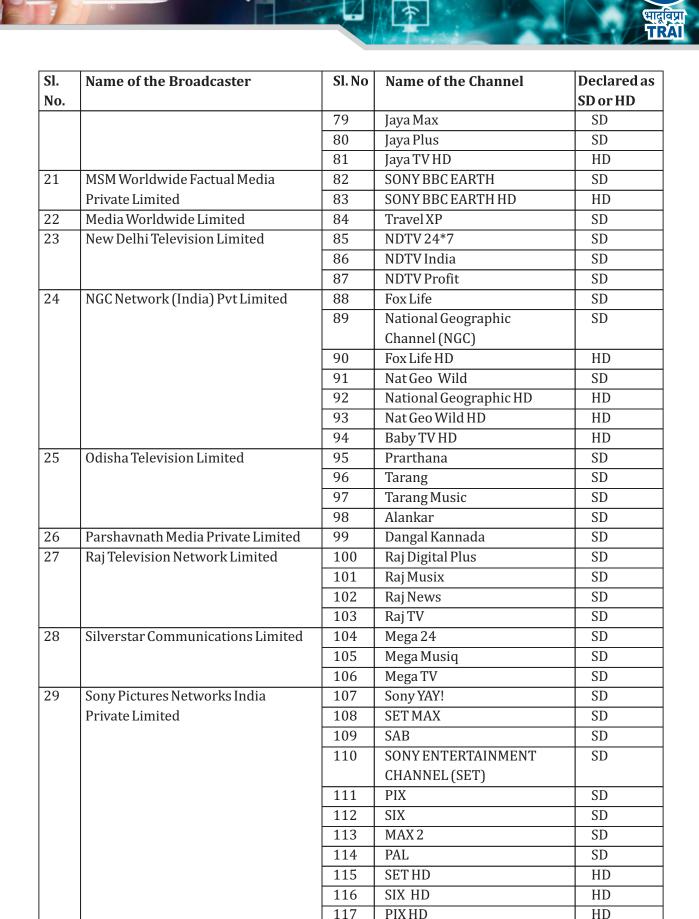


 $\mbox{Annexure - I} \label{eq:annexure - I} \mbox{List of pay TV channels as on 31}^{\mbox{\tiny st}} \mbox{ March, 2021}$

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



Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		40	Discovery HD	HD
		41	Animal Planet HD World	HD
		42	TLCHD	HD
		43	Investigation Discovery HD	HD
		44	TLC	SD
		45	EUROSPORT HD	HD
			(Earlier name "Dsport HD")	
		46	EUROSPORT (Earlier name "Dsport")	SD
10	Disney Broadcasting (India) Limited	47	Disney Junior	SD
		48	UTV Movies	SD
		49	Marvel HQ	SD
		50	Disney International HD	HD
		51	Hungama TV	SD
		52	The Disney Channel	SD
		53	UTV HD	HD
		54	UTV Bindass	SD
		55	UTV Action	SD
11	Eenadu Televisoin Private Limited	56	ETV	SD
		57	ETV Andhra Pradesh	SD
		58	ETV - Telangana	SD
		59	ETV Cinema	SD
		60	ETV Life	SD
		61	ETV Plus	SD
		62	ETV Abhiruchi	SD
		63	ETVHD	HD
		64	ETV Plus HD	HD
		65	ETV Cinema HD	HD
12	IN 10 Media Private Limited	66	EPIC TV	SD
		67	Filamchi	SD
		68	Gubbare	SD
		69	Ishara TV	SD
13	Information TV Private Limited	70	India News	SD
14	Fame Media Private Limited	71	4tv News	SD
15	Greycells18 Media Limited	72	TopperTV	SD
16	IBN Lokmat News Private Ltd	73	News 18 Lokmat	SD
17	Living Entertainment Enterprises	74	ZEE ZEST HD	HD
	Private Ltd	75	Living Travelz	SD
18	Lifestyle and Media Broadcasting Limited	76	Good Times	SD
19	Lex Sportel Vision Private Limited	77	1SPORTS	SD
20	Mavis Satcom Limited	78	Movies	SD
		1	,	



118

MAX HD

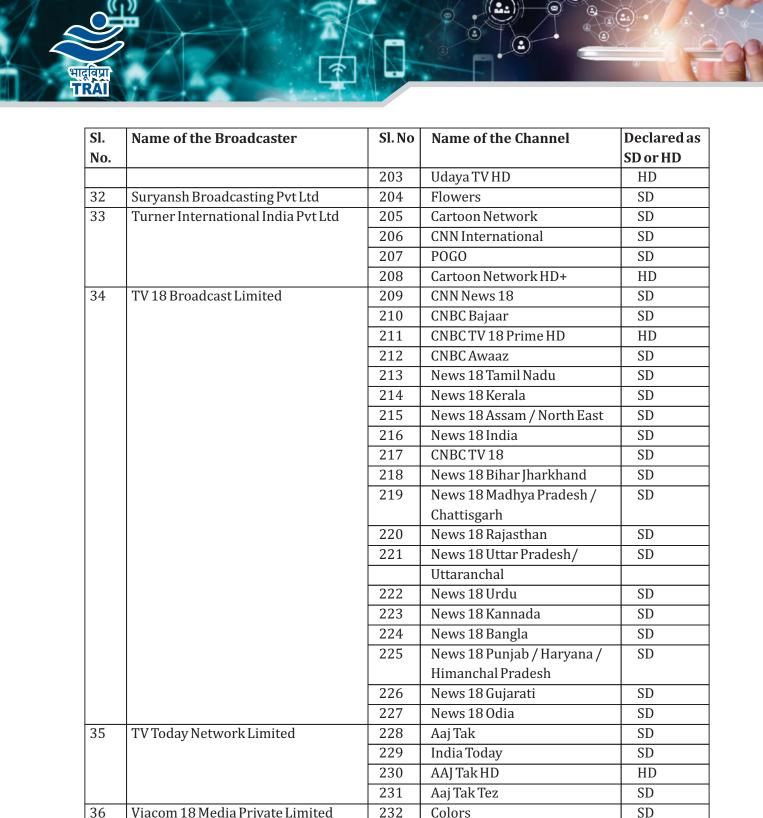
HD



Sl.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as
No.				SD or HD
		119	Ten 2 HD	HD
		120	Ten 3 HD	HD
		121	Ten 2	SD
		122	Ten 1	SD
		123	Ten 3	SD
		124	Ten 1 HD	HD
		125	SONY Wah	SD
		126	SABHD	HD
30	Star India Private Limited	127	Star Sports 3	SD
		128	Star Sports 1 Tamil	SD
		129	Star Sports Select 2	SD
		130	Star Bharat	SD
		131	Star Gold 2 (Movies OK)	SD
		132	Star Sports 1 Hindi	SD
		133	Star Gold	SD
		134	Star Jalsha	SD
		135	Star Movies	SD
		136	Star Gold Select	SD
		137	Star Plus	SD
		138	Star Pravah	SD
		139	Star Sports 1	SD
		140	Star Sports 2	SD
		141	Star World	SD
		142	Jalsha Movies	SD
		143	Star Sports HD 2	HD
		144	Star Sports HD 1	HD
		145	Star Bharat HD	HD
		146	Star Gold HD	HD
		147	Star Movies HD	HD
		148	Star Plus HD	HD
		149	Star Sports 1 HD Hindi	HD
		150	Star Sports Select 1	SD
		151	Star Movies Select HD	HD
		152	Star World HD	HD
		153	Star Sports First	SD
		154	MAA Gold	SD
		155	MAA Movies	SD
		156	MAA Music	SD
		157	MAA TV	SD
		158	Star Pravah HD	HD
		159	Star Jalsha HD	HD
		160	Jalsha Movies HD	HD



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



233234

235

236

237

238

239

240

241

242

HD

SD

SD

SD

SD

HD

HD

SD

HD

HD

Comedy Central (HD)

VH 1 (HD Distribution)
Colors Infinity HD

Colors Infinity

Colors HD

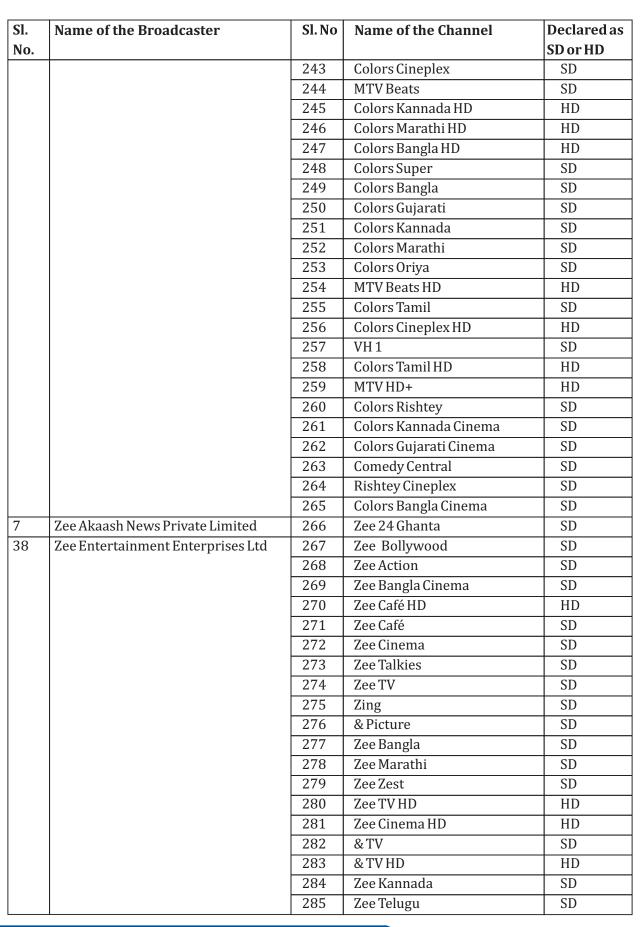
NICKS HD+

MTV

NICK

NICK JR

SONIC





Sl. No.	Name of the Broadcaster	Sl. No	Name of the Channel	Declared as SD or HD
		286	& Pictures HD	HD
		287	Zee Cinemalu	SD
		288	Zee Yuva	SD
		289	Zee Marathi HD	HD
		290	& Prive HD	HD
		291	Zee Bangla HD	HD
		292	Zee Tamil HD	HD
		293	Zee Cinemalu HD	HD
		294	Zee Telugu HD	HD
		295	Zee Tamil	SD
		296	Zee Kannada HD	HD
		297	Zee Anmol Cinema	SD
		298	& Flix HD	HD
		299	& Flix	SD
		300	Zee Keralam HD	HD
		301	Zee Keralam	SD
		302	Zee Vajwa	SD
		303	Zee Anmol	SD
		304	Big Magic	SD
		305	Big Ganga	SD
		306	Zee Classic	SD
		307	&Xplore HD	HD
		308	ZEE Sarthak	SD
		309	Zee Talkies HD	HD
		310	Zee Punjabi	SD
		311	Zee Thirai	SD
		312	Zee Picchar	SD
		313	Zee Biskope	SD
39	Zee Media Corporation Limited	314	Zee 24 Taas	SD
		315	Zee Odisha	SD
		316	Zee Business	SD
		317	Zee Punjab Haryana Himachal	SD
		318	Zee Madhya Pradesh Chattisga	h SD
		319	Zee Salaam	SD
		320	Zee 24 Kalak	SD
		321	WION	SD
		322	Zee Uttar Pradesh Uttrakhand	SD
		323	Zee Hindustan	SD
		324	Zee Bihar Jharkhand	SD
		325	Zee News	SD
		326	Zee Rajasthan News	SD
40	Zoom Entertainment Network Ltd	327	Movies Now	SD
	·			



Annexure-II

List of Pay DTH Operators

S.No	DTH Operator	
1.	M/s. Tata Sky 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 Sector, TV broadcasting and radio services with a highlight on policies and programmes of the Government during 2020-21. In line with the mandate given under the TRAI Act, TRAI has played a catalytic role in the development of the telecom, broadcasting and cable services. TRAI's endeavour is to provide a fair and transparent environment that encourages competition and promotes a level-playing field for all service providers while protecting the interest of consumers.
- 2.2 Under Section 36 of the TRAI Act 1997, the Authority may, by notification, make regulations consistent with this Act and the rules made thereunder to carry out the purposes of this Act. Further, Under Section 39 of the TRAI Act 1997. If any difficulty arises in giving effect to the provisions of this Act, the Central Government may, by order, published in the Official Gazette, make such provisions not insistent with the provisions of this Act as may appear to be necessary for removing this difficulty.
- 2.3 To formulate recommendations and suggest policy initiatives, TRAI interacts with various stakeholders such as the service providers, industry organizations, Consumer Advocacy Groups (CAGs) / Consumer Organizations and other experts in the field. It has developed a process, which allows all the stakeholders and the general public to participate in discussions about policy formulation by offering their views whenever sought for. This process involves floating of a consultation paper highlighting the issues involved and soliciting the views of the stakeholders on the issues, holding Open House Discussion (OHD) Meetings arranged in different cities in the country, inviting written comments on e-mail and through letters, and having interactive sessions with stakeholders and experts to obtain different views and clarifications on policy issues. The Regulations / Orders issued by TRAI also contain an Explanatory Memorandum which explains the basis on which the decisions are taken. The participative and explanatory process adopted by TRAI has received wide acclaim.
- 2.4 TRAI also interacts with the consumer organizations / Non-Government Organizations (NGO) in the telecom and broadcasting sectors to obtain their views. It has a system of registering consumer organizations / NGOs connected with telecom services and interact with them at regular intervals. TRAI is constantly adopting measures for strengthening the consumer organizations. It also organizes Seminars and Workshops with the participation of International Experts on various technical issues and invites stakeholders, consumer organizations and other research institutes to attend these events.
- 2.5 Under Section 11 (1) (a) of the TRAI Act 1997, the Authority is required to make recommendations either suo moto or on a request from the licensor, i.e., Department of Telecommunications, Ministry of Telecommunications or Ministry of Information & Broadcasting in the case of Broadcasting and Cable Services. Recommendations given by TRAI to Government during 2020-21 are given below.



TELECOM SECTOR

Sl. No.	List of Recommendations & Back References and Responses
1	Recommendations dated 22 nd September, 2020 on "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality."
2	Recommendations dated 14 th September, 2020 on "Cloud Services."
3	Recommendations dated 14 th September, 2020 on "Regulatory Framework for Over-The-Top (OTT) Communication Services" (OTT) Communication Services.
4	Recommendations dated 17 th August, 2020 on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing."
5	Recommendations dated 28 th July, 2020 on "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT CUG Service Authorization."
6	Recommendations dated 29^{th} May, 2020 on "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services."
7	Recommendations dated 22^{nd} April, 2020 on "Network Testing Before Commercial Launch of Services for Wireline Access Services."
8	TRAI's response dated 15 th April, 2021 to DoT's back-reference dated 12 th March, 2021 on TRAI Recommendations dated 17 th April, 2015 on "Delivering Broadband Quickly: What do we need to do?"
9	TRAI's response dated 11 th January, 2021 to the clarification sought by DoT on Recommendations on "Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration" dated 13 th March, 2020.
10	TRAI's response dated 28 th September, 2020 to DoT's back-reference on Recommendations on "Review of terms and conditions for registration of Other Service Providers (OSPs)" dated 21 st October, 2019.
11	TRAI's response dated 5 th June, 2020 to DoT's back-reference dated 29 th May, 2020 for reconsideration of TRAI Recommendations dated 9 th March, 2017 on "Proliferation of Broadband through Public Wi-Fi Networks."
12	TRAI's Response dated 10 th April, 2020 to DoT back reference dated 12 th March, 2020 on Recommendations on "Captive VSAT CUG Policy Issues."



- Recommendations dated 22nd September, 2020 on "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality"
- 2.5.1 DoT vide letter No. 12-30/NT/2015/0'IT (Pt) dated 31st July, 2018 and 17th June, 2019 sought additional recommendations on the Traffic Management Practices (TMPs) and Multi-Stakeholder Body i.e. "the necessary Traffic Management Practices (TMPs), and the composition, functions, role, and responsibilities of the multi-stakeholder body for consideration of DoT".

Pursuant to this reference, TRAI issued a consultation paper on 2^{nd} January, 2020 and raised various issues for comments and counter comments from stakeholders. Subsequently, an Open House Discussions (OHD) was held on 24^{th} June, 2020 in Delhi.

Based on the comments received and further analysis, the Authority finalized its recommendation on "Traffic Management Practices (TMPs) and Multi Stakeholder Body for Net Neutrality" and sent it to Secretary, DoT, along with Authority's letter No. 305-14/2014-QoS (Pt.-I) dated 22nd September, 2020 for its consideration.



An on-line Open House Discussion held on 24th June, 2020 on Consultation Paper on 'Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality'

- Recommendations dated 14th September, 2020 on "Cloud Services"
- 2.5.2 DoT vide letters No. 4-4/ Cloud Services/ 2017 -NT dated 27th September, 2018 and 6th May, 2019 sought additional recommendations on "the terms and conditions of registration of Industry body, eligibility, entry fee, the period of registration, and governance structure, etc.

Pursuant to this reference, TRAI issued a consultation paper on 23^{rd} October, 2019 and raised various issues for comments and counter comments from stakeholders. Subsequently, an OHD was held in Delhi on 28^{th} February, 2020.

Based on the comments received and further analysis, the Authority finalized its recommendations on "Cloud Services" and sent it to Secretary, DoT, along with Authority's letter No. 305-03/2015-QoS dated 14^{th} September, 2020 for its consideration.



2.5.3 DoT vide letter No. 12-30/NT/2015/OTT(Pt.) dated 3rd March, 2016 sought the recommendations of TRAI on net neutrality including traffic management and economic, security and privacy aspects of services, apart from other relevant standpoints as covered in the consultation paper dated 27th March, 2015.

Considering the complexity of issues, referred to in DoT's letter, and other interrelated issues, the Authority decided to deal with specific issues through distinct consultation processes. The Authority has already issued recommendations or regulations pertaining to "Prohibition of Discriminatory Tariffs for Data Services", "Regulatory framework for Internet Telephony", "Net Neutrality" and "Privacy, Security and ownership of Data in the Telecom Sector".

TRAI issued a consultation paper on 12^{th} November, 2018 on the residual issue i.e Regulatory framework for Over-The-Top (OTT) Communication Services and raised various issues for comments and counter comments from stakeholders. Subsequently, two OHD's were held one at Bangalore on 24^{th} April, 2019 and another one at Delhi on 20^{th} May, 2019.

Based on the comments received and further analysis, the Authority has finalized its recommendations on "Regulatory Framework for Over-The-Top (OTT) Communication Services" and sent it to Secretary, DoT, along with Authority's letter No. 310-05/2015-QoS dated 14^{th} September, 2020 for its consideration.

- Recommendations dated 17th August, 2020 on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing"
- 2.5.4 DoT vide its letter dated 15th January, 2020, inter alia, informed that the existing guidelines for Sharing of Access Spectrum by Access Service Providers issued by DoT on 24th September, 2015 provide that the Spectrum Usage Charge (SUC) rate of each of the licensees post sharing increases by 0.5% of Adjusted Gross Revenue (AGR). DoT also informed that it has received representations requesting that the incremental SUC rate of 0.5% post sharing should be applied only to the particular spectrum band which has been allowed to be shared between two licensees, and not on the entire spectrum held by the licensees; since sharing is permitted in a particular band. In this background, DoT requested TRAI to furnish its recommendations on (i) whether the incremental 0.5% in SUC rate in cases of sharing of spectrum should be applied only on the specific band in which sharing is taking place; or on the overall Weighted Average Rate of SUC, which has been derived from all bands and (ii) any other recommendations deemed fit for the purpose, under the TRAI Act, 1997, as amended.

In this regard, a Consultation Paper was issued on 22nd April, 2020 on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing" providing the background information and seeking inputs of the stakeholders. Comments from nine stakeholders were received. An Open House Discussion (OHD) was conducted on 9th July, 2020 through video conference.

Based on the comments/inputs received from the stakeholders and on its own analysis, on 17^{th} August, 2020, TRAI finalized its Recommendations on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of

Spectrum Sharing" and sent to the Government. The salient features of the Recommendations are:

- (i) It is clarified that as per the existing spectrum-sharing guidelines, an increment of 0.5% on SUC rate should apply on the spectrum holding in specific band in which sharing is taking place, and not on the entire spectrum holding (all bands) of the Licensee.
- (ii) To provide flexibility to the TSPs to manage their spectrum on need and commercial basis, suitable exit clause for intimation of termination of an existing spectrum-sharing arrangement by the involved TSPs should be included in the spectrum sharing guidelines.

 $The \, recommendations \, have \, been \, placed \, on \, TRAI's \, website \, www.trai.gov.in.$

- Recommendations dated 28th July, 2020 on "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT CUG Service Authorization"
- 2.5.5 Satellites provide telecommunication and broadcasting services, covering large geographical areas. Very Small Aperture Terminal (VSAT) is one of the satellite communication technologies which is very useful for remote and inaccessible locations such as rural areas, ships, coastal regions, hills, etc. where there is limited or no terrestrial connectivity. The main advantages of VSAT technology are its rapid deployment with minimum training, scalability, lower operational costs and reliability of communication, in remote locations even in adverse situations.

The National Digital Communications Policy (NDCP), 2018, released by the Government of India, has inter-alia envisaged the various steps such as revising licensing and regulatory conditions, simplifying compliance requirements and expanding the scope of permissible services for the effective utilisation of High Throughput Satellite system through appropriate licensing mechanism.

Department of Telecommunications (DoT), through its letter dated 13th August, 2019 requested TRAI to furnish recommendations under the terms of the Telecom Regulatory Authority of India Act, 1997 (as amended) by TRAI Amendment Act, 2000 on terms and conditions of Unified License and Unified License VNO agreement for permitting backhaul links for mobile network via satellite through VSAT.

Based on the reference received from DoT, the Authority on 29th January, 2020 issued Consultation Paper (CP) on 'Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization', seeking comments of the stakeholders. In the CP, apart from the issues referred to by DoT, other issues such as sharing of infrastructure by a licensee for provisioning of other services authorized under the license, migration from formula-based spectrum charging (for satellite-based services) to AGR-based SUC and associated matters of accounting separation were also raised for comments of the stakeholders.

Written comments and counter-comments on the CP were invited from the stakeholders. The Authority received comments from 15 stakeholders whereas no counter-comments were

received. These comments are available on TRAI's website. An Open House Discussion (OHD) was conducted through video conferencing on 20th May, 2020.

Based on the comments received during the consultation process and its own analysis, TRAI released its Recommendations on "Provision of Cellular backhaul connectivity via. Satellite through VSAT under Commercial VSAT CUG Service Authorization" on 28th July, 2020. The salient features of these recommendations are: -

- (a) The Commercial VSAT CUG Service provider should be permitted to provide backhaul connectivity for cellular mobile services through satellite using VSAT to the Access Service providers. They may also be permitted to provide backhaul connectivity using VSAT to Access Service Providers for establishing Wi-Fi hotspots.
- (b) Enabling provisions should be made in stand-alone Commercial VSAT CUG Service license, Unified License, and Unified License (VNO) for provision of backhaul connectivity by Commercial VSAT CUG Service provider.
- (c) Sharing of VSAT Hub for the purpose of providing authorized services should be allowed to the entity having license / authorization for both Commercial VSAT CUG and NLD services.
- (d) Sharing of active and passive infrastructure owned by a licensee under any of the service authorizations should be permitted for providing other services authorized to licensee under other authorizations or stand-alone licenses.
- (e) Spectrum charging for VSAT services in NLD license/ authorization should be prescribed as a percentage of AGR. Replacing the existing formula-based mechanism, Spectrum usage charges for using satellite frequencies under the NLD service license/ authorization should be prescribed as 1% of AGR excluding the revenue from the licensed services other than satellite-based services.
- (f) There should not be any barriers on the carrier speeds and, therefore, higher data rates, which are now possible in satellite communications with the use of latest technologies, should be permitted without any restrictions.

The Recommendations on "Provision of Cellular backhaul connectivity via. Satellite through VSAT under Commercial VSAT CUG Service Authorization" have been placed on TRAI's website www.trai.gov.in.

- Recommendations dated 29th May, 2020 on "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services"
- 2.5.6 A reference was received from the DoT vide its letter No. 20-281/2010-AS-I Vol. XII (pt.) dated 8th May, 2019, wherein it was requested to furnish recommendations on the strategies of National Digital Communications Policy 2018 which inter alia includes 'Ensuring adequate numbering resources, by developing a unified numbering plan for fixed line and mobile services'.

A Consultation Paper was issued on 20th September, 2019 on 'Developing a Unified Numbering Plan for Fixed Line and Mobile Services' seeking comments and counter-comment from

stakeholders. An Open House Discussion (OHD) was also held on $16^{\rm th}$ January, 2020 at TRAI, New Delhi.

Based on the comments/inputs received from the stakeholders, discussion held during OHD and on its own analysis, TRAI finalized its Recommendations on 'Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services' and sent to Secretary, DoT along with TRAI's letter No. 413-2/2019-NSL-I dated 29th May, 2020 for its consideration. The recommendations are available on TRAI's website www.trai.gov.in.

- Recommendations dated 22nd April, 2020 on "Network Testing Before Commercial Launch of Services for Wireline Access Services"
- 2.5.7 A reference was received from DoT vide its letter dated 16th July, 2019 wherein it was communicated that the Government has accepted TRAI's recommendations on 'Network Testing Before Launch of Commercial Services' dated 04th December, 2017 and has further requested to provide similar recommendations on Network Testing before commercial launch of Wireline Access Services under the provisions of clause 11(1)(a) of TRAI Act, 1997 as amended by TRAI Amendment Act, 2000.

In accordance with the reference received from DoT regarding Wireline Access Services, a consultation process was initiated to frame recommendations to decide the norms of network testing before commercial launch of Wireline Access Service. However, as most of the issues raised and examined during the consultation process for framing the recommendations on 'Network Testing Before Launch of Commercial Services' dated 04th December, 2017, were equally applicable for Wireline Access Services, the Authority issued detailed draft recommendations on 'Network Testing Before Commercial Launch of Services for Wireline Access Services' on 31st December, 2019 to seek comments and counter-comments from stakeholders.

Based on the comments/inputs received from the stakeholders and on its own analysis, TRAI finalized its Recommendations on 'Network Testing Before Commercial Launch of Services for Wireline Access Services' and sent to Secretary DoT vide letter No.411-01/2019-NSL-I dated 22ndApril, 2020 for its consideration. A copy of the recommendations is available on TRAI's website www.trai.gov.in.

