



Report on Activities

(1st January 2018 to 31st December 2018)

TELECOM REGULATORY AUTHORITY OF INDIA



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PREFACE

The Telecom Regulatory Authority of India (TRAI) has endeavoured to create and nurture conditions for the growth of Telecommunications and Broadcasting Sectors in the country in a manner and at a pace which will enable India to play a leading role in emerging global information society. Various measures taken by TRAI have resulted in overall benefits to the consumer in terms of choice of services, affordable tariff and better quality of services etc. These measures have contributed vastly in exponential growth in these sectors.

The Authority adopts a transparent and exhaustive consultation process on important issues related to Telecommunication and Broadcasting Sector. The consultation process includes issue of Consultation Paper (CP) on the issue of importance, seeking written comments/inputs on the CP and holding of Open House Discussions (OHDs)/Workshops etc with an aim to arrive at a consensus on the issue. In addition to this, the Authority has been conducting Interactive Meetings with the Service Providers of Telecom and Broadcasting Sector at the beginning of each year to elicit suggestions on the subjects/topics which may be taken up for consultations during the year.

During the year 2018, the Authority had taken a number of steps to sustain growth and developments in the telecom sector. The Authority had made Recommendations to the Government on many key issues such as “In-Flight Connectivity”, “Next Generation Public Protection and Disaster Relief (PPDR) Communication networks”, “Privacy, Security and Ownership of the Data in the Telecom Sector”, “Regulatory Framework for Internet Telephony”, “Method of Allocation of Spectrum for Public Mobile Radio Trunking Service (PMRTS) including auction as a transparent mechanism”, “Auction of Spectrum in 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300-3400 MHz and 3400-3600 MHz Bands”, “Promoting Local Telecom Equipment Manufacturing” and “Making ICT Accessible for Persons with Disabilities”. Important Amendments in Telecom Tariff Order (TTO) were made to ensure transparency, non-discrimination, non-predation of tariff etc. in telecommunication services. To ensure an efficient and subscriber friendly mechanism for mobile number portability, TRAI notified the Telecommunication Mobile Number Portability (Seventh Amendment) Regulations, 2018. Through these amended regulations, the mobile portability process has been made efficient. To address the issue of Unsolicited Commercial Calls, Telecom Commercial Communications Customer Preference Regulations, 2010 have been reviewed and after consultation TRAI notified TCCCP Regulation, 2018 which is aimed to curb the problem of Unsolicited Commercial Communication (UCC) more effectively and efficiently.

The Authority also addressed various regulatory challenges faced by broadcasting sector during the year. The digitization process of Broadcasting and Cable Services was continuously pursued and monitored in the midst of various odds and challenges. The Authority also implemented a new regulatory framework for broadcasting services which is aimed to benefit consumers of broadcasting service. The fruits of this initiative are expected to be visible in the coming days. During the year, recommendations were made by TRAI to the Government on key issues concerning broadcasting sector such as “Issues related to Digital Radio Broadcasting in India”, “Ease of Doing Business in Broadcasting Sector”, “Issues related to New DTH Licenses”, Uplinking and Downlinking of Television Channels in India” etc.

The Authority conducted number of consumer outreach programmes (CoPs) and workshops to inculcate consumer education and awareness, during the year. TRAI also monitored 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 Telecom Sector and institution of prosecution complaints in cases of grave misdemeanor, has resulted in better compliance and regulatory enforcement.

This report presents an abstract of the activities undertaken by the Authority during the calendar year 2018, to have a broader view and better understanding of the initiatives taken by the Authority for growth of telecom and broadcasting and protect consumer interests. This report is also made available on public domain for the information of all stakeholders. The classification of activities has only been done to provide ease of reading. All the recommendations, regulations, consultation papers, tariff orders and directions etc. referred in this report are available on the TRAI website www.traigov.in and can be referred for detailed information.



(Sunil Kr. Gupta)
Secretary

REPORT ON ACTIVITIES

I. CONSUMER INTERESTS

Protecting consumer interest is one of the main functions of TRAI and the authority reaches out to the consumers through Consumer Outreach Programmes (COP) conducted across country and through dissemination of information to the consumers through its website. TRAI has instituted a mechanism to register Consumer Advocacy Groups (CAGs) who act as interlocutors between consumers, Telecom Service Providers & TRAI. CAGs also assist TRAI in educating consumers of their rights. Publishing of educational/publicity material by TRAI are some of the initiatives to enhance consumer awareness about their rights and service-related issues. The Electronic and Print media campaigns planned by TRAI also supplement to the consumer education initiatives to a great extent. During the calendar year 2018, 89 CoPs, 9 seminars and 6 workshops for capacity building of CAGs were conducted in different service areas across the country.

Quality of Service

TRAI monitors the performance of service providers through Quarterly Performance Monitoring Reports (PMR) and Point of Interconnection congestion reports submitted by service providers for ensuring Quality of Service (QoS). Regular interactions by TRAI with service providers help in improving quality of service. The auditing & assessing quality of service is carried out by independent agencies who are engaged. Surveys are also being done through these independent agencies to assess Consumer Perception of Service. The results of the audit assessment of quality of service and surveys are published for the information of stakeholders. TRAI has also been imposing financial disincentive on service providers for failure to comply with the quality of service benchmarks.

The details of Show Cause Notices and Orders issued to the Telecom Service Providers are as under:

Non-compliance of QoS Benchmarks

During the year, TRAI issued 11 Show Cause Notices to 2G Service Providers, 15 Show Cause Notices to Basic Service Providers, 55 Show Cause Notices to Broadband Service Providers, 68 Show Cause Notices to Cellular Service Providers and 4 Show Cause Notices 3G Service Providers.

After examining the responses to Show Cause notices issued during the year, 135 orders imposing Financial Disincentives (FD) towards non-compliance of QoS Regulations and 13 orders were issued for towards delay

in submission of compliance reports of QoS Regulations along with levying of financial disincentives as detailed below:

Services	Financial Disincentive
2G	537.90 lakhs
3G	61.00 lakhs
Broadband	38.70 lakhs
Basic	37.50 lakhs
Cellular	399.50 lakhs
Total Amount	1074.60 lakhs

Quality of Service on Metering & Billing

Show Cause Notice dated 6th February 2018 was issued to M/s Vodafone for contravention of the provisions of the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulations, 2006 dated 21st March 2006 for the financial year 2016-17.

In response to above show cause notice, an order of Financial Disincentive towards non-compliance of metering and billing regulations was imposed for Rs. 42.41 lakhs.

Unsolicited Commercial Communication (UCC)

Show Cause Notices dated 6th March 2018 were issued to 11 Telecom service providers, Viz. AIRCEL, AIRTEL, BSNL, IDEA, MTNL, Quadrant, RCOM, RJIO, TATA, Telenor, VODAFONE for violating the clause 19 (8) of the TCCCPR, Regulations, 2010.

In response to above show cause notices one order of Financial Disincentive towards non-compliance of TCCCPR, 2010 was imposed for Rs. 1.00 lakh.

Mobile App for Monitoring UCC Complaints

TCCCP Regulations being complaint-based regulation; there was a need to put in place an additional complaint mechanism which was user friendly. Hence, TRAI developed an improved mobile App (DND 2.0) for easy registration of UCC Complaints with the service providers. With this App, the consumer can register, deregister, change their UCC preferences and also check the status of his complaint.

White Paper on TRAI My Speed

TRAI issued a White Paper on Wireless Data Speed on 5th February 2018. TRAI has taken various initiatives to bring transparency and empowerment to the consumers in this regard. The initiatives undertaken includes setting the benchmarks for

wireless data networks and also assessing the network performance periodically. TRAI has also introduced mobile apps known as TRAI MySpeed App to measure the broadband speed on their own and the report can be submitted to TRAI. This paper provides more information about the test set up and methodologies behind the working of TRAI MySpeed app.

Key points of conclusion are:

- Measuring broadband speed is a complex process and the outcome depends upon both the test methodology and test conditions.
- Inferences and interpretation of results of test results are to be done keeping in mind the purpose for which these test processes were designed and developed.
- Wide variations during the individual test of speed measurement may sometimes be observed because of network state and short time window of measurement. Individual user results in conjunction with results of network performance in area of concern with tests conducted at the moment may provide better picture about expected performance of broadband network.
- For comparing the results from various speed measurement app providers, all such providers need to make available complete details of their methodologies and data processing in public domain so that various stakeholders including users can better understand and interpret them.
- Speed measurement at all India level may need to be presented with spatial and temporal distributions across districts and across different times of the day instead of presenting by a single value.
- Since graphs representing download throughput are highly asymmetric, it may require to be presented by five-point summary instead of only single value like mean or median.

Consumer Protection & Empowerment

As per TRAI Act 1997, transparency and consumer protection are important mandate of TRAI. TRAI recognizes the importance of reaching out to the consumers to safeguard their interests to obtain feedback and to involve them in decision-making processes. With this objective TRAI has launched couple of Mobile Applications last year to reach out to telecom consumers in India. Encouraged by the success and acceptance, TRAI developed new consumer oriented Mobile App and Portals. The features of new technological platforms are as follows:

a) TRAI APPS- Unified TRAI Mobile App:

Presently TRAI has three mobile apps namely 'DND 2.0', 'TRAI My Speed', 'My Call' app. As already stated, the 'DND 2.0' app provides the consumers an easy way to register their number in DND registry and to lodge complaint against unsolicited message or calls. 'TRAI My Speed' app allows the consumers to measure data speeds and submit the findings to TRAI, thus enabling TRAI to crowd source the data related to user experience of mobile speeds which can be further analyzed. 'My Call' App allows consumers to give feedback on the call quality which help TRAI receive the crowd sourced data and monitors the Quality of Service. Corresponding to My Speed and My Call data, TRAI has developed analytics dashboards. The same can be seen on analytics portals of TRAI. With a view to bring all three TRAI apps on single platform, TRAI has launched an app namely 'TRAI Apps' on Google Play store. This one app has wrapped all the three TRAI mobile apps under the name 'TRAI Apps'.

b) TRAI Mobile Apps on Umang platform (App):

With a view to reach out to consumers, TRAI integrated its mobile Apps UMANG Platform. UMANG (Unified Mobile Application for New-age Governance) is developed by National e-Governance Division (NeGD), Ministry of Electronics and information Technology (MeitY). UMANG provides a single platform for all Indian Citizens to access pan India e-Gov services ranging from Central to Local Government bodies and other citizen centric services. It provides a unified approach where citizens can install one application to avail multiple government services. The objective of UMANG integration is to increase the reach ability of TRAI Apps.

c) Coverage Map Portal:

Presently some of the Telecom Service Providers (TSPs) provide Coverage Maps of their network on their websites. However, these portals offer maps at different scale and signal level, which makes it difficult for consumers to make any meaningful interpretation or comparison.

