

Telecom Regulatory Authority of India





TELECOM REGULATORY AUTHORITY OF INDIA

Report on Activities

(1st January, 2020 to 31st December, 2020)

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With the outbreak of COVID-19 in 2020, Governments and Regulators across the world faced unforeseen challenges. Pandemic affected lives and livelihoods across the globe. Worldwide lockdowns were imposed, adversely affecting all the activities including commercial business, manufacturing, services etc bringing the economy to a standstill. India was not an exception to this crisis.

During the pandemic, the telecom sector played a vital role in providing seamless connectivity to all and facilitated uninterrupted access to services despite the disruption caused. The telecom sector is one of the most crucial and critical sectors for the growth and development of the economy. During the pandemic, a testing time for all, the timely measures taken by the telecom sector helped counter several hindrances, so that many economic activities could continue. The sector has also played a tremendous role in keeping people safe and healthy by assisting the government and businesses in disseminating accurate information to the citizens. TRAI has actively engaged with various stakeholders and has come out with innovative and suitable policy initiatives for the holistic growth of the sector.

With zero contact, social distancing, and travel restrictions in place, most of the business and commercial activities moved to the digital platform. This sudden boom in digital activities had put tremendous pressure on the telecom and ICT infrastructure. Nonetheless, the telecom, ICT, and broadcasting sectors in India, rose to the occasion with considerable support and cooperation from all the stakeholders such as Government, Regulators, Service providers, etc., and provided seamless connectivity to the digital ecosystem during the lockdown.

As the regulator of Telecom and Broadcasting sectors in India, TRAI played a pivotal role and took some timely measures that further facilitated seamless connectivity through various communications' channels such as fixed and mobile phones, internet, social media, etc. With the uninterrupted telecom and internet connectivity, smooth functioning of many activities and services that propel the economy was made possible. Most of the activities such as banking, education, entertainment, and 'Work from Home' are dependent on the telecom infrastructure.

One of the core functions of TRAI is to create and nurture growth conditions for the Telecommunications and Broadcasting Sectors in the country in a manner and at a pace that will enable India to play a leading role in the global information society. TRAI through its measures has ensured benefits to the consumers in terms of choice of services, affordable tariff, and better quality of services, etc. Despite the pandemic, these measures contributed vastly to the exponential growth in different sectors.

TRAI has been following a transparent and intensive consultation process to decide on important issues related to the Telecommunication and Broadcasting Sectors. In 2020, the consultation process was shifted to online mode resulting in wider participation of stakeholders, particularly in the Open House Discussions (OHDs). Several OHDs and Workshops were held through video conferences in 2020. In addition to the consultation process, TRAI has been conducting Interactive Meetings with the Service Providers of Telecom and Broadcasting Sectors at the beginning of every year to elicit suggestions on the subjects/topics that maybe taken up for consultations during the year.

During 2020, the Authority had taken several steps to sustain growth and development in the telecom sector. Many consultation processes were initiated on a wide range of subjects such as 'Traffic Management Practices for Net Neutrality', 'Cellular backhaul connectivity via Satellite', 'SUC assessment in cases of Spectrum Sharing', 'Regulation of International Mobile Roaming Services', 'Unbundling of different layers through differential licensing', 'Transfer and merger of Telecom Licenses', 'Infrastructure Providers Category-I registrations', 'Network Testing Before Commercial Launch of Wireline Services', etc. Apart from these, TRAI had issued regulations and recommendations on many subjects, including 'Regulation of OTT services' and 'Cloud Services'. The report contains the complete list of Consultation papers, Recommendations, and Regulations.

TRAI also addressed various regulatory challenges faced by the broadcasting sector during the year. The digitization process of Broadcasting and Cable Services was continuously pursued and monitored amid various odds and challenges. TRAI also implemented a new regulatory framework for broadcasting services, which is aimed to benefit consumers of the broadcasting service. The fruits of this initiative will be visible in the upcoming days. Consultation Papers were released on various issues such as "Framework for technical compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services." During the year, TRAI made Recommendations to the Government on "Interoperability of Set-Top Box", "Reserve Price for auction of FM Radio Channels", "Review of Television Audience Measurement and Rating System in India", "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services". TRAI also released White Papers on many important issues, the details of which are contained in this report.

The challenges imposed by the pandemic, could not prevent TRAI from organizing Consumer Outreach Programmes (COPs) and workshops, conducted to spread consumer education and awareness, during the year. The digital forms of such programmes were very effective, successful, and attracted a wider participation of all stakeholders. TRAI also monitors the effective implementation of its orders, directions, and regulations. Close monitoring and imposition of financial disincentives for non-compliance of the regulatory requirements by the Service Providers of the Telecom Sector, and institution of

prosecution complaints in cases of grave misdemeanor has resulted in better compliance and regulatory enforcement during the year.

This report presents a synopsis of the activities undertaken by TRAI in 2020, to give a broader view and better understanding. It is also available in the public domain for the information of all stakeholders. The Report covers Recommendations, Regulations, Consultation Papers, Tariff Orders, and Directions, etc., issued during the course of the year. The same are available on TRAI's website www.trai.gov.in and can be referred for detailed information.

(Sunil Kr. Gupta)

Secretary

EXECUTIVE SUMMARY

TRAI has always played a crucial role in facilitating the growth of the telecom sector. The timely measures taken by the Authority during the pandemic helped ensure seamless connectivity through mobile and the internet. The measures taken by TRAI have ensured benefits to consumers in terms of choice of services, affordable tariffs, and better quality of services, etc.

TRAI fulfills its objectives by issuing Regulations and Recommendations on various issues and actively engages in consumer awareness.

TRAI follows a very transparent and intensive consultation process to decide on important issues related to the Telecommunication and Broadcasting Sectors. In 2020, the consultation process shifted to the online mode, which led to a wider participation of stakeholders, particularly in OHDs. The COPs and workshops were conducted online too, for spreading consumer education and awareness. The following were issued by TRAI in 2020:

A. Recommendations: Telecom Sector

- 1. Recommendations regarding "Reforming the Guidelines for Transfer/Merger of Telecom Licenses "dated 21st February, 2020: The Recommendations are aimed at simplifying and facilitating Compliance Obligations by reforming the Guidelines for Mergers & Acquisitions, 2014 to enable simplification and fast tracking of approvals.
- 2. Recommendations regarding "Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration "dated 13th March, 2020: TRAI recommended several measures to expand the scope of Infrastructure Providers-I to meet the demands of Telecom Sector. The recommendations are aimed at reduction of cost of service for both the TSPs and the Telecom Consumers.
- 3. Recommendations regarding "Network Testing Before Commercial Launch of Services for Wireline Access Services" dated 22nd April, 2020: TRAI prescribed the norms for network testing before commercial launch of wireline services by the entrant license through this recommendation.
- **4.** Recommendations regarding "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services" dated 29th May, 2020: The Authority was of the view that migration to unified numbering scheme, which involved large scale changes in the existing network was not recommended at this stage. However, sufficient numbering resources can be made available for fixed lines/mobiles services through alternate methods.
- 5. Recommendations regarding "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT CUG Service Authorization" dated 28th July, 2020: TRAI recommended that 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. Sharing of VSAT Hub active and passive infrastructure have also been recommended.

- 6. Recommendations regarding "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing "dated 17th August, 2020: TRAI vide its Recommendations clarified that an increment of 0.5% on SUC rate should apply on the spectrum holding in a specific band in which sharing is taking place, and not on the entire spectrum holding (all bands) of the Licensee.
- 7. Recommendations regarding "Regulatory Framework for Over the Top (OTT) Communication Services" dated 14th September, 2020: TRAI recommended that the Market forces may be allowed to respond to the situation without prescribing any regulatory intervention.
- **8.** Recommendations regarding "Cloud Services" dated 14th September **2020:** TRAI recommended for a light-touch regulatory framework for 'Cloud Services' through a three-step process including setting up an Industry Led Body.
- 9. Recommendations regarding "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality" dated 22ndSeptember, 2020: TRAI recommended that Department of Telecommunications (DoT) may frame a policy for Internet Access Service (IAS)Providers to inform the affected users about the impact of applied TMPs. It also recommended setting up of a Multi Stakeholder Body (MSB) to provide advice and support to DoT regarding the monitoring and enforcement of net neutrality principles.
- 10. TRAI's Response dated 10th April, 2020 to DoT's back reference on its Recommendations regarding "Captive VSAT CUG Policy Issues": The Authority had sent its recommendations on "Captive VSAT Policy issues" on 18th July, 2017 to DoT. The DoT referred some the recommendations for reconsideration. After due consideration, the Authority made following recommendations:
 - (i) For obtaining the Captive VSAT License, the amount of initial Financial Bank Guaranty should be Rs. 15 Lakhs. For subsequent years, the licensee should submit an amount equivalent to the license fee for two quarters.
 - (ii) The royalty charges should be limited to the assigned frequencies only.
 - (iii) A Single Window procedure may be created for all procedures related to obtaining license and other related activities.

- 11. TRAI's Response dated 5th June, 2020 on DoT's back-reference of TRAI Recommendations regarding "Proliferation of Broadband through Public Wi-Fi Networks": In its response, TRAI intimated DoT that many hotels, restaurants, airports, and malls are offering Wi-Fi services without any specific licensing/registration and no spoofing or security issue has come to the notice of TRAI.
- 12. TRAI's response dated 28th September, 2020 to DoT's back-reference on TRAI's Recommendations regarding "Review of terms and conditions for registration of Other Service Providers (OSPs)": TRAI, after due deliberations, finalized its response and sent it to DoT on 28th September 2020. Based on the recommendations of TRAI, DoT issued new Guidelines for OSPs dated 5th November, 2020.
- B. Recommendations: Broadcasting Sector
- 1. Recommendations regarding "Reserve Price for Auction of FM Radio channels" dated 11th April, 2020: It was recommended that the Reserve Price (RP) for FM radio channels in a city, should be set equal to 0.8 times the valuation of FM radio channels in that city. For NE, J&K, and Andaman and Nicobar cities 0.4 times the valuation of FM radio channels was recommended as the RP. The RPs in 10 border cities in the 'Others' category in Phase-III should be Rs. 5 lakh per channel.
- Recommendations regarding "Interoperability of Set-Top Box" dated 11th April, 2020: It was recommended that every STB provided to a consumer must be interoperable. The Ministry of Information and Broadcasting (MIB) may include a suitable clause/condition in the permission/Registration/Cable Television Network Rule mandating all the Distribution Platform Operators (DPOs [DTH and MSOs]) to compulsorily facilitate service provisioning through the interoperable STBs either provided by DPOs or procured by the consumers from the open market. As there are technical and commercial constraints to the universal STB, therefore, the interoperability shall be applicable within the DTH segment and within the cable segment, respectively. TRAI also recommended for mandatory provisioning of USB port-based Common Interface for all digital TV sets in India. A Coordination Committee may be set up by MIB with members from Ministry of Electronics and Information Technology (MeitY), TRAI, Bureau of Indian Standards (BIS), and representatives of TV manufacturers to steer the implementation of the revised STB standards for both the DTH and the cable TV segments.
- 3. Recommendations regarding "Review of Television Audience Measurement and Rating System in India" dated 28th April, 2020: TRAI recommended for structural reforms 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. It has also been recommended that an Oversight