- TRAI response dated 15th April, 2021 to DoT's back-reference dated 12th March, 2021 on TRAI Recommendations dated 17th April, 2015 on "Delivering Broadband Quickly: What do we need to do?"
- 2.5.8 The Authority on 17th April, 2015 issued Recommendations on "Delivering Broadband Quickly: What do we need to do". These recommendations covered a wide range of topics like Spectrum Licensing, Right of Way (RoW), NOFN, Towers, Fixed Line Broadband, Cable TV, Satellite, hosting of contents in India, License fee on ISPs, Infrastructure sharing and promoting adoption of Broadband. DoT sent a Reference back dated 12th March, 2021, after a gap of almost six years, related to one of the Recommendations seeking exemption of license fee on revenues earned on fixed line Broadband for a period of 5 years to promote fixed line broadband. The Authority on 15th April, 2021 issued its response to the Reference back. In its response, the Authority mentioned that it has been decided to issue a fresh consultation paper



on certain new issues raised in the Do'l's reference back such as likelihood of misappropriation of revenues and promoting fixed line Broadband by proving Direct Benefit Transfer (DBT).

- TRAI's response dated 11th January, 2021 to the clarification sought by DoT on Recommendations on "Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration" dated 13th March, 2020
- 2.5.9 TRAI on 16th August, 2019 suo-motu issued the Consultation Paper on "Review of Scope of Infrastructure Providers Category-I (IP-I) Registration' seeking comments and countercomments from stakeholders. An Open House Discussion was held on 14th November, 2019. Based on the comments/inputs received from the stakeholders, discussion held during the OHD and on its own analysis, TRAI finalized its Recommendations on 'Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration' and sent to Secretary (Telecom), DOT vide letter No.413-1/2019-NSL-I dated on 13th March, 2020 for consideration.

Department of Telecommunications (DoT) vide its letter No.10-12/2012-CS-III (Pt. II)/236 dated 18^{th} November, 2020 informed that TRAI Recommendations on "Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration" dated 13^{th} March, 2020 has been considered and some clarifications were sought from TRAI.

TRAI after due deliberations, sent its response to Secretary, DoT vide letter No. R-16/1/(1)/2021-NSL-I dated 11^{th} January, 2021.

- TRAI response dated 28th September, 2020 to DoT's back-reference on Recommendations on "Review of terms and conditions for registration of Other Service Providers (OSPs)" dated 21st October, 2019
- 2.5.10 DoT vide its letter No. 18-5/2015-CS-I (pt.) dated 26th September, 2020 informed that the Recommendations on "Review of Terms and Conditions for registration of Other Service Providers (OSPs)" dated 21st October, 2019 have been examined by DoT. The following issues were referred back under Section 11 of the TRAI Act, 1997 and was requested to send its reconsidered view: -
 - Categorization of OSP based on Voice or Data
 - Bank Guarantee,
 - CCSP/HCCSPs
 - Network Diagram
 - Foreign PABX for International OSPs
 - Penalty
 - Work from Home
 - Interconnection of Data and Voice path

TRAI, after due deliberations, finalized its response and sent to Secretary, DoT vide letter No. 413-3/2018-NSL-I dated 28th September, 2020.



- 2.5.11 The Authority issued recommendations dated 9th March, 2017 to the Government on "Proliferation of Broadband through Public Wi-Fi Networks". Through these recommendations, an 'unbundled and distributed model' for delivery of broadband services through public Wi-Fi Networks was recommended. A back reference dated 29th May, 2020 was received from DoT after a lapse of three years from the date of recommendations of TRAI. DoT's back reference largely centers around the idea of loading the smaller entities of the WANI architecture with licensing and regulatory obligations, as for the other integrated players/licensees. The Authority finalized its response to the back reference and sent the same to DoT on 5th June, 2020. In its response, the Authority pointed out, among many other things, that many hotels, restaurants, airports, and malls are offering Wi-Fi services without any specific licensing/registration. In fact, many such places in India follow MAC ID based authentication, in violation of each time authentication using OTP required as per the existing instructions, and even then, no spoofing or security issue has come to the notice of the Authority.
- TRAI's Response dated 10th April, 2020 to DoT back reference dated 12th March, 2020 on Recommendations on "Captive VSAT CUG Policy Issues"
- 2.5.12 The Authority had sent its recommendations on "Captive VSAT CUG Policy Issues" on 18th July, 2017 to the Department of Telecommunications (DoT). DoT vide its letter dated 17th March 2016, referred back some of the recommendations for reconsidered opinion/recommendations.

After considering the views given by the DoT, the Authority furnished its response to the Government on 10^{th} April, 2020. The salient recommendations after considering the back reference of DoT, are as below:

- (i) The amount of initial Financial Bank Guarantee (FBG), which is submitted by the applicant company prior to signing of Captive VSAT CUG license, should be reduced from ₹ 30 Lakhs to ₹ 15 Lakhs. For subsequent years, it should be equivalent to the estimated sum payable equivalent to the license fee for two quarters.
- (ii) The royalty charges should be limited to the charges only for the assigned frequencies. There is no justification for charging additional 25% amount as reuse factor for number of VSATs more than the number of carriers.
- (iii) It has been recommended to create a Single Window procedure to cater to the requirements of applicant/licensee companies for the entire processes that are involved in obtaining license, approvals/clearances related to space segment, ground segment, etc. in respect of Captive VSAT CUG License.

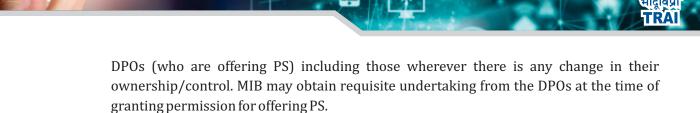
The detailed response is available at TRAI website.

BROADCASTING SECTOR

Sl. No.	List of Recommendations
1	Recommendations dated 2 nd February, 2021 on the MIB's back references on TRAI's Recommendations dated 19 th November, 2014 titled "Regulatory Framework for Platform Services" and TRAI's Recommendations titled "Platform Services offered by DTH Operators" dated 13 th November, 2019."
2	Recommendations dated 28 th April, 2020 on "Review of Television Audience Measurement and Rating System in India."
3	Recommendations dated 10 th April, 2020 on "Reserve Price for Auction of FM Radio channels."
4	Recommendations dated 10 th April, 2020 on "Interoperability of Set-Top Box."

RECOMMENDATIONS

- Recommendations dated 2nd February, 2021 on the MIB's back references on TRAI's Recommendations dated 19th November, 2014 titled "Regulatory Framework for Platform Services" and TRAI's Recommendations titled "Platform Services offered by DTH Operators" dated 13th November, 2019"
- 2.5.13 On 2nd February, 2021, TRAI issued its Recommendations on the MIB's back references on TRAI's Recommendations dated 19th November, 2014 titled "Regulatory Framework for Platform Services" and TRAI's Recommendations titled "Platform Services offered by DTH Operators" dated 13thNovember, 2019". The salient features of the recommendations were: -
 - (i) TRAI has no objection to accept Ministry's view that anybody registered as a DPO, either with MIB or with post office, shall be eligible to carry Platform Services (PS) channels, provided that Ministry of Information and Broadcasting is able to specify compliance structure to ensure that those providing platform services make full disclosure on ownership status and comply to the Programme and Advertising codes. Further, the Authority recommends that any person/ entity desirous of providing local news and current affairs as PS, or is already providing such services, must be incorporated as a company under the Indian Companies Act, 2013.
 - (ii) A maximum of 15 PS channels may be offered by MSOs, IPTV Operators and HITS operators.
 - (iii) TRAI agreed with the suggestion given by MIB that MIB will obtain security clearance of all MSOs / LCOs, who wish to offer PS and were not MHA security cleared at the time of registration, while they run their PS. However, if at any time before the MIB obtains the security clearance, it is determined that the programming service offered on PS and which has been registered on the online system is inimical to India's national security or to the public interest, MIB may require the MSO / LCO to withdraw from distribution of the PS Channel or the programming service and / or cancel the registration. Further TRAI recommended that MIB may establish a procedure to review the security clearance of all



- (iv) Authority agrees with the views of MIB. The definition of Platform Services (PS) shall be:
- a. "Platform services (PS) are programs transmitted by Distribution Platform Operators (DPOs)exclusively to their own subscribers and does not include Doordarshan channels and registered TV channels. PS shall not include foreign TV channels that are not registered in India."
- b. Registered TV channels or television channels means a channel, which has been granted downlinking permission by the Central Government under the policy guidelines issued or amended by it from time to time and reference to the term 'channel' shall be constructed as a reference to 'television channel'.
- (v) The Authority agrees with the views of MIB. The Authority recommended that:
 - a. The programme transmitted by the DTH operator/ MSOs/ IPTV/ HITS operator as a platform service shall be exclusive and the same shall not be permitted to be shared directly or indirectly with any other Distribution Platform Operator (DPO).
 - b. Programme transmitted by the DTH operator / MSOs/ IPTV/ HITS operator as a platform service shall not directly or indirectly include any registered TV channel or Doordarshan channel or foreign TV channel. Time-shift feed of registered TV channels (such as +1 services) shall not be allowed as a platform service.
 - c. DTH operator / MSOs/ IPTV/ HITS operator shall ensure and provide an undertaking to the Ministry in the format prescribed by the Ministry that the programme transmitted is exclusive to their platform and not shared directly or indirectly with any other DPO.
 - d. In case the same programme is found available on the PS of any other DPO, MIB/TRAI may issue direction to immediately stop the transmission of such programme. MIB also reserves the right for cancellation of registration of such PS of the DTH operator / MSOs/IPTV/HITS operator.
- (vi) The Authority agrees with the views of MIB. The DTH operator/ MSOs/ IPTV/ HITS operator shall provide an option of activation/ deactivation of platform services as prescribed in the orders/directions/regulations issued by TRAI from time-to-time.
- (vii) The Authority agrees with the views of MIB. For the DTH operator/ MSOs/ IPTV/ HITS operator:
 - a. The platform services channels shall be categorized under the genre 'Platform Services' in the Electronic Programmable Guide (EPG) subject to orders/directions/regulations issued by TRAI from time-to-time.
 - b. The respective maximum retail price (MRP) of the platform service shall be displayed in the EPG against each platform service subject to orders/ directions/regulations issued by TRAI from time-to-time.

- c. A provision for putting a caption as 'Platform Services' may be required to distinguish the platform services from the linear channels. Government may decide the caption in a size which is visually readable by the consumers.
- Recommendations dated 28th April, 2020 on "Review of Television Audience Measurement and Rating System in India"
- 2.5.14 On 28th April, 2020, TRAI released the Recommendations on "Review of Television Audience Measurement and Rating System in India". The salient features of the recommendations were:
 - (i) Structural reforms are required in BARC to mitigate the potential risk of conflict of interest, improve credibility, and bring transparency, and instill confidence of all stakeholders in the TRP measurement system.
 - (ii) The composition of BARC India should be changed as part of the proposed structural reforms. The Board should have at least fifty percent independent members, which should include one member as a measurement technology expert, one statistician of national repute from among the top institution(s) of the country and two representatives from the Government/Regulator.
 - (iii) Restructured Board of BARC India should provide for equal representation of the three constituent Industry Associations, namely, AAAI, ISA and IBF and with equal voting rights irrespective of their proportion of equity holding. Tenure of the members of the board shall be for two years.
 - (iv) Active participation of representatives of the Advertisers and the advertising agency will bring more accuracy, transparency, credibility, and neutrality in the system, due to their inherent need of advertisers to reach viewers accurately.
 - (v) The constituent Industry Associations shall be entitled to nominate their representatives to the board membership subject to the condition that a cooling period of 4 years shall be applicable between two consecutive tenures, for any such nominee member.
 - (vi) Tenure of the Chairman of the Board should not be more than two years. Chairmanship of the Board shall be rotated among the constituent industry associations in every two years.
 - (vii) Number of members in the technical committee should be increased to 5 with addition of two external technical experts.
 - (viii) An Oversight Committee should be formed to guide BARC India in the areas of research, design and analysis, constantly improving the rating system. The Oversight Committee shall be broad based with representation from the National Council of Applied Economic Research, IIM, IIT, media research expert and demography expert, nominee from the Ministry of Information Broadcasting, and TRAI. The Committee should also be responsible for nomination/appointment of independent members of the Board as well as to give policy direction to BARC India, if it is so required.
 - (ix) To create credible and accurate collection of data, multiple data collection agencies need to be encouraged. Competition and multiple agencies for data collection and



- (x) BARC should be at an arm's length from its own subsidiary, Meteorology Data Pvt Ltd., which is the sole data collecting agency for BARC, as of now; so that the entire process of measurement is carried out independently to ensure inherent checks in data inconsistency, i.e., there should be a clear demarcation of the roles between the data collection agency and the data processing/publishing agency.
- (xi) Efforts may be made to withhold the identity of the channel's name, and number, while collecting and processing the data from the field to bring more transparency in the complete process.
- (xii) BARC should also separate its functions in two units (a) one unit should be responsible for prescribing methodology of ratings/validation of data, publishing the data and audit mechanism and (b) the other unit for processing the data, watermarking or any other such technical work including management of data collection agencies.
- (xiii) Once multiple agencies come forward for rating, BARC should limit its role to publishing the ratings, and framing methodology and audit mechanism for the rating agencies, so that the number of agencies can develop multiple rating system leveraging new technologies.
- (xiv) The rating agency should be mandated to increase the sample size from the existing 44,000 to 60,000 by the end of 2020, and 1,00,000 by the end of 2022 using the existing technology.
- (xv) BARC shall immediately conduct a study in collaboration with the Indian Statistical Institute or any other institute of repute, to estimate the appropriate sample size, and to get the correct representation of the viewership including regional and niche channels. Sample size once increased; it will make the data tampering an arduous exercise. On the basis of the study conducted, BARC should reach the target of reaching the sample size in a time-bound manner.
- (xvi) There should be some financial disincentives prescribed as penal provisions including the cancellation of registration if the specified target is not met by BARC.
- (xvii) MIB should amend the DTH License and MSO registration so as to mandate STBs capable of transferring viewership data and adoption of RPD technology. This transfer of data can be done by establishing a return path/connection from STB to the remote servers of the Audience Measurement agency Anonymized viewership data should be transferred electronically to the Audience Measurement agency for statistical analysis and Television Rating purpose. No data from any STB should be transferred to Rating agency without explicit consent from the subscribers.
- (xviii) DPOs should be allowed to mutually negotiate the terms and conditions for sharing the data with Measurement Rating agency within the overall framework prescribed by TRAI from time to time. Such framework shall be prescribed by TRAI once these recommendations are accepted by MIB.

- (xix) BARC should keep all relevant data such as original data (meter-level data) arising out of the household panel, the data deleted/ignored/not considered for ratings and the resultant processed data for TRP rating at least for one year in the same format and pattern as in the final ratings, declared to the subscribers including Broadcasters, advertising agencies, and advertisers.
- (xx) BARC should review/frame its outlier policy based on scientific study and market survey conducted from time to time. BARC should automate data processing in such a manner that no manual intervention is required before the final TRP rating is released. Any type of manual intervention in the meter-level /raw data arising out of household panel must be avoided. Manual intervention, if any, in abnormal circumstances should be reported and informed to the auditors also.
- (xxi) Adequate framework for grievance redressal may be made having nodal officers and Appellate body so that the grievance(s) of stakeholders can be effectively addressed in a time-bound manner. BARC should also develop a portal wherein any stakeholder can raise the grievance(s) with regards to ratings published by the agency.
- (xxii) BARC should get annual audit conducted by an independent agency to ensure conformance with TRP rating methodology, sample size, and grievance redressal methodology and publish the audit report on their website after the Board's approval within three months, after the end of the financial year. An audit manual should be made to ensure accuracy of the process adopted for ratings, household-panel selection, functioning, and data collection for overall rating systems.
- (xxiii) An internal audit committee may be constituted headed by a member of AAAI or ISA to audit processes, sample size, rating methodology and effective redressal of grievances in a time-bound manner. Quarterly report of internal audit committee must be approved by the Board of BARC within 30 days from the end of quarter and shall be placed on the website of BARC.
- Recommendations dated 10th April, 2020 on "Reserve Price for Auction of FM Radio channels"
- 2.5.15 On 10th April, 2020, TRAI released the Recommendation on "Reserve Price for Auction of FM Radio channels". The salient features of the recommendations were: -
 - (i) RP for FM radio channels in a city, except the cities situated in NE, J&K and Andaman and Nicobar, should be set equal to 0.8 times the valuation of FM radio channels in that city.
 - (ii) RP for FM radio channels in a city situated in NE, J&K and Andaman and Nicobar should be set equal to 0.4 times the valuation of FM radio channels in that city.
 - (iii) The RPs in 10 border cities in the 'Others' category in Phase-III should be ₹ 5 lakh per channel.
 - (iv) Auction of remaining channels of Phase-III should be done by delinking them from technology. Broadcasters should be permitted to use any technology (analog or digital or both) for radio broadcasting on the frequency allocated to them through auction in

- future. In case radio broadcasters opt for digital technology, they should be permitted to broadcast more than one channel subject to technical feasibility on single frequency allocated to them.
- (v) Existing ceiling limit of 15% of total FM radio channels in the country permitted to a permission holder is no longer valid as the fear of monopoly is no longer real. This limit is also not practical, as the total number of channels will vary depending on availability. Hence, such limit may be withdrawn.

• Recommendations dated 10th April, 2020 on "Interoperability of Set-Top Box"

- 2.5.16 On 10^{th} April, 2020, TRAI released the Recommendations on "Interoperability of Set-Top Box". The salient features of the recommendations were: -
 - (i) All the Set-Top-Boxes in India must support technical interoperability in principle, i.e. every STB provided to a consumer must be interoperable.
 - (ii) Ministry of Information and Broadcasting may include a suitable clause/ condition in the permission/ Registration/ Cable Television Network Rule mandating all the DPOs (DTH as well as MSOs) to compulsorily facilitate service provisioning through the interoperable STBs either provided by DPOs or procured by the consumers from open market.
 - (iii) There are technical and commercial constraints to the universal STB. Therefore, Interoperability of STBs, with effect from the date as prescribed vide the extant clause/condition, shall be ensured within the DTH or cable segment. That is, the interoperability shall be applicable within the DTH segment and within the cable segment respectively.
 - (iv) MIB may notify through licensing conditions or amendment in Cable Television Network Rules, 1994, as per the Cable Television Network (Regulation) Act, 1995 or through any other appropriate mechanism mandatory use of DVB CI Plus 2.0 (with USB CAM) as per the ETSI TS 103 605 specifications both for DTH STBs and STBs being used by MSOs from a prospective date.
 - (v) A time of six months may be given to both DTH operators and MSOs to adopt DVB CI Plus 2.0 (with USB CAM) as per the ETSI TS 103 605 specifications from the date of MIB notifications. MIB may also coordinate with BIS so that suitable amendments are brought by BIS within this time frame.
 - (vi) The Authority recommends mandatory provisioning of USB port based Common Interface for all digital TV sets in India. Ministry of Information and Broadcasting (MIB) in coordination with TRAI and Ministry of Electronics and Information Technology (MeitY) may request BIS to amend the specifications for digital TV sets to include provisioning of USB-based Common Interface port as per DVB CI Plus 2.0 standard based on ETSI TS 103 605 standards. Such specifications must mandate TV manufactures to:
 - a. Provide all digital TV sets with minimum one open-interface port based on DVB CI Plus 2.0 standards permitting simple connection of USB CAM to allow reception of TV signals.



b. Provide the digital TV sets with built-in tuners to enable reception of TV content through both satellite and cable platforms.

Setting up of Coordination and Implementation Committee:

- a. A Coordination Committee may be set up by the Ministry of Information and Broadcasting (MIB) having members from Ministry of Electronics and Information Technology (MeitY), Telecom Regulatory Authority of India (TRAI), Bureau of Indian Standards (BIS), and representatives of TV manufacturers. The Committee may steer implementation of revised STB standards for both the DTH and the cable TV segment. Further, the committee may maintain continuous oversight for setting up of the digital TV standards by BIS to provide for DVB CI Plus 2.0 port based on ETSI TS 103 605 standards and to have provision for reception of both DTH and cable TV signals.
- b. The coordination committee may steer the adaptation of the revised STB and digital TV standards in a time-bound manner.

Additional Information with respect to the Important Recommendations furnished to the Government previously

2.6 Over the last few years, TRAI has sent several recommendations to DoT and MIB on important issues concerning growth of telecommunications services and Broadcasting and Cable Services in the country either on reference or suo moto. During the year, TRAI has worked with both DoT and MIB and by the concerted efforts, a number of these recommendations have been accepted during the period. However, many of the important recommendations are still pending for decision/implementation by DoT and MIB which, if implemented, would have significant positive impact on the Telecommunication and Broadcasting Sector. It is felt that the technological advancements and changes keep on happening in the Telecom and Broadcasting Sector, and if decisions are not taken in a reasonable time-frame, the recommendations lose their relevance defeating the whole purpose of making the Recommendation as envisaged by TRAI. Sometimes the Recommendations are accepted/implemented partially which defeats the very intent envisaged in comprehensive approach towards a subject while making recommendations. Further, mere acceptance of recommendations does not help the sector, until they are implemented on ground. If the Recommendations are accepted, but implemented after a lapse of many years, the impact that a particular Recommendation is supposed to make on the sector gets reduced due to this delay.

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

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

Accepted Recommendations related to the Telecom Sector during the period

- 2.7 Out of the several Recommendations made by the TRAI to the Department of Telecommunications in the past, the important recommendations have been accepted fully or partially by the Government during the year 2020-21 (as per the status provided by DoT). They are at various stages of implementation which once implemented fully will result into positive impact on the sector and the economy. The list of such accepted recommendations is given below:
 - (i) Recommendations on "Network Testing Before Commercial Launch of Services for Wireline Access Services" were forwarded to the Government on 22nd April, 2020 to remove regulatory uncertainties and create a level playing field. These recommendations have been accepted by the Government. The implementation of Recommendations will enable the subscribers to have clarity about their status and tariff plan during testing phase and Service provider will also clearly know their obligations during the test phase.
 - (ii) Recommendations on "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT CUG Service Authorization" were forwarded on 28th July, 2020 as there was a need to enhance the scope of the VSAT license to permit the licensee to provide satellite based backhaul connectivity to mobile operators. This recommendation has been accepted by the Government. This Will help in connecting rural, inaccessible areas of the country through mobile and internet.
 - (iii) Recommendations on "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services" were forwarded to the Government on 29th May, 2020. The Authority has recommended for continuation of the existing 10-digit numbering for mobile services and SDCA (short Distance Charging Area) linked numbering for fixed line services. The Recommendations of the Authority has been accepted and their implementation will ensure availability of additional numbering resources for growing subscriber base without affecting the existing network implementation and without going for any additional digit in numbering scheme.
 - (iv) Recommendations on "Proliferation of Broadband through Public Wi-Fi Networks (PM WANI)" were forwarded to the Government on 9th March, 2017. It will promote the growth of Public Wi-Fi Networks in the country and, in turn, will help in proliferation of Broadband Internet, enhancement of income and employment and empowerment of people. It will facilitate access to broadband services at affordable prices in the cellular dark areas. PM-WANI scheme has been approved by Union Cabinet on 9th December, 2020.
 - (v) Recommendations on "Allotment of Spectrum to Indian Railways for Public Safety and Security services" were forwarded to the Government on 25th October, 2019. TRAI had recommended for an allotment of 5 MHZ paired spectrum in 700 MHz band to Indian Railways for implementing the latest train signaling system, which will help in reduction of inter-train fixed distance and thus improving carrying capacity, reduction in operating cost as speed of the trains can be increased safely. It also emphasizes on loT

- (Internet of Things) based Asset reliability monitoring. The Digital Communication Commission (DCC) has approved the Standing Committee recommendations in the meeting held on 19^{th} September, 2020.
- (vi) Recommendations on "Spectrum Usage Charges and Presumptive Adjusted Gross Revenue for Internet Service Providers (ISPs) and Commercial Very Small Aperture Terminal (VSAT) Service Providers" were forwarded to the Government on 7th March, 2017. These recommendations were intended to promote the growth of ISP and VSAT service providers by reducing the burden of regulatory fees and compliances and the streamlining of processes. The Digital Communication Commission (DCC) has partially accepted the recommendation. SUC reduction from 4% to 1% for commercial VSAT is still under consideration.
- (vii) Recommendations on "Captive Very Small Aperture Terminal (VSAT) Closed User Group (CUG) Policy issues" were forwarded to the Government on 18th July, 2017. The Authority has recommended for: reduction of various fee such as Entry Fee for Captive VSAT license should be reduced by 50% i.e. from Rs. 30 Lakh to ₹ 15 Lakh, Spectrum license fee for the second hub and VSAT terminals, to put in place simplified online single-window clearance systems and to remove the restriction of maximum data rates of 512Kbps / 2Mbps per VSAT as the new technologies have made it possible to achieve higher data rates. These recommendations would reduce cost of providing such services in remote and inaccessible locations (rural areas, ships, coastal regions, hills, etc.) by banks, post offices and other captive VSAT service providers. The TRAI recommendations were considered and approved by DCC in September, 2020.
- (viii) Recommendations on "Auction of Spectrum in 700, 800, 900, 1800, 2100, 2300, 2500, 3300-3400 & 3400-3600 MHz Bands" were forwarded to the Government on 1st August, 2018. In the recommendations, apart from the reserve price, other terms and conditions such as quantum of spectrum to be put to auction, block size, roll out obligations, spectrum cap, etc. for each spectrum band were recommended. Based on the TRAI recommendations, Spectrum Auction was conducted in 2021. All the spectrum bands excluding 3300-3600 MHz Band were offered for auction.
- (ix) Recommendations on "Methodology for levy of Spectrum Charges for provision of Satellite based Phone Services" were forwarded to the Government on 27th December, 2018. These recommendations will result into uptake of this service in the areas having no other means of telecom and will help Government agencies to provide emergency services, search and rescue operation and counter terrorism in inaccessible areas. The Digital Communication Commission (DCC) has approved the Standing Committee recommendations in the meeting held on 19th August, 2020. The spectrum charges as 1% of AGR has been accepted and implemented vide DoT OM dated 28th June, 2021.
- (x) Recommendations on "Implementation Strategy for BharatNet" were forwarded to the Government on 1st February, 2016. TRAI recommended a Public Private Partnership (PPP) model that aligns private incentives with long term service delivery in the vein of the Build-Own-Operate-Transfer/Build-Operate-Transfer models. These recommendations would also ensure efficient utilization of network and the

- Government fund. The revised implementation strategy of BharatNet through Public Private Partnership mode upto all inhabited villages approved for 16 States on 30^{th} June, 2021 with estimated maximum viability gap funding of ₹ 19,041 crores. Creation, upgradation, operation, maintenance, and utilization of BharatNet by the concessionaire who will be selected by a competitive international bidding process.
- (xi) Recommendations on "Licensing framework for Audio Conferencing/ Audiotex/ Voice Mail Services" were forwarded to the Government on 16th December, 2016. These recommendations will encourage service providers to offer these services and will create a level playing field and will ensure the widespread availability of these specialized services for enterprise customers. Digital Communication Commission (DCC) approved it in the meeting held on 1st December, 2020. Implementation is in process.
- (xii) Recommendations on "Promoting Local Telecom Equipment Manufacturing" were forwarded to the Government on 3rd August, 2018. The implementation of these recommendations can make India self-reliant in telecom equipment space and a net exporter of telecom equipment. DOT has accepted the recommendations partially. The Government of India has recently announced PLI schemes worth ₹ 12,200 crore to boost local manufacturing of telecom gear for both the domestic market and exports. DoT has sent a fresh reference seeking recommendations of TRAI on certain related issues such as incentive structure etc. TRAI is working on overall manufacturing strategy for telecommunication and broadcasting and on R&D eco-system also.