Thus, to facilitate the consumers and various stakeholders, TRAI had done a Pilot Project on Coverage Map. On this interactive user-friendly portal, users had options to select various options like location, Indoor/ Outdoor, TSP, Technology (2G/3G/4GVoLTE, Voice/ Data to know the coverage provided by particular TSP at the location of their interest. The pilot was done for 2 states/LSAs viz – Delhi and Madhya Pradesh.

d) Tariff Portal:

Presently, Telecom Service Providers (TSPs) publish tariffs on their websites. To enable consumers to view tariffs of different TSPs in different Licensed

Service Areas (LSAs) on a single platform, a beta version of portal namely www.tariff.trai.gov.in was launched. This platform not only benefits the consumer but also help other stakeholders to do a comparative analysis. To get initial feedback on the look and feel of this portal from consumers, beta version of tariff data for Delhi LSA was made available with effect from 1.1.2009. Tariff filing by TSPs has been made completely paperless and Tariff Portal has been made fully operational.

e) User Centric views of TRAI Website:

With a view to make TRAI website more user friendly and to enrich the browsing experience of stakeholders, a need was felt to customize it in four broad categories of users i.e. consumers, service providers, researcher/ students and startup/consultants. This is in addition to the existing format. These are ‘Consumer view’, ‘Service providers view’, ‘Researcher/student view’, ‘Startup/Consultant view’.

f) TRAI DND App on iOS:

Earlier, TRAI DND app was available only on Android platform due to Apple Platform constraints. With the release of new features and functionality support on iOS 12, it has now become possible to develop the TRAI DND app on Apple’s iOS platform as well. However, this app will have limited features in comparison to the Android version app. Users can download the App from Apple App Store through below link:

<http://itunes.apple.com/in/app/trai-dnd-do-not-disturb/id1443781196?Is=1&mt=8>

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

TRAI has published a Consumer Handbook on Telecommunications with compilation of consumer centric information on all Regulations, Directions and Orders for easy understanding of consumers. The hand book is provided free of cost to consumers and CAGs to help in spreading consumer awareness.

A comprehensive update of the handbook has been undertaken to cover all important regulations /orders etc. issued since then. The revised edition of the handbook is being printed in Hindi, English and 10 regional languages (Tamil, Telugu, Kannada, Malayalam, Marathi, Punjabi, Gujarati, Bengali, Odiya and Assamese) and will be published by March 2019.

TRAI has also developed video films on ‘TRAI DND 2.0 App’, ‘Smart Phone Usage’ ‘Tower Fraud’, ‘Grievance Redressal Mechanism’ ‘TRAI Myspeed App’ and ‘TRAI Mycall app’ in 11 languages including Hindi, English and regional languages for creating consumer awareness.

Seminars on Consumer Interests and Protection

One of the important objectives of TRAI is to create awareness and safeguard consumer interests. To achieve this objective, TRAI organizes Seminars on contemporary technological and consumer related issues. TRAI organised nine such Seminars during the year as detailed below:

1. Seminar on Consumer Protection in Digital Era at Jaipur (Rajasthan) on 19th January 2018.
2. Seminar on Smart Phone Usage In Internet Age at Lucknow (UP) on 2nd February 2018.
3. Seminar on Big Data Analysis & Cyber Security at Bangalore (Karnataka) on 23rd February 2018.
4. Seminar on Cyber Crime & Security at Meerut on 6th September 2018.
5. Seminar on Digital India: Service and Solutions at Chandigarh on 13th September 2018.
6. Seminar on IOT: Bringing Automation for Better Tomorrow at Kolkata on 14th September 2018.
7. Seminar on Use of Block Chain & AI in Telecom Services at Hyderabad on 15th November 2018.
8. Seminar on Digital Economy at Bangalore on 29th November 2018.
9. Seminar on Smart Phone Usage at Guwahati on 20th December 2018.

Redressal of Consumer Grievances

TRAI Act, 1997 does not envisage handling of individual consumer complaints by TRAI. However, complaints received in TRAI are forwarded to concerned service providers for taking appropriate action. During the period from 1st January 2018 to 31st December 2018, TRAI received 32265 complaints related to Telecom services and 958 complaints in Broadcasting and Cable TV. All these complaints were forwarded to concerned service providers for appropriate action. Complaints of generic nature or requiring class action were handled to address the underlying issue.

Consumer Outreach Programmes (CoP)

To enhance consumer education and awareness, TRAI organizes consumer outreach programmes (COPs) across the length and breadth of the country. These CoPs also provide a platform to consumers to raise their local issues with TRAI and telecom service providers. During the year, TRAI organized 89

Consumer Outreach Programmes (CoPs). List of CoPs organized is annexed at the end of this report.

Registration of Consumer Advocacy Groups and their capacity building

Consumer Advocacy Groups (CAGs) registered with TRAI to assist TRAI in enhancing consumer education and to work for protection and propagation of the interests of the consumers. Regional Offices of TRAI are interacting with the CAGs, coordinating their activities and helping them to sort out consumer related issues with the Service Providers. CAGs are actively participating in the CoPs and workshops organized in their respective areas. These CAGs also are members of the Advisory Committee to the Appellate Authorities of TSPs. A review of the performance of CAGs (whose tenure was due for renewal) was carried out in April 2018. During this exercise, tenure of 23 CAGs was renewed and 3 new CAGs were added making the total number of registered CAGs as 55.

To keep the CAGs abreast with latest developments in the sector, TRAI conducts capacity building workshops for them. During these workshops besides the usual interaction between TRAI, CAGs and TSPs on consumer centric issues, expert sessions on important telecom issues are also organised. Six such workshops were organised during the period at Coimbatore (25th January 2018), Gangtok (16th February 2018), Manali (9th March 2018), Joshimath (7th June 2018), Aurangabad (31st August 2018) and Hyderabad (10th December 2018).

II. RECOMMENDATIONS

Recommendations were made to the Government on diverse subjects including management of scarce sources such as spectrum, Interconnection Cloud Services, Net Neutrality, Improving Telecom Services etc. Under this mandate, TRAI had made following recommendations during the year.

TELECOM SECTOR

In-Flight Connectivity

➤ **Recommendations dated 18th January 2018 on “In-Flight Connectivity”**

The Department of Telecommunications (DoT) through its letter dated 10th August 2017 had communicated that there was a proposal to introduce In-Flight Connectivity (IFC) for voice, data and video services over Indian airspace for domestic, international and overflying flights in Indian Air Space. DoT had also requested TRAI to furnish its recommendations on licensing terms and conditions for provision of IFC for voice, data and video services and associated issues such as entry fee, license fee, spectrum related issues including usage charges and method of allocation and other conditions.

In this regard, a Consultation Paper on ‘In-Flight Connectivity’ was released on 29th September 2017 seeking comments of stakeholders. An OHD was organized to discuss the issues concerned was held on 27th November 2017.

After analysing the comments received from stakeholders during the consultation and the open house discussions, TRAI finalized its Recommendation on “In-Flight Connectivity” and sent it to the Government on 18th January 2018.

The highlights of the recommendations are as follows:

- a) Both, Internet and MCA service should be permitted as In-Flight Connectivity (IFC) in the Indian airspace.
- b) The operation of MCA services should be permitted with minimum height restriction of 3000 meters in Indian airspace for its compatibility with terrestrial mobile networks.
- c) Internet Services through Wi-Fi onboard should be made available when electronic devices are permitted to use only in flight/airplane mode.
- d) A separate category of “IFC Service Provider” should be created to permit IFC services in Indian airspace. The IFC service provider

should be required to get itself registered with the DoT and it need not necessarily be an Indian entity.

- e) The IFC service provider be permitted to provide IFC services, after entering into an arrangement with Unified Licensee having appropriate authorization.
- f) If IFC service provider partners with Unified Licensee having Internet Service (Category 'A') authorization for the provision of Internet services onboard as part of IFC, then (i) If the licensee also has the Commercial VSAT CUG service authorization, it can provide the satellite links also. Alternatively, (ii) Unified Licensee with National Long Distance (NLD) service authorization can provide the satellite links.
- g) The regulatory requirements should be same for both Indian registered and foreign registered airlines for offering IFC services in Indian airspace.
- h) The deployment of a gateway in India provides an effective mechanism to lawfully intercept and monitor the in-cabin internet traffic while the aircraft is in Indian airspace. Therefore, the onboard Internet traffic must be routed to a Satellite Gateway on Indian soil. Such an obligation should be imposed regardless of whether the satellite in question is an Indian Satellite System or not.
- i) The IFC service provider should be permitted to use either INSAT systems (Indian Satellite System or foreign satellite capacity leased through DoS) or foreign satellites outside INSAT systems in the Indian airspace.
- j) To promote the adoption of IFC services in Indian airspace, the IFC service provider should be imposed a flat annual Licence Fee of token amount of Re. 1. However, the same may be reviewed and amended at a later stage, if need be.
- k) Spectrum neutral approach should be adopted subject to the condition that the frequency bands have been harmonized and coordinated for their use at the ITU. It would facilitate the IFC services in all the bands (L, Ku and Ka) in which IFC services are currently being provided.
- l) The framework recommended for IFC services in Indian airspace should be made applicable to all types of aircrafts such as commercial airlines, business jets, executive aircrafts etc.

➤ **TRAI's Response dated 5th June 2018 to DoT's back-reference on Recommendations dated 18th January 2018 on "In-Flight Connectivity"**

DoT through their letter dated 15th May 2018 referred back some of the TRAI Recommendations on "In-Flight Connectivity" dated 18th January 2018 for re-examination/reconsideration. After examining the comments of DoT, TRAI sent its response to the DoT on 5th June 2018. The recommendations have been uploaded on the TRAI's website www.trai.gov.in.

National Telecom Policy

➤ **Recommendations dated 2nd February 2018 on "Inputs for Formulation of National Telecom Policy"**

The Department of Telecommunications, through its letter dated 21st August 2017, requested TRAI to suggest its policy inputs for formulation of National Telecom Policy – 2018 (NTP-2018). Upon receiving the Government's request, TRAI prepared an initial draft consisting of a range of issues proposed to be addressed in NTP-2018 and shared the same with stakeholders for preliminary discussions. Based on preliminary discussions with various stakeholders including telecom service providers, telecom equipment manufacturers, industry associations, consulting firms, cloud service providers etc.; the Authority prepared draft inputs for formulating the NTP-2018 and issued a Consultation Paper on 3rd January 2018 to seek views of stakeholders.