- Committee should be formed to guide BARC India in the areas of research, design, and analysis, constantly improving the rating system.
- 4. TRAI's Response to MIB's back-reference on TRAI's recommendations regarding "Platform Services offered by DTH Operators" dated 26th May, 2020: TRAI recommended inclusion of few issues regarding platform services with reference to DTH guidelines. In its response, TRAI reiterated its recommendations on the issues raised by the Government.
- C. Regulations: Telecom Sector
- 1. Telecommunication Consumers Education and Protection Fund (Fifth Amendment) Regulations, 2020, dated 16th January, 2020: With this amendment, the service providers are mandated to deposit unclaimed consumer money of any form such as excess charges, security deposit, plan charges of failed activations, or any amount belonging to a consumer, which service providers are unable to refund to consumers, to the fund after providing time of 12 months or period of limitation specified under the law whichever is later.
- 2. The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020, dated 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 1stMay, 2020.
- 3. The Telecommunication Interconnection (Second Amendment) Regulations, 2020, dated 10th July, 2020: TRAI notified the Regulations to facilitate smooth interconnection between any two Public Switched Telephone Networks (PSTN), and between PSTN and National Long Distance (NLD) Network.
- 4. Telecom Consumers Protection (Eleventh Amendment) Regulation, 2020, dated 30th September, 2020: This amendment will facilitate the regulatory framework for International Mobile Roaming Services and empower the consumer and ensure protection of consumer from bill shocks.
- D. Regulations: Broadcasting Sector
- 1. Amendments to Tariff Order, Interconnection Regulations and Quality of Services Regulations of 2017 for Broadcasting and Cable Services sector dated 1st January, 2020: TRAI issued a comprehensive regulatory framework for Digital Addressable System (DAS) on 3rd March

2017. The need for some changes in the framework was felt necessary to achieve the overall objective of the regulatory framework notified in March 2017. After due consultations with the stakeholders, certain amendments were made in the Regulatory framework on 1st January, 2020to address the teething issues faced by the consumers, while balancing the interests of broadcasters and the DPOs to create a level-playing field. These amendments are aimed to address anomalies in market and facilitate orderly growth of the sector.

E. Tariff Order: Telecom Sector

1. Telecom Tariff (65th Amendment) Order, 2020, dated 3rd June, 2020: 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, i.e., doing away with the tariff regulation and strengthening the regime of tariff forbearance.

F. Consultation Papers: Telecom Sector

- 1. Consultation Paper regarding "Regulation of International Mobile Roaming Services" dated 26th May, 2020: The consultation paper (CP) was issued to review the regulatory framework of International Mobile Roaming (IMR) Service. The main focus of the CP was the specific causes of bill shocks to consumers while availing the IMR Service and evaluating the need for introducing regulations while reviewing the efficacy of existing regulatory requirements.
- 2. Consultation Paper regarding "Roadmap to Promote Broadband Connectivity and Enhanced Broadband speed" dated 20th August, 2020: Increasing reliable and high-speed broadband connectivity in the country has been a focus of the Government and TRAI, since 2004. Several policy and regulatory initiatives have been taken in the past to reach the present state. 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. TRAI, through this CP sought the inputs of stakeholders on defining fixed and mobile broadband, innovative approaches for infrastructure creation, promoting broadband connectivity, and the measures to enhance broadband speed.
- 3. Consultation Paper regarding "Enabling Unbundling of Different Layers Through Differential Licensing" dated 20th August, 2020: DoT requested TRAI to furnish recommendations on enabling unbundling of different layers through differential licensing. Accordingly, a CP was issued seeking comments of the stakeholders.

- 4. Consultation Paper regarding "Review of The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2006" dated 1st September, 2020: The CP deliberates on issues such as the guidelines for metering and billing in the changing scenario of the telecom world, technological solutions which can get the process of audit conducted in a more efficient and effective manner, etc.
- G. Consultation Papers: Broadcasting Sector
- 1. Consultation Paper regarding "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services" (22nd April, 2020): Through this CP, comments of the stakeholders were sought on 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. The consultation paper also set out to deliberate upon the issues related to CAS and SMS systems, their underlying factors and possible remedial measures to address such issues.
- 2. Consultation Paper regarding MIB back reference on TRAI's Recommendations on "Regulatory Framework for Platform Services" and "Platform Services offered by DTH Operators" dated 7th December, 2020: TRAI issued a CP on 7th December, 2020 on the issues involved in the back references received from the MIB for seeking comments of all the stakeholders. The recommendations will be forwarded based on the outcome of the consultation process. The consultation paper also set out to deliberate upon the issues related to CAS and SMS systems, their underlying factors and possible remedial measures to address such issues.

H. Other Issues: Telecom Sector

White Paper released on "Smart Cities in India: Framework for ICT 1. Infrastructure" dated 22nd September, 2020: 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. As a way forward, the White Paper has laid emphasis to achieve Standardization, Inter-operability, Scalability, Sustainability, and Resiliency in the ICT infrastructure for Smart Cities that 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 pave the way for the industry and technocrats to kindle their thought process and bring about transformation through identification of the key enablers in order to accelerate the development of Smart Cities in India.

2. Monograph – Quest for a good quality network inside Multi-Storey Residential Apartment dated 22nd September, 2020: The monograph covers recommendations on aspects such as development of a good quality network with collaborative partnerships, developing processes, and practices that assure a good quality network, aligning incentives of principals and agents in a manner that does not conflict, etc.

I. RECOMMENDATIONS BY THE TRAI TO THE GOVERNMENT TELECOM SECTOR

Recommendations regarding "Reforming the Guidelines for Transfer/Merger of Telecom Licenses" dated 21st February, 2020

DoT vide its letter dated 8th May, 2019, inter alia, informed that the National Digital Communications Policy NDCP-2018, envisages simplifying and facilitating compliance obligations by reforming the Guidelines for Mergers and Acquisitions, 2014, to enable simplification and fast-tracking of approvals. Accordingly, it had sought TRAI's (hereinafter referred to as the Authority) recommendations on "Reforming the Guidelines on Mergers & Acquisitions, 2014."

In this regard, a CP on "Reforming the Guidelines for Transfer/Merger of Telecom Licenses" was released providing the background information and seeking inputs of the stakeholders on reforms required to be made in the existing guidelines on Transfer/Merger of Licenses to enable simplification and fast tracking of approvals. An OHD was conducted on 23^{rd} December, 2019 in New Delhi.

Based on the comments/inputs received from the stakeholders and on its analysis, the Authority finalized its Recommendations on "Reforming the Guidelines on Transfer/Mergers of Telecom Licenses" and sent it to Secretary, DoT along with letter no.102-5/2019-NSL-II on 21st February, 2020 for its consideration.

Recommendations regarding "Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration" dated 13th March, 2020

NDCP-2018 envisages encouraging and facilitating sharing of active infrastructure by enhancing the scope of Infrastructure Providers (IP) and promoting and incentivizing deployment of common sharable, passive, and active infrastructure.

The Authority had suo motu issued a Consultation Paper on 'Review of Scope of Infrastructure Providers Category-I (IP-I) Registration' on 16th August, 2019 seeking comments and counter-comments from the stakeholders. An OHD 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, the Authority finalized its Recommendations on "Enhancement of Scope of Infrastructure Providers Category-I (IP-I) Registration" and sent to Secretary, DoT along with letter no.413-1/2019-NSL-I dated 13th March, 2020 for its consideration.

Recommendations regarding "Network Testing Before Commercial Launch of Services for Wireline Access Services" dated 22nd April, 2020

A reference was received from DoT vide its letter dated 16th July, 2019 wherein it was communicated that the Government has accepted the Authority's Recommendations on "Network Testing Before Launch of Commercial Services" dated 4thDecember, 2017 and has further requested to provide similar recommendations on Network Testing before the 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 4th 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 countercomments from stakeholders on relevant issues by 30th January, 2020 and 13th January, 2020, respectively.

Based on the comments/inputs received from the stakeholders and on its own analysis, the Authority finalized its Recommendations on "Network Testing Before Commercial Launch of Services for Wireline Access Services" and sent to Secretary, DoT along with letter No.411-01/2019-NSL-I dated 22nd April 2020 for its consideration.

Recommendations regarding "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services" dated 29th May, 2020

A reference was received from 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 NDCP-2018, which inter alia includes "Ensuring adequate numbering resources, by developing a unified numbering plan for fixed line and mobile services".

Accordingly, a CP on "Developing a Unified Numbering Plan for Fixed Line and Mobile Services" was issued on 20^{th} September, 2019 seeking comments and counter-comments from stakeholders. An OHD was also held on 16^{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, the Authority finalized its Recommendations on "Ensuring Adequate Numbering Resources for Fixed Line and Mobile Services" and sent it to Secretary,

DoT, along with Authority's letter No. 413-2/2019-NSL-I dated 29th May, 2020 for its consideration.

Recommendations regarding "Provision of Cellular Backhaul Connectivity via Satellite Through VSAT Under Commercial VSAT CUG Service Authorization" dated 28th July, 2020

Satellites provide telecommunication and broadcasting services, covering a large geographical area. 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.

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 effective utilisation of High Throughput Satellite system through appropriate licensing mechanism.

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

Based on the reference received from DoT, the Authority issued a CP on "Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization" on 29th January, 2020, 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. An OHD was conducted through video conferencing on 20th May, 2020.

Based on the comments received during the consultation process and its own analysis, the Authority finalized its Recommendations on "Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization" and sent it to Secretary, DoT, along with Authority's letter No. 402-6/2019-NSL-II dated 28th July, 2020 for its consideration.

Recommendations regarding "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing" dated 17th August, 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 licensee 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 the Authority to furnish its recommendations regarding(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 CP on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing" was released on 22^{nd} April, 2020 providing the background information and seeking inputs of the stakeholders. Comments from nine stakeholders were received. An OHD was conducted through video conference on 9^{th} July, 2020.

Based on the comments/inputs received from the stakeholders and on its own analysis, the Authority finalized its Recommendations regarding "Methodology of applying Spectrum Usage Charges (SUC)" under the weighted average method of SUC assessment, in cases of Spectrum Sharing" and sent it to Secretary, DoT, along with Authority's letter No. 103-1/2020-NSL-II dated 17th August, 2020 for its consideration.

> Recommendations regarding "Regulatory Framework for Over the Top (OTT) Communication Services" dated 14th September, 2020

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 12th 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 24th April, 2019 and another one at Delhi on 20th 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 14th September, 2020 for its consideration.