Pending Recommendations related to the Telecom Sector at the end of period

2.8 However, many of the important Recommendations which were forwarded to the Department of Telecommunication (DoT) in the past are still pending. The list of Recommendations that are still pending with Government for acceptance and implementation as on 31st March, 2021 are detailed below:

Sl. No.	Subject	Date of forwarding
1.	Recommendations on "Allocation and pricing of Microwave Access (MWA)	29-08-2014
	and Microwave Backbone (MWB) RF carriers."	
2.	Recommendations on "Complaints/Grievance Redressal in the Telecom	10-03-2017
	Sector."	
3.	Recommendations on "Next Generation Public Protection and Disaster Relief	04-06-2018
	(PPDR) communication networks."	
4.	Recommendations on "Making ICT accessible for Persons with Disabilities"	09-07-2018
5.	Recommendations on "Privacy, Security and Ownership of the Data in the	16-07-2018
	Telecom Sector."	
6.	Recommendations on "Method of allocation of spectrum for Public Mobile	20-07-2018
	Radio Trunking Service (PMRTS) including auction, as a transparent	
	mechanism."	
7.	Recommendations on "Reforming the Guidelines for Transfer/Merger of	21-02-2020
	Telecom Licenses."	

8.	Recommendations on "Enhancement of Scope of Infrastructure Providers	13-03-2020
	Category-I (IP-I) Registration"	
9.	Recommendations on "Methodology of applying Spectrum Usage Charges	17-08-2020
	(SUC) under the weighted average method of SUC assessment, in cases of	
	Spectrum Sharing"	
10.	Recommendations on "Cloud Services"	14-09-2020
11.	Recommendations on "Traffic Management Practices (TMPs) and Multi-	22-09-2020
	Stakeholder Body for Net Neutrality"	

$\label{lem:commendations} Accepted \, Recommendations \, related \, to \, the \, Broadcasting \, \& \, Cable \, Services \, Sector \, during \, the \, period$

- 2.9 The important Recommendations that have been accepted by MIB during the year 2020-21 and the likely positive impact of these Recommendations on the sector are detailed below:
 - (i) Recommendations on "Issues related to New DTH Licenses" forwarded to the Government on 23rd July, 2014. The implementation of these recommendations will ensure certainty and continuity of business and orderly growth of the DTH sector and will promote level playing field. After acceptance of these recommendations by MIB, the amendments to DTH License guidelines have been issued on 30th December, 2020.
 - (ii) Recommendations on "KYC of DTH Set Top Boxes" forwarded to the Government on 24th October, 2019 addressed the security concerns for use of DTH boxes outside the country as satellites have footprints beyond geographical boundaries. The acceptance and implementation of these Recommendations will result in standardization of verification process and will ensure installation of DTH connection at the address mentioned in CAF and will not load the industry/customer with unnecessary additional requirements and costs.
 - (iii) Recommendations on "Platform Services offered by DTH Operators" forwarded to the Government on 13th November, 2019 addressed the issues of bringing platform services under regulatory framework and providing transparent information to consumers about Platform services. Amendments to DTH License guidelines have been issued by MIB on 30th December, 2020 whereby DTH operator are permitted to operate Platform Services channels to a maximum of 5% of its total channel carrying capacity.

Pending Recommendations related to the Broadcasting & Cable Services Sector at the end of the period

2.10 Several Recommendations were made by the Authority to the Ministry of Information and Broadcasting from time to time. However, several important Recommendations forwarded Ministry of Information and Broadcasting are still pending with Government as on 31st March, 2021, are detailed below:



Sl. No.	Subject	Date of Issue
1	Recommendations on Restrictions on certain entities from entering business of broadcasting and distribution of TV channels	28.12.2012
2	Recommendations on Issues related to Radio Audience Measurement and Ratings in India	15.09.2016
3	Recommendations on Issues related to Digital Terrestrial Broadcasting (DTT) in India	31.01.2017
4	Recommendations on Sharing of Infrastructure in TV Broadcasting Distribution Sector	29.03.2017
5	Recommendations on Issues related to Digital Radio Broadcasting in India	01.02.2018
6	Recommendations on Issues relating to Uplinking and Downlinking of Television channels in India	25.06.2018
7	Recommendations on Reserve Price for auction of FM Radio Channels in new cities	10.04.2020
8	Recommendations on Interoperability of Set-Top Box	10.04.2020
9	Recommendations on Review of Television Audience Measurement and Rating System in India	28.04.2020
10	Recommendations on Regulatory Framework for Platform Services (PS) for MSO	02.02.2021

2.11 During the year 2020-21, 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 sectors:

TELECOM SECTOR

Sl. No.	List of Regulations	
1.	The Telecom Consumer Protection (Eleventh Amendment) Regulation, 2020 dated 30 th September, 2020.	
2.	The Telecommunication Interconnection (Second Amendment) Regulations, 2020 dated 10 th July, 2020.	
3.	The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020 dated 17 th April, 2020.	

REGULATIONS

- "The Telecom Consumer Protection (Eleventh Amendment) Regulation, 2020" dated 30thSeptember, 2020
- 2.11.1 TRAI notified the Telecom Consumers Protection (Eleventh Amendment) Regulations (TCPR), 2020 on 30th September, 2020. With the enactment of this amendment, a new chapter is added in the Telecom Consumers Protection Regulations, 2012 providing the regulatory framework for International Mobile Roaming Services and to empower the consumer & ensuring protection of consumer from bill shock. The afore-mentioned amendment was uploaded on TRAI's website (www.trai.gov.in).

• "The Telecommunication Interconnection (Second Amendment) Regulations, 2020" dated 10th July, 2020

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

A consultation paper on the "Review of the Regulatory framework for Interconnection" was issued on 30th May, 2019 seeking comments and counter-comments from the stakeholders. In this regard, an Open House Discussion (OHD) was held on 19th August, 2019 at New Delhi. Based on the comments/inputs received from the stakeholders, discussion held during the OHD and after its own analysis, the Authority notified "The Telecommunication Interconnection (Second Amendment) Regulations, 2020" on 10th July, 2020. A copy of the Regulation is available on TRAI's website www.trai.gov.in.

The synopsis of the 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.
- "The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020" dated 17th April, 2020
- 2.11.3 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) @ Re.0.30 per minute has been revised to forbearance regime within a prescribed range of Re.0.35 per minute to Re.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.



2.12 During the year 2020-21, the Authority issued the following Tariff Order in Telecom Sector

TELECOM SECTOR

Sl. No.	List of Tariff Order
1.	Telecom Tariff (65th Amendment) Order, 2020 dated 3 rd June, 2020.

TARIFF ORDER

- Telecom Tariff (65th Amendment) Order, 2020 dated 3rd June, 2020
- 2.12.1 After following an elaborate consultation process and online Open House Discussion, the TRAI on 3rd June, 2020 issued the Telecom Tariff (65th Amendment) Order, 2020 which is available at link https://www.trai.gov.in/sites/default/files/Regulation_03062020.pdf. The Amendment Order provides for deletion of Schedule XIII of the Telecommunication Tariff Order, 1999 which made it obligatory for telecom service providers to charge a minimum of 50 paisa per SMS for every SMS exceeding 100 SMS per SIM per day. The Amendment Order marked another initiative of TRAI in doing away of the tariff regulation and strengthening the regime of tariff forbearance.
- 2.13 TRAI issued the following Directions and Order to the Service Providers during the year 2020-21 for compliance of its order/Regulations, some of these Directions are detailed below: -

TELECOM SECTOR

Sl. No.	List of Directions and Amendment	
1	Direction dated 15 th February, 2021 issued to all service providers regarding submission of Performance Monitoring Report to the Authority under the Telecom Commercial Communication Customer Preference Regulations, 2018.	
2	Direction dated 4 th December, 2020 issued to Telecom Service Providers seeking information related to segmented offers.	
3	Amendment dated 22 nd October, 2020 to Direction dated 18 th September 2020 on Tariff Publications.	
4	Direction dated 18 th September, 2020 issued to Telecom Service Providers on Tariff Publications.	
5	Direction dated 18 th September, 2020 issued to Telecom Service Providers on Tariff Advertisements.	
6	Direction dated 27 th August, 2020 for minimum threshold of rupees ten to be applicable for generating unique porting code, raising of Non-Payment Disconnection requests and reconnection of mobile numbers.	
7	Direction dated 19 th June, 2020 regarding Implementation of the Telecom Commercial Communications Customer Preference Regulations (TCCCPR), 2018.	

DIRECTIONS

- Direction dated 15th February, 2021 issued to all service providers regarding submission of Performance Monitoring Report to the Authority under the Telecom Commercial Communication Customer Preference Regulations, 2018
- 2.13.1 The Authority vide direction dated 15th February, 2021 in exercise of the powers under section 13 of the TRAI Act 1997 and the provisions of the Telecom Commercial Communications Customer Preference Regulations, 2018 in supersession of the Direction No.311-04/2017-QoS dated 6th August, 2019, directed all Access Providers to submit Performance Monitoring Report (PMR), on quarterly basis, separately for each calendar month in every quarter as per PMR formats specified in Annexures (Annex. I, II, III, IV, V & VI) as a part of standard code of practice for periodic reporting within a period of 21 days of quarter ending on 31st March, 30th June, 30th September and 31st December of the year respectively starting from quarter ending 31st March 2021.,
- Direction dated 4th December, 2020 issued to Telecom Service Providers seeking information related to segmented offers
- 2.13.2 In pursuance of the Order dated 6th November, 2020 passed by Hon'ble Supreme Court of India, TRAI directed all the telecom service providers to provide, within fifteen days of the date of issue of direction dated 4th December, 2020, on a monthly basis, for each LSA, the following details of segmented offer from the month of December, 2020 onwards:
 - i. details of rates and related terms & conditions, quantum of services, name of the tariff plan and validity period of subscription & benefits available to the subscribers in the tariff plan in which segmented offer has been given;
 - ii. number of segmented offers to the existing subscribers under the respective tariff plan at the end of the month;
 - iii. details of rates and related terms & conditions, quantum of services, validity period of subscription & benefits available to the subscribers in each of the said segmented offer;
 - iv. number of subscribers, at the end of each month, who have availed the segmented offer within each tariff plan;
 - v. the declaration that the benefits of such segmented offers have been made available to all the existing customers falling in the segment/class and the principle of non-discrimination has been strictly followed.
- Amendment dated 22nd October, 2020 to Direction dated 18th September, 2020 on Tariff Publications
- 2.13.3 The Authority on 18th September, 2020 issued direction on Tariff Publication to all Telecom Access service providers (TSPs) to disclose essential information in respect of tariff plans, Special tariff vouchers (STVs), Combo vouchers (CV) and Add on packs issued by them and update on their websites, apps customer care centres, point of sale and retail outlets with fifteen days from the date of issue of this Direction. On the request of the COAI for additional time for implementation of the said Direction, the Authority issued an Amendment on 22nd



October, 2020 in its Direction dated 18^{th} September, 2020 for implementation of the Direction by 2^{nd} November, 2020 in place of fifteen days from the date of issue of this Direction.

- Direction dated 18th September, 2020 issued to Telecom Service Providers on Tariff Publications
- 2.13.4 The Authority in exercise of its power under section 13 of TRAI Act read with subclauses (i) and (v) of sub section (1) of section 11 of the Telecom Regulatory Authority of India Act, 1997 and clause 9 of the Telecommunication Tariff Order, 1999 and in supersession of Direction dated 16th January, 2012 directed the telecom service providers vide Direction dated 18th September, 2020 to disclose the following, while make tariff offers:

Essential disclosure for Tarif plans

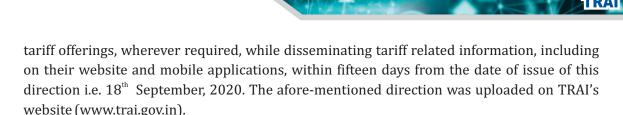
- A. Publish, service area wise, within fifteen days of the date of issue of this Direction, each Tariff Plan for post-paid subscribers and pre-paid subscribers, as applicable, and shall make available such Tariff Plan to the subscribers at the Customer Care Centres, the points of sale, retail outlets and on the website, App of the telecom service provider having the following essential disclosures:
 - i. All important information, viz, units/volume of voice, data and SMS, rates for the same as applicable, limit of usages, rates and speed beyond the entitled use etc,
 - ii. Complete details of upfront cost along with relevant itemized details, including but not limited to, advance rental, deposits, connection fee etc. for post-paid services and the start-up kit (SUKs). Top Up, Tariff vouchers, First Recharge Coupon (FRC) etc. as applicable;
 - iii. Information regarding validity period of the tariff plan and the last date of payment of bill, in a clear, unambiguous and easy to understand manner for consumers;
 - iv. An exhaustive list of all specific inclusions in tariff plan, such a quantity/rate details of telecom products such as voice, data and SMS along with non-telecom products in case of a bundled tariff offer;
 - v. Complete details of all charges that can be levied on consumers for usage of telecom and non-telecom products beyond the specified entitlement or for telecom and non-telecom products which are not specifically proposed or included in the Tariff Plan;
 - vi. All the promised service parameters such as data speed etc., in a clear, unambiguous and easy to understand manner; and
 - vii. Complete details of all material conditions including, but not limited to, details of applicable Fair Usage Policy, which is specifically covered in the above paras.

Essential disclosures for STV/CV/Add on packs

B. Publish, service area wise, within fifteen days of the date of issue of this Direction, each tariff offer in the nature of Special Tariff Vouchers/Combo Vouchers/Add on Pack and shall make available such Tariff Offers to the subscribers at the Customer Care Centres, the points of sale,

retail outlets and on the website, App of the telecom service provider having the following essential disclosures:

- i. All important information viz., units/volume of voice, data and SMS, rates for the same as applicable, limit of usage, rates and speed beyond the entitled use etc., of each STV/CV/Add on Pack, as applicable, and also the Tariff Plan(s) to which the STV/CV/Add on Pack is applicable;
- ii. Complete details of upfront cost and cost components by whatever name called, including but not limited to, First Recharge Conditions (FRCs), requirement of subscribing to a Tariff Plan to avail benefit of a particular STV/CV/Add on Pack which may entail additional cost, etc.;
- iii. Information regarding validity period of the STVs/CVs/Add-on Packs and the amount of recharge required at the end of the validity period, in a clear, unambiguous and easy to understand manner for consumers;
- iv. An exhaustive list of all specific inclusions in STV/CV/Add on Pack, be it quantity/rate information for telecom products such as voice, data and SMS along with the non-telecom products in case of a bundled tariff offer;
- v. Complete details of all charges that can be levied on consumers for usage of telecom/non-telecom products beyond the specified entitlement or for telecom/non telecom products which are not specifically proposed or included in the STV/CV/Add on Pack;
- vi. all the promised service parameters such as data speed etc. In a clear, unambiguous, and easy to understand manner; and
- vii. complete details of all material conditions which are not specifically covered in the aforesaid information points such as the Fair Usage Policies etc.
- C. ensure that the tariffs published in aforesaid manner and referred to in sub-paras (AP and (B) above, are updated on the website, App and Customer Care Centre of the service provider, points of sale and retail outlets every time is any chang4e in any of the tariff offers or new tariff offer is launched;
- D. submit to the Authority a compliance report of the directions at sub-paras (A) and (B) above, within fifteen days of the publication of this Direction; and
- E. submit to the Authority, the fact of continued compliance in respect of directions at sub-para (C) above, by way of a self-certificate by 7th of the month following the quarter ending 31st March, 30th June, 30th Septembe and 31st December of the fiscal year.
- Direction dated 18th September, 2020 issued to Telecom Service Providers on Tariff Advertisements
- 2.13.5 The Authority on 18th September, 2020, in exercise of its power under section 13 of TRAI Act and in supersession of para 10(i)(d) of the Direction No.301-14/2010-ER dated 26th March, 2012 directed telecom service providers to prominently highlight the additional terms and conditions and shall also provide a link to the specified terms and conditions of each of the



- Direction dated 27th August, 2020 for minimum threshold of rupees ten to be applicable for generating unique porting code, raising of Non Payment Disconnection requests and reconnection of mobile numbers
- 2.13.6. The Authority on 13th December, 2018 issued Telecommunication Mobile Number Portability (Seventh Amendment) Regulations, 2018, which were implemented from 16th December, 2019, and wherein it was provided that unique porting code (hereinafter referred to as the "UPC") shall be allocated by the Mobile Number Portability Service Providers based on the validation of the conditions contained in regulation 6A of the regulations.
 - The Authority, vide its Direction No. 116-3/2011-MN dated 24th May, 2011, had directed all the Cellular Mobile Telephone Service Providers and Unified Access Service Providers not to reject a request for porting of a mobile number:
- (a) if the outstanding payment due from the subscriber, in the previous paid bill, is less than rupees ten which the service provider may include in the subsequent bill of the subscriber without any penal charges;
- (b) on the ground of subsisting contractual obligations except in the case of, --
 - (i) the post-paid connection with bundled handset with contractual obligation having an exit clause and subscriber has not complied with the same; and,
 - (ii) corporate connection with contractual obligation having an exit clause and subscriber has not complied with the same;

Cellular Operators' Association of India (COAI), vide its letter dated 22nd June, 2020 had written to the Authority that the threshold of rupees ten may also be applicable for closure of Non Payment Disconnection (NPD) service requests under the regulations, both at the time of disconnection and reconnection, i.e. when the MNPSP shall query the outstanding status of a mobile number to the Donor Operator within the first thirty days, the Donor Operator shall respond as NPD closed if the outstanding amount is less than rupees ten, and similarly at the time of reconnection request, if the outstanding amount due is less than rupees ten, the Donor Operator shall not send a negative response to the MNPSP and such outstanding shall not include any penal charges like late payment charges etc.;

The issue mentioned in the para above was discussed during the meeting held on $1^{\rm st}$ July, 2020 on 'NPD issues in MNP Process' through video conferencing, wherein representatives from all the telecom service providers and MNPSPs participated and were in agreement with the suggestion of COAI.

Consequent to implementation of seventh amendment regulations, the porting request submitted by an individual subscriber with correct UPC, within validity period of UPC, shall not be rejected, and whereas corporate porting requests which are forwarded by MNPSP to the Donor Operator for validation of authorization letter may be accepted or rejected depending

upon the matching of details mentioned in the authorization letter with those in the database of the Donor Operator.

Therefore, the Authority was of the opinion that direction dated 24th May, 2011 needs to be aligned with the prevailing regulations, and thus, the requests made for UPC should not be rejected if the outstanding payment due from the post-paid subscriber by way of pending bill, issued as per the normal billing cycle but before the date of request for unique porting code, is rupees ten or less.

The Authority, however, while reviewing the status of the implementation of the seventh amendment regulations and during discussions with the representatives of TSPs and MNPSPs, noted that many of the NPD requests are being raised for recovery of very nominal outstanding amounts from the ported subscribers, for e.g. ~ 8.50 or ~ 0.50 etc., and thereby causing inconvenience not only to the subscriber, but also to the Donor Operator, Recipient Operator and MNPSPs for such a miniscule amount.

The Authority, therefore, agreed with the proposal of COAI which has been supported by all the telecom service providers, to not raise such NPD requests by the Donor Operator where outstanding amount payable by the ported subscriber is rupees ten or less, and also send a positive response to the MNPSP when the reconnection requests are raised by the Recipient Operator where the outstanding amount due is rupees ten or less than rupees ten.

Therefore, the Authority, in exercise of the powers conferred under the Telecom Regulatory Authority of India Act, 1997 (24 of 1997) and in supersession of the Direction No. 116-3/2011-MN dated 24^{th} May, 2011 and for ensuring compliance of terms and conditions of license and for protecting the interest of consumers, directed on 27^{th} August, 2020 all the Access Service Providers as Donor Operator that: --

- (a) in response to the query relating to the outstanding dues, made by the MNPSP under clause (b) of sub-regulation (3) of the regulation 6A of the regulations, clearance should be granted for generating UPC if the outstanding payments due from the post-paid subscriber in the previous paid bill is rupees ten or less than rupees ten, which the service provider may include in the subsequent bill of the subscriber without any penal charges;
- (b) NPD requests should not be raised for the mobile number if the outstanding amount due from the ported subscriber is rupees ten or less than rupees ten without any penal charges;
- (c) the response of Donor Operator to the reconnection request received from MNPSP on being raised by the Recipient Operator should be 'No Dues Pending', if the outstanding amount due from the subscriber is rupees ten or less than rupees ten;
- (d) when query relating to the subsisting contractual obligations is made by MNPSP under clause (g) of sub-regulation (3) of regulation 6A for generating UPC, clearance should be granted for generating UPC, except in the case of --
 - (i) the post-paid connections with bundled handset with contractual obligation having exit clause and the subscriber has not complied with the same; and
 - (ii) corporate connection with contractual obligation having an exit clause and the subscriber has not complied with the same.



A copy of the said Direction dated 27^{th} August, 2020 is available in the TRAI's website www.trai.gov.in.

- Direction dated 19th June, 2020 regarding Implementation of the Telecom Commercial Communications Customer Preference Regulations (TCCCPR), 2018
- 2.13.7 The Authority vide its direction no. 311-04/2017-QoS dated 19th June, 2020 directed all Access Service Providers that:
- a) Minimum performance requirements for dealing with the request for assigning of a new header to a Principal Entity: To ensure that there is no pendency in processing new requests for registrations and assignment of headers, etc., each access provider shall:
 - (i) ensure that registration of Principal Entity is approved within seven working days from the date of submission of all relevant details by the Principal Entity.
 - (ii) ensure that the Principal Entity who has applied for registration is duly informed, within three working days from the date of submission of the application, about the deficiencies observed in the application giving therein contact details of the Access Provider for any further clarification.
 - (iii) ensure that header is assigned to a registered Principal Entity or rejected with valid reasons, within two working days from the date on which such request for the assignment of header is made; in case of rejection, applicant shall be intimated of the reasons for such rejection.
- b) Publishing of information about registered Principal Entities (PEs) and the associated Headers: Each Access Provider, in order to bring transparency about the senders, shall:
 - (i) publish on its website, the latest list of all PEs registered on DLT, irrespective of the Access Provider who has actually registered such PE, with complete details of Name, Address, City, Pin Code;
 - (ii) publish on its website, the latest list of all headers associated with a particular PE with details of distinct purpose of each header for which it is to be used;
 - (iii) facilitate its customers to fetch the information mentioned in (i) and (ii) for a particular Header via sending SMS with text "DETAILS of <Header>" to the number 1909, which is already in use for UCC-related purposes.
- c) Service Agreements to delegate roles to entities and assigning of headers as per the regulations: Every Access Provider shall ensure that no role is delegated by it to any entity which is not in accordance with the provisions of the regulations, and shall
 - (i) ensure that no such service agreement is entered into that delegates the role(s) to be performed by the Access Providers to other entities such as Telemarketers.
 - (ii) review and revise the existing terms and conditions of the service agreements with telemarketers, if any, wherein the Access Provider has delegated its role(s) and functions, such as, Entity Registration, Content/Consent Template Registration, Header Registration to telemarketer as these are not in compliance to the regulations.

- (iii) ensure that an entity other than a person or legal entity, who sent the message or made a voice call, caused the message to be sent or the voice call to be made or authorized the sending of the message or making of the voice call, do not present themselves as PE for registration or assignment of new headers.
- d) Run an awareness campaign for PEs to get registered: Each Access Provider shall run a media campaign on its own or in collaboration with other Access Providers, within 15 days from the issue of this direction, by publication of advertisements in at least two leading National newspapers of Hindi and English, to make
 - (i) PEs, who have not registered so far, are aware that by sending commercial communication without being registered with Access Providers and not using the headers assigned to them, may violate the provisions of the regulations.
 - (ii) PEs are aware about the measures that they need to take such as registration of header and content template, submission of existing subscriber's consents, and acquisition process of consent to protect their business interests.
 - (iii) PEs are aware about the measures they need to take and also about measures taken by the Access Providers, including the details of web portal and relevant apps to curb the menace of unsolicited commercial communications.
 - (iv) PEs are aware about the links of the specific pages of websites of the Access Providers who provide interface to get registered with them through an online process and publish Frequently Asked Questions (FAQs) developed for this purpose; use various other channels of campaign, such as digital media, to reach out to PEs.

BROADCASTING SECTOR

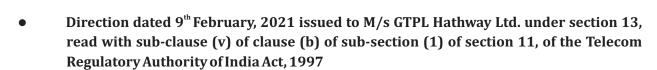
Sl. No.	List of Directions and Amendment
1.	Direction dated 9 th February, 2021 issued to M/s Fastway Transmissions Pvt Ltd. under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997
2.	Direction dated 9 th February, 2021 issued to M/s Kerala Communicators Cable Ltd. under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997.
3.	Direction dated 9 th February, 2021 issued to M/s GTPL Hathway Ltd. under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997.
4.	Direction dated 9 th February, 2021 issued to M/s KAL Cables Pvt Ltd under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997.
5.	Direction dated 9 th February, 2021 issued to M/s UCN Cable Network Pvt. Ltd. under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997.