The Authority, after due consultation process and internal analysis formulated its recommendation on the issues and forwarded the same to DoT on 2nd February 2018. The Authority has recommended the following Vision, Mission and Objectives for NTP-2018:

Vision

To develop a competitive, sustainable and investor friendly Information and Communication Technology (ICT) market for rollout of state-of-art ubiquitous digital communication infrastructure to provide resilient, reliable, affordable and consumer friendly products and services to meet local as well as global needs; and in the process, transform India's knowledge economy, support inclusive development, foster innovation and stimulate job creation.

Mission

1. To fulfill the information and communication needs of the individuals including persons with disabilities, governments, enterprises and industries with high quality experience at affordable prices on a sustainable basis;

2. To facilitate growth of state-of-the-art, secure and energy-efficient digital communication infrastructure for delivering ubiquitous, resilient, reliable and ultra-high-speed connectivity with extremely low latency for objects machines and devices;
3. To stimulate the environment for innovation and entrepreneurial opportunities making India a global centre for research and development, patent-creation and standardization on Information and Communication Technologies and services;
4. To develop indigenous technologies, equipments, platforms and applications ecosystem for providing digital services to local and global markets;
5. To establish India as a global hub for cloud computing, content hosting and delivery and data communication systems and services in a net-neutral environment;
6. To protect consumer interests by increasing awareness and putting in place an effective grievance redressal mechanism, improving quality of experience, ensuring network, communication and data security, encouraging adoption of environment and safety standards of ICT and modernizing public safety and emergency communications networks;
7. To attract investment by enhancing ease of doing business through simplification of licensing and regulatory frameworks, rationalization of taxes, levies and related compliance and facilitating availability of resources including spectrum.

Objectives

1. To enable access at affordable prices for wireless broadband services, including through satellite to 90% population by 2022;
2. To ensure availability of bandwidth on demand through wireline, including cable TV and optical fibre networks to 30% households by 2020 and 50% households by 2022;
3. To provide at least 1 Gbps data connectivity to all Gram Panchayats to enable wireless broadband services to inhabitants by 2022;
4. To achieve 900 million broadband subscriptions supporting download speed of 2 Mbps, out of that at-least 150 million broadband subscriptions supporting download speed of 20 Mbps and 25 million at a download speed of 50 Mbps by 2022;
5. To achieve 'unique mobile subscriber density' of 55 by 2020 and 65 by 2022 by enhancing mobile network coverage to 95% of inhabitants by 2020 and 100% by 2022;

6. To deploy 2 million public WLAN including Wi-Fi hotspots in the country by 2020 and 5 million by 2022;
7. To leapfrog India into the top-50 nations in the ICT Development Index (IDI), released by ITU every year, by 2022;
8. To enable access for connecting to 1 billion IoT/ M2M sensors/ devices by 2020 and 5 billion by 2022;
9. To attract an investment equivalent to USD 60 billion in communication sector by 2020 and USD 100 billion by 2022;
10. To become net positive in international trade of communication systems and services by 2022;
11. To create 2 million additional jobs in ICT sector by 2022;
12. To put in place an ombudsman-based consumer grievance redressal mechanism by end of 2018;
13. To establish online centralised platform for provision of Right of Way (RoW) permissions for single window clearance by 2019;
14. To achieve backhaul connectivity on optical fibre for at least 60% base stations by 2022;
15. To put in place an online platform for all Government to Business (G2B) activities including spectrum and license related information, applications, clearances, compliances, and payments by 2019;
16. To simplify licensing and regulatory frameworks, and rationalize taxes, levies and related compliances by 2019;
17. To put in place a flexible, robust data protection regime powered by a strong encryption policy by 2019;
18. To establish a policy framework for facilitating setting up of data centres by 2019.

Public Protection and Disaster Relief (PPDR)

➤ **Recommendations dated 4th June 2018 on “Next Generation Public Protection and Disaster Relief (PPDR) communication networks”**

Public Protection and Disaster Relief (PPDR) communication supports a wide range of services related to day to day life of public such as maintenance of law and order, protection of life and property, disaster relief and emergency responses.

The advancement of technology has provided PPDR networks with latest and enhanced features in terms of capability, capacity and interoperability. Broadband PPDR supports wide range of applications such as sending live images, videos and texts apart from the voice communication. Existing PPDR networks in the country are analog and digital systems supporting narrowband voice and data communications. Introduction of advanced broadband PPDR communication networks can be a great enabler in decision making and handling of PPDR operations for personnel and organizations involved.

Keeping in view the need to have a robust policy framework for the introduction of an advanced, reliable, robust and responsive broadband PPDR communication system in the country, TRAI had *suo-motu* on 9th October 2017 issued a Consultation Paper on “Next Generation Public Protection and Disaster Relief (PPDR) communication networks” for the comments of the stakeholders.

TRAI formulated its recommendations based on inputs received from the stakeholders, views expressed during the OHD and its own internal analysis and sent it to the Government on 4th June 2018.

The salient features of the recommendations are:

- (a) Government to set up pan-India integrated Broadband PPDR (BB-PPDR) Communication Network (to be called “National BB-PPDR Network”) based on 3GPP PS-LTE technology.
- (b) A hybrid model of BB-PPDR network in India should be put in place in which dedicated network for BB-PPDR communication funded by government be created in metro cities, border districts, disaster prone areas (identified by NDMA) and sensitive areas like J&K and North East by PSU like BSNL/MTNL and existing commercial network can be leveraged in other regions through any TSP.
- (c) Stringent SLAs to be put in place and operators should be mandated to provide mobile BTS and backpack devices in case of disaster when terrestrial network gets destroyed in order to make available communication facilities for PPDR agencies.
- (d) Setting up a Special Purpose Vehicle (SPV) under Ministry of Home Affairs (MHA) to plan, coordinate and steer the nationwide BB-PPDR communication network implementation and its subsequent operation.
- (e) An advisory committee should be constituted that includes representatives from all disciplines of public safety, state government,

central government and Ministry of Communications to provide domain specific advice to the SPV.

- (f) DoT should study the feasibility to do away with CMRTS license for PPDR agencies in a phased manner.
- (g) SPV shall be the nodal agency to coordinate with DoT for allocation of spectrum and other issues. The PPDR agencies and details of equipment deployed by them can be registered with DoT through SPV.
- (h) DoT should work out timelines to Phase out existing analog networks in PPDR in a phased manner. New spectrum assignments may be done only for deploying digital equipment.
- (i) Carrying out pilot testing of BB-PPDR dedicated network (dedicated spectrum and network) to be implemented through BSNL/MTNL, funded by the central government, at five zones identified as disaster prone/sensitive areas to evaluate the efficacy of the proposed network.
- (j) Testing the efficacy of PPDR trunking service roaming on public telecom networks during pilot testing, and if found feasible, it should be implemented on pan-India basis.
- (k) 2x10 MHz of dedicated spectrum should be allocated nationwide to the SPV on no-cost basis for LTE based broadband PPDR networks.
- (l) 814-824/859-869 MHz should be assigned for nationwide BB-PPDR services as per APT Frequency Arrangement number G 3-1-4.
- (m) 20 MHz of spectrum in the frequency range 440-470 MHz (preferably 450-470 MHz) should be allocated for future evolution of broadband PPDR.

ICT for All

➤ Recommendations dated 9th July 2018 on “Making ICT Accessible for Persons with Disabilities”

Telecommunication provides the underlying infrastructure over which several services like banking, education, healthcare and public services are delivered. However, Persons with Disabilities (PwDs) are not able to fully access these ICT services mainly due to lack of necessary accessibility features or unaffordable prices of the equipment or due to unavailability of required services. It is necessary that benefits of ICT technology are passed on to every person in the society including PwDs.

In the light of above, after undertaking a detailed consultation process, the Authority submitted its recommendations to the Government on the matter on 9th July 2018.

The Authority has recommended (i) mandating specific essential accessibility standards identified for mobile phones, landline phones and set top boxes (STBs) (ii) 50% of the channel to be developed in accessible format too for PwDs in the next five years (iii) By 2020, all mobile (producing 5 or more models) and STBs manufacturers/importers to make/import at least one mobile handset/STB satisfying accessibility criteria for PwDs (iv) Telecom, DTH service providers and Multi System Operators (MSOs) to have dedicated customer support services for PwDs (v) separate desk at Public Safety Answering Points (PSAPs) to be set up to facilitate accessibility of emergency services by PwDs (vi) Service providers to ensure to give sensitivity training from time to time to their staff to deal with PwDs issues (vii) Government mandating accessibility in Government ICT procurement, and (viii) setting up a Steering committee under the aegis of Department of Empowerment of Persons with Disabilities for reviewing accessibility for PwDs from time to time and ensuring its implementation.

Data Security and Ownership

➤ **Recommendations dated 16th July 2018 on “Privacy, Security and Ownership of the Data in the Telecom Sector”**

TRAI had issued recommendations on “Privacy, Security and Ownership of the Data in the Telecom Sector” on 16th July 2018.

The recommendations made by the Authority are as follows:

- (a) Each user owns his/ her personal information/ data collected by/ stored with the entities in the digital ecosystem. The entities, controlling and processing such data, are mere custodians and do not have primary rights over this data.
- (b) A study should be undertaken to formulate the standards for anonymisation/ de-identification of personal data generated and collected in the digital eco-system.
- (c) All entities in the digital ecosystem, which control or process the data, should be restrained from using Meta-data to identify the individual users.
- (d) The existing framework for protection of the personal information/ data of telecom consumers is not sufficient. To protect telecom consumers against the misuse of their personal data by the broad range of data controllers and processors in the digital ecosystem, all entities in the digital ecosystem, which control or process their personal data should be brought under a data protection framework.

- (e) Till such time a general data protection law is notified by the Government, the existing Rules/license conditions applicable to TSPs for protection of users' privacy be made applicable to all the entities in the digital ecosystem. For this purpose, the Government should notify the policy framework for regulation of Devices, Operating Systems, Browsers, and Applications.
- (f) Privacy by design principle coupled with data minimization should be made applicable to all the entities in the digital ecosystem viz, Service providers, Devices, Browsers, Operating Systems, Applications etc.
- (g) The Right to Choice, Notice, Consent, Data Portability, and Right to be forgotten should be conferred upon the telecommunication consumers.
- (h) In order to ensure sufficient choices to the users of digital services, granularities in the consent mechanism should be built-in by the service providers.
- (i) For the benefit of telecommunication users, a framework, on the basis of the Electronic Consent Framework developed by MeitY and the master direction for data fiduciary (account aggregator) issued by Reserve Bank of India, should be notified for telecommunication sector also. It should have provisions for revoking the consent, at a later date, by users.
- (j) The Right to Data Portability and Right to be Forgotten are restricted rights, and the same should be subjected to applicable restrictions due to prevalent laws in this regard.
- (k) Multilingual, easy to understand, unbiased, short templates of agreements/ terms and conditions be made mandatory for all the entities in the digital eco-system for the benefit of consumers.
- (l) Consumer awareness programs be undertaken to spread awareness about data protection and privacy issues so that the users can take well informed decisions about their personal data.
- (m) Data Controllers should be prohibited from using "pre-ticked boxes" to gain users consent. Clauses for data collection and purpose limitation should be incorporated in the agreements.
- (n) Devices should disclose the terms and conditions of use in advance, before sale of the device.
- (o) It should be made mandatory for the devices to incorporate provisions so that user can delete pre-installed applications if he/she so decides.