> Recommendations regarding "Cloud Services" dated 14th September, 2020

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 23rd October, 2019 and raised various issues for comments and counter comments from stakeholders. Subsequently, an OHD was held in Delhi on 28th 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 14th September, 2020 for its consideration.

Recommendations regarding "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality" dated 22nd September, 2020

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 in Delhi on 24^{th} June, 2020.

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.

Back References to Recommendations Issued by The Authority for Telecom Services

> The Authority's response dated 10th April 2020 to DoT's back reference on Recommendations regarding "Captive VSAT CUG Policy Issues" dated 12th March, 2020

DoT through its letter No. 824-200/CAP-VSAT/POLICY/2013-DS dated 12th March, 2020 informed that the TRAI recommendations on "Captive VSAT CUG Policy issues" dated 18th July, 2017 have been considered by the Government and it referred back some of the recommendations for reconsidered opinion/ recommendation under Section 11 of the TRAI Act 1997.

TRAI, after due deliberations finalized its response to the back reference and sent it to Secretary, DoT, along with Authority's letter No.102-2/2016-NSL-II(Vol.-II) dated 10th April, 2020 for its consideration.

> The Authority's response dated 5th June, 2020 to DoT's backreference dated 29th May, 2020 for re-consideration of the Authority's Recommendations regarding "Proliferation of Broadband through Public Wi-Fi Networks" dated 9th March, 2017

DoT vide letter No. DS-16/13/2017-DS-III dated 29th May, 2020 referred back TRAI recommendations dated 9th March, 2017 on "Proliferation of Broadband through Public Wi-Fi Networks" for reconsideration.

TRAI, after due deliberations finalized its response to the back reference and sent it to Secretary, DoT, along with Authority's letter No.4-5/2016-BB&PA dated 5th June, 2020 for its consideration.

The Authority's response dated 28th September, 2020 to DoT's backreference on Recommendations regarding "Review of terms and conditions for registration of Other Service Providers (OSPs)" dated 21st October 2019

DoT vide its letter No. 18-5/2015-CS-I (pt.) dated 26th September, 2020 informed that the Recommendations regarding "Review of Terms and Conditions for registration of Other Service Providers (OSPs)" dated 21st October, 2019 have been examined by the Government and referred back some of the issues such as Categorization of OSP based on Voice or Data, Bank Guarantee, CCSP/HCCSPs, Network Diagram, Foreign PABX for International OSPs, Penalty, Work from Home and Interconnection of Data and Voice path for reconsideration under Section 11 of the TRAI Act, 1997.

The Authority, after due deliberations, finalized its response and sent it to the Secretary, DoT along with Authority's letter No. 413-3/2018-NSL-I dated 28th September, 2020 for its consideration.

BROADCASTING SECTOR

Recommendations regarding "Reserve Price for Auction of FM Radio channels" dated 10th April, 2020

The Ministry of Information and Broadcasting, vide its letter No. N-3801 1/1/2019-FM dated 22nd August, 2019 requested TRAI to furnish recommendations on fresh reserve price for 283 cities (260 new +23 existing), under FM phase -Ill Policy in terms of Section 11 (l) (a) of TRAI Act.

In this connection, TRAI issued a consultation paper on "Reserve Price for auction of FM Radio Channels" on 16th October, 2019, seeking comments/views of the stakeholders. Subsequently, TRAI held an Open House Discussion in New Delhi on 8th January, 2020.

Based on the comments of the stakeholders received during the above-mentioned consultation process and its own analysis, the Authority finalized its recommendations and sent it to MIB along with letter no. 23-3/2014-B&CS dated 10th April, 2020 for its consideration.

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

Non-interoperability of Set Top Box is recognized as one of the major impediments to free competitive market. In present scenario, television consumers cannot exercise their freedom to change service providers due to artificial barrier created by non-interoperable devices. TRAI has been taking various measures to achieve the set top box interoperability in the unidirectional broadcast services.

In this regard, TRAI issued a Consultation Paper on suo-motu basis on "Interoperability of Set Top Box" on 11th November, 2019 to elicit response from all the stakeholders. Questions were put up to seek the best solution to implement the interoperability. An Open House Discussion (OHD) was also conducted on 29th January, 2020 in New Delhi.

Based on the comments/ inputs received, discussion held during OHD, global practices and its own analysis, TRAI finalized its Recommendations on "Interoperability of Set Top Box" and sent it to MIB along with letter no. 21-9/2019-B&CS/Vol.II dated 10th April, 2020 for its consideration.

Recommendations regarding "Review of Television Audience Measurement and Rating System in India" dated 28th April, 2020

In 2012, MIB sought recommendations of TRAI for laying down comprehensive guidelines/accreditation mechanism for Television rating

agencies in India to ensure transparency and accountability in the rating system. After an exhaustive consultation process TRAI gave its recommendations on "Guidelines/Accreditation Mechanism for television ratings Agencies in India" to MIB on 13th September, 2013. The Authority supported self-regulation of television ratings through an industry led body like BARC. TRAI recommended comprehensive guidelines for registration of television rating agencies.

MIB accepted TRAI recommendations and notified Policy Guidelines for Television Rating Agencies in India on 10th January, 2014. Under these guidelines, the industry-led body BARC was accredited by MIB on 28th July, 2015, to carry out the television ratings in India. BARC commenced its operations in 2015 and since then it is the sole provider of TV rating services on commercial basis.

Several concerns relating to neutrality and reliability of the existing rating system have been raised by stakeholders, which necessitated a need to review of existing Television Audience Measurement and Ratings system in India.

Accordingly, TRAI suo-motu issued a consultation paper on "Review of Television Audience Measurement and Ratings in India" on 3rd December, 2018 for seeking comments of stakeholders on the issues related to review of existing system. Subsequently, Open House Discussions on the subject were held at New Delhi on 31st May, 2019 and at Mumbai on 3rd July, 2019.

Based on the comments of the stakeholders received during the above-mentioned consultation process and its own analysis, the Authority has finalized its recommendations on "Review of Television Audience Measurement and Rating System in India" and sent it to Secretary, MIB, along with Authority's letter No. 23-4/2013-B&CS dated 28th April, 2020 for its consideration.

Back References to Recommendations Issued by the Authority for Broadcasting services

The Authority's Response dated 26th May, 2020 to MIB's back-reference dated 13th May, 2020 for furnishing the Recommendations on the suggested modifications of the Authority's "Recommendations on Platform Services offered by DTH Operators" dated 13th November, 2019.

The Authority issued Recommendations on "Platform Services offered by DTH Operators" dated 13th November, 2019 to the Government. Through these Recommendations, the Authority recommended inclusion of few issues regarding platform services with reference to DTH guidelines. A back reference dated 13th May, 2020 was received from MIB to furnish the Authority's recommendations on the suggested modifications to enable the Government to take a final decision in this matter. The Authority

finalized its response to the back reference and sent the same to MIB on 26^{th} May, 2020. In its response, the Authority reiterated its recommendations on the issues raised by the Government.

II. REGULATIONS

TELECOM SECTOR

> Telecommunication Consumers Education and Protection Fund (Fifth Amendment) Regulations, 2020, dated 16th January, 2020

The principal regulations, in the Telecommunication Consumers Education and Protection Fund Regulations, 2007, dated 15th June, 2007, provide basic framework for depositing unclaimed money of consumers by Service Providers, maintenance of the Telecommunication Consumers Education and Protection Fund and other related aspects. In accordance with these regulations, service providers have been depositing such unclaimed amounts to the fund. The Authority observed that there is a need to bring clarity among service providers in depositing money which they are unable to refund to the consumers. In this regard, the Authority issued amendment to the said regulations, i.e., Telecommunication Consumers Education and Protection Fund (Fifth Amendment) Regulations, 2020, dated 16th January, 2020. With this amendment, the service providers will deposit any unclaimed consumer money of any form such as excess charges, security deposit, plan charges of failed activations, or any amount belonging to a consumer, which service providers are unable to refund to consumers, to the fund after providing time of 12 months or period of limitation specified under the law whichever is later.

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

The Authority on 17th April, 2020 issued "The Telecommunication Interconnection Usage Charges (Sixteenth Amendment) Regulations, 2020". Through these Regulations, the regime of fixed 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 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 1stMay, 2020.

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

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

A CP 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 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".

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

- a) 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.
- b) 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.
- c) 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.
- d) 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.

> Telecom Consumer Protection (Eleventh Amendment) Regulation, 2020, dated 30th September, 2020

The Authority 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 and ensure protection of consumer from bill shocks.

BROADCASTING SECTOR

Amendments to Tariff Order, Interconnection Regulations and Quality of Services Regulations of 2017 for Broadcasting and Cable Services sector dated 1st January, 2020

Keeping in view the implementation of DAS and to enable the sector to realize its benefits, the Authority, after due consultation process, published a comprehensive regulatory framework for DAS on 3rd March,

2017. The framework was quite successful in establishing harmonized business processes in the sector, level-playing-field, bringing-in transparency in TV channel pricing, reducing litigations among stakeholders and providing equal opportunities to smaller Multi-System Operators (MSOs). As a result, there was a pronounced reduction in disputes among stakeholders as well as entry barriers. The transparency also ushered in better tax compliance thereby improving the government revenue. However, the intended freedom of choice to consumers to select what they want, got scuttled due to various malpractices by the service providers.

Therefore, through consultation process, the Authority sought comments and suggestions from various stakeholders, on certain tariff and interconnection related issues which the Authority felt require some changes and are pivotal to achieve the overall objective of the regulatory framework notified in March 2017. After due consultation with the stakeholders, the Authority issued the following amendments to the regulatory framework for Broadcasting and Cable Services Sector on 1st January, 2020:

- a) The Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff (Second Amendment) Order, 2020
- b) Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) (Third Amendment) Regulations, 2020
- c) Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Second Amendment) Regulations, 2020

The amendments address the teething issues faced by the consumers, while balancing the interests of broadcasters and the DPOs to create a level-playing field. These amendments are expected to address certain anomalies in market that necessitated a review for achieving the orderly growth of the sector. The said amendments carried out through the consultation process has left the basic contours of the new regime untouched and the Broadcasters/DPOs will continue to enjoy the flexibility in carrying out their businesses. The review exercise has been limited to certain consumer friendly measures and to balance the interest of stakeholders. The revisions strive to ensure that the objectives of the existing framework get fulfilled to a great extent. The salient features of the amendments to the regulatory framework for Broadcasting and Cable Services Sector on 1st January, 2020 were:

- a) Increase in the number of SD channels from 100 to 200 in the NCF of maximum Rs. 130/- per month.
- b) More than 200 SD channels in the NCF of maximum Rs. 160/- per month.