6.	Direction dated 21 st October, 2020 issued to M/s Good Media Cable Network under section 13, read with clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997.
7.	Direction dated 16 th December, 2020 issued to M/s Thamizhaga Cable TV communication Pvt. Ltd, M/s Manakula Vinayagar Digital Network and M/s KAL Cables Pvt Ltd under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997.
8.	Direction dated 04 th December, 2020 issued to M/s DEN Satellite Networks Pvt. Ltd, under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997.
9.	Direction dated 04 th December, 2020 issued to M/s Metro Cast Network India Pvt. Ltd, M/s JPR Network Pvt. Ltd and M/s Seven Star Dot Com Pvt. Ltd under section 13, read with subclause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997.
10.	Direction dated 18 th August, 2020 regarding amendment to Direction dated 24 th July, 2020 issued to all Broadcasters under Section 13, read with section 11, of the Telecom Regulatory Authority of India Act, 1997
11.	Direction dated 24 th July, 2020 issued to all Broadcasters to ensure compliance of various provision of the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff (Second Amendment) Order, 2020 dated 01 st January, 2020 and The Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Second Amendment) Regulations, 2020 dated 01 st January, 2020.

DIRECTIONS

- Direction dated 9th February, 2021 issued to M/s Fastway Transmissions Pvt Ltd. under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997
- 2.13.8 Through this direction dated 9th February, 2021 M/s Fastway Transmissions Pvt Ltd was directed to ensure compliance to the Telecommunication (Broadcasting & Cable) Services (Eighth) (Addressable Systems) Tariff order, 2017 and the Telecommunication (Broadcasting & Cable) Services (Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017, dated 3rdMarch, 2017.
- Direction dated 9th February, 2021 issued to M/s Kerala Communicators Cable Ltd. under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997
- 2.13.9 Through this direction dated 9th February, 2021, M/s Kerala Communicators Cable Ltd was directed to ensure compliance to the Telecommunication (Broadcasting & Cable) Services (Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017, dated 3rd March, 2017.



- 2.13.10Through this direction dated 9th February, 2021, M/s GTPL Hathway Ltd was directed to ensure compliance to the Telecommunication (Broadcasting & Cable) Services (Eighth) (Addressable Systems) Tariff order, 2017, the Telecommunication (Broadcasting & Cable) Services Interconnection (Addressable Systems) Regulation, 2017 and the Telecommunication (Broadcasting & Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017, dated 3rd March, 2017.
- Direction dated 9th February, 2021 issued to M/s KAL Cables Pvt Ltd under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997

Through this direction dated 9th February, 2021, M/s KAL Cables Pvt Ltd was directed to ensure compliance to the Telecommunication (Broadcasting and Cable) Services (Eighth)(Addressable Systems) Tariff Order, 2017, and the Telecommunication (Broadcasting & Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017, dated 3rd March, 2017.

• Direction dated 9th February, 2021 issued to M/s UCN Cable Network Pvt. Ltd. under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997

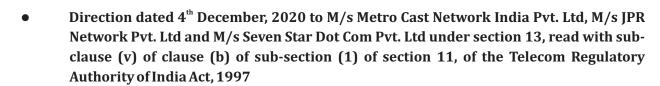
Through this direction dated 9th February, 2021, M/s UCN Cables Network Pvt Ltd was directed to ensure compliance to the Telecommunication (Broadcasting and Cable) Services (Eighth)(Addressable Systems) Tariff order, 2017.

• Direction dated 16th December, 2020 issued to M/s Thamizhaga cable TV communication Pvt. Ltd, M/s Manakula Vinayagar Digital Network and M/s KAL Cables Pvt Ltd under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997

Through this direction dated 16^{th} December, 2020, the above service providers were directed to ensure compliance with the provisions of the Interconnection Regulation dated 3^{rd} March, 2017 & Quality of Service Regulation dated 3^{rd} March, 2017 regarding listing of channels in electronic programme guide.

• Direction dated 4th December 2020 to M/s DEN Satellite Networks Pvt. Ltd, under section 13, read with sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997

Through this direction dated 4th December, 2020, M/s DEN Satellite Networks Pvt. Ltd, was directed to ensure compliance to the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017, and the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017, dated 3rd March, 2017.



Through this direction dated 4th December, 2020, M/s Metro Cast Network India Pvt. Ltd, M/s JPR Network Pvt. Ltd and M/s Seven Star Dot Com Pvt. Ltd were directed to ensure compliance to the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017, the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017, and the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017, dated 3rd March, 2017.

Direction dated 21st October, 2020 to M/s Good Media Cable Network under section 13, read with clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997

Through this direction dated 21st October, 2020, M/s Good Media Cable Network was directed to ensure compliance with the provisions of the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 dated 3rd March, 2017 and the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017 dated 3rd March, 2017, regarding listing of channels in electronic programme guide.

• Direction dated 18th August, 2020 regarding amendment to Direction dated 24th July, 2020 issued to all Broadcasters under Section 13, read with section 11, of the Telecom Regulatory Authority of India Act, 1997

The Authority on 24th July, 2020 directed all the broadcasters to report to the Authority by 10th August, 2020, name, nature, language, maximum retail prices per month of channels and maximum retail price per month of bouquets of channels, or composition of bouquets and also amend Reference Interconnected Offer (RIO) in compliance with the provisions of the TAO 2020 and Interconnection Regulations, 2020.

Two Interim Applications (IAs) filed in Writ Petition (L) Nos. 117 of 2020 and 147 of 2020 were listed and heard by a Division Bench of the Hon'ble High Court of Bombay on 7^{th} August, 2020, which passed an order directing that all the IAs filed by petitioners-broadcasters, be listed before the Division Bench which had heard the Writ Petitions.

All the IAs by the petitioners-broadcasters were accordingly listed before the concerned Division Bench of the Hon'ble High Court of Bombay on 12^{th} August, 2020 wherein during the course of proceedings before the Hon'ble Court, the Authority assured the Hon'ble Court that date of 10^{th} August, 2020, as prescribed in the direction dated 24^{th} July, 2020, would be extended to 26^{th} August, 2020;

Therefore, the Authority notified that the direction dated 24^{th} July, 2020, stands modified to the extent that the date of 10^{th} August, 2020, as prescribed in the direction dated 24^{th} July, 2020 shall stand substituted by 26^{th} August, 2020.

• Direction dated 24th July, 2020 issued to all Broadcasters to ensure compliance of various provision of the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff (Second Amendment) Order, 2020 dated 01st January, 2020 and The Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Second Amendment) Regulations, 2020 dated 01st January, 2020

In the months of June-July 2020, few broadcasters started asking DPOs to accept new bouquets with revised prices and one major broadcaster discontinued its low-priced bouquets so that consumers take new higher priced bouquet thereby increasing their monthly payout and that the said broadcaster announced to discontinue its low-priced bouquets with effect from $1^{\rm st}$ August, 2020 for subscription. The new bouquets being pushed by the said broadcaster were not compliant with the provisions of the TAO 2020 and that the broadcaster did not even care to inform TRAI, in clear violation of reporting requirements provided for in the Principal Tariff order 2017.

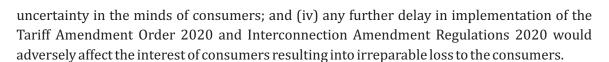
Such broadcasters, in utter disregard to the settled principles and extant regulations, started changing the service offerings in violation of Tariff Amendment Order 2020 by unilaterally increasing the prices of bouquets and are also simultaneously discontinuing the low-priced bouquets disturbing the status quo thereby adversely affecting the interests of the consumers.

Further, some DPOs have brought to the notice of the Authority that many broadcasters are not willing to sign the agreements as per the provisions of Tariff Amendment Order 2020 and Interconnection Amendment Regulations 2020 and as the RIOs offered by Broadcasters are not in compliance with the extant regulations and orders, DPOs are not willing to enter into such non-compliant agreements thereby creating a regulatory vacuum in the sector.

The Authority observed that there was complete ad-hocism prevailing in the industry wherein all interconnection and other agreements are getting renewed for one/two months thereby creating uncertainty in the sector and causing serious concern regarding timely completion of agreements and provision of signal/revenue share etc. for the healthy and orderly growth of the sector.

It was also noticed that the restraint exercised by TRAI qua not taking coercive measure vis a vis the non-implementation of the impugned Tariff Amendment Order 2020 and Interconnection Regulations 2020 was unfair not only to consumers but also to those DTH operators and MSO etc., who have already complied with their part of the obligation as per the Interconnection Regulations 2020 and Tariff Amendment Order 2020 and that such DTH operators and MSOs also represented to TRAI that they were not able to implement remaining part of the Amendment Tariff Order 2020 due to absolute non-performance of the obligations by some Broadcasters.

In view of the fact that (i) the revised prices announced by some broadcasters were to take effect from 1st August, 2020; (ii) the Authority was legally bound to protect the consumers' interest and cannot abdicate its responsibility; (iii) there was every possibility that other broadcasters could also start similar malpractices thereby nullifying the very legal framework laid down for regulation of broadcasting sector by TRAI resulting in total chaos and



Therefore, TRAI on 24th July, 2020, issued a Direction to Broadcasters to ensure compliance of various provisions of the and to report to TRAI on or before 10th August, 2020, the change in name, nature, language, maximum retail prices, per month, of channels and maximum retail price, per month, or composition of bouquets etc.

2.9 In addition, TRAI issued following Consultation Papers to seek views of the various stakeholders on the various issues:

TELECOM SECTOR

Sl. No.	List of Consultation Papers
1.	Consultation Paper dated 12 th March, 2021 on "Licensing Framework for Satellite-based connectivity for low bit rate applications".
2.	Consultation Paper dated 1 st September, 2020 on "Review of The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2006".
3.	Consultation Paper dated 20^{th} August, 2020 on "Enabling Unbundling of Different Layers Through Differential Licensing".
4.	Consultation Paper dated 20 th August, 2020 on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed".
5.	Consultation Paper dated 22 nd April, 2020 on "Methodology of applying SUC under the weighted average method of SUC assessment, in cases of Spectrum Sharing".

CONSULTATION PAPERS

• Consultation Paper dated 12th March, 2021 on "Licensing Framework for Satellite-based connectivity for low bit rate applications"

DoT through its letter dated 23^{rd} November, 2020 requested TRAI, under section 11(1)(a) of the TRAI Act, to furnish recommendations on "Licensing Framework to enable the provisioning of Satellite based low bit-rate applications for both commercial and captive usage".

Considering the constraints of the existing provisions in respect of proposed Satellite based low bit-rate services, DoT has stated that there is a need for suitable licensing framework providing such services both on commercial as well as captive usage. In view of this, DoT has requested TRAI to examine all the factors holistically and recommend enabling provisions under the existing licensing framework of DoT, or new licensing framework may be suggested including the entry fee, license fee, bank guarantee, NOCC charges, spectrum usage charges/royalty fee, etc. for such services for both commercial and captive usage.



In this regard, a Consultation Paper was released on 21stMarch, 2021 on "Licensing Framework for Satellite based connectivity for low bit rate applications", seeking inputs from the stakeholders.

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

• Consultation Paper dated 1st September, 2020 on "Review of The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2006"

The Authority on 1stSeptember, 2020 issued a consultation paper on "Review of The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2006," for seeking the comments of the stakeholders. The last date for written comments by stakeholders was 27th October, 2020 and counter comments, was 10th November, 2020.The OHD was held on 3rd March, 2021.The paper deliberates upon the guidelines for metering and billing in the changing scenario of the telecom world, the possibilities of technological solutions to help conduct audit in a more efficient and effective manner, and to check if there is a need to review the quality of Service (Code for Metering and Billing Accuracy) Regulations, 2006.

• Consultation Paper dated 20th August 2020 on "Enabling Unbundling of Different Layers Through Differential Licensing"

DoT through its letter dated 8th May, 2019, inter alia, informed that the National Digital Communications Policy (NDCP) 2018, under its 'Propel India' mission, envisages one of the strategies as 'Reforming the licensing and regulatory regime to catalyse Investments and Innovation and promote Ease of Doing Business'. Enabling unbundling of different layers (e.g., infrastructure, network, services, and application layer) through differential licensing is one of the action plans for fulfilling the aforementioned strategy. Through the said letter dated 8th May, 2019, DoT, inter alia, requested TRAI to furnish recommendations on enabling unbundling of different layers through differential licensing, under the terms of the Telecom Regulatory Authority of India Act, 1997, as amended.

Earlier, TRAI had sought inputs from stakeholders on the broad framework for unbundling of license through a Pre-consultation paper on "Enabling Unbundling of Different Layers Through Differential Licensing" dated 9th December, 2019.

Based on the inputs received from the stakeholders on the Pre-Consultation Paper, international practices and internal analysis, a Consultation Paper was released on 20th August, 2020 on "Enabling Unbundling of Different Layers Through Differential Licensing".

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

• Consultation Paper dated 20th August, 2020 on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed"

TRAI on 20th August, 2020 released the Consultation Paper on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed".

Increasing reliable and high-speed broadband connectivity in the country has been in focus of the Government and the Authority since 2004. Number of policy and regulatory initiatives have been taken in the past to reach the present state. Constant developments happening in the

field of ICTs are putting continuous pressure on the Government, the Authority, and the TSPs to further improve the penetration and performance of broadband networks. Efforts are continuing to meet the ever-growing demand and expectations of consumers. Many strategies have been identified in the NDCP-2018 to improve the penetration and performance of broadband networks. Such strategies need to be converted into actionable points.

Further, DoT through its letter dated 26th April, 2019 requested the Authority to furnish its recommendations as per Section 11(1)(a) of TRAI Act 1997, as amended, on the following points:

- (a) "Different speeds for different categories i.e. fixed vs Mobile with upload/download speeds defined;
- (b) How different categories of broadband speeds such as basic broadband, high broadband & Ultra-High Broadband etc. can be defined as in Europe; and
- (c) The roadmap to enhance Broadband speed to achieve the NDCP-2018 objective of 50 Mbps."

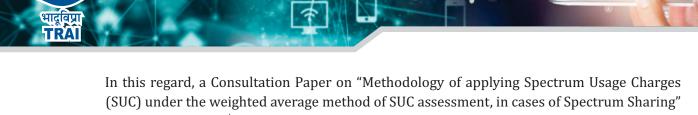
DoT, through two other separate references dated 8th May, 2019 & 6th June, 2019 sought the recommendations of the Authority for implementing NDCP-2018 strategies "By encouraging innovative approaches to infrastructure creation and access including through resale and Virtual Network Operators (VNO)" and "Promoting broadband connectivity through innovative and alternative technologies", respectively. Both strategies are part of the mission "Connect India: Creating a Robust Digital Communication Infrastructure".

With this background, the Authority, through this Consultation Paper intended to seek the inputs of stakeholders on (i) defining fixed and mobile broadband, (ii) innovative approaches for infrastructure creation, (iii) promoting broadband connectivity, and (iv) measures to be taken for enhancing broadband speed.

• Consultation Paper dated 22nd April, 2020 on "Methodology of applying SUC under the weighted average method of SUC assessment, in cases of Spectrum Sharing"

TRAI released Consultation Paper on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing" dated 22^{nd} April, 2020.

DoT through its letter dated 15th January, 2020, inter-alia, informed that the existing guidelines for Sharing of Access Spectrum by Access Service Providers issued by DoT on 24th September, 2015 provide that the SUC rate of each of the licensees post sharing increases by 0.5% of Adjusted Gross Revenue (AGR). DoT also informed that it has received representations requesting that the incremental SUC rate of 0.5% post sharing should be applied only to the particular spectrum band which has been allowed to be shared between two licensees, and not on the entire spectrum held by the licensees, since sharing is permitted in a particular band. In this background, DoT requested TRAI to furnish its recommendations on (i) whether the incremental 0.5% in SUC rate in cases of sharing of spectrum should be applied only on the specific band in which sharing is taking place; or to the overall Weighted Average Rate of SUC, which has been derived from all bands and (ii) any other recommendations deemed fit for the purpose, under TRAI Act 1997, as amended.



was released on 22^{nd} April, 2020 seeking comments/counter comments from the stakeholders on the issues raised in the Consultation Paper.

The Consultation Paper may be browsed in the TRAI's website www.trai.gov.in.

BROADCASTING & CABLE TV SECTOR

Sl. No.	List of Consultation Papers
1.	Consultation Paper dated 7 th December, 2020 on MIB back reference on TRAI's Recommendations dated 19 th November, 2014 on "Regulatory Framework for Platform Services" and MIB reference on TRAI's Recommendations on "Platform Services offered by DTH Operators" dated 13 th November, 2019.
2.	Consultation Paper dated 22 nd April, 2020 on "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services".

CONSULTATION PAPERS

• Consultation Paper dated 7th December, 2020 on MIB back reference on TRAI's Recommendations dated 19th November, 2014 on "Regulatory Framework for Platform Services" and MIB reference on TRAI's Recommendations on "Platform Services offered by DTH Operators" dated 13th November, 2019

MIB vide its letter dated 23^{rd} October, 2020 referred back TRAI's Recommendations dated 19^{th} November, 2014 on "Regulatory Framework for Platform Services" as per proviso to Section 11(1) of the TRAI Act 1997, for reconsideration of the recommendations that have been approved with modifications.

Further, MIB vide it's another letter dated 23rd October, 2020 referred to TRAI's Recommendations on Regulatory Framework for Platform Services dated 19th November, 2014 and TRAI's Recommendations on "Platform Services Offered by DTH Operators" dated 13th November, 2019. Vide this second reference, MIB has proposed to adopt the certain recommendations on four issues, in respect of Platform Services offered by MSOs also by appropriately replacing the word "DTH" with "MSO" and requested TRAI to furnish its views on the above proposal.

The Authority considered both the above-mentioned letters together. The Authority had forwarded its recommendations on "Regulatory Framework for Platform Services" in 2014 and lot of developments have happened since then. Further, there are a few new issues that have been raised by MIB in its above referred letter dated 23rd October, 2020 vis-à-vis applying certain recommendations made for DTH operators in 2019 on MSOs also. Therefore, in line with its practise, TRAI shall provide its recommendations on the above-mentioned letters to MIB after a due consultation process. Therefore, TRAI on 7th December, 2020, released Consultation Paper for seeking comments of all the stakeholders.

- Consultation Paper dated 22nd April, 2020 on "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services"
 - TRAI on 22nd April, 2020, released Consultation Paper on "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services". Through this consultation paper, TRAI sought comments of the stakeholders on the following issues:-
 - (i) List all the important features of CAS & SMS to adequately cover all the requirements for Digital Addressable Systems with a focus on the content protection and the factual reporting of subscriptions. Please provide exhaustive list, including the features specified in Schedule III of Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017.
 - (ii) As per audit procedure (in compliance with Schedule III), a certificate from CAS / SMS vendor suffices to confirm the compliance. Do you think that all the CAS & SMS comply with the requisite features as enumerated above? If not, what additional checks or compliance measures are required to improve the compliance of CAS/SMS?
 - (iii) Do you consider that there is a need to define a framework for CAS/ SMS systems to benchmark the minimum requirements of the system before these can be deployed by any DPO in India?
 - (iv) What safeguards are necessary so that consumers as well as other stakeholders do not suffer for want of regular upgrade/configuration by CAS/SMS vendors?
 - (v) Who should be entrusted with the task of defining the framework for CAS & SMS in India? Justify your choice with reasons thereof. Describe the structure and functioning procedure of such entrusted entity.
 - (vi) What should be the mechanism/ structure, so as to ensure that stakeholders engage actively in the decision-making process for making test specifications / procedures? Support your response with any existing model adapted in India or globally.
 - (vii) Once the technical framework for CAS & SMS is developed, please suggest a suitable model for compliance mechanism
- a) Should there be a designated agency to carry out the testing and certification to ensure compliance to such framework? Or alternatively should the work of testing and certification be entrusted with accredited testing labs empanelled by the standards making agency/government? Please provide detailed suggestion including the benefits and limitations (if any) of the suggested model.
- b) What precaution should be taken at the planning stage for smooth implementation of standardization and certification of CAS and SMS in Indian market? Do you foresee any challenges in implementation?
- c) What should be the oversight mechanism to ensure continued compliance? Please provide your comments with reasoning sharing the national/international best practices

- STIRAL TRAIL
 - (i) Once a new framework is established, what should be the mechanism to ensure that all CAS/ SMS comply with the specifications? Should existing and deployed CAS/ SMS systems be mandated to conform to the framework? If yes, please suggest the timelines. If no, how will the level playing field and assurance of common minimum framework be achieved.
 - (ii) Do you think standardization and certification of CAS and SMS will bring economic efficiency, improve quality of service and improve end- consumer experience? Kindly provide detailed comments.
 - (iii) Any other issue relevant to the present consultation.

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

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

(a) Rural Telephone Network

As on 31st March, 2021 the rural wireline subscriber base stood at 1.67 million as compared to 2.24 million at the end of 31st March, 2020, registering a decline of 25.45% over the year.

(b) Expansion of Telephone Network

- 2.10 The total wireline subscriber base as on 31st March, 2021 stood at 20.24 million as compared to 20.22 million subscribers on 31st March, 2020, registering an increase of 0.11% during the year 2020-21. Out of 20.24 million wireline subscribers, 18.57 million are urban subscribers and 1.67 million are rural subscribers.
- 2.11 The Wireless Subscriber base is 1180.96 million as on 31st March, 2021 in comparison to the subscriber base of 1157.75 million as on 31st March, 2020. The subscriber base increased by 27.18 million subscribers during the financial year 2020-21.

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

2.12 As on 31^{st} March, 2021, following are the number of licenses under UL / UL (AS) / UASL / CMTS to provide Access Services:

Name of licence	Number of licence
Unified Licence (UL) authorisations for Access Services	14
Unified Access Service Licence (UASL)	61
Cellular Mobile Telephone Service (CMTS) Licence	2

		धार
Unified License (Virtual Network Operator) [UL (VNO)] for	Access Service	16
providing Access Service	Category 'B' Services	110
No. of NLD Licence (Before UL regime)	21	
No. of NLD Licence (Under UL regime)	11	
[as on 30th June 2021 (under UL Regime), 30th June 2017 (NLD)		

Source: DoT

No. of ILD Licence (Before UL regime)

No. of ILD Licence (Under UL regime)

as on 15th December 2015(ILD), Source: DoT]

(d) Technical Compatibility and effective interconnection with service providers

2.13 Under the TRAI Act, the Authority is mandated to fix the terms and conditions of interconnectivity and to ensure technical compatibility and effective interconnection between service providers. Interconnection lies at the core of the telecom business in a multi-operator environment. The terms and conditions of interconnection need to be regulated to ensure a level playing field among service providers. Accordingly, the following measures regarding interconnection were taken by TRAI during the reporting period: -

"The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020" dated 17th April, 2020

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TRAI on 17th April, 2020 issued "The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020". Through these Regulations, the regime of fixed International Termination charges (ITC) @ Re.0.30 per minute has been revised to forbearance regime within a prescribed range of Re.0.35 per minute to Re.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.

(e) Telecommunication Technology

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

i. Channel Selector App:

TRAI's prevailing regulations/orders for the television and broadcasting sector gave freedom to consumers to select television channels they want to watch. In order to help consumers for selection of channels with the implementation of the new framework, TRAI has developed this Channel Selector App & launched on $25^{\rm th}$ June, 2020 for both Android & iOS platform. This App facilitates DTH/Cable subscribers to check their own subscription, know complete platform



offerings provided by their DTH/Cable Operator, get optimized solution and submit modify subscription request.

ii. Portal for Exemption from SMS Termination Charges:

This Portal facilitates Government entities to online apply 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 the 5 paisa exemption.

iii. Header Information Portal:

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

iv. DND App - API Specification:

With the release of TCCCP, Regulation 2018, major changes were being done regarding the implementation of provisions of the regulation. Accordingly, DND App needed updation as per regulation. Hence, API specifications were created to securely communicate with service providers systems. With these API specifications service providers shall develop their APIs for integrating in DND App.

v. E-office:

Dr P.D. Vaghela, Chairman, TRAI on $1^{\rm st}$ January, 2021 inaugurated E -Office. With the adoption of eOffice, TRAI became largely a paperless organization wherein all file work is handled through electronic file mode. This adoption of eoffice shall ensure greater accountability and transparency in administration, reduce costs incurred in storage and preservation of physical files, facilitate officers to dispose off files from "anywhere and anytime" thereby by improving efficiency of file disposal, enable 24/7 access to files and important papers to senior officers, etc.



vi. Reporting Automation:

IT division developed a Data Collection and Analytical Reports Portal, which will provide automated Data Collection, Processing and Reports Generation for various divisions in TRAI. The stakeholders, identified by concerned division, will submit the data with valid login id & password. The processed data and analytical reports are being created by using Tableau and are available in the system for the concerned division to download. Presently the NSL-II division is using the system for Performance Monitoring Report (PMR). Later on, once customization for NSL-I & QoS divisions are done, these divisions shall be able to use the system.

vii. Data Analytics and Cloud Services:

To create meaningful insights & information from the data collection through crowdsourcing & from respective service providers, data analysis is regularly being done using free/licensed tools & technology for internal report generations for various divisions of TRAI. Also, majority of the TRAI applications are hosted on Cloud environment thus leveraging the opportunity of savings in terms of time and infrastructure costs.

viii. Infrastructure Upgradation:

1. Due to COVID-19 pandemic, all official work was done online including meetings/video conferencing.

To facilitate the work following were done:

- a. 50 Mbps NICNET line was established between NIC and TRAI for securely accessing eoffice & video conferencing.
- b. 16 dual band WiFi routers were installed for Sr. Officers for access to high-speed internet/broadband.
- c. 35 WebCams and Headphones were provided to Dy. Advisors and above level officers for attending to e-meetings.
- d. 20 high speed scanners & 100 DSCs were procured for implementation of e-office.

Consumer Outreach:

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



2.15 The National Digital Communications Policy (NDCP-2018) envisages to encourage and facilitate sharing of active infrastructure by enhancing the scope of Infrastructure Providers (IPs) and promoting and incentivizing deployment of common sharable, passive as well as active, infrastructure.