Also, the user should be able to download the certified applications at his/her own will and the devices should in no manner restrict such actions by the users.

- (p) Department of Telecommunication should re-examine the encryption standards, stipulated in the license conditions for the TSPs, to align them with the requirements of other sector regulators.
- (q) To ensure the privacy of users, National Policy for encryption of personal data, generated and collected in the digital eco-system, should be notified by the Government at the earliest.
- (r) For ensuring the security of the personal data and privacy of telecommunication consumers, personal data of telecommunication consumers should be encrypted during the motion as well as during the storage in the digital ecosystem. Decryption should be permitted on a need basis by authorized entities in accordance to consent of the consumer or as per requirement of the law.
- (s) All entities in the digital ecosystem including Telecom Service Providers should be encouraged to share the information relating to vulnerabilities, threats etc in the digital ecosystem/ networks to mitigate the losses and prevent recurrence of such events.
- (t) All entities in the digital ecosystem including Telecom Service Providers should transparently disclose the information about the privacy breaches on their websites along with the actions taken for mitigation and preventing such breaches in future.
- (u) A common platform should be created for sharing of information relating to data security breach incidences by all entities in the digital ecosystem including Telecom service providers. It should be made mandatory for all entities in the digital ecosystem including all such service providers to be a part of this platform.
- (v) Data security breaches may take place in-spite of adoption of best practices/necessary measures taken by the data controllers and processors. Sharing of information concerning to data security breaches should be encouraged and incentivized to prevent/ mitigate such occurrences in future.

Regulatory framework for Internet Telephony

- **Authority's response dated 16th July 2018 to DoT reference on the Authority's recommendations on "Regulatory Framework for Internet Telephony"**

TRAI issued its recommendations on "Regulatory Framework for Internet Telephony" on 24th October 2017.

The Department of Telecommunication on 19th June 2018 had referred back one of the Authority's Recommendations dated 24th October 2017 on "Regulatory Framework for Internet Telephony".

The Authority after due deliberations finalized its response and forwarded the same to DoT on 16th July 2018.

Spectrum related issues

- **Recommendations dated 1st August 2018 on "Auction of Spectrum in 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300-3400 MHz and 3400-3600 MHz Bands"**

Department of Telecommunications (DoT) vide its letter No. dated 19th April, 2017 requested TRAI to provide applicable reserve price, quantum of spectrum to be auctioned and associated conditions for auction of spectrum in 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300-3400 MHz and 3400-3600 MHz Bands for all the LSAs under the terms of clause 11 (1) (a) of TRAI Act, 1997 (as amended).

TRAI, vide its letter dated 15th May 2017 sought additional information/clarifications on some of the issues from DoT. However, to speed up the process, based on the available information, TRAI issued the Consultation Paper on 28th August 2017 seeking comments of stakeholders. An Open House Discussion was conducted on 18th January 2018 at New Delhi. Subsequent to the issue of CP, DoT provided additional/updated information vide its letters dated 7th September 2017 and 23rd July 2018, as sought by TRAI.

Based on the comments/inputs received from the stakeholders and further analysis, the Authority finalized its recommendations on "Auction of Spectrum in 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300- 3400 MHz and 3400-3600 MHz Bands" and sent it to DoT on 1st August 2018.

The salient features of the recommendations are given below:

- Entire available spectrum should be put to auction in the forthcoming auction.

- Barring the specific locations or districts where ISRO is using the 25 MHz (3400 MHz - 3425 MHz) of spectrum, the entire spectrum from 3300 MHz to 3600 MHz should be made available for access services and should be included in the forthcoming auction.
- 3300-3600 MHz should be auctioned as a single band and TDD based frequency arrangement should be adopted for this band.
- Spectrum in 3300-3600 MHz band should be put to auction in the block size of 20 MHz. To avoid monopolization of this band, there should be limit of 100 MHz per bidder. Since the TSPs are allowed to trade their partial or complete spectrum holding to another TSP, the limit of 100 MHz spectrum in 3300-3600 MHz band, shall also apply for spectrum trading. In case a TSP acquires more than one block, the entire spectrum should be assigned to it in contiguous form.
- No roll out obligations should be mandated for spectrum in 3300-3600 MHz band. However, to avoid any misuse of not mandating any roll-out obligations, the lock-in period for spectrum in this band for becoming eligible for spectrum trading should be 5 years instead of 2 years.
- The revised provisions of spectrum cap (i.e. 35% Overall cap and a Cap of 50% on the combined spectrum holding in the sub-1 GHz bands) should be extended to 3300-3600 MHz band also. Additionally, in 3300-3600 MHz band, there should be a spectrum holding cap of 100 MHz per licensee.
- There is an urgent need of audit for all allocated spectrum both commercial as well as spectrum allocated to various PSUs/Government organizations. This should be done by an independent agency on a regular basis.

Recommended reserve price for various spectrum bands is as per table given below:

RECOMMENDED RESERVE PRICE (In Rs. Crore)								
LSA	700 MHz	800 MHz	900 MHz	1800 MHz	2100 MHz	2300 MHz	2500 MHz	3300-3600 MHz
	Per MHz (Paired)					Per MHz (Unpaired)		
Delhi	915	640	NA	457	635	164	164	69
Mumbai	1122	727	NA	561	528	167	167	84
Kolkata	347	160	NA	173	115	38	38	26
Andhra Pradesh	557	390	NA	279	185	78	78	42

RECOMMENDED RESERVE PRICE (In Rs. Crore)								
LSA	700 MHz	800 MHz	900 MHz	1800 MHz	2100 MHz	2300 MHz	2500 MHz	3300-3600 MHz
	Per MHz (Paired)				Per MHz (Unpaired)			
Gujarat	546	385	373	273	181	70	45	41
Karnataka	219	192	238	109	91	112	98	16
Maharashtra	729	510	NA	365	391	72	66	55
Tamil Nadu	199	174	235	100	394	151	132	15
Haryana	113	57	102	57	63	8	NA	8
Kerala	190	157	NA	95	203	20	NA	14
Madhya Pradesh	190	143	NA	95	68	9	NA	14
Punjab	177	157	NA	88	104	21	24	13
Rajasthan	211	266	NA	105	NA	6	NA	16
U. P. (East)	305	251	262	153	126	9	NA	23
U.P. (West)	230	161	211	115	76	12	NA	17
West Bengal	105	74	NA	53	35	6	NA	8
Assam	92	NA	NA	46	30	2	NA	7
Bihar	175	136	201	88	99	7	7	13
Himachal Pradesh	37	24	NA	18	12	1	1	3
Jammu & Kashmir	30	NA	NA	15	13	1	1	2
North East	25	NA	NA	13	6	1	NA	2
Orissa	54	47	NA	27	44	5	NA	4

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

➤ **Recommendations dated 20th July 2018 on “Method of allocation of spectrum for Public Mobile Radio Trunking Service (PMRTS), including auction, as a transparent mechanism”**

PMRTS is a well proven niche market service having its unique capability of communication instantly within the closed user group (CUG). The service has found its growing prominence in all critical infrastructure sectors such as Manufacturing, Oil & Gas, Mining, Construction, Courier, Emergency Medical Services, Utilities, Transportation (Road, Airports, Harbours), Energy & Communication apart from the utility for rescue and relief during

emergency situation. In the past, as an alternative, PMRTS has been often used for communications by agencies involved in protection of life and property, disaster relief and emergency responses.

The Department of Telecommunications (DoT) vide its letter dated 13th July, 2017, requested TRAI to provide its recommendations on 'Method of allocation of spectrum for Public Mobile Radio Trunking Service (PMRTS) including auction, as a transparent mechanism' with applicable reserve price, and other associated conditions for auction of spectrum for PMRTS under the terms of clause 11 (1) (a) of TRAI Act, 1997 (as amended).

In this context, TRAI had issued a consultation paper on 8th February 2018, which, *inter-alia*, included the aspects of methodology of allocation of spectrum, duration of license, assignment of spectrum (throughout the license area or city wise), preferable frequency bands for PMRTS, block size, reserve price, spectrum cap etc.

After considering the comments received from the stakeholders and further analysis, TRAI finalized its recommendations on "Method of allocation of spectrum for Public Mobile Radio Trunking Service (PMRTS), including auction, as a transparent mechanism" and sent it the Government on 20th July 2018.

The salient features of the recommendations are given below:

- The existing Licensed Service Area (LSA) based authorization criteria for a period of 20 years for PMRTS license should continue.
- Taking into consideration factors viz. PMRTS market conditions; spectrum demand and supply; the assignment of spectrum for PMRTS should be made administratively on the basis of demand.
- In order to promote efficient use of spectrum, the existing cap on the number of PMRTS handsets per channel that can be imported, should be removed.
- Carrier size for assignment to PMRTS licensee (both for analog or digital) shall be 6.25 KHz and multiples of 6.25 KHz.
- Carriers (frequency pairs) of 25 KHz already assigned to the service providers should be allowed to be retained by the service providers and additional assignment of carriers for the existing analogue system shall continue @ carrier size of 25 KHz (counted as 4 carriers of 6.25 KHz each).
- Assignment in new cities / Service Areas shall be made for digital systems only.