- c) Flexibility to DPOs to declare different NCFs for different regions/areas within its service area. This provision will help DPOs to innovate and cater to local demands in their tariff offerings resulting in lower NCF in rural/remote areas.
- d) Flexibility for DPOs to offer promotional schemes. They can also offer discounts on NCF and Distributor Retail Prices (DRP) on long-term subscriptions, having a duration of 6 months or above.
- e) Reduction of ceiling price on MRP of pay channels for inclusion in bouquet from Rs. 19/- to Rs. 12/-.
- f) NCF for 2nd TV connection and onwards in multi-TV homes not more than 40% of declared NCF per additional TV.
- g) Subscribers can choose different set of channels for each TV connection in a multi-TV home.
- h) DPOs may offer discounts on NCF and DRP on long-term subscriptions of duration of 6 months and above.
- i) Introduction of a time tested and industry accepted twinconditions to ensure that there is a reasonable relationship between the prices of pay channels on à la carte basis and the bouquet.
- j) Reasonable restrictions on the number of bouquets offered by the broadcasters. Number of bouquets of pay channels not to be more than the number of pay channels offered by a broadcaster.
- k) MRP of a channel should not be more than the MRP of any bouquet containing that channel in order to bring further reasonableness in the bouquet formation and pricing.
- l) Full flexibility to the DPOs to organize the television channels on EPG based on Language or Genre. The provision will safeguard consumers' and broadcasters' interest vis-à-vis erstwhile arbitrary maneuvering by DPOs. This will also save regional and smaller broadcasters from any probable misuse by DPO.
- m) Capping of the carriage fee @ Rs. four lakhs (Rs. 4 Lakh) per Standard Definition (SD) Channel per month for a DPO. This will ensure viability of news, regional, and niche channels.

III. TARIFF ORDERS

TELECOM SECTOR

> Telecom Tariff (65th Amendment) Order, 2020, dated 3rd June, 2020

After following an elaborate consultation process and an online OHD, the Authority issued the Telecom Tariff (65^{th} Amendment) Order, 2020, on 3^{rd} June, 2020.

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 the Authority in doing away of the tariff regulation and strengthening the regime of tariff forbearance.

IV. DIRECTIONS

TELECOM SECTOR

Direction dated 2nd January, 2020 issued to all Basic Service operators/CMTS/ UASL/UL & UL(VNO) and all International Long Distance Service Providers regarding withdrawal of its directions No. 815-3/2012-TD dated 18th November, 2013 and to all the Internet Service Providers regarding withdrawal of its directions No. 815-3/2012-TD dated 14th November, 2013

In 2012, DoT issued directions to all International Long Distance Service Providers and National Long Distance Service Providers, all Internet Service Providers, Basic Service Licensees, CMTS, UASL, UL & UL(VNO) Licensees, including BSNL and MTNL on implementation of Green Technologies in Telecom Sector and directed to declare the Carbon Footprint of their network operations to the Authority. Accordingly, the Authority issued Directions vide No. 815-3/2012-TD dated 14th November, 2013 and 18th November, 2013 to comply with the provisions of DoT.

In pursuance of DoT's communication dated 23rd November, 2015, the Authority issued recommendations on "Approach towards Sustainable Telecommunications" on 23rd October, 2017, to achieve the objectives of Green Telecom and reduce the carbon footprint in the telecom sector. The Government of India considered the said recommendations of TRAI and accordingly, DoT issued Directions vide (i) Letter No. 20-271/2010-AS-I Vol. II dated 15th May, 2019 to all Basic Service Licensees, CMTS, UASL, UL & UL(VNO) and Internet Service Providers and (ii) Letter No.16-6/2011-CS-III dated 7th January, 2019 to all International Long Distance Service Providers and National Long Distance Service Providers for reporting the Carbon Footprint of their network operation to DGT Wing of DoT in the prescribed proforma.

Thereafter, the Authority withdrew its directions No. 815-3/2012-TD dated 14th November, 2013 and 18th November, 2013 vide letter dated 2nd January 2020.

Direction dated 20th January, 2020 regarding implementation of The Telecom Commercial Communications Customer Preference Regulations (TCCCPR), 2018

The Authority vide its direction no. 311-04/2017-QoS dated 20th January, 2020 directed all Access Service Providers:

- a) To not assign new SMS and voice headers without registration in the new system established by Access Providers in accordance with the regulations.
- b) To migrate the existing SMS and voice headers as listed by the Authority, based on the list of headers submitted by the Access Providers (consolidated list shared by the Authority with Access

- Providers vide email dated 10th January, 2020), and which are in use in the last one year, to new system within four weeks' time.
- c) To ensure that Principal Entities submit list of existing subscriber's consent to Access Providers within fifteen days from the issue of this Direction.
- d) To ensure that consents recorded prior to six months from the date of issue of this Direction, become invalid, and should not be migrated to the new system.
- e) To ensure that all new consents of the subscribers shall be registered in the new system, as per the provisions of the regulations.
- f) To ensure that Principal Entities are not able to send promotional messages or calls to the subscribers who have not opted for such preference if they have not shared subscribers' consent with Access Providers or not acquired consent from the subscribers according to the provisions of the regulations.
- g) To ensure that Principal Entities are not able to send any commercial communication till they register themselves with Access Providers.
- h) To ensure that Principal Entities are not able to send any service and transactional messages till they register content template against specific registered header with Access Providers.
- i) To run a media campaign on its own or in collaboration with other Access Providers, within fifteen days from the issue of this direction, by publication of advertisements in at least two leading National newspapers of Hindi and English.
- j) To make Customers aware that in case they make unsolicited commercial communication, their telecom resources may be put under Usage Cap or Disconnected, as per the provisions of the regulations.
- k) To make Principal Entities aware about the measures they need to take such as registration of header and content template, submission of existing subscriber's consents and acquisition process of consent.
- l) To make Customer, Principal entities, and other stakeholders aware about the measures they need to take, and measures taken by the Access Providers, including the details of web portal and relevant apps, to curb the menace of unsolicited commercial communications.
- m) To share with the Authority the plan with timelines, in compliance to regulation 11 of the Regulations, for periodic publicity specifying content, medium, frequency, and manner of such publicity, within 30days of issue from this direction.

Amendment to the Direction dated 17th October, 2019 to facilitate porting of second and further Mobile Numbers in Jammu and Kashmir License Service Area dated 26th February 2020

The Authority, vide its Direction dated 17th October, 2019, interalia, directed Access Service Providers to set up, in its mobile network, a mechanism for the purpose of receiving Short Message Service (SMS) from its subscribers requesting for a Unique Porting Code (UPC) and for cancellation of the in-progress port request as per the mechanism provisioned in the Telecommunication Mobile Number Portability (Seventh Amendment) Regulations, 2018, dated 13th December, 2018, as the case may be, and forwarding such requests to the Mobile Number Portability Service Provider of the zone to which the mobile number belongs.

In the scenario of inter-circle porting, a subscriber intending to port his second or subsequent mobile connections from any of the telecom service provider belonging to a licensed service area other than Jammu & Kashmir, North East and Assam, to the telecom service provider in Jammu and Kashmir licensed service area, would face rejection of porting request as the UPC generated by the subscriber with the validity of four days (as specified through seventh amendment regulations) will be no longer valid upon expiry of 10 days' time specified through the instructions of DoT for clearance from the local Police.

Therefore, the Authority, through its Direction dated 26th February, 2020, for the reasons mentioned above and to ensure compliance of terms and conditions of license and to protect the interest of consumers, amended the Direction dated 17thOctober, 2019 by inserting the following proviso:

"Provided also that if upon receipt of the porting request from recipient operator, the Mobile Number Portability Service Providers finds that the recipient operator belongs to Jammu & Kashmir licensed service area and the donor operator belongs to any licensed service area other than Jammu & Kashmir, North East and Assam; the validity of the UPC in such porting requests shall be deemed to be 15 days and the validity of UPC shall be counted ignoring the day on which the request for UPC is made by the subscriber."

Direction dated 19th June, 2020 issued to all the Access Service Providers regarding Implementation of the Telecom Commercial Communications Customer preference regulations (TCCCPR), 2018

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, they 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.
- Direction dated 27th August, 2020 for a minimum threshold of Rs. 10 to be applicable for generating unique porting code, raising of Non-Payment Disconnection requests and reconnection of mobile numbers

The Authority vide its direction no. 116-6/2017-NSL-II (Vol.II) dated 27th August, 2020 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 24th May, 2011, and for ensuring compliance of terms and conditions of license and for protecting the interest of consumers, directed 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 postpaid subscriber in the previous paid bill is Rs. 10 or less than Rs. 10, 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 Rs. 10 or less than Rs. 10 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 Rs. 10 or less than Rs. 10;
- 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 postpaid 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.

> Direction dated 18th September, 2020 on "Tariff publications and Tariff advertisements"

The Authority issued a consultation paper on "Transparency in Publishing of Tariff Offers" on 27th November, 2019. An OHD on the Consultation Paper was conducted by the Authority on 17th June, 2020 through Video Conferencing. Pursuant to the consultation, it was observed that the existing Directions on tariff publications required publishing of details of tariff plans only in the specified format which have become inadequate and are no longer an efficient approach to deal with publication of tariffs in a dynamic scenario with changes in the tariff offerings.

Thus, The Authority in supersession of Direction No.301-14/2010-ER dated 16th January, 2012 directed the TSPs vide Direction dated 18th September 2020 as specified below:

- a) Publish, service-area wise, each Tariff Plan for post-paid subscribers and pre-paid subscribers, as applicable. Service Providers shall make available such Tariff Plans to the subscribers at the Customer Care Centres, the points of sale, retail outlets and on the website, App of the telecom service provider. The service providers shall have the following essential disclosures for tariff plans and Special Tariff Vouchers/Combo Vouchers/Add on packs:
 - (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,

- (iii) Information regarding validity period of the tariff plan/pack and the last date of payment of bill,
- (iv) An exhaustive list of all specific inclusions in tariff plan/pack,
- (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/pack,
- (vi) All the promised service parameters such as data speed, etc., and
- (vii) Complete details of all material conditions, including, but not limited to, details of applicable Fair Usage Policy.
- b) ensure that the tariffs published are updated on the website, App, and Customer Care Centre of the service provider, points of sale, and retail outlets every time is any change in any of the tariff offers or new tariff offer is launched,
- c) submit to the Authority a compliance report of the directions within fifteen days of the publication of the Direction, and
- d) submit to the Authority, the fact of continued compliance in respect of directions by way of a self-certificate by 7th of the month following the quarter ending 31st March, 30th June, 30th September, and 31st December of the fiscal year.

Direction dated 4th December, 2020 issued to telecom service providers regarding seeking information related to segmented offers

In pursuance of the Order dated 6^{th} November, 2020 passed by the Hon'ble Supreme Court of India, the Authority directed all the TSPs to provide, within fifteen days of the date of issue of direction 4^{th} December, 2020, on a monthly basis, for each LSA, the following details of segmented offer from December, 2020 onwards:

- (i) details of rates and related terms and conditions, quantum of services, name of the tariff plan, and validity period of subscription and 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 and conditions, quantum of services, validity period of subscription and 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.