TRAI had suo-motu issued the Consultation Paper on "Review of Scope of Infrastructure Providers Category-I (IP-I) Registration" on 16th August, 2019. After due consultation process, TRAI issued Recommendations on 'Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration' dated 13th March, 2020 and sent to Secretary (Telecom), DOT for consideration.

DoT vide its letter No.10-12/2012-CS-III (Pt. II)/236 dated $18^{\rm th}$ November, 2020 informed that TRAI Recommendations on "Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration" dated $13^{\rm th}$ March, 2020 has been considered and some clarifications were sought from TRAI. After due deliberations, TRAI sent its response to Secretary, DoT vide letter No. R-16/1/(1)/2021-NSL-I dated $11^{\rm th}$ January, 2021.

DoT vide its letter dated 08th May, 2019 requested TRAI to furnish recommendations on the strategies of National Digital Communications Policy 2018 which inter alia includes 'Ensuring adequate numbering resources, by developing a unified numbering plan for fixed line and mobile services.' TRAI after due deliberations of Consultation process and discussions with stakeholders, had finalized its recommendations on "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services' and sent to Secretary, DoT vide letter dated 29th May, 2020.

(g) Quality of Service (QoS)

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

The Quality of Service performance of service providers against the benchmarks 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 services are submitted on a quarterly basis.

The QoS regulations were reviewed in 2019 and TRAI issued "The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (seventh Amendment) Regulations, 2019" dated 1st November, 2019.

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

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

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

Cellular Services

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

Basic Services (Wireline)

For non-compliance with the benchmarks the financial disincentive is $\stackrel{?}{\underset{?}{?}}$ 50,000/- per parameter.

Broadband Services

For non-compliance with the benchmarks first instance the financial disincentive is $\stackrel{?}{\stackrel{\checkmark}{}}$ 50,000/- per parameter and for alternate instance the financial disincentive is $\stackrel{?}{\stackrel{\checkmark}{\stackrel{}}}$ 1,00,000/- per parameter.

Unsolicited Commercial Communications

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

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

- For non-compliance to the provisions of Code(s) of Practice, Service Provider shall be liable to pay following amount:
 - a. not exceeding Rupees five thousand per day for the period of exceeding the timeline if the period of delay is less than or equal to thirty days;
 - b. not exceeding Rupees twenty thousand per day for the additional period of delay which is more than thirty days;

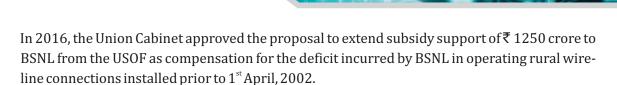
The performance of the service providers is evaluated every Quarter based on the compliance reports submitted by service providers and also based on the reports of the audit agencies engaged by TRAI. Wherever deficiencies in achieving the Quality of Service benchmarks have been noticed through close monitoring of the performance of service providers by way of periodic reports, audit and assessment of quality of service through independent agencies is conducted, TRAI has been following up with the service providers for addressing such deficiencies in achieving the benchmarks for the various parameters. In this regard, various meetings were held in TRAI with the service providers from time to time. These meetings and follow-up action with the service providers have been pivotal in improving the quality of service. Further, based on compliance reports, wherever non-compliance with the benchmarks is observed, the explanation of the service provider is called for and considering the explanation submitted by the service provider, gravity of non-compliance, action taken to improve the service, financial disincentives are imposed on service providers. The total amount of financial disincentive received during the financial year 2020-21 on account of QoS regulations violations was ₹ 1.485 crore. TRAI also publishes information about the Quality-of-Service performance by service providers, the results of Audit and assessment of Quality of Service undertaken by Independent Agencies through its website for the information of stakeholders. The publishing of quality of service-related information has also been forcing the service providers to improve the Quality-of-Service performance and also to address deficiencies in meeting the benchmark.

(h) Universal Service Obligation

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

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

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



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

Other Activities

• White Paper dated 22nd September, 2020 on "Smart Cities in India: Framework for ICT Infrastructure"

The objective of smart city is to enhance quality of life of people and provide a clean and sustainable environment by establishing a common core infrastructure and deploying 'Smart Solutions' using digital infrastructure.

In order to manage the ever-increasing population in the cities, it is important that infrastructure in the cities is upgraded and managed by using Information and Communication Technologies (ICT) to make them sustainable in the long run.

While studying the ICT infrastructure being planned and deployed in various smart cities in India, it has been observed that each smart city is planning and deploying ICT solutions in its own way and there is no common framework for ICT infrastructure for smart cities.

In absence of any regulation or standards, non-standardized proprietary devices and solutions have come up in the market. Such proprietary or non-standardized solutions have been created in silos and pose problems of interoperability and prevent sharing of data amongst divergent applications.

Non-standardized and non-interoperable ICT solutions will pose a risk as it will suffer from the following constraints:

- (i) Proprietary solutions will have proprietary maintenance and vendor lock-in
- (ii) Upgradation and Scalability will also be proprietary and hence costly
- (iii) Replicability in other areas will be a challenge
- (iv) Integration of various applications and information sharing will be a challenge
- (v) In disaster situation, it will be difficult to have integrated relief operations

Keeping this in view, TRAI released a White Paper on Smart Cities in India: Framework for ICT Infrastructure on 22^{nd} September, 2020. The White Paper discussing the relevant aspects related to ICT infrastructure used in Smart Cities. The following topics have been covered in the White Paper:

- (i) Elements of a Smart City- Ecosystem
- (ii) ICT Requirement for different Elements of Smart City



- (iii) Gaps and Challenges
- (iv) Standardized ICT technology to make system interoperable
- (v) Common Framework for ICT Infrastructure for a Smart City
- (vi) Integrated efforts of various Stakeholders in developing and deploying standardized, inter-operable, resilient, secure ICT Infrastructure

The White Paper highlights the Role of digital technologies for smart cities, discusses the key smart solutions, deliberates the need of Global Standardization and connectivity related aspects specific to smart cities, and tries to identify the framework for ICT Infrastructure for the success of Smart Cities Mission in India.

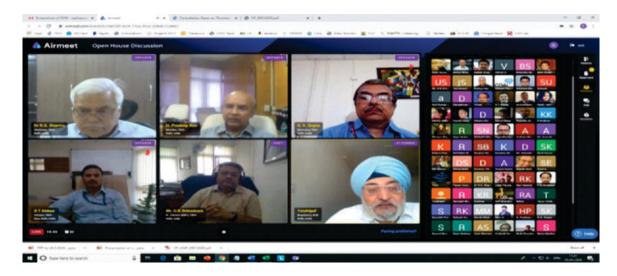
The White Paper has laid emphasis to achieve Standardization, Inter-operability, Scalability, Sustainability, Resiliency in the ICT infrastructure for Smart Cities which can be achieved through Harmonized Standards, Compliance Testing, Cloud Strategy, National Trust Centre (for Device testing), Cyber Security Strategy and Data Analytics.

The White Paper will open the gates for the industry and the technocrats to kindle their thought process and bring about transformation through identification of key enablers in order to accelerate the development of Smart Cities in India.

• OHD held on 20th May, 2020 through Video Conferencing on Consultation Paper on "Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization"

TRAI on 20th May, 2020 convened an Open House Discussion (OHD) through Video Conferencing on Consultation Paper on 'Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization'

The OHD was convened to obtain valuable inputs of the concerned stakeholders. A number of stakeholders including, telecom service providers, industry associations, technology companies etc. participated in the open house discussion. There was overwhelming response for conducting the OHD through video conferencing even during the Covid Pandemic.





• OHD held on 9th July, 2020 through Video Conferencing on "Consultation Paper on Methodology of applying SUC under the weighted average method of SUC assessment, in cases of Spectrum Sharing"

TRAI on 9th July, 2020 convened an Open House Discussion (OHD) through Video Conferencing on "Consultation Paper on Methodology of applying SUC under the weighted average method of SUC assessment, in cases of Spectrum Sharing".

The OHD was convened to obtain valuable inputs of the concerned stakeholders. A number of stakeholders including, telecom service providers, industry associations etc. participated in the open house discussion. There was good response for conducting the OHD through video conferencing even during the COVID Pandemic.

• Open House Discussion (OHD) held on 3rd February, 2021 through Video Conferencing on the Consultation Paper on "Enabling Unbundling of Different Layers Through Differential Licensing"

TRAI on 3rd February, 2021 convened an Open House Discussion (OHD) through Video Conferencing on "Consultation Paper on Enabling Unbundling of Different Layers Through Differential Licensing".

The OHD was convened to obtain valuable inputs of the concerned stakeholders. A number of stakeholders including, telecom service providers, industry associations etc. participated in the open house discussion. There was good response for conducting the OHD through video conferencing.

Consumer Outreach Programme (COP)

2.19.2 To enhance consumer education and awareness, TRAI organises Consumer Outreach Programmes (COPs) across the length and breadth of the country. These COPs also provide a platform to consumers to raise their local issues with TRAI and telecom service providers. In the situation of COVID-19 Pandemic, in order to follow COVID protocols these programs were conducted on online platform so that consumers can attend them from their place of choice. During the above period, TRAI organised 37 online Consumer Outreach Programmes (COPs) for the benefit of consumers of different places all over the country. List of COPs organized is annexed.

Consumer Education Literature and Media Campaigns Organizing Seminars and Redressal of Consumer Grievances

2.19.3 In order to create awareness amongst TV subscribers about their rights and freedom they are being granted by TRAI through the implementation of new framework for Broadcasting and Cable Services across the country, a Consumer Handbook is being prepared and it is in the process of finalization.

Seminars/Webinars on Consumer Interests and Protection

- 2.19.4 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. Due to COVID-19, TRAI conducted all such programmes through online mode. TRAI organised Nine (9) Webinars targeting audiences of different places during the year are as follows:
 - 1) Webinar held on 24th July, 2020 in Jaipur on "5G in India-Specification, Use Cases, Challenges and Action Plan"
 - 2) Webinar held on 21st August, 2020 in Bengaluru on "5G-Arhitecture, Use Cases and Govt. Initiatives" Cyber Security"
 - 3) Webinar held on 28th August, 2020 in Bhopal on "IoT (Internet of Things) Trends, Security Challenges and Solutions"
 - 4) Webinar held on 21st September, 2020 in Bengaluru on "Cyber Security"
 - 5) Webinar held on 26th November, 2020 in Jaipur on "Cyber Security"
 - 6) Webinar held on 29th January, 2021 in Bhopal on "Data Privacy, Safety and Security"
 - 7) Webinar held on 19th February, 2021 in Hyderabad on "Data Privacy, Safety and Security"
 - 8) Webinar held on 5th March, 2021 in Kolkata on "5G-Introduction, Eco System Development, Application & Regulatory Aspects"
 - 9) Webinar held on 17th March, 2021 in Bengaluru on "Artificial Intelligence and uses in Telecom"

These webinars attracted participation from large number of Consumer Advocacy Groups, industry associations, representatives of TSPs, officers of state and central government, faculty members, research scholars and students from various academic institutions etc.

(ii) Redressal of Consumer Grievances

2.19.5 TRAI Act, 1997 does not envisage 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, 2020 to 31st March, 2021, TRAI received 50846 complaints related to Telecom services and 13037 complaints in Broadcasting and Cable TV. All these complaints were forwarded to concerned service providers for appropriate action. Complaints of generic nature or requiring class action were handled to address the underlying issues.

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

Registration of Consumer Advocacy Groups

2.19.6 Consumer Advocacy Groups (CAGs) registered with TRAI co-ordinate and assist TRAI in dissemination of information about TRAI activities to consumers awareness Programs in their areas. They also participate in consumer outreach program conducted by TRAI. These CAGs are also members of the Advisory Committee to the Appellate Authorities of TSPs. A review of the performance of CAGs whose tenure were due for renewal was carried out and 13 new CAGs also have been registered. Total 58 CAGs have been registered with TRAI.

Broadcasting Sector

• Open House Discussions (OHD) held on 25th June, 2020 on Consultation Paper on "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services"

Open House Discussions (OHDs) held on 25th June, 2020 through video conference on Consultation Paper on "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services". It was attended by around 220 participants.

• Empanelment of Audit Firms

TRAI issued Expression of Interest (EoI) on 1^{st} June, 2020 for empanelment of auditors to carry out audit of Digital Addressable System in compliance of regulation 15 of the Interconnection Regulation, 2017 as amended from time to time. The empanelment of auditors is an ongoing process and proposals received for empanelment, are being evaluated on monthly basis.

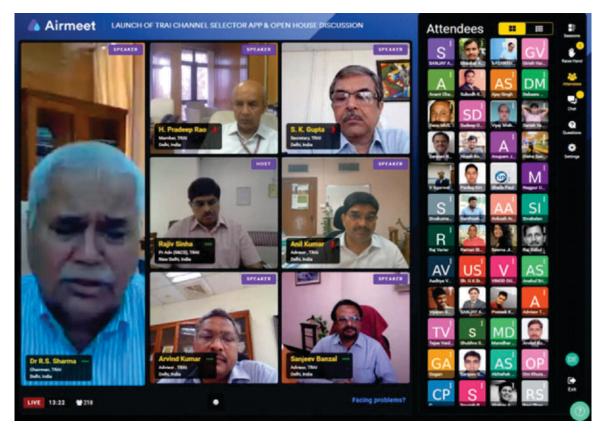
During the year 2020-21, TRAI has included 37 audit firms in the list of empanelled audit firms to carry out audit of digital addressable system. So far, a total number of 51 audit firms have been empanelled. Updated list of empanelled audit firms is available in public domain on TRAI website.

TRAI Channel Selector App

In order to help consumers for ease in selection of channels (addition/deletion), TRAI launched TRAI Channel Selector App on 25th June, 2020 and is available to the public for use. Through TRAI Channel Selector App, consumer can view and modify their current subscription any number of times. The app is available for download on both Android and iOS platforms for free. For more information visit TRAI website at the following URL: https://trai.gov.in/channel-selector-application.







TRAI launched TRAI Channel Selector App on 25th June, 2020

• TRAI letters to DPOs regarding compliance of regulation 15 of the Interconnection Regulation, 2017, as amended, issued on 4th May, 2020 and 2nd November, 2020

Telecom Regulatory Authority of India (TRAI) notified the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 [hereinafter referred to as the Interconnection Regulations 2017] on 3rd March, 2017 and its first amendment on 30th October, 2019 and subsequent second amendment on 1st January 2020. The provisions of regulation 15 of the Interconnection Regulation mandate that every distributor of television channels shall, once in a calendar year, cause audit of its system by M/s BECIL or any of the auditor empanelled by TRAI, to verify that the monthly subscription reports made available by the distributor to the broadcasters are complete, true and correct, and issue an audit report to this effect to each broadcaster with whom it has entered into an interconnection agreement.

Vide TRAI's letters dated 4^{th} May, 2020 and 2^{nd} November, 2020, all the Distributors of television channels (DTH operators, Multi System Operators (MSOs), HITS operators and IPTV operators) were advised to comply with the regulation 15 of the Interconnection Regulation, 2017, as amended from time to time.

• TRAI letter to the Broadcasters and distributors of TV channels regarding compliance of the Telecommunication (Broadcasting and Cable) Services Register of Interconnection Agreements and all such other matters Regulations, 2019, issued on 2nd January, 2020 and 28th May, 2020

Telecom Regulatory Authority of India (TRAI) notified the Telecommunication (Broadcasting and Cable) Services Register of Interconnection Agreements and all such other matters Regulations, 2019 [hereinafter referred to as Register Regulation 2019] on 4th September, 2019.

Vide TRAI's letters dated 2nd January, 2020 and 28th May, 2020, all the broadcasters and distributors of television channels were requested to comply with all the provisions of the Telecommunication (Broadcasting and Cable) Services Register of Interconnection Agreements and all such other matters Regulations, 2019 and they were advised to submit all the documents/reports as per Register Regulation 2019 on the Broadcasting & Cable Services Integrated (BIPS) portal, developed by TRAI for the purpose.

• TRAI letters to all Multi System Operators (MSOs) regarding compliance of provisions of the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 and Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Second Amendment) Regulations, 2020 related to assigning a unique channel number for each television channel available on the distribution network and indicating genre of television channels as declared by broadcaster in the interconnection agreement, issued on 17th September, 2020, 9th October, 2020 and 1st December, 2020

Telecom Regulatory Authority of India (TRAI) notified the Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 [hereinafter referred to as the Interconnection Regulations 2017] on 3^{rd} March, 2017 and its first amendment on 30^{th} October, 2019 and subsequent second amendment on 1^{st} January, 2020.

Vide TRAI's letters dated 17th September, 2020, 9th October, 2020 and 1st December, 2020, all the Multi System Operators (MSOs) were advised to ensure compliance of the provisions of regulation 18 of the Interconnection Regulations 2017 and its Second Amendment Regulations related to assigning a unique channel number for each television channel available on the distribution network and indicating genre of television channels as declared by broadcaster in the interconnection agreement.

• Compliance of the Register of Interconnection Regulation, 2019 dated 4th September, 2019

The Register Regulation, 2019 is sub-judice in various courts and hence the provision of regulation 4, related to levy of financial disincentives in consequence of failure to comply with the provision of Register Regulation 2019, has not been applied so far by the Authority. In this regard, perhaps the Hon'ble High court of Kerala order dated 9th January, 2020 is applicable only on the petitioners before High Court of Kerala, however, it has been proposed that TRAI may not initiate any action related to levy of financial disincentives in consequence of failure to comply with the provision of Register Regulation 2019, till the Register Regulation, 2019 is sub-judice. The proposal has been vetted by Legal Division and approved by the Authority.

International Relations

- 2.19.7 Proposals initiated to sign bi-lateral agreements with other Regulators during the year
 - (i) Proposal to sign Letter of Intent (LoI) with Afghanistan Telecommunication Regulatory Authority (ATRA), Afghanistan is under process.
 - (ii) Proposal to sign Letter of Intent (LoI) with Independent Communications Authority of South Africa (ICASA), South Africa is under process.
 - (iii) Proposal to sign Letter of Intent (LoI) with Communications and Information Technology Commission (CITC), Saudi Arabia has been finalized and to be signed.
 - (iv) Proposal to sign Letter of Intent (LoI) with Information and Communications Technologies Authority (ICTA), Mauritius has been finalized and to be signed.
 - (v) Proposal to sign Letter of Intent (LoI) with Telecommunications Regulator of Cambodia (TRC), Cambodia has been finalized and to be signed.
 - (vi) Proposal to sign Letter of Intent (LoI) with Botswana Communications Regulatory Authority (BOCRA), Botswana has been finalized and to be signed.
 - (vii) Proposal to sign Letter of Intent (LoI) with Telecommunications and Post Regulatory Authority (TPRA), Sudan has been finalized and to be signed.

Bilateral Meetings

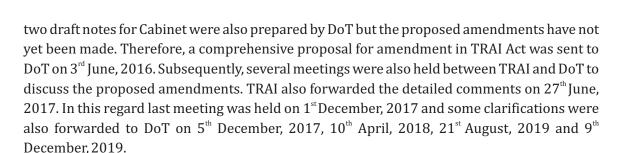
- (i) Virtual Bi-lateral meeting between Chairman, TRAI and Executive President (Eng. Hossam El Gamal), National Telcom Regulatory Authority (NTRA), Egypt on 12th November, 2020.
- (ii) Virtual Bilateral Meeting with officers of Botswana Communications Regulatory Authority (BOCRA), Botswana on 13th January, 2021.
- (iii) Virtual bilateral meeting with the officers of Telecommunications and Post Regulatory Authority (TPRA), Sudan on 19th January, 2021.

Administrative, Legal and Financial Issues under consideration of the Department of Telecommunications (DoT)

2.20 In addition with the various matters discussed in the report, there are certain important issues pending with DoT for decision. The following Paras elaborate such Administrative and Legal issues which are under consideration of DoT:

(i) Proposal for Amendment of TRAI Act 1997

TRAI has been established under TRAI Act 1997, inter-alia to regulate the telecommunication services and to protect the interest of service providers and consumers of telecom sector. The Authority has been conferred powers to issue directions, regulations, and orders in discharge of its regulatory functions but does not have any power to take punitive action to secure compliance of the regulatory measures taken by it. In order to ensure effective discharge of its functions under TRAI Act, 1997 the Authority sent a comprehensive proposal for amendment in the TRAI Act in the year 2007. Thereafter, several correspondences were made with DoT and



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

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

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

TRAI had sent a proposal for amendment in the Schedule-I of TRAI (Salary, Allowances and other conditions of services of Officers and Employees) Rules, 2002 for the purpose of modification/introduction of certain category posts in Schedule-I of the Rules. The proposal was to include some new category of posts that have been subsequently created by Pay Commissions and operated in all ministries and to exclude certain category of posts that are no more required/operational in TRAI.

As desired by DoT in this matter, a draft amendment along with consolidated schedule- I was sent to DoT in September, 2017 in response to DoT letter no. 10-14/2009-Restg. dated $14^{\rm th}$ August, 2017. Further, clarification was also furnished in February 2019. Also, Communication in this regard was sent to DoT in June, 2020 & October, 2020.



 $\label{eq:Annexure-I} Annexure - I$ List of COPs during the period from 1st April, 2020 to 31st March, 2021

SNO	PLACE OF COPs	Date
1	Chhattisgarh	19.06.2020
2	Rajasthan	26.06.2020
3	West Bengal	26.06.2020
4	Andhra Pradesh	29.06.2020
5	Uttar Pradesh	06.08.2020
6	Gujarat	07.08.2020
7	West Bengal	19.08.2020
8	Jharkhand	09.09.2020
9	Uttrakhand	11.09.2020
10	Telangana	16.09.2020
11	Haryana	18.09.2020
12	Assam	28.09.2020
13	Maharashtra	29.10.2020
14	Madhya Pradesh	29.10.2020
15	North East	05.11.2020
16	Punjab	06.11.2020
17	Tamilnadu	06.11.2020
18	Karnataka	20.11.2020
19	Karnataka	25.11.2020
20	Chhattisgarh	27.11.2020
21	Karnataka	04.12.2020
22	Kerala	07.12.2020
23	Bihar	08.12.2020
24	Uttar Pradesh	17.12.2020
25	Rajasthan	18.12.2020
26	Puducherry UT	21.01.2021
27	Gujarat	22.01.2021
28	Kerala LSA	15.02.2021
29	Uttarakhand	25.02.2021
30	Haryana	04.03.2021
31	Maharashtra LSA	09.03.2021
32	Madhya Pradesh	18.03.2021
33	Andhra Pradesh	23.03.2021
34	Karmataka	24.03.2021
35	Bihar & Jharkhand	25.03.2021
36	Punjab	26.03.2021
37	Telangana	26.03.2021

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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 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;
- $(ix) \quad \textit{ensure effective compliance of universal service obligations}.$
- (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 subsection shall not be binding upon the Central Government.

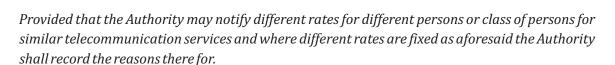
Provided further that the Central Government shall seek the recommendations of the Authority in respect of matters specified in sub-clauses (i) and (ii) of clause (a) of this subsection in respect of new licence to be issued to a service provider and the Authority shall forward its recommendations within 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:

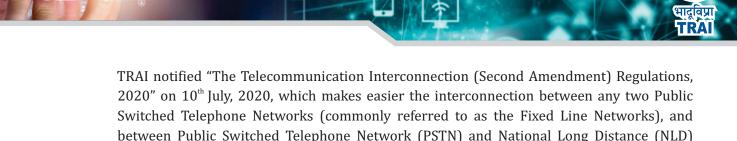
Provided also that if the Central Government having considered that recommendation of the Authority, comes to a prima facie conclusion that such recommendation cannot be accepted or needs modifications, it shall, refer the recommendation back to the Authority for its reconsideration, and the Authority 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:



- (3) While discharging its functions under sub-section (1) or sub¬section (2) the Authority shall not act against the interest of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality.
- (4) The Authority shall ensure transparency while exercising its powers and discharging its functions.
- 3. The Authority, in pursuance of achieving the objectives of ensuring growth of industry and protecting interest of consumers has made several Recommendations either suo moto or on matters referred to it by the Government; notified various Regulations to carry out purposes of the Act; taken action to enforce licence terms and conditions; and initiated work on several other issues. By discharging various recommendatory & regulatory functions, TRAI has contributed to growth of telecom services including the broadcasting and cable TV services in terms of increased number of consumers and a vast network providing telecom services across the length and breadth of the country. These continued measures have also resulted in overall benefits to the consumer in terms of choice of services, reduced tariff of telecom service, better quality of service etc. Some of the specific functions carried out by TRAI in respect of various matters specified in Section 11 of the TRAI Act are as follows.
- a) Telecommunication rates both within India and outside India including the rates at which messages shall be transmitted to any country outside India
- 3.1 Section 11 (2) of the Telecom Regulatory Authority of India Act, 1997 as amended by TRAI (Amendment) Act, 2000, empowers the Authority to notify in the Official Gazette the rates at which telecommunication services within India and outside India shall be provided, including the rates at which the messages shall be transmitted to any country outside India. It also provides that the Authority may notify different rates for different persons or class of persons for similar telecommunication services. Besides specifying the tariff regime applicable to various services, TRAI is also required to ensure that tariffs prevailing in the market are consistent with the specified tariff regime. For this purpose, the Authority monitors the rates at which the service providers provide the various telecom services. Further, the function of specifying norms for fixation of rates for Pay Channels as well as fixation of rates for Cable Services is also assigned to TRAI. Details of action taken by TRAI in Telecom Sector and Broadcasting & Cable Sector during 2019-20 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 or Ministry of Information & Broadcasting in the case of Broadcasting and Cable Services. Recommendations forwarded by TRAI to Government during 2020-21 are given below: -
 - (i) TRAI's Response dated 10th April, 2020 to DoT back reference dated 12th March, 2020 on Recommendations on "Captive VSAT CUG Policy Issues".
 - (ii) Recommendations dated 10th April, 2020 on "Reserve Price for Auction of FM Radio channels" .
 - (iii) Recommendations dated 10th April, 2020 on "Interoperability of Set-Top Box".
 - (iv) Authority's response dated 15th April, 2021 to DoT's back-reference dated 12th March, 2021 on TRAI Recommendations dated 17th April, 2015 on "Delivering Broadband Quickly: What do we need to do?"
 - (v) Recommendations dated 28th April, 2020 on "Review of Television Audience Measurement and Rating System in India".
 - (vi) Authority's response dated 5th June, 2020 to DoT's back-reference dated 29th May, 2020 for re-consideration of TRAI Recommendations dated 9th March, 2017 on "Proliferation of Broadband through Public Wi-Fi Networks".
 - (vii) Recommendations dated 28th July, 2020 on "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT CUG Service Authorization".
 - (viii) Recommendations dated 17th August, 2020 on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing".
 - (ix) Recommendations dated 2nd February, 2021 on the MIB's back references on TRAI's Recommendations dated 19th November, 2014 titled "Regulatory Framework for Platform Services" and TRAI's Recommendations titled "Platform Services offered by DTH Operators" dated 13th November, 2019.
- c) Ensuring technical compatibility and effective inter-connection
- 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.