- Initially for each city, twelve carriers (frequency pairs) of carrier size 6.25 KHz in metro licensed service area and eight carriers (frequency pairs) in non-metro license service area shall be assigned for PMRTS (Digital system) depending on the availability.
- The Royalty charges for the PMRTS on an yearly payment option shall be Rs.1200/- per year per 6.25 KHz channel for link distance upto 30 Km and Rs.2400/- per year per 6.25 KHz channel for link distance upto 60 Km.
- The PMRTS providers shall also have an option of onetime upfront payment of Royalty charges.
- The Spectrum Usage Charge (SUC) for the spectrum allocated to PMRTS provider shall be levied @ 1% of AGR and while determining the AGR for the purpose of levy of license fee and SUC, the revenue from sale of handsets (the cost of which is separately identifiable) shall be allowed as deduction from the GR of PMRTS for the purpose of levy of licence fee. The Authority is however not making any specific recommendation on license fee of PMRT Service.
- An overall combined spectrum cap of 35% in a LSA on the spectrum identified and available for assignment to PMRT Services, as per provision of NFAP-2011, shall be applicable to PMRT licensee.
- In order to make the spectrum available for Broadband-Public Protection Disaster Relief (BB-PPDR) networks, existing PMRTS assignments in the band 814-819/859-864 MHz should be refarmed and further accommodated in the 811-814/856-859 MHz band. The refarming process should be completed within a period of two years.
- The agencies handling PPDR networks who have been operating in the band 806-824 MHz paired with 851-869 MHz should be confined to and accommodated in the proposed PPDR network for which the assignment of spectrum is proposed in 814-824/859-869 MHz sub-band.
- Upon refarming the bands mentioned above, the sub-band 806-811/851-856 MHz should be made available both for PMRTS and CMRTS on need and justification basis.
- Allocations of the frequencies in the sub-band 338-340/348-350 MHz shall be predominantly considered for PMRTS. Provisions for allocation in sub-band 351-358/361-368 MHz and 380-389.9/390-399.9 MHz shall remain unchanged.

The recommendations have been uploaded in the TRAI's website www.trai.gov.in.

➤ **Recommendations dated 27th December 2018 on “Methodology for levy of Spectrum Charges for provision of Satellite based Services using Gateway installed in India under ‘sui-generis’ category”**

Department of Telecommunications (DoT) vide its letter dated 13th August 2018, requested TRAI to provide Recommendations on “Methodology for levy of Spectrum Charges for provision of Satellite based Services using Gateway installed in India under ‘sui-generis’ category”. In this regard, a Consultation Paper (CP) on “Methodology for levy of Spectrum Charges for provision of Satellite based Services using Gateway installed in India under ‘sui-generis’ category” was issued on 10th October 2018. An Open House Discussion (OHD) was conducted on 26th November 2018 in New Delhi.

Based on the comments/inputs received from the stakeholders and on its own analysis, TRAI finalized its Recommendations on 27th December 2018 on “Methodology for levy of Spectrum Charges for provision of Satellite based Services using Gateway installed in India under ‘sui-generis’ category”.

The salient features of the recommendations are as follows:

- (a) The formula-based spectrum charges should be replaced with AGR based spectrum charges in respect of provision of services by BSNL under its license for “Provision and Operation of Satellite based services using Gateway installed in India” under ‘sui-generis’ category. These charges would cover the entire spectrum charges for handsets as well as for gateway.
- (b) The spectrum charges should be levied at 1% of the AGR of BSNL’s satellite-based services under ‘sui-generis’ category.
- (c) While determining the AGR for the purpose of levy of license fee and Spectrum Charges, the cost of handsets (which is separately identifiable) should be allowed as deduction from the Gross revenue of BSNL’s Satellite based services under ‘sui-generis’ category.
- (d) There should be a defined time-line not exceeding 30 days within which an Import Licence should be granted and the same should be declared in the portal as well as in the Citizen’s Charter.
- (e) DoT may review whether roaming service can be allowed for GSP service customers in a similar way in which mobile roaming is permitted.
- (f) DoT may review the need to restrict the GSP Service in certain (barred) areas, consequent to the establishment of Gateway by BSNL.

The recommendations have been placed on TRAI’s website www.traigov.in.

Promoting Local Manufacturing

➤ **Recommendations dated 3rd August 2018 on “Promoting Local Telecom Equipment Manufacturing”**

TRAI issued its Recommendations dated 3rd August 2018 on “Promoting Local Telecom Equipment Manufacturing”.

The main recommendations made by the Authority are as follows:

- (a) The progress of indigenous telecommunication equipment manufacturing in the country should be monitored in Department of Telecommunications (DoT) at least at the level of Member, Telecom Commission. A dedicated unit in DoT should be made responsible for facilitation and monitoring of telecommunication equipment design, development, and manufacturing in the country.
- (b) India should aim to achieve the objective of ‘net zero imports of telecommunication equipments’ by 2022. For this purpose, Telecom Equipment Manufacturing Council (TEMC), should identify and recommend specific areas of priorities.
- (c) For promoting research, innovation, standardization, design, testing, certification and manufacturing indigenous telecom equipment, Telecom Research and Development Fund (TRDF), with initial corpus of Rs. 1000 Crore should be created. Subsequently, setting up of Telecom Entrepreneurship Promotion Fund (TEPF) and Telecom Manufacturing Promotion Fund (TMPF) should also be considered.
- (d) A Telecommunication Equipment Development Board (TEDB) should be constituted in the DoT, under the Telecom Engineering Centre (TEC), for faster and coordinated decisions relating to funding of and incentives for design, development, and manufacturing of telecommunication equipment in the country. It should be responsible for facilitating innovation, R&D (Research and Development), testing and certification, and manufacturing in the telecom sector in the country.
- (e) Universities/ technical institutes offering specialization in telecommunication technologies and system design should be setup/ identified near the Telecom Products Development clusters.
- (f) Telecommunication Technology and Systems Design Labs should be setup in these Universities/ technical institutes in collaboration with Telecom Equipment Manufacturers and Telecom Service Providers.
- (g) Participation of indigenous research institutions, telecom service providers, and telecom equipment manufacturing companies in

deliberations at international organizations like IEEE, 3GPP, One M2M, ITU, and ETSI etc. should be encouraged.

- (h) Permissions for trials of new technologies/ products and running pilot projects should be simplified.
- (i) Alternate Dispute Resolution Framework for time bound resolution of patent licensing disputes should be institutionalized in the country.
- (j) A common portal should be developed for self-declaration of Standard Essential Patents (SEP) by the patent holders in the telecom products. The portal should have the facility for listing of registered telecom product design, manufacturing, marketing, and System Integration (SI) companies along with their designs/ products so that development of the complete ecosystem in the country can be facilitated.
- (k) To expand understanding about patent filing policies and procedures, the patent information cells should be created in leading Universities/ technical institutions to be identified for promoting research, innovation, and development of telecom technology and systems designs.
- (l) Telecom Engineering Centre should be made responsible for regulation and accreditation of telecom products testing and certification agencies in the country.
- (m) Mandatory testing and certification of the telecom equipments in the country should be started at the earliest.
- (n) To expedite setting up of testing and infrastructure facilities in the country, the Government should incentivize setting up of such facilities by private entities. These facilities should be accredited by the Telecom Engineering Centre.
- (o) All telecom products meant for use in the telecommunication network or by consumer and marketed in the country should be classified as either fully finished imported products or Indigenous products. Indigenous products should be further classified into Made in India Products, Designed in India Products or Designed and Made in India Products.
- (p) DoT should immediately review its PMA policy, issued in October 2012, so that the products specified under the Policy as well as the norms of the value addition specified in the Policy can be aligned with the present day's local market realities.
- (q) PMA policy should be made applicable for all public telecom networks to address the national security concerns.

- (r) Telecom Service Providers should be incentivized for deploying indigenous telecom products, beyond the quantities to be mandated under the PMA, by giving them graded incentives.

Other Recommendations on Issues related to Telecom

In-Building Access

- **TRAI's Response dated 9th March 2018 to back-reference dated 22nd November 2017 received from Department of Telecommunications on TRAI's recommendations on "In-Building Access by Telecom Service Providers" dated 20th January 2017**

The Authority forwarded its recommendations on "In-Building Access by Telecom Service Providers" dated 27th January 2017 to the Department of Telecommunications (DoT). On 22nd November 2017, DoT sought considered opinion on the comments / observations on the recommendations. The Authority furnished its response to the Government on 9th March 2018. The response has been placed on TRAI's website www.traai.gov.in.

Licensing Agreements

- **Authority's response dated 25th June 2018 to DoT's back reference dated 19th April 2018 on "Sale/Rent of International Roaming SIM Cards/Global Calling Cards in India"**

The Authority made its recommendations to the Department of Telecommunications (DoT) on the 9th May 2016 on "Sale/Rent of International Roaming SIM Cards/Global Calling Cards in India". The Authority had also made its additional recommendations on "Sale/Rent of International Roaming SIM Cards/Global Calling Cards in India" to DoT on 14th June 2017. The recommendation number 4, 8, 9 & 10 of Recommendations dated 9th May 2016 and recommendation no. (a) to (e) of additional recommendations dated 14th June, 2017 were referred back by the DoT vide its letter dated 19th April 2018 to the Authority to provide its reconsidered recommendations in the light of comments/observations of the DoT. The Authority after due deliberations had finalized its response and forwarded the same to DoT on 25th June 2018.

Ease of Doing Telecom Business

- **TRAI's Response dated 20th July 2018 to DoT's back-reference on Recommendations on "Ease of doing Telecom Business" dated 30th November 2017**

DoT through their letter dated 6th June 2018 referred back some of the TRAI Recommendations on 'Ease of doing Telecom Business' dated 30th

November 2017 for re-examination / reconsideration. After examining the comments of DoT, TRAI sent its response to the DoT on 20th July 2018. The recommendations have been uploaded on the TRAI's website www.traigov.in.

Access Service authorization

- **TRAI's response dated 21st December 2018 to DoT back reference dated 31st August 2018 on Recommendations on "Introduction of UL (VNO) for Access Service authorization for category 'B' license with districts of a State as a service area"**

Department of Telecommunications (DoT) through letter dated 31st August 2018 communicated to TRAI that: -*"TC has agreed with the requirement to submit SLA (Service Level Agreement) to Licensor / TRAI. Accordingly, TRAI is asked to design & prescribe a model SLA framework in this regard"*.

In this regard, TRAI made its view that respective Quality of Service parameters/ benchmarks prescribed for parent NSO (TSP) should be equally applicable on UL (VNO) licensees too. In order to comply with Clause 28 of UL (VNO) license and to enforce & ensure the prescribed QoS parameters, the VNO licensee may include service level agreement as part of their commercial agreement with parent NSO. However, instead of prescribing template SLA, it may be left to their mutual commercial agreement. After analysing the issues, the TRAI sent its response to the back reference on 21st December 2018. A copy of the response sent to DoT is available on TRAI website www.traigov.in.

BROADCASTING SECTOR

Digital Radio Broadcasting

- **Recommendations dated 1st February 2018 on "Issues related to Digital Radio Broadcasting in India"**

TRAI issued its Recommendations dated 1st February 2018 on "Issues related to Digital Radio Broadcasting in India".