BROADCASTING SECTOR

Direction dated 17th January, 2020 issued to M/s Tata Sky Limited to ensure compliance of Direct to Home Broadcasting Services (Standards of Quality of Service and Redressal of Grievances) Regulations, 2007

The Authority vide its direction dated 17th January, 2020 directed M/s Tata Sky Limited to:

- a) refund all the subscribers who were affected during 1stOctober, 2018 to 5th December, 2018, for which the payment was charged.
- b) submit, to the Authority, a list of subscribers, to whom refund has been made under para (i) above, along with the amount of such refund.
- c) deposit any amount that could not be refunded to the subscribers under para (i) above, into the following account, as per the provisions of the Telecommunication Consumers Education and Protection Fund Regulations 2007 (6 of 2007).

Account Name: Telecommunication Consumers Education and Protection Fund (TCEPF)

Account No: 520101223026359

Bank and Branch: Corporation Bank, Asaf Ali Road

IFSC Code: CORP0000679

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 1st January, 2020 and The Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Second Amendment) Regulations, 2020, 1st January, 2020

During 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 bouquets; thereby increasing their monthly payout, and that the said broadcaster announced to discontinue its low-priced bouquets with effect from 1st 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 the

Authority, 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 were 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 were 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 the 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 adhocism and uncertainty in the sector caused serious concern regarding timely completion of agreements and provision of signal/revenue share, etc. impacting the healthy and orderly growth of the sector.

It was also observed that the restraint exercised by the Authority for not taking coercive measure vis-à-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. Such DTH operators and MSOs also represented to the Authority 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.

The Authority observed 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 the Authority resulting in total chaos and uncertainty in the minds of consumers; and (iv) any further delay in implementation of the Tariff Amendment Order 2020 and Interconnection Amendment Regulations 2020 would adversely affect the interest of consumers resulting into irreparable loss to the consumers.

Therefore, the Authority on 24th July, 2020 issued a Direction to the Broadcasters to ensure compliance of various provisions and to report to the Authority 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.

Amendment to the 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 dated 18th August, 2020

The Authority directed all the broadcasters on 24th July, 2020 to report by 10th August, 2020 the 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 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 7th 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 12th August, 2020, wherein during the proceedings before the Hon'ble Court, the Authority assured the Hon'ble Court that date of 10th August, 2020, as prescribed in the direction dated 24th July, 2020, would be extended to 26th August, 2020. Therefore, the Authority notified that the direction dated 24th July, 2020 stands modified to the extent that the date of 10th August, 2020, as prescribed in the direction dated 24th July, 2020, shall stand substituted by 26th August, 2020.

Direction dated 21st 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

The Authority vide its direction dated 21st October, 2020 directed M/s Good Media Cable Network 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 4th December, 2020 issued to M/s DEN Satellite Networks Pvt. Ltd, 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 sub-clause (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997

The Authority vide its direction dated 4th December, 2020 directed M/s DEN Satellite Networks Pvt. Ltd., M/s Metro Cast Network India Pvt. Ltd., M/s JPR Network Pvt. Ltd. and M/s Seven Star Dot Com Pvt. Ltd. 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 16th December, 2020 issued to M/s Thamizhaga cable TV communication Pvt. Ltd. to ensure compliance of 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

The Authority vide its direction dated 16th December, 2020 directed M/s Thamizhaga cable TV communication Pvt. Ltd., M/s Manakula Vinayagar Digital Network, and M/s KAL Cables Pvt. Ltd. to ensure compliance with the provisions of the Interconnection Regulation dated 3rd March, 2017 & Quality of Service Regulation dated 3rd March, 2017 regarding listing of channels in electronic programme guide.

V. CONSULTATION PAPERS

TELECOM SECTOR

CP regarding "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality" dated 2nd January, 2020

The Authority on 2nd January, 2020 issued a Consultation Paper on 'Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality". The paper deliberates on issues related to TMPs and the MSB Net Neutrality, to understand the various challenges in measurement of internet traffic and compilation of reasonable TMPs, to establish a framework to formulate TMPs, and to discuss issues related to composition, function, and the Governance Structure of various MSBs.

> CP regarding "Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization" dated 29th January, 2020

DoT, through its letter dated 13th August, 2019, requested the Authority to furnish recommendations on terms and conditions of Unified License and Unified License (VNO) agreement for permitting backhaul links for mobile network via satellite through VSAT under the terms of the Telecom Regulatory Authority of India Act, 1997 (as amended). DoT had stated that there exists a requirement for utilizing VSAT capabilities and allowing cellular backhaul for connecting BTS/Mobile network in far flung areas under Commercial VSAT CUG Service License to enhance provisioning of internet and voice services in the hitherto uncovered areas.

In this regard, a CP on "Provision of Cellular backhaul connectivity via Satellite through VSAT under commercial VSAT CUG Service Authorization" was released on 29th January, 2020 seeking inputs from the stakeholders.

> Draft Telecom Tariff (65th Amendment) Order dated 18th February, 2020

In a bid to discourage use of discounted SMS package available in the market for retail consumers for unsolicited commercial communication, the Authority had issued the Telecom Tariff (54th amendment) Order dated 5th November, 2012 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. However, considering the revised comprehensive regulatory framework for UCC as prescribed under the Telecom Commercial Communications Customer Preference Regulations, 2018, a need was felt to review the issue of SMS tariff regulation. Accordingly, the Authority released Draft Telecommunication Tariff (Sixty-Fifth Amendment) Order, 2020, on 18th February, 2020 for comments of the stakeholders.

> CP regarding "Methodology of applying SUC under the weighted average method of SUC assessment, in cases of Spectrum Sharing" dated 22nd April, 2020

DoT through its letter dated 15th January, 2020, interalia, 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 licensee post sharing increases by 0.5% of the 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 the Authority 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.

In this regard, a CP on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing" was released on 22nd April, 2020 seeking comments/counter-comments from the stakeholders on the issues raised in the CP.

> CP regarding "Regulation of International Mobile Roaming Services" dated 26th May, 2020

The Authority took cognizance of concerns of potentially abusive tariffs or a general lack of transparency in the communication of tariffs relating to IMR Service leading to bill shocks. It was decided to review the regulatory framework relating to IMR Service and accordingly a consultation paper was issued on 26th May, 2020, focussing on specific causes of bill shocks to consumers while availing the IMR Service and evaluating the need for introducing regulations while reviewing the efficacy of existing regulatory requirements.

> CP regarding "Roadmap to Promote Broadband Connectivity and Enhanced Broadband speed" dated 20th August, 2020

The Authority issued the Consultation Paper on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband speed" on 20th August, 2020.

Increasing reliable and high-speed broadband connectivity in the country has been the Government's and the Authority's focus since 2004. Several policy and regulatory initiatives have been taken in the past to reach the present state. Constant developments in the field of ICT are putting

continuous pressure on the Government, the Authority, and the TSPs to further improve the penetration and performance of the broadband networks. Efforts are continuing to meet the ever-growing demand and expectations of the 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 has 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 and 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 has 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 CP intends to seek the inputs of stakeholders on defining fixed and mobile broadband, innovative approaches for infrastructure creation, promoting broadband connectivity, and the measures to be taken for enhancing broadband speed.

> CP regarding "Enabling Unbundling of Different Layers Through Differential Licensing" dated 20th August, 2020

DoT through its letter dated 8th May, 2019, inter alia, informed that NDCP-2018, under its 'Propel India' mission, envisages one of the strategies as 'Reforming the licensing and regulatory regime to catalyze 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 the Authority 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, the Authority 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 on "Enabling Unbundling of Different Layers Through Differential Licensing" was released on 20th August, 2020.

CP regarding "Review of The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2006," dated 1st September, 2020

The Authority issued a CP on "Review of The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2006," on 1st September, 2020 for seeking the comments of the stakeholders. 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.

BROADCASTING SECTOR

CP regarding "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services" dated 22nd April, 2020

The Authority on 22nd April, 2020, released CP on "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services". The CP was taken on suo moto basis to deliberate upon the issues related to CAS and SMS systems, their underlying factors, and possible remedial measures.

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

MIB vide its letter dated 23rd October, 2020 has referred back the Authority's Recommendations dated 19th 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 another letter dated 23rd October, 2020 has referred to the Authority's Recommendations on Regulatory Framework for Platform

Services dated 19th November, 2014 and the Authority's Recommendations on "Platform Services Offered by DTH Operators" dated 13th November, 2019. Vide this second reference, MIB has proposed to adopt certain recommendations on four issues, in respect of Platform Services offered by MSOs; also, by appropriately replacing the word "DTH" with "MSO" and requested the Authority 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 many 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 applicable on certain recommendations made for DTH operators in 2019 on MSOs too. Therefore, in line with its practice, the Authority shall provide its recommendations on the above-mentioned letters to MIB after a due consultation process Therefore, the Authority on 7th December, 2020, released CP for seeking comments of all the stakeholders.

VI. OPEN HOUSE DISCUSSION (OHD)

TELECOM SECTOR

> OHD on the CP "Developing a unified numbering plan for fixed line and mobile network services" held on 16th January, 2020

An OHD was conducted on 16th January, 2020 at TRAI Headquarter, New Delhi, on the CP "Developing a unified numbering plan for fixed line and mobile network services".



OHD on the CP "Developing a unified numbering plan for fixed line and mobile network services" held on $16^{\rm th}$ January, 2020

> OHD on the CP on "Review of Interconnection Usage Charges" held on 3rd February, 2020

The Authority conducted an OHD on 3rd February, 2020 at TRAI Conference Hall on the CP on "Review of Interconnection Usage Charges" dated 8th November, 2019. The OHD was attended by various entities including TSPs, Service Providers Associations, Companies, Organizations, etc.

> OHD on CP on "Cloud Services" held on 28th February, 2020

The Authority convened an OHD through Video Conferencing on the CP on "Cloud Services" on 28th February, 2020.



OHD held on the CP on "Cloud Services" held on 28th February, 2020

> OHD on the CP on "Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization" held on 20th May, 2020

The Authority convened an OHD through Video Conferencing on the CP on "Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization" on 20th May, 2020.

Several stakeholders, including, TSPs, industry associations, technology companies, etc., participated in the OHD. There was an overwhelming response for conducting the OHD through video conferencing even during the pandemic.

> OHD on the CP on "Methodology of applying SUC under the weighted average method of SUC assessment, in cases of Spectrum Sharing" held on 9th July, 2020

The Authority convened an OHD on 9th July, 2020 through Video Conferencing on CP on "Methodology of applying SUC under the weighted average method of SUC assessment, in cases of Spectrum Sharing".

Many stakeholders, including TSPs, industry associations, etc., participated in the OHD. There was a good response for conducting the OHD through video conferencing even during the pandemic.