- 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.

The Authority specified IUC for the first time in 2003. Subsequently, these charges have been revised through various amendments. These charges were further revised vide regulations issued during the report period, as detailed below:

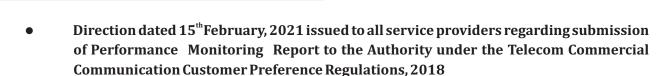
TELECOM SECTOR

Network.

• "The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020" 17th April 2020.

The Telecom Regulatory Authority of India (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) @ Re.0.30 per minute has been revised to forbearance regime within a prescribed range of Re.0.35 per minute to Re.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.

- 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
- During the report period, following directions were issued to Telecom Service providers to ensure compliance of the Terms and conditions of license:



The Direction has been discussed in detail in Part-II of this report.

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

3.7 TRAI, with a view to enhance consumer education and awareness organises 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 2020-21 have been detailed in the Part-II of the report.

Auditing of Metering and Billing System:

3.7.1 **Auditing of Metering and Billing System:** In order to (i) bring uniformity and transparency in the procedures being followed by service providers with regard to metering and billing; (ii) prescribe standards relating to accuracy of measurement, reliability of billing; (iii) measure the accuracy of billing provided by the Service Providers from time to time and to compare them with the norms so as to assess the level of performance; (iv) minimize the incidences of billing complaints; (v) and to protect the interest of consumers of telecommunication services, TRAI had reviewed the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 and issued the Quality of Service (Code of Practice for Metering and Billing Accuracy) (Amendment) Regulations, 2013 on 25th March, 2013. The Regulation mandates the service providers to arrange audit of their Metering and Billing System on an annual basis through any one of the auditors notified by TRAI and to furnish to TRAI an audit certificate thereof not later than 31st July of every year. The Regulation also provides that the service providers have to take corrective action on the inadequacies, if any, pointed out by the Agency in the Certificate and to file with TRAI an Action Taken Report thereon not later than 15th November of every financial year. Further, for effective implementation of these regulations TRAI has also enforced financial disincentive at the rate of ₹ 1,00,000/-per week for delay in submission of Audit Reports and Action Taken Reports and Financial disincentive not exceeding an of ₹ 10,00,000/- per action taken report for false or incomplete information. The service providers have submitted the audit reports and action taken reports within the time limit. The audit has helped in identifying billing and charging deficiencies leading to refunds of excess charges levied to affected customers and addressing systemic issues.

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

Access Provider would have to maintain the time duration of alert for an incoming voice call, which is neither answered nor rejected by the called party, to thirty seconds for Cellular Mobile Telephone Service and sixty seconds for Basic Telephone Service. The terminating network shall, on expiry of thirty second in case of Cellular Mobile Telephone Service and sixty seconds

in case of Basic Telephone Service, release the incoming voice call and transmit the call release message to the originating network. However, originating network may release an unanswered call after ninety seconds in case the call release message is not received from the terminating network.

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

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, using an intelligent spam detection engine and Updates about action taken on complaints within the App.

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

Exemption to Government organizations for sending SMS of public interest – Portal for Exemption from SMS Termination Charges: This Portal facilitates Government entities to online apply 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 5 paisa exemption from SMS Termination charges.

Workshop on "Improving connectivity inside buildings"

TRAI and Ministry of Housing and Urban Affairs, jointly conducted a workshop on "Improving connectivity inside buildings" on 4^{th} September, 2020 attended by builders, RWAs, architects, telecom service providers, infrastructure providers, technology providers, consultants, senior government officials from various development authorities and municipalities from the National Capital Region. The event provided an opportunity to stakeholders to present their concerns and participate in working out solutions that satisfy everyone's requirement of a good quality telecom network.

Monograph

TRAI, on 22nd September, 2020 published a Monograph – "Quest for a good quality network inside Multi- storey Residential Apartments". The monograph suggests a blended approach in improving the network, i.e., both general interventions and solutions that are specific to a

user's requirement. It also advocates the involvement of users in defining and achieving the optimum outcomes for themselves. The monograph assesses the effectiveness of the existing rules and practices, the technological solutions that are emerging, and the experience of policies in the other parts of the world to suggest the way forward for India.

TRAI also conducted other case studies such as Quality of Services at Delhi Airport and adjoining areas and also in Delhi Airport Express Metro train. Detailed report has been published at TRAI website. The report highlights various systemic issues, infrastructure deficiencies and concerns related to commercial arrangements. The report has been forwarded to DoT for further action too.

Case Studies

To identify the factors which causes gap in quality perceived by the users and quality reflected during assessments, TRAI has conducted cases studies. Case studies were more focused on quality inside the buildings. Case studies have revealed that the issue of poor quality inside building is due to non-availability of a good quality network which depends upon various aspects such as good design, good choices available to the TSPs or infrastructure Providers at the time of deployment, business case to deploy solutions etc. It is also revealed that in building solutions are neither expensive nor intractable, although they do require some coordination between a multitude of agencies. Another major hurdle faced in the deployment of mobile network inside the apartment or building areas is refusal or delay in grant of permission to deploy telecom infrastructure to service providers and EMF concerns expressed by some of the residents or Residence Welfare Associations (RWAs). Deployment of illegal jammers and boosters by some users also cause degradation of Quality of Services.

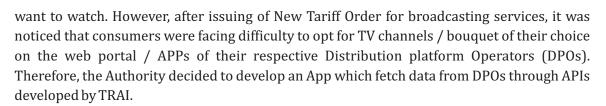
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Wi-Fi Access Network Interface (WANI): Recently, DoT based on the recommendations of TRAI has released framework and guidelines on Wi-Fi access network and penetration of Public Data Offices (PDOs) to help in improving voice quality of service.

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

Steps taken to protect the Interest of the Consumers of Broadcasting Services

3.7.2 TRAI, in March, 2017, notified the 'New Regulatory Framework' for Broadcasting and Cable Services. The new framework gave freedom to consumers to select television channels they



On 9th October, 2019, after due consultation process, TRAI issued Standards of Quality of Services and Consumer Protection (Addressable System) (Second Amendment) Regulations 2019. Through this second amendment, Authority mandated the DPOs to share APIs with TRAI so that consumer can edit and modify their subscriptions using an APP developed by TRAI.

In order to help consumers for ease in selection of channels (addition/deletion), TRAI on 25th June, 2020 launched TRAI Channel Selector App and is available to the public for use. TRAI Channel Selector App facilitates subscribers to:

- Check their own subscription
- View all Channels and Bouquets provided by their DTH / Cable Operator
- Choose only the channels of interest and remove other channels
- Get optimized solution; Get best combination of user selected channels / bouquets in same price or in less price
- Facility to add channels in the applicable NCF (Network Capacity Fee)
- Allow users to modify existing subscription
- Check real time status of your subscription request.

Channel Selector App is made available on both Google Play Store and Apple Store. Using the App customer of DTH /Cable Operator can see their subscription, modify (add/delete channels) subscription and set new subscription. Another prominent feature of the App is optimization of the subscription before it is sent to DTH /Cable Operator for activation to enable subscriber to get best value for money.

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

To facilitate competition and promote efficiency in the operation of telecommunications following steps were taken by TRAI in 2020-21:

TELECOM SECTOR

• "The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020" dated 17th April, 2020

The Telecom Regulatory Authority of India (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) @ Re.0.30 per minute has been revised to forbearance regime within a prescribed range of Re.0.35 per minute to Re.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 in its recommendations dated 14th May, 2012 on support for Rural Wire-line Connections, has recommended that support to M/s BSNL may be continued for two years for sustenance of rural wire-line connections, installed before 1st April, 2002. The amount of support may be Rs.1500 crore for the first year and Rs.1250 crore for the second year. The Authority vide its recommendations dated 22nd July, 2014 on "Improving Telecom Services in Andaman and Nicobar Islands and Lakshadweep" has recommended measures for improving the telecom services in these areas. Further, to encourage data usage in rural areas the Authority forwarded its Recommendations dated 19th December, 2016 on "Encouraging data usage in Rural Areas through provisioning of free data". In this recommendation, the Authority has recommended that the scheme may be funded through USOF.
- 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:
 - (i) Authority's response dated 5th June, 2020 to DoT's back-reference dated 29th May, 2020 for re-consideration of TRAI Recommendations dated 9th March 2017 on "Proliferation of Broadband through Public Wi-Fi Networks".
 - (ii) Authority's response dated 15th April, 2021 to DoT's back-reference dated 12th March, 2021 on TRAI Recommendations dated 17th April, 2015 on "Delivering Broadband Quickly: What do we need to do?"



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

- Monitoring of the quality of services and details of promotional survey of such services by the service providers
- (b) Monitoring of the quality of service 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 noncompliance with the benchmark for the Network Service Quality Parameters and Customer Service Quality Parameters. These regulations also provide for deterrent as financial disincentives against false reporting and delay in submission of report of the Quality of Service benchmarks.

3.12.2 Broadband Service

TRAI monitors the performance of the service providers against the Quality of Service benchmarks laid down by TRAI, through the quarterly Performance Monitoring Reports (PMRs) vide Regulation on Quality of Service of Broadband Service dated 6^{th} October, 2006. The quarterly reports submitted by Broadband service providers are analyzed for assessing their performance with regard to the QoS benchmark.). To further strengthen the quality of standards TRAI had issued "The Quality of Service of Broadband Service (Second Amendment) Regulations, 2012, on 25^{th} June, 2014 for improve the speed of Broadband.

3.12.3 Network/Point of Interconnection (POI) reports

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

3.12.4 TRAI MyCall App:

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



3.12.5 TRAI MySpeed App:

This application allows subscribers to measure wireless data speed experience and sends the results to TRAI. The application captures and sends coverage, data speed and other network information along with device and location of the tests. MySpeed portal displays a comparison of the wireless data speeds from such samples across the service providers in each License service area.

- m) Inspection of equipment used in the network and recommendation made on the type of equipment to be used by the service providers
- 3.13 The specific steps taken under this head during the report period 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 $22^{\rm nd}$ April, 2020 for its consideration.



PART - IV

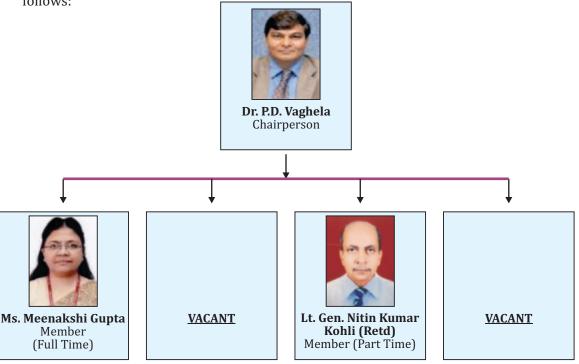
ORGANISATIONAL MATTERS OF TELECOM REGULATORY AUTHORITY OF INDIA AND FINANCIAL PERFORMANCE

(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.

(a) ORGANISATION

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, and not more than two whole-time members and not more than two-part time members that are appointed by the Central Government. The head office of the Authority is at New Delhi. The constitution of the Authority as on 31st March, 2021 is as follows:



(b) SECRETARIAT OF TRAI (HQ)

- 4.3 The Authority functions with a Secretariat headed by the Secretary and assisted by seven Divisions which are as follows:
 - (i) Administration & International Relations (A&IR); (ii) Broadcasting & Cable Services (B&CS); (iii) Financial & Economic Analysis (F&EA); (iv) Networks, Spectrum and Licensing (NSL); (v) Quality of Service (QoS) (vi) Legal and (vii) Consumer Affairs, Information Technology & Technology Development (CA, IT & TD).



4.4 Administration 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), Communication & Public Relation (Comm. & PR) Section, OL Section, Management Representative and RTI (MR&RTI) Section. The Division has managed a well-equipped Library having a good collection of knowledge, which includes Technical Books, Legal Books, Literature books etc. It also has the institutional membership of DELNET to share the resources. The Division also handles International Relations which include coordination with all International Organizations/bodies viz., ITU, APT, World Bank, WTO, ADB, SATRC, OECD and Regulatory Bodies in other countries.

BROADCASTING & CABLE SERVICES (B&CS) DIVISION

4.5 The Broadcasting and Cable Services (B&CS) Division is responsible for advising the Authority to lay down the overall regulatory framework; encompassing tariff, interconnection and quality of services aspects; for the broadcasting sector including broadcasting of satellite TV channels, Direct to Home (DTH) services, Cable TV services, Head-end in the Sky (HITS) services, Internet Protocol Television (IPTV) services, FM Radio broadcasting etc. The division is also responsible for examining the issues relating to modernization/ 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.

FINANCIAL & ECONOMIC ANALYSIS (F&EA) DIVISION

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



4.7 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 interconnection issues of Submarine Cable Landing Stations are also handled by the Division. Further, the Division is responsible for making recommendations on matters related to license conditions of Access Services including Internet/Broadband, National Long Distance (NLD) Service, International Long Distance (ILD) Service, Mobile Radio Trunking Service, Very Small Aperture Terminal (VSAT) service, Public Mobile Radio Trunking Service (PMRTS) and value-added services such as Audio Conferencing / Audiotex / Voice Mail. The Division also provides recommendations on efficient management of spectrum including its refarming. The Division is also responsible for providing recommendations on matters related to introduction of new technologies and services and promoting indigenous telecom equipment manufacturing. The matters related to Infrastructure Sharing, Sustainable Telecommunications, Other Service Providers (OSPs) and Radio Communications Systems for Public Protection & Disaster Relief (PPDR) are also handled. The Division also deals with issues related to National Numbering Plan, Intelligent Network (IN) Service, Calling Cards and Satcom Policy.

The Division monitors compliance of license conditions by service providers for all type of services mentioned above. The Division also monitors subscription of Fixed line, Mobile and Internet services as well as mobile data usage in the country. The Division handles recommendations on issues related to Universal Service Obligation (USO) and all related matters. The Division also regulates Mobile Number Portability (MNP) and ensures its compliance.

QUALITY OF SERVICE (QOS) DIVISION

4.8 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 Consumer; to ensure accuracy of metering and billing; to prevent Unsolicited Commercial Communications (UCC), spam The division is responsible for framing of guidelines for registration of consumer organizations/Non-Governmental Organizations(NGOs) and their interactions with TRAI. The division monitors the Quality of Service through periodic performance reports submitted by the Service Providers on various Performance Indicators. Quality of service of the service providers is also assessed through field measurements conducted across the country. The division 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.

LEGAL DIVISION

4.9 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.

CONSUMER AFFAIRS, INFORMATION TECHNOLOGY & TECHNOLOGY DEVELOPMENT (CA, IT & TD) DIVISION

4.10 CA Division is responsible for the development of consumer advocacy in the telecommunication sector and creating general awareness amongst consumers about various measures taken by the Telecom Regulatory Authority of India to protect the interest of consumers. The 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 organizing regional workshops & seminar on relevant topics, undertake media campaigns, developing and publishing consumer education material in Hindi, English and regional languages for enhancing consumer education etc.

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

TD Section is conducting technical sessions, time to time, from eminent persons in their respective fields, so as to create awareness regarding new technology trends and capacity building among officers of TRAI. The Section is also publishing technical information paper in the form of 'Technology Digest' from time to time for spreading knowledge in telecom and broadcasting domain. TD section also looks after the complaints regarding mobile towers such as installation/removal, radiations hazard, monetary frauds, court cases, RTI etc.

(c) HUMAN RESOURCES

4.11 A staff of 180 (as on 31st March, 2021) 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.

(i) Staff strength of TRAI HQ (as on 31st March, 2021)

4.12 As on 31st March, 2021, the Staff strength of the TRAI (Headquarters) was as under:

Sl.No.	POSTS	SANCTIONED	ACTUAL
1.	SECRETARY	01	01
2.	PR. ADVISOR	1.4	12
3.	ADVISOR	14	12
4.	JT. ADVISOR	25	21
5.	DY. ADVISOR	10	09
6.	SR. PR. PRIVATE SECRETARY	03	03
7.	SR. RESEARCH OFFICER	35	26
8.	PRINCIPAL PRIVATE SECRETARY	05	03
9.	TECHNICAL OFFICER	12	11
10.	TECHNICAL OFFICER (ENGINEERING)	5	0
11.	SECTION OFFICER	20	17
12.	PRIVATE SECRETARY	12	11



13.	ASSISTANT	48	35
14.	PERSONAL ASSISTANT	18	09
15	JR. HINDI TRANSLATOR	01	00
16.	LDC	07	01
17.	DRIVER SPECIAL GRADE	01	00
18.	DRIVER GRADE-I	04	02
19.	DRIVER GRADE-II	04	04
20.	DRIVER ORDINARY GRADE	04	04
21.	PCMO	02	02
22.	DESPATCH RIDER	01	01
23.	ATTENDANTS	05	08
	TOTAL	237	180

$4.13 \qquad \text{Details of Secretary, Pr. Advisors / Advisors Level Officers in TRAI (HQ) as on 31^{st} March, 2021}$

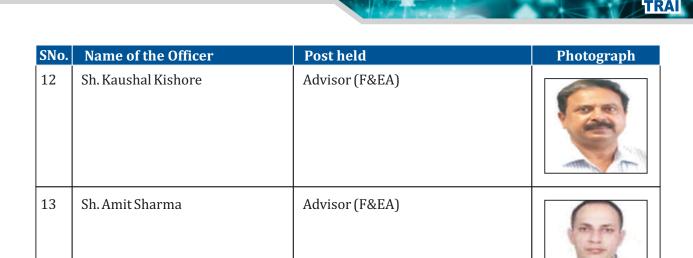
SNo.	Name of the Officer	Post held	Photograph
1	Sh. Sunil Kumar Gupta	Secretary	R. A.
2	Sh. S.K. Mishra	Principal Advisor (F&EA)	
3	Sh. Rajiv Sinha	Principal Advisor (B&CS)	
4	Sh. Sanjeev Kumar Sharma	Advisor (Admn. & IR)	



SNo.	Name of the Officer	Post held	Photograph
5	Sh. Anil Kumar	Advisor (B&CS)-I	
6	Sh. Sunil Kumar Singhal	Advisor (BB&PA)	
7	Sh. Sanjeev Banzal	Advisor (CA, IT & TD)	
8	Sh. Arvind Kumar	Advisor (B&CS)-II	
9	Sh. S.T. Abbas	Advisor (NSL)-I	
10	Sh. Rajiv Ranjan Tiwari	Advisor (Legal)	
11	Sh. Asit Kadayan	Advisor (QoS)	

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

(ii) Recruitment

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

(iii) Training

- 4.16 TRAI accords utmost importance to human resource initiatives to develop expertise for its staff in the fields of Telecom and Broadcasting. A structured training policy has been put in place covering all the employees. The following types of training are being given to employees of TRAI:
 - i. Orientation / Entry Level Training
 - ii. Short Term Thematic Training



- iii. Long Term Training Mostly online courses
- iv. Mid-Career Training Program
- v. Others International training and On Job training

This initiative has proved to be useful for its officers and staff in participating effectively in the consultative process for the Authority, both through the preparation of consultation papers and analyzing feedback and responses received. This has also helped in developing the policy framework to address various issues which arise in regulating the telecom sector. 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. The Authority sponsors its officers for international trainings under the 'Institutional Capacity Building Project' for further developing their expertise within the organization.

4.17 Due to COVID-19 pandemics most of the trainings were conducted online rather than face-to-face trainings. These Training Programmes were, inter-alia, conducted by GSMA, International Telecommunications Union (ITU) and Asia Pacific Telecommunity (APT). The officers have received valuable inputs through these trainings which have enriched their skills in their respective area of regulatory work. The topics include Principles of Mobile Privacy, 5G-The Path to the Next Generation, Radio Signals and Health, Spectrum Management for Mobile Telecommunications, Regulatory Recommendations to sustain Connectivity during COVID-19 Crises, Responding to Disaster & Humanitarian Crises, Technical, business and regulatory aspects of 5G Network, IoT Advanced Applications: Smart City & Industry 4.0 etc.

(iv) Seminar / Workshops

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

(v) Office accommodation

4.19 As per the policy of the Government of India TRAI is an eligible office for Office Accommodation from Government pool. But, since its inception in 1997 TRAI has been functioning through rented accommodation. Presently, TRAI's office is situated in a building owned by MTNL on rental basis.

Government of India (GoI) through Department of Telecommunication (DoT) has approved the proposal for procurement of built-up Office Space for TRAI in upcoming World Trade Centre (WTC), Nauroji Nagar, New Delhi. TRAI has been allotted an area of 1,15,982 Sq. Ft. in the project that is under construction.

(vi) Residential quarters for TRAI staff

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

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

(vii) Medical facility to employees of TRAI after retirement:

4.21 Medical facility to employees of TRAI is governed by the Schedule II of TRAI (Salary, Allowance and other conditions of service of the officers and employees) Rules, 2002. TRAI had requested DoT for inclusion of medical facility to employees of TRAI after their retirement in the said rules.

Department of Telecommunications notified "Telecom Regulatory Authority of India (Salary, Allowances and other conditions of Service of the officers and employees) (Amendment) Rules, 2020" in the Gazette of India on 22nd December, 2020 vide which the officers and employees of the Authority, both serving and retired, have been made entitled to medical facilities.

(viii) Recreation Room for Women employees of TRAI:

4.22 The female officers and officials form a healthy chunk of the entire organisation. Therefore, a necessity to have a separate place for them to cater to their recreational needs was felt for a long time. In quest to fulfil this need, a new recreation room was created in the office premises for women employees which was inaugurated by Hon'ble Chairperson, TRAI and dedicated to all the female employees on the occasion of International Women Day celebrated on 8th March, 2021 in TRAI.





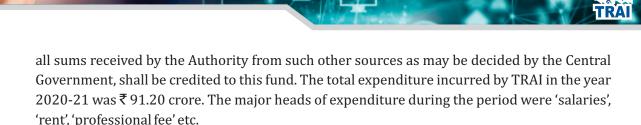


Recreation Room for women employees inaugurated by Hon'ble Chairperson, TRAI on International Women's Day held on $8^{\rm th}$ March, 2021

(d) FUNDING

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4.23 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



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.

(e) TRAI REGIONAL OFFICES

4.25 Authority had approved 11 (eleven) Regional Offices of TRAI at various locations across the country in the year 2012. The Authority reviewed the working of the Regional Offices and approved the closure of 5 Regional Offices located at Chandigarh, Patna, Mumbai, Guwahati and Lucknow and continuation of 6 (six) Regional Offices located at Hyderabad, Kolkata, Bengaluru, Bhopal, Jaipur and Delhi during 2014-15 with revised jurisdictions. These Regional Offices of TRAI are operating on Pilot Project basis under Plan Fund as part of the Capacity Building Project of TRAI. TRAI has decided to continue the 06 Regional Offices up to 31st March, 2022 as a part of capacity building Project. The locations of Regional Office with revised License – Service Areas covered (during 2020-21) are as follows: -

SN	Location of the 6	License Service Areas covered	
	TRAI Regional Offices	by each Regional Offices	
1	Kolkata	West Bengal, Kolkata, Northeast, Assam, Bihar	
2	Bengaluru	Karnataka, Kerala, Maharashtra, Mumbai	
3	Hyderabad	Andhra Pradesh, Tamilnadu including Chennai, Orissa	
4	Bhopal	Madhya Pradesh, UP (East), UP(West)	
5	Jaipur	Rajasthan, Gujarat, Haryana, Punjab	
6	Delhi	Delhi, Himachal Pradesh, Jammu & Kashmir	

Staff strength of TRAI Regional Offices (as on 31st March, 2021)

4.26 As on 31st March, 2021, the Staff strength of the TRAI (Regional Offices) was as under:

SL. NO.	POSTS	SANCTIONED	WORKING
1.	Advisors	06	03
2.	Jt. Advisor / Dy. Advisor	12	09
3.	Sr. Research Officer	12	8
4.	Assistant	06	2
	TOTAL	36	22



Sl No.	Location of Regional Office	Name of the Officer (S/Shri/Smt.)	Post	
1.	Hyderabad	A. Munisekhar	Advisor	9
2.	Bengaluru	Shreenivas S. Galgali	Advisor	
3.	Bhopal	Vinod Gupta	Advisor	
4.	Jaipur	Vacant	Advisor	
5.	Kolkata	Vacant	Advisor	
6.	Delhi	Vacant	Advisor	

- 4.28 A. The role and functions of the above Regional Offices (ROs) are:
 - (i) Ensuring compliance of Tariff related Guidelines & effective monitoring of Retail Tariff of Telecommunications, Broadcasting & Cable Services;
 - (ii) Proper coordination with Service Providers with regard to Regulatory and marketing aspects;
 - (iii) Monitoring of Quality of Service and handling of consumer grievance;
 - (iv) Organizing Open House Discussions (OHD) / Consumer Advocacy Groups (CAG) meetings of TRAI;
 - (v) Coordination & monitoring of Audit and Survey by Independent Agencies appointed by TRAI;
 - (vi) Development of CAG upto District / Block level and close interaction with CAGs;
 - (vii) Organizing Consumer Education Workshops;



- (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.

(f) RIGHT TO INFORMATION ACT

4.29 During the financial year 2020-21, total 730 applications were received 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.

(g) IS/ISO 9001:2015 CERTIFICATION TO TRAI

4.30 Telecom Regulatory Authority of India (TRAI) was awarded ISO 9001:2000 certificate in December, 2004 by the Bureau of Indian Standards (BIS). The certificate has been renewed in the year 2007, 2010, 2013, 2016. BIS while renewing in 2016 insisted for latest certification series of IS/ISO 9001:2015. Accordingly, TRAI obtained IS/ISO 9001:2015 certification in August, 2018. Thereafter, the Bureau of Indian Standards (BIS) has been carrying out its Surveillance audit of the Quality Management System (QMS) of TRAI on periodic basis.