The salient features of the recommendations are:

- (i) Government should notify the policy framework for digital radio broadcasting in India in time bound manner with clear roadmap for rollout of digital radio broadcasting services.
- (ii) The WPC wing of DoT should carry out necessary amendments in NFAP-2011 for permitting Digital Radio Broadcasting in MW, SW, and VHF-II frequency bands.

- (iii) Private sector should be permitted to provide digital radio broadcasting services within the existing frequency band of 88 –108 MHz used for FM radio broadcasting.
- (iv) Frequency and geographical area coverage planning for digital radio broadcasting using the vacant 600 KHz spectrum in VHF-II (88 –108 MHz) and VHF-III (174-230 MHz) bands should be completed by BECIL, AIR, and WPC together in phased manner.
- (v) 200 KHz bandwidth spectrum in VHF-II band should be auctioned for providing digital Radio broadcasting services. Auction should be carried out in phases – starting with cities of category ‘A+’ and ‘A’ and subsequently in cities of other categories.
- (vi) Immediately after the successful auction of spectrum for digital radio broadcasting, an offer should be made to the existing FM Radio broadcasters to get their existing frequency bandwidth of + 100 KHz, already allocated through auction in Phase-III of FM Radio, liberalized and provide digital radio broadcasting services in simulcast mode with analog FM Radio services.
- (vii) For liberalizing of existing spectrum, already allocated to the FM radio broadcasters in Phase-III of FM Radio, they will have to pay an amount equal to the difference of auction determined price of equivalent spectrum for digital radio broadcasting in a city and amount paid for allocation of FM radio frequency.
- (viii) In case market determined price of 200 KHz for digital radio broadcasting is less than or equal to the price paid by FM radio broadcasters than FM radio broadcasters will not be required to pay any additional amount and he will be permitted to provide digital radio broadcasting services also for the remaining period of permission.
- (ix) The broadcasters should be allowed to make use of any available digital technology, recognized by ITU, within the allocated/liberalized spectrum for providing digital radio broadcasting services subject to adaptation, if any, recommended by Ministry of Information and Broadcasting (MIB) /TRAI from time to time.
- (x) No date for digital switch over of radio broadcasting services should be declared at this stage.
- (xi) Existing analog FM Radio channels should be allowed to remain operational for the remaining period of their Phase-III permissions.
- (xii) The continuance of operation of existing analog FM Radio channels that do not migrate to digital radio broadcasting, should be reviewed after the expiry of their existing Phase-III permissions.

- (xiii) The auction of remaining channels of Phase-III should be done by delinking them from technology. Broadcasters should be permitted to use any technology (analog or digital or both) for radio broadcasting on the frequency allocated to them through auction in future.
- (xiv) For initial three years after declaration of digital radio broadcasting policy, the Government should grant fiscal incentives in the form of lower tax rates to manufacturers of digital radio receivers.

Ease of Doing Business in Broadcasting Sector

➤ Recommendations dated 26th February 2018 on “Ease of Doing Business in Broadcasting Sector”

To facilitate ease of doing business in the Broadcasting sector, the Authority issued its recommendations to the Government on 26th February 2018. In its recommendations, the Authority has stated that it is necessary that the MIB should review the procedural framework for grant of permission/ registration/ licenses in broadcasting sector that were introduced over a period of time. The processes which are redundant or which do not have any connection with the stated objective of the policy and/or those which do not lead to any value addition should be done away with. Further, the processes which are inefficient and obsolete should be re-engineered.

TRAI had given its recommendations after holding an exhaustive consultation with the stakeholders. Some of the key recommendations are:

- (i) The process of granting of permission/ license/ registration for broadcasting services should be streamlined by removing redundant processes, re-engineering necessary processes, and making them efficient using ICT.
- (ii) The Government should setup an online integrated portal for broadcasters, teleport operators, and distributors of TV channels, which should facilitate the filing, processing and tracking of applications, payments, frequency assignments, endorsements and renewals with common database.
- (iii) The security clearances required for grant of permission/ license for broadcasting service should be issued within a period of 60 days.
- (iv) Allocation of spectrum for the commercial satellite usage should be carried out throughout the year. The current procedure of intermittent opening of window neither has any stated objective nor it ensure judicious use of space spectrum.

- (v) All processes, including time taken by MIB, WPC, DoS, MHA, and NOCC for issuing permissions/ licenses for broadcasting services, should be completed within 6 months period.
- (vi) The registration of LCO and its renewal should be carried out through online portal.
- (vii) The Government should contemplate creating a centre of excellence exclusively for broadcasting services.

Uplinking and Downlinking of TV Channels

➤ **Recommendations dated 25th June 2018 on “Issues relating to Uplinking and Downlinking of Television Channels in India”**

TRAI released Recommendations on “Issues relating to Uplinking and Downlinking of Television Channels in India” on 25th June 2018. The salient features of the recommendations are:

Issues related to uplinking and downlinking of satellite TV channels

- i) No change in the existing definitions of ‘News and Current Affairs TV channels’, and ‘Non-News and Current Affairs TV channels’ mentioned in the existing uplinking and downlinking guidelines dated 5th December 2011.
- ii) No change in the amount of minimum net-worth of an applicant company seeking permissions for uplinking and downlinking of TV channels.
- iii) Auction not feasible for grant of permissions for uplinking and downlinking of TV channels.
- iv) Existing administrative system for grant of permissions for uplinking and downlinking of TV channels should be continued and should be streamlined.
- v) TRAI reiterated its recommendations on “Ease of Doing Business in Broadcasting Sector” dated 26th February 2018 sent to the Government wherein several measures have been recommended for streamlining the existing process of granting permissions for uplinking and downlinking of TV channels.
- vi) No change in the Permission fee and Entry fee for uplinking and downlinking permissions.
- vii) Annual License fee for uplinking and downlinking permissions should be enhanced as follows:

Permission	Annual Permission Fee
Uplinking of TV Channel from Indian Soil	Rs. 3 lakh per annum
Downlinking of TV Channel uplinked from Indian soil	Rs. 7.5 Lakh per annum
Downlinking of TV Channel uplinked from Foreign Soil	Rs. 22.5 Lakh per annum

- viii) Encryption of broadcast of FTA channels should not be mandated and it should be left to the broadcasters providing FTA channels.
- ix) Transfer of permissions should not be permitted between two different companies. In case of merger and acquisition as recognised under the Companies Act, 2013 or any other applicable law(s), transfer of permissions should be permitted after following the due process. Transfer of permission of TV channels to its subsidiary company or holding company or subsidiary company of the holding company should be allowed freely, provided such company has a valid uplinking and downlinking permission.
- x) A lock-in period of one year from the date of operationalisation of a channel for the transfer of permission of such channel.

Other Recommendations of Broadcasting Sector

New DTH Licenses

➤ TRAI’s Response dated 12th April 2018 on Recommendations on “Issues related to New DTH Licenses”

Ministry of Information and Broadcasting (MIB) on 12th March 2018 had referred back TRAI’s recommendations on “Issues related to New DTH Licenses” dated 23rd July 2014 as per proviso to section 11 of the TRAI Act 1997, for reconsideration and seeking views of TRAI on certain recommendations. On 12th April 2018, TRAI sent its recommendations to the Government on “Issues related to New DTH Licenses”.

III. REGULATIONS

Telecom Sector

➤ **"The Telecommunication Interconnection Regulations, 2018" dated 1st January 2018**

TRAI issued "The Telecommunication Interconnection Regulation, 2018" on 1st January 2018. These regulations came into effect from the 1st February 2018.

Through these Regulations, the Authority has mandated that every service provider shall, within thirty days of receipt of request from a service provider, enter into interconnection agreement, on non-discriminatory basis, with such service provider. The Authority has also laid down a framework for provisioning and augmentation of ports at POIs, which stipulates a step-by-step process for provisioning of ports at POIs.

➤ **"The Telecommunication Interconnection Usage Charges (Fourteenth Amendment) Regulations, 2018" dated 12th January 2018**

TRAI issued "The Telecommunication Interconnection Usage Charges (Fourteenth Amendment) Regulations, 2018" on 12th January 2018. These regulations came into effect from the 1st February, 2018. Through these Regulations, the termination charges payable by an International Long Distance Operator (ILDO) to the access provider in whose network the call terminates has been reduced from Rs. 0.53 (paise fifty three only) per minute to Rs. 0.30 (paise thirty only) per minute.

➤ **The Telecommunication Mobile Number Portability Per Port Transaction Charge and Dipping Charge (Amendment) Regulations, 2018 dated 31st January 2018**

TRAI on 31st January 2018 issued "The Telecommunication Mobile Number Portability Per Port Transaction Charge and Dipping Charge (Amendment) Regulations, 2018, thereby reducing the 'Per Port Transaction Charge' of Rupees Nineteen to Rupees Four for each successful porting.

The Telecommunication Mobile Number Portability Per Port Transaction Charge and Dipping Charge Regulations, 2009 notified on 20th November 2009 had prescribed Rs. 19/- as 'Per Port Transaction Charge' and The Telecommunication Tariff (Forty-Ninth Amendment) Order, 2009" dated 20th November 2009, prescribed the Per Port Transaction charge Rs. 19/- as ceiling which was applicable for the porting customers.

The Telecommunication Tariff (Forty-Ninth Amendment) Order, 2009 prescribed the ceiling of Per Port Transaction Charge leviable from subscriber by the recipient operator through “The Telecommunication Mobile Number Portability Per Port Transaction Charge and Dipping Charge Regulations, 2009”(as amended from time to time). Now, with notification of this amendment to the aforesaid Regulations, the ceiling of charges leviable from subscriber stands automatically reduced to Rupees Four. However, recipient operators are free to charge a lesser amount from the subscriber for Mobile Number Portability.

➤ **“The Telecommunication Interconnection (Amendment) Regulations, 2018” dated 5th July 2018**

TRAI on 5th July 2018, issued “The Telecommunication Interconnection (Amendment) Regulations, 2018” which prescribes amendment in Regulations 6, 8 & 9 of “The Telecommunication Interconnection Regulations, 2018” issued by TRAI on 1st January 2018.

The main amendments in the Regulations are as follows:

- a) A service provider may request the other service provider for additional ports at a POI, if the projected utilisation of the capacity of such POI at the end of sixty days from the date of placing the request, is likely to be more than eighty-five percent and such projected utilization of the capacity of POI shall be determined on the basis of the daily traffic for the preceding sixty days at the POI during busy hour: Provided that the service provider shall request for such number of additional ports which is likely to bring the utilization of the capacity of such POI, at the end of sixty days from the date of making request, to less than seventy-five percent.
- b) The time-frame for provisioning of ports for initial interconnection and augmentation of ports at POIs is increased to 42 working days.
- c) Every service provider shall provide to the interconnecting service provider, at interval of every six months, its forecast of busy hour outgoing traffic, for the succeeding six months, at each POI and the first such forecast shall be provided within sixty days of the commencement of the Telecommunication Interconnection (Amendment) Regulations, 2018 and thereafter on the 1st April and 1st October every year.
- d) The port charges and infrastructure charges, for all ports provided before the 1st February 2018 shall continue to be payable as per the terms and conditions which were applicable to them before the 1st February 2018.