> OHD on CP on "Regulation of International Mobile Roaming Services" held on 27th August, 2020

The Authority convened an OHD through Video Conferencing on CP on "Regulation of International Mobile Roaming Services" on 27th August, 2020.

BROADCASTING SECTOR

> OHD on CP on "Reserve Price for auction of FM Radio channels" held on 8th January, 2020

OHD on CP on the "Reserve Price for auction of FM Radio channels" was held on 8th January, 2020 in Delhi.

> OHD on CP on "Interoperability of Set Top Box" held on 29th January, 2020

OHD on CP on "Interoperability of Set Top Box" was held on 29th January, 2020 in Delhi.

> OHD held on 25th June, 2020 on CP on "Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services"

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

VII. CONSUMER INTERESTS

The Authority reaches out to the telecom subscribers through its website and social media platforms such as Facebook, Twitter, YouTube, etc., and also through COPs which are being conducted across the country. The Consumer Advocacy Groups (CAGs) registered with the Authority work as interlocutors between consumers, Telecom Service Providers, and the Authority. These interlocutors assist the Authority in promoting consumer education. The Authority constantly works towards enhancing consumer awareness about the regulatory measures that it has undertaken by publishing handbooks, newsletters, etc., and through media campaigns in the print and electronic media.

Consumer Protection & Empowerment

As per the TRAI Act 1997, transparency and consumer protection are important mandates of the Authority. The Authority recognizes the importance of reaching out to the consumers in order to safeguard their interests and obtain their feedback, which are further utilized in the decision-making processes. With this objective, the Authority launched a couple of Mobile Apps and Portals in 2019 to increase its outreach of telecom consumers in India. The success and acceptance of this idea encouraged the Authority to develop new consumer-oriented Mobile App and Portals. The features of new technological platforms developed during the year are as follows:

Channel Selector App

In order to help consumers in selecting channels (addition/deletion), the Authority launched the TRAI Channel Selector App on 25th June, 2020. Through the TRAI Channel Selector App, consumers can view and modify their current subscription any number of times. The app is available on both Google Play Store and Apple Store for free. For more information, please visit the TRAI website.

Through the App the consumers can view their DPO's offerings, fetch the existing subscription details, choose, and optimize channel and bouquet selection, modify existing selection, and set selection with respective DPOs. The App will suggest an optimum configuration, i.e., combination of Channels/Bouquet based on the consumer's selection so as to reduce total monthly bill. Additionally, it will make suggestions on different combination of Channels/Bouquets based on the consumer's interest keeping in view the geography, region, language, genres, preferences, etc. For more information, please visit the TRAI website.

B&CS Integrated Portal (BIPS) - Register of Interconnect (ROI) Module

The Authority developed an integrated web-based portal to facilitate the online filing of information. This module will enable online filing of

information related to all the interconnection agreements, carriage fee agreements, placement fee agreement and other related agreements between broadcasters and distributors of television channels. It will have the provision of registering and updating profile. Every broadcaster and distributor of television channels (irrespective of the average active subscriber base) has to submit the RIO after registering on the portal. BIPS facilitates all stakeholders of Broadcasting Sector, viz., Broadcasters and Distributors, to submit information related to the Interconnection and other agreements pursuant to the Telecommunication (Broadcasting and Cable) Services Register of Interconnection Agreements and all such other matters Regulations, 2019.

Mobile Number Revocation List (MNRL) Portal

MNRL portal is a platform where TSPs can submit the list of permanently disconnected mobile numbers. The stakeholders such as banks can download MNRL and clean up their databases by using their own workflows (for example, a bank could download the list, check each number and if it is one of their customers', then can flag it, and let the customer update it with his new number). The stakeholders thereby shall not send a one-time password, etc., to someone other than their customer. This will help the customers, who either are not using the concerned services regularly, and, hence, do not update their mobile number regularly, or are unaware of the potential danger associated with a mobile number being reused if it has been re-allocated to another person/entity.

Header Information Portal

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

SMS Header exemption (5 ps.) Portal

As per Regulation 35 of the Telecom Commercial Communications Customer Preference Regulations, 2018 (TCCCPR, 2018), this portal shall facilitate the government entities to take 5 paisa exemption from transactional SMS charge. Government Entities may apply online for new exemption or renewal of exemption against the headers registered with the TSPs.

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

The Authority has released advertisements in English, Hindi, and some regional languages for the subscribers of DTH/cable TV about the "Channel Selector App" developed by it. Handbook for Broadcasting and Cable Services is in the process of finalization.

Webinars/Seminars on Various Topics of Consumer Interests and Protection

One of the important objectives of the Authority is to create awareness and safeguard consumer interests. To achieve this objective, the Authority organizes seminars on contemporary technological and consumer-related issues. During to the pandemic, the Authority had organized eight Webinars (Seminar through online mode):

- a) Seminar on "Future of OTT (Over-The-Top)" at Hyderabad (Telangana) on 23rd January, 2020.
- b) Seminar on "Enabling 5G in India" at Indore (MP) on 24th January, 2020.
- c) Seminar on "Emergence of Artificial Intelligence and Machine Learning" at Kolkata on 13th March, 2020.
- d) Webinar on "5G in India–Specification, Use Cases, Challenges and Action Plan" at Jaipur on 24th July, 2020.
- e) Webinar on "5G-Architecture, Use Cases and Govt. Initiatives" at Hyderabad on 21st August, 2020.
- f) Webinar on "IoT (Internet of Things) Trends, Security Challenges and Solutions" at Bhopal on 28th August, 2020.
- g) Webinar on "Cyber Security" at Bangalore on 21st September, 2020.
- h) Webinar on "Cyber Security" at Jaipur on 26th November, 2020.

Redressal of Consumer Grievances

TRAI Act, 1997, does not envisage handling of individual consumer complaints. However, any complaints received by the Authority are forwarded to the concerned service providers for appropriate action. From 1st January, 2020 to 31st December, 2020, the Authority received 50192 complaints related to Telecom services and 12177 complaints from the subscribers of DTH and Cable TV services. All these complaints were forwarded to the concerned service providers for appropriate action. Complaints of generic nature or the ones that required class action were handled to address the underlying issues. The issues noticed regarding International Mobile Roaming were addressed by amending the consumer protection regulations. Similarly, the issues observed were mainly related to Tariff transparency and were addressed though directions to the respective TSPs.

Consumer Outreach Programmes (COPs)

To enhance consumer education and awareness, the Authority organises COPs across the length and breadth of the country. These COPs also provide a platform to consumers to raise their local issues with the Authority and the telecom service providers. Owing to COVID-19, COPs were conducted online during the year. So far 43 COPs have been held, both in physical (during the pre-COVID-19 period) and online mode. List of COPs organized during the year is annexed at the end of this report.

Registration of Consumer Advocacy Groups and Their Capacity Building

CAGs, registered with the Authority, co-ordinate and assist in disseminating the information about the Authority's activities on consumer awareness programs in their areas. They also participate in COPs of the Authority. CAGs are also members of the Advisory Committee to the Appellate Authorities of TSPs. A review of the performance of CAGs whose tenure was due for renewal w.e.f. 1st April, 2020 was carried out. Some new organizations have applied to register with the Authority, out of which 13 new CAGs were registered w.e.f. 1st April, 2020. Till date, 58 CAGs are registered with the Authority.

To keep the CAGs abreast of the latest developments in the sector, the Authority conducts capacity building workshops for them. During these workshops, besides the usual interaction between the Authority, CAGs, and TSPs on consumer-centric issues, expert sessions on important telecom issues are organized. Two such workshops were organized pre-COVID-19 at Rameswaram (Tamil Nadu) on 24th January, 2020 and at Bikaner (Rajasthan) on 6th March, 2020. Due to the prevailing pandemic situation in the country, CAGs have been asked to attend webinars organized by the Authority as a part of their capacity building.

Quality of Service

To ensure the Quality of Service (QoS) by service providers, the Authority monitors their performance through publishing Quarterly Performance Monitoring Reports (PMR) and Point of Interconnection congestion reports. These are compiled through the reports submitted by service providers. Additionally, regular interactions with the service providers help to improve the QoS. Independent agencies carry out the auditing and assessment of the QoS. To better gauge consumers' perception of service, surveys are conducted by the independent agencies. The results of the audit assessment of QoS and surveys are published for the information of stakeholders. The Authority has also been imposing financial disincentive on service providers in case they fail to comply with the quality-of-service benchmarks.

The details of Show Cause Notices and Orders issued to the TSPs are as under:

Non-Compliance of QoS Benchmarks

During the year, the Authority issued Show Cause Notices to 5 Cellular Service Providers, 3 Basic Service Providers, and 4 Broadband Service Providers for not meeting the benchmarks of QoS parameters, and 1 service provider for delay in submission of compliance report for broadband services.

In response to the above Show Cause notices, from 1st January, 2020 to 31st December, 2020, 11financial disincentive orders towards non-compliance of QoS Regulations and 3 financial disincentive orders towards delay in submission of compliance reports of QoS Regulations were issued as detailed below:

Services	Total Amount of FD		
Cellular	76.50 lakhs		
Broadband	19.30 lakhs		

Unsolicited Commercial Communications

95.80 lakhs

The Authority also issued Show Cause Notice to Service Providers for non compliance to the provisions of TCCCPR as detailed below:

- a) Show Cause Notice dated 14th February, 2020 issued to BSNL for Violating the Clause 26 of the TCCCPR, Regulations, 2018.
- b) Show Cause Notices dated 21st August, 2020 issued to 7 Service Providers, viz., Airtel, MTNL, QTL, RJIO, TTSL, V-CON Mobile and Infra Pvt. Ltd, and Vodafone Idea Ltd., for non-compliance to the provisions of TCCCPR, 2018 for March, 2020.
- c) Show Cause Notices dated 24th August, 2020 issued to 2 Service Providers, viz., BSNL and RCOM for not submitting the PMR as per the provisions of TCCCPR, 2018 till June, 2020.
- d) Show Cause Notices dated 1st October, 2020 issued to 7 Service Providers, viz., Airtel, MTNL, QTL, RJIO, TTSL, V-CON Mobile and Infra Pvt. Ltd. and Vodafone Idea Ltd., for non-compliance of the provisions of TCCCPR, 2018, for April to June, 2020.
- e) In response to the above Show Cause Notices, 8 orders were issued for an amount of Rs. 3499.98 lakhs.

Mobile App for Monitoring UCC Complaints:

TCCCP Regulations are complaint-based regulations. There was a need to have an additional complaint mechanism that can be easily used by the consumer. For this the Authority developed an improved mobile App (DND Services) for easy registration of UCC Complaints. With this App, the consumer can also check the status of the complaint.