(h) IMPLEMENTATION OF OFFICIAL LANGUAGE POLICY

4.31 An Official Language Section under the supervision of Secretary, TRAI is functioning in Telecom Regulatory Authority of India 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 communiqués, 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 Advisor (Administration). 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 Official Language policy in TRAI is also done and 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, 3 meetings of OLIC were held on 14th September, 2020, 30th December, 2020 and 30th March, 2021 respectively.

In compliance with the directives received from the Department of Official Language (Ministry of Home Affairs) and Department of Telecommunications, "Hindi Pakhwara" was organized in TRAI from 14th September, 2020 to 28th September, 2020, during which various Hindi competitions viz. Hindi Kahani-lekhan/Katha Vistar, Hindi Nibandh Lekhan, Hindi Quiz, Hindi Kavita Path Pratiyogita etc. and Hindi Nibandh Lekhan only for Group 'D' were organized through online mode. A number of officers up to the rank of Senior Research Officer and staff took part in the competition with great zeal and enthusiasm. On the occasion of Hindi Divas, a message from Chairperson, TRAI for ensuring the compliance of Official Language rules/regulations was circulated among the officers/staff.

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

With a view to facilitating 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 these workshops dictionaries, administrative glossaries, help/reference books etc. are distributed to the participants, which render them useful help while doing their official work in Hindi. During the period under report, three (03) Hindi workshops were organized on 09^{th} September, 2020, 31^{st} December, 2020 and 30^{th} March, 2021 respectively.





Hindi workshop organized on 9th September, 2020 hosted by Shri Kewal Krishna, Senior Technical Director (Senior), NIC, Delhi, to further strengthen the use of Hindi in TRAI.

(i) IMPLEMENTATION OF RESERVATION PRESCRIBED FOR RESERVED CATEGORIES

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

B) AUDITED ACCOUNTS OF TRAI FOR THE YEAR 2020-21

Separate Audit Report of the Comptroller & Auditor General of India on the Annual Accounts of Telecom Regulatory Authority of India for the year ended 31st March, 2021

- 1. We have audited the attached Balance Sheet of the Telecom Regulatory Authority of India as on 31st March, 2021 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 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 and the Income and Expenditure Account/Receipts and Payments Account dealt with by this report have been drawn up in the 'Uniform format of Accounts' approved by the Controller General of Accounts under Section 23 (1) of the Telecom Regulatory Authority of India Act, 1997 (as amended in January 2000)
 - iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Telecom Regulatory Authority of India as required under Section 23(1) of the Telecom Regulatory Authority of India Act, 1997 (as amended in January 2000) in so far as it appear from our examination of such books.
 - $iv. \quad \, Our \, observations \, on \, the \, annual \, accounts \, of \, TRAI \, are \, given \, in \, subsequent \, paragraphs.$

A. Balance Sheet

Current Liabilities and Provisions (Schedule 7)-₹36.93 Crore.

i) Other Current Liabilities-TRAI General Fund (EMD)

The above head is overstated by $\ref{22.45}$ lakh due to inclusion of EMDs pertaining to the period from 2004-05 to 2017-18. These EMDs need to be reviewed on case to case basis and written off, if required. This has also resulted in overstatement of deficit by the same amount.



ii) Provisions-Provisions for expenses

The above head is overstated by ₹ 3.45 crore due to inclusion of amounts which are very old pertaining to the period from 1997-98 to 2017-18. TRAI should review these balances and which needs to be reviewed and written off, if required. This has also resulted in overstatement of deficit by the same amount.

Assets

Fixed Assets (Schedule 8)-₹8.77 Crore

- i) The above head is understated by ₹ 16.98 lakh due to non- capitalization of e-Office (lite) version license purchased on 18th November 2020 for ₹ 18.33 lakh. This has also resulted in understatement of depreciation by ₹ 1.35 lakh and understatement of deficit by the same amount.
- ii) The above head is understated by ₹ 40.79 lakh due to non- capitalization of routers, switch and 8 small Form-Factor Pluggable Transceiver purchased through GEM on 16th March 2021.

B. Income & Expenditure

Expenditure

Depreciation (Schedule 8) - ₹ 1.61 Crore.

The above head is overstated by $\ref{23.15}$ lakh due to charging of depreciation for complete year instead of pro-rata in respect of mobiles, laptops, furniture &fixtures and vehicles purchased during the year. This has resulted in excess depreciation and overstatement of deficit by the same amount.

C. GRANTS IN AID

Out of the grants in aid of $\ref{110.84}$ crore (including unspent balance of $\ref{20.84}$ crore of the earlier year) received during the year, TRAI utilised a sum of $\ref{89.78}$ crore, leaving a balance of $\ref{21.06}$ crore, as unutilised grant as on 31^{st} March, 2021.

- i. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this Report are in agreement with the books of accounts.
- ii. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure-I to this Audit Report give a true and fair view in conformity with the accounting principles accepted in India:
 - a. In so far as it relates to the Balance Sheet, of the state of affairs of the Telecom Regulatory Authority of India as on 31st March, 2021; and
 - b. In so far as it relates to the Income and Expenditure Account of the Deficit for the year ended on that date.

For and on behalf of C&AG of India

-Sd/-(Manish Kumar) Director General of Audit (Finance & Communication)



Annexure-I to Separate Audit Report on the accounts of Telecom Regulatory Authority of India for the year ended 31st March 2021

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 upto March 2021 and got approved by the Secretary, TRAI. The Internal Audit System of the organization is adequate and commensurate with its size and nature of its 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.

3. System of Physical Verification of Fixed Assets.

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

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

4. System of Physical Verification of Inventory.

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

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

5. Regularity in payment of Statutory Dues.

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

-Sd/-(Manish Kumar) Director General of Audit (Finance & Communication)



-Sd/-Chairperson

-Sd/-Member

-Sd/-Secretary

-Sd/-Pr. Advisor (F&EA)

FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) TELECOM REGULATORY AUTHORITY OF INDIA BALANCE SHEET AS ON 31st March 2021

		REVENUE	NUE
		2020-21	2019-20
CORPUS/CAPITAL FUND	1	(4,99,11,135)	(3,92,85,802)
RESERVES AND SURPLUS	2		
EARMARKED/ENDOWMENT FUNDS	3	226,198,520	
SECURED LOANS AND BORROWINGS	4		
UNSECURED LOANS AND BORROWINGS	72		
DEFERRED CREDIT LIABILITIES	9		
CURRENT LIABILITIES AND PROVISIONS	7	36,92,99,430	43,04,71,351
TOTAL		54,55,86,815	39,11,85,549
ASSETS			
FIXED ASSETS	8	01000000	0226260
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	6	6,77,59,410	9,02,03,079
INVESTMENTS-OTHERS	10		
CURRENT ASSETS, LOANS, ADVANCES ETC	11		070 10 00 00
MISCELLANEOUS EXPENDITURE		45,76,47,005	30,09,21,870
(to the extent not written off or adjusted)			
TOTAL			
SIGNIFICANT ACCOUNTING POLICIES	24	54,55,86,815	39,11,85,549
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		



INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st March 2021 FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) TELECOM REGULATORY AUTHORITY OF INDIA

Incomp	Cohodulo	REVI	REVENUE
IIICOIIIE	- acinemie	Current Year 2020-21	Previous Year 2019-20
Income from Sales/Services	12		
Grants/Subsidies	13	000'00'00'06	000'00'00'06
Fee/Subscriptions	14	•	
Income from Investments (Income on Invest from earmarked /endow.	15		
Funds transferred to Funds			
Income for Royalty, Publication etc.	16		
Interest Earned	17	7,04,564	
Other Income	18	193,488	2,84,667
Increase(decrease) in stock of Finished goods and works-in-progress	19		
TOTAL(A)		90,08,98,052	90,02,84,667
EXPENDITURE			
Establishment Expenses	20	43.06.41.796	46.06.09.333
Other Administrative Expenses etc	21	46,47,68,002	44,36,29,717
Expenditure on Grants, Subsidies etc	22		
Interest	23	ı	
Depreciation (Net Total at the year end-corresponding to Schedule 8)		1,61,13,587	1,47,24,511
TOTAL (B)			1
Ralance being excess of Income over Expenditure (A-B)		91,15,23,385	91,89,63,561
Datailte being excess of income over tabelluluie (A-D) Transfer to Special Reserve (Specify each)			
Transfer to / from General Reserve			
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/CAPITAL FUND		(1 06 25 333)	(1 86 78 894)
SIGNIFICANT ACCOUNTING POLICIES	24	(00000000000000000000000000000000000000	
CONTINGENT LABILITIES AND NOTES ON ACCOUNTS	25		
-Sd/- Pr. Advisor (F&EA) Secretary	-Sd/- Member		-Sd/- Chairperson



SCHEDULE I - CORPUS/CAPITAL FUND

_	REVE	NUE
	Current Year 2020-21	Previous Year 2019-20
Balance as at the beginning of the year	(3,92,85,802)	(2,06,06,908)
Add:/Less Contributions towards Corpus/Capital Fund		
Add/(Deduct): Balance of net income/(expenditure)	(1,06,25,333)	(1,86,78,894)
transferred from the		
Income and Expenditure Account		
BALANCE SHEET AS AT THE YEAR-END	(4,99,11,135)	(3,92,85,802)

SCHEDULE 2 - RESERVES AND SURPLUS

	NON	-PLAN
	Current Year 2020-21	Previous Year 2019-20
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	-	-



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st March 2021 SCHEDULE 3 - EARMARKED/ENDOWMENT FUNDS TELECOM REGULATORY AUTHORITY OF INDIA

TOTAL

	Building Fund Fund Fund	REVI	REVENUE
	Fund XX YY ZZ	Current Year 2020-21	Current Year 2020-21 Previous Year 2019-20
a) Opening balance of the funds	1		
b) Additions of the funds:			
i. Donations/grants			
ii. Income from investments made on account of funds			
iii. Other additions (Misc income, receipt of advances)			
(iv) Funds Received from DOT for building	113,00,00,000		
TOTAL (a+b)	113,00,00,000		
c) Utilisation/exependiture towards objectives of funds			
i. Capital Expenditure			
- Fixed Assets		NIL	NIL
- Others			
Building advance NBCC			

ii. Revenue Expenditure

90,38,01,480

- Salaries, Wages and Allowances etc

- Rent

- Other Administrative Expenses

TOTAL (c)

Total

22,61,98,520 **NET BALANCE AS AT THE YEAR-END (a+b+c)**

90,38,01,480

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.



	REV	ENUE
	Current Year 2020-21	Previous Year 2019-20
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 ₹)

			(minount in v)
		REV	ENUE
		Current Year 2020-21	Previous Year 2019-20
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)	-	-
TC	TAL	-	-

Note: Amount due within one year.



	REV	ENUE
	Current Year 2020-21	Previous Year 2019-20
a) Acceptances secured by hypothecation of	-	-
capital equipment and other assets	-	-
b) Others	-	-
TOTAL	-	-

Note: Amounts due within one year.

SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS

		(Amount in ₹)
	REV	ENUE
	Current Year 2020-21	Previous Year 2019-20
A. CURRENT LIABILITIES		
1) Acceptances	-	-
2) Sundry Creditors	-	-
a) For Goods	-	-
b) Others	-	-
3) Advances Received	-	-
4) Interest accrued but not due on:	-	-
a) Secured loans/borrowings	-	-
b) Unsecured Loans/borrowings	-	-
5) Statutory Liabilities	-	-
a) Overdue	-	-
b) Others	-	-
6) Other current Liabilities	-	-
 For TRAI General Fund (EMD) 	57,01,871	79,92,575
2) For Telemarketers Registration Fees	1,78,302	1,78,302
For Customer Education Fees	15,631	5,46,363
4) Penalty from Telemarketers	92,00,000	7,93,30,015
TOTAL (A)	1,50,95,804	8,80,47,255
B. PROVISIONS		
1. For Taxation		
2. Gratuity	9,25,26,411	8,60,42,258
3. Superannuation/Pension		
4. Accumulated Leave Encashment	9,98,88,759	9,27,13,358
5. Trade Warranties/Claims		
6. Other(Specify)		
Provisions for expenses	16,17,88,456	16,36,68,480
TOTAL (B)	35,42,03,626	34,24,24,096
TOTAL (A+B)	36,92,99,430	43,04,71,351



SCHEDULE 8 - FIXED ASSETS

(Amount in ₹)

DESCRIPTION	GR	GROSS BLOCK			Ω	DEPRECIATION	z		NET BLOCK	OCK C
	Cost/valuation	Additions	Deductions (Additions Deductions Cost/valuation	As at the	Additions Deductions	eductions	Total up	As at the	As at the
	as at begining	during the	during	at the	begining of	during	during	to the	current	previous
	of the year	year	the year	year-ended	the year	the year	the year	year-end	year-end	year-end
A. FIXED ASSETS:										
1. LAND	•	•	•	•			•			
a) Freehold	1	•	•	•	•	•	•	,	•	
b) Leasehold	•	1	•	•	•	•	1	•	•	1
2. BUILDINGS										
a) On Freehold Land	•	•	•	•	•	•	•	•	•	•
b) On Leasehold Land	•	•	•	•	•	•	•	•	•	•
c) Ownership Flats/Premises	•	•		1	•	•	•	•	•	
d) Superstructures on land			•	•	•	•	•	•	•	•
not belonging to the entity										
3. PLANT MACHINERY & EQUIPMENTS	NTS -	•	•	٠	•	•	•	•		٠
4. VEHICLES	73,70,025	2,092,446		94,62,471	45,85,722	7,79,729		53,65,451	40,97,020	27,84,303
5. FURNITURE, FIXTURES	2,82,16,970	168,690		2,83,85,660	2,30,37,971	9,43,463		2,39,81,434	44,04,226	51,78,999
6. OFFICE EQUIPMENT	4,05,73,955	2,599,404		4,31,73,359	3,31,43,116	31,40,295		3,62,83,411	68,89,948	74,30,839
7. COMPUTER/PERIPHERALS	12,00,59,743	8,715,212		12,87,74,955	6,59,54,428	64,97,110		7,24,51,538	5,63,23,417	5,41,05,315
8. ELECTRIC INSTALLATIONS	1,17,35,827	•		1,17,35,827	87,07,858	4,48,525		91,56,383	25,79,444	30,27,969
9. LIBRARY BOOKS	44,34,192	13,366		44,47,558	43,70,332	31,435		44,01,767	45,791	63,860
11.AUDITORUM	2,20,90,493			2,20,90,493	44,18,099	42,73,030		86,91,129	1,33,99,364	1,76,72,394
TOTAL OF CURRENT YEAR	23,44,81,205 1,35,89,118	1,35,89,118	0	24,80,70,323	14,42,17,526	1,61,13,587	0	0 16,03,31,113	8,77,39,210	9,02,63,679
PREVIOUS YEAR	22,40,37,012 1,15,98,651	1,15,98,651	11,54,458	23,44,81,205	13,05,35,202	1,47,24,511 10,42,187 14,42,17,526	10,42,187	14,42,17,526	9,02,63,679	9,35,01,810
B.CAPITAL WORK-IN-PROGRESS										
TOTAL										



SCHEDULE 9 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS

(Amount in ₹)

	REVI	ENUE
	Current Year 2020-21	Previous Year 2019-20
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

	REVE	ENUE
	Current Year 2020-21	Previous Year 2019-20
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 11 - CURRENT ASSETS, LOANS, ADVANCES ETC

(Amount in ₹)

		REVENU	E
		Current Year 2020-21	Previous Year 2019-20
A. CU	IRRENT 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 m	onths -	-
	b) Others		
3.	Cash balances in hand (including cheques/drafts a	nd imprest) 26,385	66,822
4.	Bank Balances:		
	a) With Scheduled Banks		
	- On Current Accounts TRAI General fund	3,00,801	20,84,12,360
	- On Current Accounts Registration Fees	1,77,694	1,78,302
	Penalty from Telemarketers	15,318	5,46,363
	- On Savings Account Customer Education Fees		
	- On Savings Account Financial Disincentive	92,00,000	7,93,30,015
	b) With non-Scheduled Banks	43,65,00,000	
	- On Current Accounts		
	- On Deposit Accounts	-	-
	- On Savings	-	-
5.	Post Office-Savings Accounts	-	<u>-</u>
TOTA	L (A)	44,62,20,199	28,85,33,862

Contd.....



SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC

(Amount in ₹)

		REVENUE		
		Current Year 2020-21	Previous Year 2019-20	
B. LO	ANS, ADVANCES AND OTHER ASSETS			
1.	Loans			
a)	Staff			
b)	Other Entities engaged in activities/objectives similar to the	nat of Entity		
c)	Others (TA, LTC and Festival Advances to Officers & Staff)	31,11,912	30,93,074	
2.	Advance and other amounts recoverable in cash or in kind value to be received:	or for		
a)	On Captial Account			
b)	Prepayments	77,76,372	84,63,189	
c)	Others	, ,	, ,	
3.	Income Accrued			
	a) On Investments from Earmarked/Endowment Funds			
	b) On Investments-Others			
	c) On Loans and Advances	7,39,122	8,31,745	
	d) Others			
	(includes income due unrealised Rs.)			
5.	Claims Receivable			
TOTAL	(B)	1,16,27,406	1,23,88,008	
	(A+B)	45,78,47,605		



SCHEDULE 12 - INCOME FROM SALES/SERVICES

(Amount in ₹)

		REVENUE	
		Current Year 2020-21	Previous Year 2019-20
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)	-	-
TO	TAL	-	-

SCHEDULE 13 - GRANTS/SUBSIDIES

	REVENUE	
(Irrevocable Grants & Subsidies Received)	Current Year 2020-21	Previous Year 2019-20
1) Central Government	90,00,00,000	90,00,00,000
2) State Government(s)		
3) Government Agencies		
4) Institutions/Welfare Bodies		
5) International Organisations		
6) Other (Swach Bharat)		
TOTAL	90,00,00,000	90,00,00,000

SCHEDULE 14 - FEES/SUBSCRIPTIONS

(Amount in ₹)

		REVE	REVENUE	
		Current Year 2020-21	Previous Year 2019-20	
1.	Entrance Fees	-	-	
2.	Annual Fees/Subscriptions	-	-	
3.	Seminar/Program Fees	-	-	
4.	Consultancy Fees	-	-	
5.	Others(specify)	-	-	
TO	OTAL			

Note: Accounting Policies towards each item are to be disclosed



SCHEDULE 15 - INCOME FROM INVESTMENTS

(Amount in ₹)

(Income on Investment from Earmarked/	REVE	NUE
Endowment Funds Transferred to Funds)	Current Year 2020-21	Previous Year 2019-20
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

(Amount in ₹)

		(imiouni ii i)
(Income on Investment from Earmarked/	REVE	NUE
Endowment Funds Transferred to Funds)	Current Year 2020-21	Previous Year 2019-20
1. Income from Royalty	-	-
2. Income from Publications	-	-
3. Others(specify)	-	-
TOTAL	-	-

SCHEDULE 17 - INTEREST EARNED

	REVENUE	
	Current Year 2020-21	Previous Year 2019-20
1) On Term Deposits	-	-
a) With Scheduled Banks	-	-
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Others	7,04,564	-
2) On Savings Account	-	-
a) With Scheduled Banks	-	-
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Others	-	-
3) On Loans	-	-
a) Employees/Staff	-	-
b) Others	-	-
4) Interest on Debtors and Other Receivables	-	-
TOTAL	7,04,564	-

Note - Tax deducted at source to be indicated



(A	m	O	un	t	in	₹۱

	REVENUE	
	Current Year 2020-21	Previous Year 2019-20
1. Profit on Sale/disposal of Assets		
a) Owned assets	175,507.00	2,68,354.00
b) Assets acquired out of grants,or received free of	of cost	
2. Export Incentives realized		
3. Fees for Miscellaneous Services		6,169.00
4. Miscellaneous Income	17,981.00	10,144.00
5. Registration Fees from Telemarketers		
6. Customer Education Fees from Telemarketers		
7. Penalty from Telemarketers		
8. Financial Disincentive		
TOTAL	193,488.00	2,84,667.00

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

	REV	REVENUE	
	Current Year 2020-21	Previous Year 2019-20	
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

	NON-PLAN	
Cur	rent Year 2020-21	Previous Year 2019-20
a) Salaries and Wages	35,23,25,335	36,25,10,401
b) Allowances and Bonus	4,70,913	4,63,478
c) Contribution to Provident Fund	1,93,28,583	1,64,26,839
d) Contribution to Other Fund(specify)		
e) Staff Welfare Expenses	10,52,062	7,39,635
f) Expenses on Employees Retirement and Terminal Benefit	s 4,22,46,667	6,92,19,643
g) Others (LTC, Medical to Officers & Staff and OTA to Staff)	1,52,18,236	1,12,49,337
TOTAL	43,06,41,796	46,06,09,333



SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC

(Amount in ₹)

	REV	VENUE
	Current Year 2020-21	Previous Year 2019-20
a) Purchases		
b) Labour and processing expenses		
c) Cartage and Carriage Inwards		
d) Electricity and power	19,75,235	29,33,360
e) Water charges		
f) Insurance and bank charges	1,95,686	1,77,864
g) Repairs and maintenance	1,06,68,605	1,74,87,809
h) Excise Duty		
i) Rent, Rates and Taxes	30,01,02,796	28,77,12,415
j) Vehicles Running and Maintenance	14,74,332	19,48,180
k) Postage, Telephone and Communication Charges	1,16,51,249	68,41,990
l) Printing and Stationery	17,83,148	42,26,092
m) Travelling and Conveyance Expenses	2,22,98,087	5,06,66,397
n) Expenses on Seminar/Workshops	1,30,333	62,77,076
o) Subscription Expenses	57,15,398	56,72,528
p) Prior period expenses	-528,240	-5,68,38,592
q) Auditors Remuneration	1,90,000	1,90,000
r) Hospitality Expenses	4,90,794	11,67,139
s) Professional Charges	4,22,04,312	4,08,80,848
t) Consultation and training	2,63,19,680	3,65,33,080
u) Swach Bharat expenses		
v) loss on sale of assets		
w) Freight and Forwarding Expenses		
x) Software develop expenses		
y) Advertisement and Publicity	25,35,500	47,14,834
z) Others		
(i) Others (Payment to Security, Housekeeping etc	3,75,61,087	3,30,38,697
TOTAL	46,47,68,002	44,36,29,717



SCHEDULE 22 - EXPENDITURE ON GRANTS, SUBSIDIES ETC

(Amount in ₹)

	RE	VENUE
	Current Year 2020-21	Previous Year 2019-20
a) Grants given to Institutions/Organisations	-	-
b) Subsidies given to Institutions/Organisations	-	-

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

SCHEDULE 23 - INTEREST

	RE	VENUE
	Current Year 2020-21	Previous Year 2019-20
a) On Fixed Loans	-	-
b) On Other Loans(including Bank Charges)	-	-
c) Others (specify)	-	-
TOTAL	-	-



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) TELECOM REGULATORY AUTHORITY OF INDIA RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 31st March 2021

	REV	REVENUE		REVENUE	NUE
RECEIPTS CU	Current Year P 2020-21	Previous Year 2019-20	PAYMENTS	Current Year 2020-21	Previous Year 2019-20
I. Opening Balance a) Cash in hand i) In current accounts	66,822 20,84,12,360	51,388 28,45,83,956	I Expenses a) Establishment Expenses (corresponding to Schedule 20) b) Administrative expenses (corresponding to Schedule 21)	41,30,18,567 47,12,79,323	44,19,80,936 52,64,72,712
ii) In deposit accounts iii) Savings accounts penalty registration fees customer education fees Financial disincentive II. Grants Received	5,46,363 1,78,302 7,93,30,015	10,85,281 53,15,405 6,33,07,463	II Payments made against funds for various projects (Name the fund or project should be shown along with the particulars of payments made for each project) Payments made for Swach Bharat III. Investments and deposits made a) Out of Earmarsked/Endowment funds	90,38,01,480	
b) From State Government c) From other sources (details shown separately) III. Income on Investments from a) Earmarked/Endowment Funds b) Own Funds (Other Investment)	\leftarrow		b) Out of Own Funds(investments-Others) IV. Expenditure on Fixed Assets & Capital Work-in-progress a) Purchase of Fixed Assets b) Expenditure on Capital Work-in-progress V. Refund of surplus money/Loans a) To the Government of India	22,61,98,520 s 21,03,01,480 1,35,89,118	1,15,98,651
a) On Bank Deposit b) Loans, Advances etc.			b) To the State Government c) To DOT for Telemarketer Registration fees To DoT for Customer education fees To DoT for Penalty from Telemarketeres To DoT for Financial Disincentive	5,108 5,46,363 7,93,30,015	53,15,405 10,85,281 6,33,07,463
c) Miscellaneous V Other Income(Specify) To Miscellaneous Income	7,21,728	16,313	VI. Finance Charges(Interest) VII. Other Payments(Specify) Loans and advances and security deposits	22 90 705	831306
VI Amount Borrowed VII. Any other receipts(give details)	ls)		VIII. Closing Balances a) Cash in hand b) Bank Balances	26,385	66,822
To Security Deposits other advances To Sale of Assets	7,60,602	43,30,506 3,80,624	1) In current accounts TRAI General fund i) In current accounts Registration fees ii) In deposit accounts 2) Savines accounts	3,00,801 1,77,694	20,84,12,360 1,78,302
To registration fees To customer education fees To penalty from telemarketers To financial disincentive	1,39,382 5,108 15,631 92,00,000	1,78,302 5,46,363 7,93,30,015	i) customer education fees ii) penalty from telemarketers iii) financial disincentive	15,318 92,00,000	5,46,363
TOTAL	233,00,80,877	133,91,25,616		233,00,80,877	133,91,25,616



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 23rd July 2007 for Revenue Head.
- (b) Accounts have been prepared on accrual basis for the current year i.e., 2020-21. 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. 2-1/97-LAN dated 04th May 2007 to provide/write off these handsets in three years on the same pattern as DoT. Accordingly depreciation on Mobile Handsets from the year 2007-08 onwards have been charged off @ 33.33%.

- (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.

5 Retirement Benefits:

- (a) Provision for Leave Salary and Pension Contribution up to 31.03.21 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 2020-21 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)

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 2020-21, a sum of ₹ 90.00 crores have been received as Government Grant from DoT for meeting the day to day expenses in TRAI.