➤ **Telecommunication Consumers Education and Protection Fund (fourth Amendment) Regulations 2018 dated 18th July 2018**

Telecommunication Consumers Education and Protection Fund (Fourth Amendment) Regulations 2018 were notified on 18th July 2018. Through the amendment the name of AUSPI (Association of Unified Telecom Service Providers of India) was removed from the committee for Utilization of Telecommunication Consumers Education and Protection Fund (CUTCEF) and changes in the provisions relating to time lines for submission of annual Budget Estimates to the Authority were made.

➤ **Telecom Commercial Communication Customer Preference Regulations, 2018 dated 19th July 2018 and corrigendum dated 21st December 2018**

To make the system more effective and efficient, Telecom Commercial Communications Customer Preference Regulations, 2010 have been reviewed after consultation. TRAI on 19th July 2018 notified Telecom Commercial Communication Customer Preference Regulations, 2018 that is proposed to curb the problem of Unsolicited Commercial Communication (UCC).

The main features of the framework are:

- a. Registration of senders (businesses and telemarketers)
- b. Registration of Headers
- c. Registration of subscribers' consent
- d. Message template
- e. Fine-grained control over preferences

The salient features of the regulations are:

- a) Adoption of Distributed Ledger Technology (or blockchain) as the RegTech to ensure regulatory compliance while allowing innovation in the market.
- b) Co-regulation where Telecom Service Providers/ Access Providers establish and arrange the framework, which is legally backed by regulation.
- c) Enabling compliance through innovation in technology solutions that are demonstrated in a regulatory sandbox.

A corrigendum was issued on 21st December 2018 to correct the serial numbers of some clauses.

➤ **The Telecom Commercial Communication Customer Preference (Amendment) Regulations, 2018 dated 21st December 2018**

TRAI on 21st December 2018 notified the Telecom Commercial Communication Customer Preference (Amendment) Regulations, 2018 to modify the time period for implementation for regulations 23, 24, 26, 27, 29 and sub-regulations 1 to 6 of regulation 25.

➤ **The Standards of Quality Of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (Sixth Amendment) Regulations, 2018 dated 31st July 2018**

TRAI on 31st July 2018 notified “The Standards of Quality Of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (Sixth Amendment) Regulations”, to specify parameters and benchmarks for packets dropped or lost in cases of Voice over LTE (VoLTE) Calls.

The details are as given below:

Where service providers launched LTE networks and were providing Voice over LTE (VoLTE), it was observed that instances of pauses or mute of voice were being experienced by the users during conversation while voice call continued. Such instances of mute were mainly due to drop or loss of voice packets in the networks. It was found that in case of LTE networks, it is appropriate to observe drop or loss of packets in terms of Packet Data Convergence Protocol (PDCP) Service Data Units (SDUs).

Packet drops may be observed on downlink as well as on uplink. It was decided to specify two additional parameters namely QoS Downlink PDCP SDUs Drop Rate (DL-PDR) and Uplink PDCP SDUs Drop Rate (UL-PDR). Less than equal to 2% is set as benchmarks for both the parameters. These parameters are to be reported as part of QoS Periodic Monthly Report from the quarter starting from 1st October 2018.

➤ **The International Telecommunications Cable Landing Stations Access Facilitation Charges and Co-location Charges (Amendment) Regulations, 2018 dated 28th November 2018**

TRAI on 28th November 2018 issued “The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-Location Charges (Amendment) Regulations, 2018”.

Access Facilitation Charges (AFC) are the charges, which are payable by International Long Distance Operators (ILDO)/ Internet Service Providers (ISP) to the owner of the cable landing station to access the acquired international bandwidth in a submarine cable. Submarine cables provide vital international telecommunication links between countries across the

world. Submarine cables terminate in the country through cable landing stations.

TRAI had issued “The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-Location Charges Regulations, 2012” on 21st December 2012. The AFC Charges and Co-location Charges specified in the Regulations dated 21st December 2012 were to be effective from 1st January 2013. However, it was challenged in the Hon’ble Madras High court by two of the Owners of Cable Landing Station (OCLS). The Single Judge Bench of the Hon’ble Madras High Court on 11th November 2016 had dismissed the writ petitions. But, appeals were filed by these two OCLS before a Division Bench of the Hon’ble Madras High Court. The Hon’ble Division Bench of Madras High Court vide its final Judgment and order dated 2nd July 2018 had quashed the Schedules I, II and III of ‘The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-location Charges Regulations, 2012 dated 21st December 2012’ and directed TRAI to redo and re-enact the aforesaid schedules.

Subsequently, TRAI filed Special Leave Petition in the Hon’ble Supreme Court against the judgment of the Division Bench of Hon’ble Madras High Court. Similar, Special Leave Petitions were also filed by other stakeholders in the Hon’ble Supreme Court. The Hon’ble Supreme Court vide its Order dated 8th October 2018 directed the Authority to re-work the figures on both counts within a period of six weeks. The both counts are ‘Utilization factor’ and ‘Conversion factor’ which were used for estimation of the Access Facilitation Charges. Accordingly, to seek the views of the stakeholders the Authority issued a Consultation Paper on “Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations” on 18th October 2018. An Open House Discussion on the same was also held on 5th November 2018.

After taking into consideration the comments, counter comments and additional comments received from stakeholders and analysis of other relevant facts, the Authority decided to take the ‘Utilisation Factor’ of 70% and ‘Conversion Factor’ of 2.6, wherever applicable. Accordingly, the Schedules I, II and III of the principal regulations have been re-worked and the charges are being prescribed. The Authority has, accordingly, notified “The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-Location Charges (Amendment) Regulations, 2018” on 28th November 2018.

➤ **Telecommunication Mobile Number Portability (Seventh Amendment) Regulations 2018 dated 13th December 2018**

TRAI issued the “Telecommunication Mobile Number Portability (MNP) Regulations 2009” dated 23rd September 2009 laying down the basic

business process framework for implementation of MNP in the country. In a continuous endeavour to make MNP process more subscriber friendly, based on feedback from the stakeholders and its own analysis, TRAI has issued various Directions and amendments to the MNP regulations.

Keeping in view to devise mechanism for reducing the rejections on the grounds of “Unique Porting Code (UPC) Mismatch” and “Unique Porting Code (UPC) expired”, the Authority initiated draft Telecommunications Mobile Number Portability (Seventh Amendment), Regulations 2017, on 16th August 2017 for seeking comments of the stakeholders. The comments received from the stakeholders were examined and analysed. Through the comments, it was observed that in addition to the amendments as proposed in the draft MNP regulations (Seventh Amendment) as mentioned above, various other issues were also raised by stakeholders and new mechanisms were suggested.

Pursuant to the suggestions/ comments submitted by the stakeholders during consultation on draft 7th amendment, the Authority on 6th April 2018, initiated the Consultation Paper on “Review of the Mobile Number Portability (MNP) process” for the comments of the stakeholders. The Consultation Paper envisaged to review all the existing issues with a vision to make the MNP process more efficient and convenient for the telecom subscribers. An Open House Discussion was convened on 11th June 2018. Based on the comments /counter-comments received during consultation process, the Draft Telecommunication Mobile Number Portability (Seventh Amendment) Regulations 2018 were issued for the comments of stakeholders on 25th September 2018.

Through these Regulations (amendment), a major shift in the mechanism for generating Unique Porting Code (UPC) has been provisioned. To make the porting process faster and convenient, for all the cases except corporate porting cases; in the revised process for validation of conditions and generation & delivery of UPC; it has been provisioned to establish a query response mechanism to enable the Mobile Number Portability Service Provider (MNPSP) to query the database of the Donor Operator on real time basis to obtain the response for the queries. Based on the result of queries made by MNPSP and fulfilment of other prescribed conditions, the allocation and delivery of UPC to the subscriber shall be ensured by MNPSP.

Initially, it was envisaged that all the Law Enforcement Agencies (LEAs) will come on-board to Central Monitoring System (CMS) before the implementation of the amendment of regulations and accordingly time period of one day was considered sufficient for porting. However, upon receipt of a communication and suggestion from Department of Telecommunications (DoT) on the porting timelines; in the final regulations (amendment), porting timeline of 2 working

days has been provisioned for the requests of Intra-Licensed Service Area (Intra-LSA) numbers except the requests made under corporate category and the timelines of 4 working days has been provisioned for all the porting requests of Inter-Licensed Service Area (Inter-LSA) numbers and corporate category. Besides above, other major changes have been incorporated such as the validity of UPC has been kept 4 days in place of 15 days earlier for all LSAs except for the LSAs of Jammu & Kashmir, Assam and North East for which the validity of UPC remains unchanged. Process for withdrawal of porting requests has been made simpler and quicker through SMS. For the cases of corporate porting, present limit of 50 numbers in single authorization letter has been enhanced to 100 numbers per authorization letter. Provisions for the Financial Disincentives have been broadened upon contravention of the provisions of MNP Regulations. Post implementation of these regulations (amendment), appropriate Quality of Service (QoS) parameters will be devised by the Authority to monitor the role of MNPSPs and Access Providers in the new scenario.

The “Telecommunication Mobile Number Portability (Seventh Amendment) Regulations, 2018” is available on TRAI’s website www.trai.gov.in.

Broadcasting Sector

➤ **The Telecommunications (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) (Amendment) Regulations 2018 dated 28th December 2018**

TRAI on 18thMay 2016, issued a consultation paper to harmonize the QoS Regulations issued by TRAI from time to time and to formulate a unified regulatory framework for different platforms, resulting in notification of the Telecommunications (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017 dated the 3rdMarch, 2017. In order to enable a smooth transition from the old regulatory framework to the new one, the Authority in these regulations provided a time up to 180 days to the service providers to either discontinue or modify all their existing packages, bouquets/channels and plans in compliance of the regulations and tariff orders. These regulations also provide that certain provisions relating to offering of services, CPE Scheme, customer care centre, customer care programming service and website are to be implemented within 120 days from the date of publication of the Regulations in the official gazette.