VIII. SHOW CAUSE NOTICES

BROADCASTING SECTOR

Show Cause Notices dated 20th July, 2020 issued to 9 MSOs for non-compliance of the provisions of the Tariff Order, 2017, dated 3rd March, 2017 as amended, and QoS Regulation dated 3rd March, 2017 as amended

Show Cause Notices dated 20th July, 2020 were issued to nine (9) MSOs viz. M/s ACT Digital Home Entertainment Private Limited, M/s E-Infrastructure and Entertainment Private Limited, M/s Fastway Transmissions Private Limited, M/s GTPL Hathway Limited, M/s Indusind Media and Communication Limited, M/s Kal Cable Private Limited, M/s Kerala Communicators Cable Limited, M/s NXT Digital Limited and M/s UCN Cable Network Private Limited for non-compliance of the provisions of the Tariff Order, 2017, dated 3rd March, 2017 as amended, and QoS Regulation dated 3rd March, 2017 as amended.

The Authority received complaints from various consumers with regards to applicability of Network Capacity Fee (NCF) of Rs 130/-for up to 200 channels and Rs 160/- for more than 200 channels, including charges of a maximum 40% of declared NCF for second and additional TV connections. On scrutiny of the website of the said service providers on 12th July, 2020, it was observed that they had not declared the revised network capacity fee NCF) in accordance with the extant regulatory provisions and thus have failed to comply with certain provisions of the Tariff Order 2017 and QoS Regulation 2017.

Therefore, on 20th July, 2020, Show Cause Notices (SCNs) were issued to these 9 MSOs for non-compliance of the provisions of the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017, dated 3rd March, 2017 as amended and the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017, dated 3rd March, 2017 as amended.

Show Cause Notices dated 26th November, 2020 issued to 4 MSOs viz. M/s Fastway Transmission Private Limited, M/s Kal Cable Private Limited, M/s Tamil Nadu Arasu Cable TV Corporation Limited, and M/s V K Digital Network Private Limited for non-compliance of the provisions of the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Services and Consumer Protection (Addressable Systems) (Second Amendment) Regulation 2019 dated 9th October, 2019

Show Cause Notices dated 26th November, 2020 were issued to 4 MSOs, viz., M/s Fastway Transmission Private Limited, M/s Kal Cable Private Limited, M/s Tamil Nadu Arasu Cable TV Corporation Limited, and M/s V

K Digital Network Private Limited for non-compliance of the provisions of the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Services and Consumer Protection (Addressable Systems) (Second Amendment) Regulation 2019 dated 9th October, 2019.

IX. OTHER ISSUES

TELECOM SECTOR

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

The Authority on 22nd September, 2020 released a White Paper on "Smart Cities in India: Framework for ICT Infrastructure". The White Paper discussed the relevant aspects related to ICT infrastructure used in Smart Cities. The following topics have been covered in the White Paper:

- a) Elements of a Smart City-Ecosystem
- b) ICT Requirement for different Elements of the Smart City
- c) Gaps and Challenges
- d) Standardized ICT technology to make system interoperable
- e) Common Framework for ICT Infrastructure for a Smart City
- f) Integrated efforts of various Stakeholders in developing and deploying standardized, inter-operable, resilient, and 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.

As a way forward, the White Paper has laid emphasis on achieving Standardization, Inter-operability, Scalability, Sustainability, Resiliency in the ICT infrastructure for Smart Cities that 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 pave the way for the industry and technocrats to kindle their thought process and bring about transformation through identification of the key enablers in order to accelerate the development of Smart Cities in India.

The Authority's QoS Monograph—Quest for a good quality network inside Multi-Storey Residential Apartment "Reimagining ways to improve quality" dated 22nd September, 2020

The Authority on 22nd September, 2020 released the Monograph on "Quest for a good quality network inside Multi-Storey Residential Apartments." The monograph covers the recommendations on the following aspects:

- a) To build a good quality network with collaborative partnerships
- b) Engaging with the end user, while designing the networks

- c) Developing processes and practices that assures a good quality network
- d) Aligning incentives of principals and agents in a manner that does not conflict

Measures taken by the Authority to address concerns arising from COVID-19

Measures to ensure provision of uninterrupted services

The Government of India had prescribed a lockdown in the country for an initial period of 21 days with effect from 25th March, 2020. Recognizing the concern that the lockdown may adversely affect the working of customer service centres/point of sale locations, and the subscribers who wish to top up their prepaid balances or want to extend their subscription to a prepaid tariff using offline channels may face hardships and/or disruption of services, the Authority vide letter dated 29th March, 2020 required the TSPs to take necessary steps as deemed fit, including extending the validity period to ensure uninterrupted services to all prepaid subscribers. The TSPs responded by following measures which, inter alia, included, extending the validity periods to ensure that subscribers are able to receive incoming calls, crediting talk-time or voice minutes to ensure that subscribers are able to make outgoing calls.

> Measures to address compliance concerns of service providers

Considering the hardships faced by the service providers, the Authority, on the request of COAI extended the date of compliance of all monthly and quarterly reports due on $31^{\rm st}$ March, 2020 by six weeks from the respective due dates. Subsequently, the Authority also extended the date of compliance in respect of all reports due on $30^{\rm th}$ April, 2020 by two weeks.

> Initiation of usage of digital platforms for OHDs

The Authority is committed to uphold the highest levels of transparency in its regulatory process and to ensure the same while also ensuring that regulatory initiatives do not lag due to COVID-19, the Authority started conducting OHDs online, and the first such OHD was held on 6th May, 2020 on "Draft Telecommunication Tariff (65th Amendment) Order, 2020" in New Delhi through video conferencing.

X. OTHER ISSUES

BROADCASTING SECTOR

> The Authority's letter issued to DPOs regarding modified API Specifications dated 7th February, 2020

The Authority released Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) (Second Amendment) Regulations, 2019, on 9th October, 2019. In the explanatory memorandum to the above said regulation it has been also mentioned that the Authority is in the process of finalizing the API Specifications, which will be communicated separately to the DPOs. Accordingly, the Authority vide letter dated 22nd October, 2019 to the DPOs had enclosed the API Specification document and directed the DPOs to share the URLs of production APIs as envisaged in API specification document. Through this letter, DPOs were informed that the Authority on a pilot basis with some DPOs has tested these API specifications and accordingly minor modifications were carried out in the earlier API Specification document sent on 22nd October, 2019. The modified API Specification document was enclosed as Annexure with the said letter, and the DPOs were directed to share the URLs of production APIs as per the modified API specification document.

Letter issued dated 13th February, 2020 to all Pay Broadcasters and DPOs for Implementation of Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff (Second Amendment) Order, 2020, dated 1st January, 2020

The Authority notified the Telecommunication (Broadcasting and Cable) Services Tariff Order, 2017, dated 3rd March, 2017. Tariff Order 2017 was amended and notified on 1st January, 2020 vide the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff (Second Amendment) Order, 2020. The provisions of the Tariff Amendment Order 2020 were to come into force from 1st March, 2020.

Therefore, on 13th February, 2020, a letter was sent to all the service providers concerned requesting to take suitable steps to ensure that the consumers have enough time to make their choices of channels, so that a smooth transition takes place on 1st March, 2020.

Expression of Interest for empanelment of auditors to carry out audit of Digital Addressable System dated 27th February, 2020 and its subsequent corrigendum issued on 6th March, 2020

Expression of Interest for empanelment of auditors to carry out audit of Digital Addressable System, issued on 27th February, 2020 and its subsequent corrigendum issued on 6th March, 2020.

Expression of Interest for empanelment of auditors to carry out audit of Digital Addressable System issued on 1st June, 2020

Expression of Interest for empanelment of auditors to carry out audit of Digital Addressable System issued on 1stJune, 2020.

> Lists of empanelment of auditors to carry out audit of Digital Addressable System

Lists of empanelment of auditors to carry out audit of Digital Addressable System, is issued and uploaded on the Authority's website from time to time. Latest list of 42 audit firms (dated 17th November, 2020) has been uploaded on the Authority's website on 18th November, 2020.

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

The Authority 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 the subsequent second amendment on 1st January, 2020. The provisions of regulation 15 of the Interconnection Regulation mandate that every distributor of the television channels shall, once in a calendar year, get its system audited by M/s BECIL or any of the auditor empaneled by the Authority, 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 the Authority's letters dated 4th May, 2020 and 2nd November, 2020, all the Distributors of television channels (DTH 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.

The Authority's 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

The Authority 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 the Authority'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 the Authority for the purpose.

The Authority's letters to all 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 the broadcaster in the interconnection agreement, issued on 17th September, 2020, 9th October, 2020, and 1stDecember, 2020

The Authority 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 the subsequent amendment on 1st January, 2020.

Vide the Authority's letters dated 17th September, 2020, 9th October, 2020, and 1st December, 2020, all the 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 the broadcaster in the interconnection agreement.

XI. OTHER ACTIVITIES

> Activities under Swachhta Action Plan (SAP) 2019–20

One community-based awareness camp was organized on 15th January, 2020 at Gandhi Market, New Delhi. In this awareness camp a street play, a Quiz on Swachh Bharat Abhiyan and Swachhta Pledge were conducted.

A workshop on health and hygiene and related issues for women employees of TRAI under Swachhta Action Plan (SAP) 2019–20 was conducted on 27th February, 2020.

> Observance of the Martyrs Day on 30th January, 2020

On 30th January, 2020, two minutes silence was observed at 11.00 AM at TRAI in the memory of those who sacrificed their lives in the struggle for India's freedom.

Bilateral Meeting of Chairman, Federal Communication Commission (FCC), U.S., with the Authority held on 24th February, 2020

Mr. Ajit Pai, Chairman, Federal Communication Commission (FCC), U.S., visited TRAI and had a bilateral meeting with the Authority and interacted with TRAI's Officers on 24th February, 2020 at New Delhi, India.



TRAI Welcomes Shri Ajit Pai, Chairman FCC, on 26th February, 2020

> International Women's Day held on 8th March, 2020

Every year, the Authority commemorates International Women's Day on 8th March. A function was organized on 6th March, 2020 (8th March, 2020 being Sunday) in honour of the female employees of TRAI Office.





International Women's Day celebrated in TRAI on 6th March, 2020

Celebration of Yoga Day held on 21st June, 2020

The 6th International Yoga Day was celebrated in TRAI as per the guidelines issued by the Ministry of AYUSH. The employees of TRAI had practiced Yoga-asanas as per the Common Yoga Protocol (CYP) at their home with family members and shared their pictures as a token of participation. The employees were also encouraged to adopt yoga in their lifestyle.

Joining of Dr. P.D. Vaghela as Chairman TRAI on 1stOctober, 2020 Dr.P.D. Vaghela has joined as Chairman, TRAI, w.e.f 1st October, 2020.



Dr. P.D. Vaghela Chairman, TRAI

➢ Bi-lateral Meeting TRAI and NTRA (National Telecom Regulatory Authority) Egypt held on 12th November, 2020

Bi-lateral Meeting between the Chairman, TRAI, and the Executive President, NTRA (National Telecom Regulatory Authority), Egypt, was held on 12th November, 2020, through Video Conferencing.