5 Earmarked Grant:

From time to time, TRAI was requesting the Ministry of Communication for alloting of funds for Office space. On 26^{th} November, 2020. DoT vide letter no 15-11/2012-Restg conveyed TRAI regarding the administrative approval of the Competent authority for an area of 1,15,188/ sq. feet for Office space. Thereafter vide letter no 1-15/2021-B/313 DoT conveyed the sanction for ₹113 crore for allotment of Building funds. The said money was received in the month of Febuary 2021 and a sum of ₹90,38,01,480.00 was paid to NBCC for construction of office space for TRAI. The said building fund and its utilization has been disclosed in schedule 3 of the Balance sheet.

6 Previous year figures:

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



7 Transactions in Foreign Currencies:

Expenditure in Foreign Currency: NIL

(a) Travel: Nil

A sum of ₹54,35,575.00 was paid for participation

fees for foreign institutions

(b) Remittances and Interest payment to Financial Institution, Banks in Foreign Currency Nil

(c) Other Expenditure: Nil

Schedules 1 to 25 are annexed to and form an integral part of the Balance Sheet as at 31st March, 2021 and the Income and Expenditure Account for the year ended on that date.

-Sd/- -Sd/- -Sd/- -Sd/Pr. Advisor (F&EA) Secretary Member Chairperson

C) AUDITED CONTRIBUTORY PROVIDENT FUND ACCOUNTS OF TRAI FOR THE YEAR 2020-21

Peparate Audit Report on the Annual Accounts of Telecom Regulatory Authority of India-Contributory Provident Fund Account for the year ended 31st March, 2021.

1. INTRODUCTION

We have audited the attached Balance Sheet of the Telecom Regulatory Authority of India-Contributory Provident Fund Account as on 31st March, 2021 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. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements, read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure-I to this Audit Report, give a true and fair view in conformity with the accounting principles accepted in India:
 - a. In so far as it relates to the Balance Sheet of the state of affairs of the Telecom Regulatory Authority of India-Contributory Provident Fund Account as on 31^{st} March, 2021; and
 - b. In so far as it relates to the Income and Expenditure Account of the 'Excess of Income over Expenditure' for the year ended on that date.

-Sd/-(Manish Kumar) Director General of Audit (Finance & Communication)



Annexure-I to Separate Audit Report

Telecom Regulatory Authority of India-Contributory Provident Fund Account for the year ended 31st March, 2021

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

(1) Adequacy of Internal Audit System

The Internal Audit Report of TRAI-CPF accounts are available upto February, 2021 and got approved by Secretary, TRAI. The internal Audit of TRAI-CPF Accounts were conducted online for March, 2021. 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/-(Manish Kumar) Director General of Audit (Finance & Communication)



An evaluation of the Internal Control System existing in Telecom Regulatory Authority of India (TRAI)-CPF Account was done during the course of certification of the annual accounts of TRAI for the year 2020-21 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 10 April 2003. TRAI has a total sanctioned strength of 237 and 180 men in position. Out of this, 48 are on deputation and 113 are on regular strength as on 31.03.2021. The deductions from salary on account of GPF/EPF/CPF (as the case may be) are made from the employees on deputation and are remitted to their parent offices as per terms and conditions of their appointment. In the case of regular staff of TRAI, CPF deductions are made from their salary as per the CPF Rules and employees' as well as employer's contributions are remitted to TRAI-CPF Account, by TRAI on a month to month basis along with the details of deduction of each employee.

2. Organizational Setup

TRAI-CPF Account has no separate employees on its own. The entire work of maintenance of TRAI-CPF Account is done by the Board of Trustees, which is constituted from the employees of TRAI only. As per decision taken by the TRAI Authority, the Dy. Advisor (F&EA) is the Secretary to the Board of Trustees. The following are the trustees of the Board:

(i) Advisor (Administration) : President (Ex-officio) TRAI CPF Trust

(ii) Joint Advisor (HR) : Trustee (Ex-officio)

(iii) Dy Advisor (NSL-II) : Trustee

(iv) Assistant (QoS) : Trustee

(v) Dy. Advisor (F&EA) : Secretary, CPF

The Secretary to the Board of Trustees is responsible for maintenance of Accounts of the TRAI-CPF Account and conducting the meetings of the Board of Trustees. All decisions of the Board of Trustees are taken in their periodical meetings.

3. Scope and independence of Internal Audit

TRAI has its own Internal Audit division headed by Technical Officer (IAU). The reports of Internal Audit, including CPF-Accounts, are submitted to the Secretary for approval and are thereafter forwarded to the respective divisions for necessary corrective measures. The actions taken by the divisions are monitored continuously and regularly.



4. Receipts and Disbursement of Funds

The work relating to receipt and disbursement of the funds is done by a Section Officer under the supervision of Secretary to the Board of Trustees. No cash transaction is done in TRAI-CPF Account as all receipts and payments are made through cheques only. Receipt of CPF deductions from TRAI and payments made to the members of TRAI-CPF Account, if any, on account of CPF withdrawal or advance are regularly recorded in bank book.

5. Investments

The funds of TRAI-CPF Account are invested in various Securities as per Government norms. The interests accrued/ received on these securities are credited in interest income. The decisions of making investments are taken in the periodical meetings of Board of Trustees.

6. Interest

Interest on the CPF deposits of the members is credited to their individual accounts at the rate specified by the Central Government from time to time for the payment of interest on subscriptions to the General Provident Fund. Deficit, if any, in the interest payable to the members is met from TRAI General Fund.

7. Withdrawal/Advance of CPF

The members of TRAI-CPF Account are entitled for withdrawal or for temporary advance out of their balance as per the guidelines of CPF Rules. In the case of advances given to the members, the Drawing and Disbursement Officer of TRAI is informed regarding the monthly deductions to be made from salary of the concerned members towards recovery of advances.

-Sd/-(Manish Kumar) Director General of Audit (Finance & Communication)



THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 31st March, 2021 FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

(Amount in ₹)

D						
	Income			Schedule	Current Year 2020-21	Previous Year 2019-20
OPT 20	Income from Sales/ Services Grants/ Subsidies Fee/Subscriptions	Se		12 13 14		
	Income from Investments (Income on Invest Funds transferred to Funds)	Income on Invest from earmarked /endow.s)	ed /endow.	15	12,290,199.14	10,418,150.64
1	Income for Koyalty ,Publication etc Interest Earned Other Income Increase(decrease) in stock of Finis	Income for Koyalty ,Publication etc Interest Earned Other Income Increase(decrease) in stock of Finished goods and works-in-progress	-nropress	16 17 18	8,060,553.00 188,763.00	7,787,673.00
	TOTAL (A)	0		i	20,539,515.14	18,205,823.64
	EXPENDITURE Establishment Expenses Other Administrative Expenses etc	nses etc scidies etc		20 21 22	77,864.90	767,705.72
	Interest Diminution Value of Investments in Mutual Funds	ments in Mutual Funds	ر میں در میں	23.1	18,526,682.00	18,140,190.00
	Depreciation (ivet fotal at t TOTAL (B)	Depreciauon (ivet 10tal at the year end-corresponding to schedule o) TOTAL (B)	cnedule o)		18,604,546.90	18,907,895.72
	Balance being excess of Income o Transfer to Misc Expenditure to t Diminution Value of Investments	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	on account of		1,934,968.24	-702,072.08
	Transfer to / from General Reserve	Reserve			1,934,968.24	-702,072.08
	Balance being Surplus/ (Deficit) carrie SIGNIFICANT ACCOUNTING POLICIES CONTINGENT LABILITIES AND NOTES	Balance being Surplus/ (Deficit) carried to Corpus/ Capital Fund SIGNIFICANT ACCOUNTING POLICIES CONTINGENT LABILITIES AND NOTES ON ACCOUNTS	Fund	24 25		
	Sd/- Meetu Gulati Dy. Advisor (F&EA) Secretary (CPF)	Sd/- Reshma S. Usmani Asstt. (QoS) Trustee	Sd/- Sonia Madan Dy. Advisor (NSL-II) Trustee	E J	Sd/- S.K. Dutta Jt. Advisor (HR) Ex-Officio Trustee	Sd/- Sanjeev Kumar Sharma Advisor (Admin) Ex-Officio President



THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) BALANCE SHEET AS AT 31st March, 2021

(Amount in ₹)

CORPUS/CAPITAL FU	CORPUS/CAPITAL FUND AND LIABILITIES	Schedule		Current Year 2020-21	Previous Year 2019-20
TRAI - CPF MEMBERS' ACCOUNT RESERVES AND SURPLUS EARMARKED/ ENDOWMENT FUNDS SECURED LOANS AND BORROWINGS UNSECURED LOANS AND BORROWINGS	ACCOUNT SIS MENT FUNDS CORROWINGS D BORROWINGS	1 2 8 4 12		292,965,139.00 6,388,213.50	260,833,399.00 4,453,245.26
DEFERRED CREDIT LIABILITIES CURRENT LIABILITIES AND PROVISIONS TOTAL	BILITIES AND PROVISIONS	9		440,226.00 299,793,578.50	4,871,152.00
ASSETS FIXED ASSETS INVESTMENTS-FROM EARMARKED/ENDO INVESTMENTS - OTHERS CURRENT ASSETS, LOANS, ADVANCES ETC MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)	ASSETS FIXED ASSETS INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS INVESTMENTS - OTHERS CURRENT ASSETS, LOANS, ADVANCES ETC MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)	8 9 10 11	0.1	280,600,000.00 19,193,578.50	250,202,274.00 19,955,522.26
TOTAL SIGNIFICANT ACCOUNTING POLICIES CONTINGENT LIABILITIES AND NOTE	TOTAL SIGNIFICANT ACCOUNTING POLICIES CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	24	4.10	299,793,578.50	270,157,796.26
Sd/- Meetu Gulati Dy. Advisor (F&EA) Secretary (CPF)	Sd/- Reshma S. Usmani Asstt. (QoS) Trustee	Sd/- Sonia Madan Dy. Advisor (NSL-II) Trustee	Jt. Ex-(Sd/- S.K. Dutta Jt. Advisor (HR) Ex-Officio Trustee	Sd/- Sanjeev Kumar Sharma Advisor (Admin) 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 ON 31st MARCH, 2021

SCHEDULE 1 - TRAI - CPF MEMBERS' ACCOUNT

(Amount in ₹)

Previous Year

	Current Year 2020-21	Previous Year 2019-20
Balance as at the beginning of the year	260,833,399.00	218,732,073.00
Deduct: Adjustments for previous year		
Add: Contributions towards Members' Account	32,131,740.00	42,101,326.00
Add/(Deduct): Balance of net income/(expenditure)		
transferred from the		
Income and Expenditure Account		
BALANCE AS AT THE YEAR-END	292,965,139.00	260,833,399.00

SCHEDULE 2 - RESERVES AND SURPLUS

Current Year

		2020-21	2019-20
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	4,453,245.26	5,155,317.34
	Addition during the year	1,934,968.24	
	Less: Deductions during the year		-702,072.08
)TAL	6,388,213.50	4,453,245.26



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH, 2021

SCHEDULE 3 - EARMARKED/ ENDOWMENT FUNDS

(Amount in ₹)

		Current Year 2020-21	Previous Year 2019-20
b) Ade i. ii.	ening balance of the funds ditions of the funds: Donations/grants Income from investments made on account of funds Other additions (specify nature)		
i.	lisation/exependiture towards objectives of fund Capital Expenditure - Fixed Assets - Others Total Revenue Expenditure - Salaries,Wages and allowances etc - Rent - Other Administrative expenses	ls	

NET BALANCE AS AT THE YEAR-END (a+b+c)

Notes

- 1) Disclosures shall be made under relevant head based on conditions attached to the grants.
- 2) Plan funds received from the Central/State Governments are to be shown as separate funds and not to be mixed up with any other Funds.



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH, 2021

SCHEDULE 4 - SECURED LOANS AND BORROWINGS

(Amount in ₹)

	/
/	



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH, 2021

SCHEDULE 5 - UNSECURED LOANS AND BORROWINGS

(Amount in ₹)

		Current Year 2020-21	Previous Year 2019-20
1.	Central Government		
2.	State Government (Specify)		
3.	Financial Institutions	/	
4.	Banks	/	
	a) Term Loans		
	-Interest accrued and due		
	b) Other-Loans(Specify		
	-Interest accrued and due		
5.	Other Institutions and Agencies		
6.	Debentures and Bonds	/	
7.	Others(Specify)	/	
		/	
		/	/

TOTAL

Note: Amount due within one year

SCHEDULE 6 - DEFERRED CREDIT LIABILITIES

(Amount in ₹)

		,
	Current Year 2020-21	Previous Year 2019-20
a) Acceptances secured by hypothecation of capital equipment and other assets		
b) Others		
TOTAL		

Note: Amounts due within one year



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH, 2021

SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS

	Current Yea 2020-21	r Previous Year 2019-20
A. CURRENT LIABILITIES		1 1
1) Acceptances		
2) Sundry Creditors		
a) For Goods		
b) Others		
3) Advances Received		
4) Interest accrued but not due on:		
a) Secured loans/borrowings		
b) Unsecured Loans/borrowings		
5) Statutory Liabilities		
a) Overdue		
b) Others		
6) Other current Liabilities		
TOTAL (A)		
B. PROVISIONS		
1. For		
2. Gratuity		
3. Superannuation/Pension	306,919.00	4,838,382.00
4. Accumulated Leave Encashment		
5. Trade Warranties/Claims		
6. Other (Payable to MEA/TRAI)	133,307.00	32,770.00
TOTAL (B)	440,226.00	4,871,152.00
TOTAL (A+B)	440,226.00	4,871,152.00



THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH, 2021 FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

SCHEDULE 8 - FIXED ASSETS

			GROSS BLOCK	*		DESCRIPTION	PTION		NET B	NET BLOCK	
SCHE	SCHEDULE	"Cost/valuationas Additions Deductions Cost/ As at the On On Total up As at the As at the at beginning during the during the valuation beginning Additions Deduction to the current previous of the year year year year year year ended year year end end end	s Additions during the	Deductions during the year	Cost/ valuation at the year ended	As at the beginning of the year	Cost/ As at the On On Total u valuation beginning Additions Deduction to the at the year of the during the during the year ended year year end	On T Deduction during the year	Fotal up to the year end	Total up As at the As at the to the current previous; year year year end end	As at the previous year end
A. FE	A. FIXED ASSETS:										,
1.	1. LAND									\	\
	a) Freehold										
	b) Leasehold								\	\	
2.	BUILDINGS								\		
	a) On Freehold Land										
	b) On Leasehold Land							\			
	c) Ownership Flats/Premises										
	d) Superstructures on land						\				
	not belonging to the entity						\				
3.	PLANT MACHINERY & EQUIPMENT	T				\					
4.	VEHICLES					\					
5.	FURNITURE, FIXTURES				\						
.9	_				\						
7.	COMPUTER/PERIPHERALS			\							
89	ELECTRIC INSTALLATIONS		\	\							
9.	LIBRARY BOOKS										

(Note to be given as to cost of assets on hire purchase basis included above)

B. CAPITAL WORK-IN-PROGRESS

TOTAL

11. OTHER FIXED ASSETS TOTAL OF CURRENT YEAR

PREVIOUS YEAR

10. TUBEWELLS & WATER SUPPLY



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH, 2021

SCHEDULE 9 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS

		(Amount in ₹)
	Current Year 2020-21	Previous Year 2019-20
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 3)
		Current Year 2020-21	Previous Year 2019-20
1.	In Government Securities	186,500,000.00	131,000,000.00
	- Long - term Investments		
	- Current Investments		
2.	Other Approved Securities		
3.	Shares		
4.	Debentures and Bonds		
5.	Subsidiaries and Joint Ventures		
6.	Others (Fixed Deposits in Banks/PSU) - Long - term	94,100,000.00	119,202,274.00
TO)TAL	280,600,000.00	250,202,274.00



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH, 2021 SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC

(Amount in ₹)

				Current Year 2020-21	Previous Year 2019-20
A.	CU	RRI	ENT ASSETS:		
	1	T			
	1.		ventories		
		a)	Stores and Spares		
		c)	Stock-in-trade		
			Finished Goods		
			Work in progress		
			Raw Material		
	2.	Su	ndry Debtors:		
		a)	Debts Outstanding for a period exceeding six mon	iths	
		b)	Others		
	3.	Ca	sh balances in hand (including cheques/drafts and	l imprest)	
	4.	Ba	nk Balances:		
		a)	With Scheduled Banks		
			- On Current Accounts		
			- On Deposit Accounts (includes margin money)	-	-
			- On Savings Account	5,014,663.09	9,874,490.93
		b)	With non-Scheduled Banks		
			- On Current Accounts		
			- On Deposit Accounts		
			- On Savings Account		
	5.	Po	st Office-Savings Accounts		
TO	TAL		-	5,014,663.09	9,874,490.93

Contd.....



FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH, 2021

SCHEDULE 11 - CURRENT ASSETS, LOANS, ADVANCES ETC

(Amount in ₹)

Current Year	Previous Year
2020-21	2019-20

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
- 3. Income Accrued
 - a) On Investments from Earmarked/Endowment Funds
 - b) On Investments Others

14,178,915.41 10,081,031.33

- c) On Loans and Advances
- d) Others (includes income due unrealised Rs.)

4. Claims Receivable -

TOTAL (B)	14,178,915.41	10,081,031.33
TOTAL (A+B)	19,193,578.50	19,955,522.26



SCHEDULE 12 - INCOME FROM SALES/SERVICES

(Amount in ₹)

	Current Year 2020-21	Previous Year 2019-20
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)	/	/

SCHEDULE 13 - GRANTS/SUBSIDIES

	Current Year 2020-21	Previous Year 2019-20
(Irrevocable Grants & Subsidies Received)	/	
1) Central Government		
2) State Govenemnt(s)		
3) Government Agencies		
4) Institutions/Welfare Bodies	/	
5) International Organisations		
6) Other (Specify)	/	/



SCHEDULE 14 - FEES/ SUBSCRIPTIONS

(Amount in ₹)

	Current Year 2020-21	Previous Year 2019-20
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 ₹)

(Income on Invest. from Earmarked/Endowment Funds Transferred to Funds)	Current Year 2020-21	Previous Year 2019-20
1) Interest		_
a) On Govt Securities	12,290,199.14	10,418,150.64
b) Other Bonds/Debentures		
2) Dividends		
a) On Shares		
b) On Mutual Fund Securities		
3) Rents		
4) Others		
TOTAL	12,290,199.14	10,418,150.64

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, 2021

SCHEDULE 16 -INCOME FROM ROYALTY, PUBLICATION ETC

(Amount in ₹)

	Current Year 2020-21	Previous Year 2019-20
1. Income from Royalty		
2. Income from Publications		
3. Others (Specify)		
TOTAL	,	<u> </u>

SCHEDULE 17 - INTEREST EARNED

		(mount m v)
	Current Year 2020-21	Previous Year 2019-20
1) On Term Deposits		
a) With Scheduled Banks	7,883,605.00	7,593,493.00
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
2) On Savings Account		
a) With Scheduled Banks	176,948.00	194,180.00
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	8,060,553.00	7,787,673.00



SCHEDULE 18 - OTHER INCOME

(Amount in ₹)

		Current Year 2020-21	Previous Year 2019-20
1.	Profit on Sale/ Disposal of Assets		
	a) Owned assets		
	b) Assets acquired out of grants,or received free of cost		
2.	Export Incentives realized		
3.	Fees for Miscellaneous Services		
4.	Miscellaneous Income	188,763.00	
TC	TAL	188,763.00	

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

	Current Year 2020-21	Previous Year 2019-20
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

	Current Year 2020-21	Previous Year 2019-20
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 Ber	nefits /	
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, 2021

SCHEDULE 21-OTHER ADMINISTRATIVE EXPENSES ETC (Amount in ₹)

		(Amount m \)
	Current Year 2020-21	Previous Year 2019-20
a) Purchases		
b) Labour and processing expenses		
c) Cartage and Carriage Inwards		
d) Electricity and power		
e) Water charges		
f) Insurance		
g) Repairs and maintenance		
h) Excise Duty		
I) Rent, Rates and Taxes		
j) Vehicles Running and Maintenance		
k) Postage, Telephone and Communication Charges		
l) Printing and Stationery		
m) Travelling and Conveyance Expenses		
n) Expenses on Seminar/Workshops		
o) Subscription Expenses		
p) Expenses on Fees		
q) Auditors Remuneration		
r) Hospitality Expenses		
s) Professional Charges		
t) Provision for Bad and Doubtful Debts/Advances		
u) Irrecoverable Balances Written-off		
v) Packing Charges		
w) Freight and Forwarding Expenses		
x) Distribution Expenses		
y) Advertisement and Publicity		
z) Others		
DLIS		
Bank & Finance Charges	77,864.90	767,705.72

767,705.72

77,864.90

TOTAL



SCHEDULE 22-EXPENDITURE ON GRANTS, SUBSIDIES ETC (Amount in ₹)

	Current Year 2020-21	Previous Year 2019-20
a) Grants given to Institutions/Organisationsb) 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

	Current Year 2020-21	Previous Year 2019-20
a) On Fixed Loans		
b) On Other Loans(including Bank Charges)		
a) Others (specify) - Interest Payable to Members	18,526,682.00	18,140,190.00
FINANCE CHARGES		
TOTAL	18,526,682.00	18,140,190.00



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., 2020-21. There is no change in Method of Accounting from the preceding year.
- iii) Investments depicted in Schedule 10 (Investments Others) are carried at cost.

SCHEDULE 25 - CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS

Contingent Liabilities:

1 Claims against the Entity not acknowledged as debts NIL.

Notes on Accounts

- 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.
- Investments depicted in Schedule 10 (Investments Others) include investment in Government Securities amounting to $\stackrel{?}{\stackrel{\checkmark}{}}$ 18,65,00,000.00 and Others (FDs in Banks/ PSUs) amounting to $\stackrel{?}{\stackrel{\checkmark}{\stackrel{}}}$ 9,41,00,000.00.
- 3 The withdrawal/advances santioned during the year amounts to ₹49,56,199.00. Interest paid to members amounts to ₹1,85,26,682.00 and Refund of the advances amounts to ₹6,42,450.00.
- "Provision depicted in Schedule 7 (Current Liabilites and Provisions) include a) An amount of ₹ 3,06,919/-, as the subscription available in his CPF account along with interest, of Shri Om Prakash Giri, Ex-Driver, who was removed from the services of TRAI has been shown as payable to Members. b) An amount of ₹ 1,33,307/- dues payable to TRAI by Shri Om Prakash Giri, Ex-Driver, has been made a provision from his CPF account as payable to TRAI. c) An amount of ₹1,88,763/- the remaining TRAI Contribution along with interest available in his CPF account, after adjusting his dues payable to TRAI, has been transferred to Misc. Income account."
- 5 Corresponding figures for the previous year have been re-grouped/ re-arranged wherever necessary.

Sd/-Meetu Gulati Dy. Advisor (F&EA) Secretary (CPF) Sd/-Reshma S. Usmani Asstt. (QoS) Trustee

Sd/-Sonia Madan Dy. Advisor (NSL-II) Trustee Sd/-S.K. Dutta Jt. Advisor (HR) Ex-Officio Trustee Sd/-Sanjeev Kumar Sharma Advisor (Admin) Ex-Officio President



THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS) RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-MAR-2021

_							
DEDO	RECEIPTS	Current Year 1 2020-21	Previous Year 2019-20	PAYMENTS		Current Year 2020-21	Previous Year 2019-20
DT 0000 04	I. Opening Balance a) Cash in hand b) Bank Balances i) In current accounts ii) In deposit accounts iii) Savings accounts	9,874,490.93	721,450.87	a) Establishment Expenses b) Administrative Expenses i) Bank Charges & Finance Charges II Payments made against funds for various projects (Name the fund or project should be shown along with the particulars of payments made for each project) III. Investments and Deposits made	arges ds for various projects lld be shown along with de for each project) i made	359.90 3,540.00 75,735.00	767,705.72
	c) From State Government. C) From Other Sources (Details) (Grants for capital & revenue exp to shown seperately) III. Income on Investments from a) Earmarked/ Endow Funds b) Own Funds (On Investment in Mutual Funds) IV. Interest Received	o shown seperately ı lutual Funds)	(c	a) Out of Cwn Funds (Investment Junus) b) Out of Own Funds (Investments - Others) (Investments - Flexi Account) IV. Expenditure on Fixed Assets & Capital Work-in-progress a) Purchase of Fixed Assets b) Expenditure on Capital Work-in-progress V. Refund of surplus monev/Loans	unds (Investments - Others) unds (Investments - Others) on Fixed Assets & Capital Work-in-pro Fixed Assets on Capital Work-in-progress on Capital Work-in-progress	00'000'00	116,900,000.00
	a) On Bank Deposits b) Loans, Advances etc. c) Miscellaneous d) interest on savings V. Other Income (Specify)	5,184,262.00 10,891,658.06 176,948.00	7,093,612.00 10,051,272.78 194,180.00	 a) The Government of India b) The State Government c) Other providers of funds VI. Finance Charges (Interest) VII. Other Payments (Specify) 			
	To Miscellaneous Income (Finance Charge) 188,763.00 VI. Amount Borrowed VII. Any other Receipts (Give Details) Fees Capital Fund Sales of Publication Sale of Assets	Charge) 188,763.00		Final Payments Advances and Withdrawals VIII. Closing Balances a) Cash in hand b) Bank Balances i) In current accounts ii) In deposit accounts		34,846,870.00 4,956,199.00	9,661,982.00 9,146,996.00
	Contribution from Members Contribution from TRAI Transfer of Balances Repayment of Advances Maturity of FDs/ Encashment of Mutual Funds		37,987,081.00 36,207,189.00 9,909,214.00 10,280,097.00 440,226.00 32,770.00 642,450.00 1,121,21).000 33,302,274.00 80,649,393.00	iii) Savings accounts		5,014,663.09	9,874,490.93
	IOIAL Cd/-	7 PS	140,331,1/4,03	-/ PS	76 / PS	108,597,300.99 140,351,174.05 CA/-	146,331,174.03 Sd /-
	ılati [F&EA] [CPF]	Reshma S. Usmani Asstt. (QoS) Trustee		Sonia Madan Dy. Advisor (NSL-II) Trustee	S.K. Dutta Jt. Advisor (HR) Ex-Officio Trustee	Sanjeev K Advisc Ex-Offic	Sanjeev Kumar Sharma Advisor (Admin) Ex-Officio President





TELECOM REGULATORY AUTHORITY OF INDIA