Bi-lateral Meeting held on 12th November, 2020 between TRAI and NTRA, Egypt

Observance of Swachhta Pakhwada-2020 (16th to 30th November, 2020)

In 2020, Swachhta Pakhwada was observed in TRAI. As per the approved action plan, all divisions of TRAI HQ and ROs performed cleanliness drives all over the office premises by removing waste, old files, and other un-used materials, etc. In order to ensure effective cleanliness of office premises, an industrial dustbin of 1100 Ltr. capacity and two double-sided high-rise sponge mops were procured. An essay competition on Swachhta was also organized in TRAI office.

> Celebration of Samvidhan Divas held on 26th November, 2020

26th November, is celebrated as Samvidhan Divas to commemorate the adoption of the Constitution of India. To mark the occasion, the Preamble to the Constitution of India was read out in TRAI office through a weblink.



Constitution Day, ceremony of reading the Preamble to the Constitution of India held on 26th November, 2020 in TRAI HQ, New Delhi

Armed Forces Flag Day held on 7th December, 2020

In order to observe the Armed Forces Flag Day on 7th December, 2020 in TRAI, a contribution of Rs. 200/- was made by all employees of TRAI in November, 2020 and an amount of Rs. 40,000/- was remitted to AFFD.

> Signing ceremony of Memorandum of Understanding (MoU) between TRAI and BEREC

A Memorandum of Understanding (MoU) was held on 4th December, 2020 between TRAI and Body of European Regulators for Electronic Communications (BEREC)

A signing ceremony of Memorandum of Understanding (MoU) was held on 4th December, 2020 between TRAI and Body of European Regulators for Electronic Communications (BEREC).



Signing ceremony held on 4th December, 2020 between TRAI and BEREC

e-Office

With the prevailing situation of COVID-19 in the country presently all TRAI officers/officials are working online through NIC emails. Working via emails has its own challenges and is becoming difficult to manage with the prolonged pandemic situation. It has become imperative to handle all official work in paperless mode. Hence, TRAI has adopted NIC e-Office for automation of file-related official works through eFile. The implementation of e-Office is being done at TRAI HQ and 5 Regional Offices.

Reports published by the Authority on Monthly, Quarterly, and Yearly Basis

Monthly

i. The Authority publishes the monthly press release on Telecom Subscription Data based onthe data/information received for the Wireline, Wireless, and Broadband services, respectively.

Quarterly

ii. TRAI releases the "Indian Telecom Services Performance Indicator Report" quarterly based on PMR/data/details.

Yearly

iii. The Authority has been publishing a report namely 'Yearly Performance Indicators – Indian Telecom Sector' on a calendar year basis. The publication derives the data/information from the report/information papers in the Authority on matters relating to their respective activities.

These reports present Key Parameters and growth trends for the Telecommunications and Broadcasting & Cable Services in India. All telecom and broadcasting service providers submitted their data/details to the Authority in compliance to the orders/directions issued by the Authority. Based on the data/details furnished by the service providers, the reports are prepared and published on TRAI's website. These reports are very useful for the concerned stakeholders since these reports indicate the current scenario/trend of market and help them to take suitable decision.

XII. RAJBHASHA

Details of activities conducted during 1st January, 2020 to 31st December, 2020 by Rajbhasha Section

To promote the use of Hindi in the day-to-day work of the office, an incentive scheme called "Annual Incentive Scheme" has been implemented in TRAI for the last eleven years for officers/employees. Under this scheme, 10 cash prizes are awarded every year to officers/employees for carrying out the office work in Hindi during the planned period. This scheme has proved to be very popular and effective among employees and they are encouraged to do most of their work in Hindi throughout the year to participate in this incentive scheme.

The idea is to make the officers/employees aware of the Official Language Hindi and to do more work in Hindi and simplify the work of noting and drafting. In TRAI for the purpose of informing the employees about the official language policy of the Union Government, Hindi workshops are held regularly. During the period under report, Hindi workshops were held in TRAI on 9th January, 2020, 9th September, 2020, and 31st December, 2020.

In compliance with the instructions received from the Department of Official Language (Ministry of Home Affairs) and Department of Telecommunications, "Hindi Pakhwara 2020" was organized in TRAI from 14th September, 2020 to 28th September, 2020. During this period, five Hindi competitions such as Hindi story writing/story extension competition, Hindi essay writing competition, Hindi Quiz competition, Hindi poetry recitation competition, and for drivers and Group-D category Hindi story writing/story extension competition were organized through the online mode.

Annexure

List of Consumer Outreach Programmes held during 1st January, 2020 to 31st December, 2020

S1.No.	Place of Consumer Outreach Programmes	Date
1	Khajuraho (Chhatarpur)	08.01.2020
2	Ambala (Haryana)	09.01.2020
3	Jhunjhunu (Rajasthan)	23.01.2020
4	Bihar, Nalanda	23.01.2020
5	Noida (U.P.)	31.01.2020
6	Dumka (Jharkhand)	06.02.2020
7	Mahasamund (Chhattisgarh)	13.02.2020
8	Kurukshetra (Haryana)	13.02.2020
9	Paloncha (Telangana)	14.02.2020
10	Jabalpur (Madhya Pradesh)	19.02.2020
11	Bishnupur, Distt. Bankura (WB)	20.02.2020
12	Rajahmundry (Andhra Pradesh)	20.02.2020
13	Faridabad (Haryana)	24.02.2020
14	Kapurthala (Punjab)	26.02.2020
15	Kurnool (Andhra Pradesh)	27.02.2020
16	Kanpur (Uttar Pradesh)	04.03.2020
17	Kannur (Kerala)	05.03.2020
18	Mahabubnagar (Telangana)	12.03.2020
19	Chhattisgarh	19.06.2020
20	Jaipur (Rajasthan)	26.06.2020
21	Asansol (West Bengal)	26.06.2020
22	Andhra Pradesh	29.06.2020
23	Uttar Pradesh	06.08.2020
24	Gujarat	07.08.2020
25	West Bengal	19.08.2020
26	Jharkhand	09.09.2020
27	Uttarakhand	11.09.2020
28	Hyderabad	16.09.2020
29	Haryana	18.09.2020
30	Assam	28.09.2020
31	Maharashtra	29.10.2020
32	Madhya Pradesh	29.10.2020
33	North East	05.11.2020
34	Punjab	06.11.2020

35	Tamil Nadu	06.11.2020
36	Karnataka	20.11.2020
37	Karnataka	25.11.2020
38	Chhattisgarh	27.11.2020
39	Karnataka	04.12.2020
40	Kerala	07.12.2020
41	Bihar	08.12.2020
42	Uttar Pradesh	17.12.2020
43	Rajasthan	18.12.2020

List of Acronyms

Sl. No.	Acronyms	Description	
1	AAAI	Advertising Agencies Association of India	
2	AGR	Adjusted Gross Revenue	
3	API	Application Programming Interface	
4	BARC	Broadcast Audience Research Council	
5	BEREC	Body of European Regulators for Electronic	
		Communications	
6	BIPS	Broadcasting & Cable Services Integrated Portal	
7	BIS	Bureau of Indian Standards	
8	BSNL	Bharat Sanchar Nigam Limited	
9	CAG	Consumer Advocacy Group	
10	CAS	Conditional Access System	
11	CCSP	Contact Centre Service Providers	
12	CMTS	Cellular Mobile Telephone Services	
13	COAI	Cellular Operators Association of India	
14	COP	Consumer Outreach Programme	
16	СР	Consultation Paper	
17	CSP	Cloud Service Provider	
18	CUG	Closed User Groups	
19	CYP	Common Yoga Protocol	
20	DAS	Digital Addressable System	
21	DGT	Director General of Telecom	
22	DLT	Distributed Ledger Technology	
23	DND	Do Not Disturb	
24	DoT	Department of Telecommunications	
25	DPO	Distribution Platform Operator	
26	DRP	Distributor Retail Prices	
27	DTH	Direct to Home	
28	EPG	Electronic Programming Guide	
29	FAQ	Frequently Asked Questions	
30	FBG	Financial Bank Guarantee	
31	HCCSP	Hosted Contact Centre Service Provider	
32	HITS	Headend-In-the-Sky	
33	HQ	Headquarter	
34	IaaS	Infrastructure as a Service	
35	IAS	Internet Access Service	
36	IBF	Indian Broadcasting Foundation	
37	ICT	Information and Communications Technology	

38IIMIndian Institutes of Management39IITIndian Institutes of Technology40ILDOInternational Long-Distance Operators41IMRInternational Mobile Roaming42IPInfrastructure Providers43IP-1Infrastructure Providers Category-I44IPTVInternet Protocol Television45ISAIndian Society of Advertisers46ITCInternational Termination Charges47M&AMerger and Acquisition48M2MMachine-to-Machine49MAC IDMedia access control address Identification50MeitYMinistry of Electronics and Information Technology51MIBMinistry of Information and Broadcasting52MNPMobile Number Portability53MNRLMobile Number Revocation List54MoUMemorandum of Understanding55MSBMulti Stakeholder Body56MSOMulti-System Operators	ogy
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56 MSO Multi-System Operators	
57 MTNL Mahanagar Telephone Nigam Limited	
58 NCF Network Capacity Fee	
59 NDCP-2018 National Digital Communications Policy 2018	
60 NIC National Informatics Centre	
61 NLD National Long Distance	
62 NPD Non-Payment Disconnection	
63 NTRA National Telecom Regulatory Authority	
64 OHD Open House Discussion	
65 OSP Other Service Providers	
66 OTP One Time Password	
67 OTT Over the Top	
68 PaaS Platform as a Service	
69 PABx Private Automatic Branch Exchange	
70 PE Principal Entities	
71 PMR Performance Monitoring Reports	
72 PoI Point of Interconnection	
73 PSTN Public Switched Telephone Networks	
74 QoS Quality of Service	
value of between	

76	ROI	Register of Interconnect	
77	RP	Reserve Price	
78	RPD	Resource Profile Directory	
79	SCN	Show Cause Notices	
80	SD	Standard Definition	
81	SDCA	Short-Distance Charging Area	
82	SDCC	Short Distance Charging Centres	
83	SMS	Short Message Service	
84	STB	Set-Top-Boxes	
85	SUC	Spectrum Usage Charges	
86	TMPs	Traffic Management Practices	
87	TRP	Television Rating Point	
88	TSP	Telecom Service Providers	
89	UASL	Unified Access Service License	
90	UCC	Unsolicited Commercial Communication	
91	UL	Unified License	
92	UNO	United Nations Organization	
93	UPC	Unique Porting Code	
94	UPI	Unified Payments Interface	
95	URL	Uniform Resource Locator	
96	USB	Universal Serial Bus	
97	VNO	Virtual Network Operators	
98	VSAT	Very Small Aperture Terminal	
99	WANI	Wi-Fi Access Network Interface	
100	Wi-Fi	Wireless Fidelity	



Telecom Regulatory Authority of India

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