In addition to the aforesaid regulations, the Authority has also notified the Interconnection Regulations of 2017 and Tariff Orders of 2017. The QoS Regulations 2017 were challenged before Hon’ble Delhi High Court by service provider and a consumer, inter-alia, seeking stay and setting aside

of these regulations. During the course of hearing of the matter before the Hon'ble Delhi High Court, the Authority informed the Hon'ble High Court that in view of challenge to the Interconnection Regulations and Tariff Order pending before Hon'ble Madras High Court wherein status quo has been ordered by the Hon'ble Supreme Court, the Authority is not implementing the QoS Regulations of 2017. Thereupon the Hon'ble Delhi High Court directed TRAI that upon the pronouncement of judgment by the Hon'ble Madras High Court, the Authority shall inform the petitioners of the outcome in the judgment and shall inform the Hon'ble Delhi High Court as well before effectuating the orders.

Since the implementation of QoS Regulations, 2017 was linked with the inter-connection Regulations of 2017 and the Tariff Order of 2017, their implementation was also deferred in view of the status quo order dated the 8th May 2017 passed by the Hon'ble Supreme Court in SLP No. 14336 of 2017. The Hon'ble High Court of Madras vide its judgment dated 2nd March 2018 and 23rd May 2018 upheld the validity of the Telecommunications (Broadcasting & Cable) services (Eighth) (Addressable Systems) Tariff Order 2017 and Telecommunication (Broadcasting & Cable) Interconnection (Addressable Systems) Regulations 2017. Thereafter the Authority issued a press release dated 3rd July 2018 informing the stakeholders that interconnection regulation, 2017, the Tariff Order 2017 and QoS Regulation 2017 came into effect from 3rd July 2018.

In order to have a smooth implementation of the new regulatory framework, TRAI held a series of meetings and consultations with all the stakeholders including Consumer Advocacy Groups (CAG). During these meetings, it was pointed out by some of the stakeholders that Distributor Retail Price (DRP) by the DPOs could be declared within 180 days from the 3rd July 2018 and the subscribers were also required to be migrated to the new framework within the same period. This entire process of migration including taking options from the subscribers after declaration of DRPs as well as to bring the subscribers to the new framework cannot be carried out simultaneously. Further, to make the consumers aware about the new framework and the process of seeking fresh choice of TV channels from all subscribers would require some time and resources. A meeting of the Authority was also held on 19th December 2018 with the CEO's of major service providers in the broadcasting and cable services sector. The issue of smooth migration from the old to new regulatory framework was specifically discussed and deliberated upon. Subsequently, to assess the preparedness for migration, the Authority held another meeting on 27th December 2018 with all broadcasters and leading DPOs (DTH/MSO/HITS/IPTV). It emerged from the discussions that most of the stakeholders were by and large ready for implementation of new regulatory framework. However, the progress to

collect choice of subscribers was slow. In order to have a smooth transition of subscribers from old to new framework, across the country, some more time was desirable. Accordingly, the Authority agreed to the request of industry and decided that DPOs may be given time up to 31st January 2019 to obtain subscribers' options of TV channels for migration to new regulatory framework. The subscribers would accordingly be migrated to new regulatory framework as per their options w.e.f. from 1st February 2019. In this regard, a detailed schedule of activities dated 27th December 2018 was also issued by TRAI.

Vide this amendment, sub-regulation (3), of the regulation 45 of the Telecommunications (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017 has been substituted as under:

“(3) Nothing contained in these regulations shall affect any packs, plans or bouquets on offer before the commencement of these regulations and all the distributors of television channels shall continue to offer the said packs, plans or bouquets to all the subscribers till 31st January 2019.

Provided that it shall be mandatory for all the distributors of television channels to either discontinue or modify all their existing packs, plans or bouquets in compliance with the provisions of these regulations after 31st January 2019.

Provided further that all distributors of television channels shall offer and obtain the option for subscription of new packs, plans or bouquets from the subscribers in compliance with the provisions of these regulations on or before 31st January 2019 and shall ensure that services to the subscribers are provided as per the new packs, plans or bouquets opted for subscription by the subscribers only after 31st January 2019.”

IV. Telecom Tariff Orders

➤ **Telecommunication Tariff (63rd Amendment) Order, 2018 dated 16th February 2018**

TRAI notified the “Telecommunication Tariff (63rd Amendment) Order, 2018 on ‘Regulatory Principles of Tariff Assessment’ to ensure Transparency, Non-discrimination and Non-predation in telecommunication services on 16th February 2018.

These Amendments were issued after a detailed public consultation, beginning with the Consultation Paper on ‘Regulatory Principles of Tariff Assessment’ issued on 17th February 2017, followed by an Open House Discussion held in New Delhi on 30th May 2017 and extensive research, *inter alia*, the international best practices. The Authority held a meeting with CEO’s of Telecom Companies on 15th June 2017 on the issue, *inter alia*, of setting some form of floor price for retail tariff. This was followed by another meeting with the Telecom Service Providers on 21st July 2017 on the same issue, wherein the majority view was that as of now, TRAI should not undertake fixation of floor price and the IUC should not be taken as a floor for retail tariff.

Salient features of the TTO (63rd Amendment) Order, 2018

- The amendments further clarified and bolster the provisions relating to the regulatory principles of tariff – Transparency, Non-discrimination and Non-predation. Amendments deal with reporting requirements, guiding principles for checking transparency in tariff offers, definition of non-discrimination, adherence to the principle of non-predatory pricing, definition of predatory pricing, relevant market, assessment of significant market power (SMP) and other related provisions.
- These amendments will be beneficial for the consumers, telecom service providers and the regulator.
- As such, the transparency in tariff offers will be objectively observed by the telecom service providers vis-à-vis the guiding principles of transparency. Similarly, TRAI will also examine the tariffs of telecom service providers on the touchstone of accessibility, accuracy, comparability and completeness. It will also take in account whether tariffs are distinct and identifiable, explicit and non-misleading, simple and unambiguous etc. This would ensure transparent offering of telecom tariffs to consumers.
- Further, the definition of Non-discrimination provides a clear benchmark to telecom service providers to bring tariff offers to consumers on non-discriminatory basis.

- The amendments relating to the definitions of SMP, Predatory Pricing etc would ensure fair play and healthy competition amongst the telecom service providers. This in turn would result in more ‘value for money’ for consumers.
- The amendments provide greater clarity on aforementioned regulatory principles of enabling telecom service providers for designing their tariff in more innovative manner and also smoothly comply with the regulatory principles.

➤ **Telecommunication Tariff (64th Amendment) Order, 2018 dated 25th September 2018**

TRAI notified the “Telecommunication Tariff (64th Amendment) Order, 2018 dated 25th September 2018 on ‘Purging of Infructuous/Redundant provisions of Telecommunication Tariff Order’ (TTO).

The initial TTO was notified in 1999 and several amendments were made to incorporate new provisions. Some of the provisions of TTO, 1999 had become infructuous and redundant due to passage of time and several subsequent amendments of the TTO. The committee set up by TRAI consisting of representatives from TRAI, Telecom service Providers and Industry Associations made recommendations suggesting purging/modifying of several provisions of existing regulations. The recommendations of the Committee, inter-alia included a proposal to delete, purge or modify various provisions of TTO. The Authority considered these recommendations and decided to bring out an amendment to the tariff order to give effect to the recommendations made by the Committee.

Some of the existing Schedules to the TTO relating to Radio Paging Service, Telex and Telegraph Services, Global Mobile Personal Communication by Satellite (GMPCS) etc. which were part of the original TTO, 1999 have become infructuous as these services have lost their relevance in the modern time. Such Schedules have been removed from the TTO through this Amendment to the TTO. Provision relating to ‘Deposits’ has been modified to clarify that the ceiling specified shall not apply to ISD and International Roaming Services.

The “Telecommunication Tariff (64th Amendment) Order, 2018” is available on TRAI’s website www.trai.gov.in

V. DIRECTIONS

Telecom Sector

- **Direction dated 1stJanuary 2018 regarding extension of the validity period of UPCs issued to the subscribers of M/s Reliance Communication Ltd., pursuant to the direction dated 3rd November 2017**

Direction was issued on 3rdNovember 2017 to MNPSs, TSPs so as to facilitate Mobile Number Portability of subscribers of M/s Reliance Communications Limited (RCL) consequent upon to discontinuation of 2G/GSM services by M/s RCL in Andhra Pradesh, Haryana, Maharashtra, UP (East), UP(West), Tamil Nadu, Karnataka and Kerala licensed service areas and upgrading of network from CDMA to LTE/4G in 800 MHz band in Delhi, Rajasthan, UP(West), Tamil Nadu, Kerala, Karnataka, West Bengal, Gujarat and Kolkata licensed service areas consequent to conclusion of merger of licenses of M/s Sistema Shyam Telecommunications Limited into M/s Reliance Communications Limited.

Through the Direction dated 1stJanuary 2018, M/s RCL was, inter-alia, directed to keep all UPCs generated pursuant to the direction dated the 3rdNovember 2017 and UPCs that are expiring on the 31stDecember, 2017, valid till 23:59:59 hours of the 31stJanuary 2018.

- **Direction dated 19thJanuary 2018 to M/s Reliance Telecom Ltd. (RTL) and M/s Reliance Communications Ltd. (RCL) to refund the unspent balance and security deposits of their mobile subscribers**

Consequent upon closure of 2G/GSM, CDMA services and discontinuation of voice services in all the licensed services, TRAI received large number of complaints from the subscribers of M/s RCL and M/s RTL regarding refund of balance amount left with M/s RCL and M/s RTL in the form of recharge or vouchers / plans in their prepaid mobile account and non-refund of security deposits for the postpaid mobile accounts. In order to protect the interest of the consumers at large, TRAI directed M/s RCL and M/s RTL on 19th January 2018 to refund the unspent balance and security deposits to its mobile subscribers.

- **Direction dated 22ndFebruary 2018 to M/s Reliance Communications Ltd. and M/s Reliance Telecom Ltd. regarding Extension of validity of UPCs issued pursuant to Directions dated 13th December 2017**

Direction was issued on 22ndFebruary 2018 to M/s Reliance Communications Ltd. and M/s Reliance Telecom Ltd. Through this Direction both M/s RCL and M/s RTL were inter-alia, directed to keep all UPCs generated pursuant to the direction dated the 3rd November 2017 and UPCs that were expiring

on the 31stDecember 2017, valid till 20thMarch 2018 and allow porting of their mobile numbers till 20thMarch, 2018.

➤ **Direction dated 27th February 2018 to M/s Aircel Ltd. and M/s Dishnet Wireless Ltd. regarding provision of additional codes for UPC generation**

Direction dated 27thFebruary, 2018 was issued to MNPSPs, M/s Aircel Ltd and TSPs to facilitate Mobile Number Portability of subscribers of M/s Aircel Ltd. and M/s Dishnet Wireless Ltd with a view to help subscribers to exercise their right to port their mobile number consequent to the sites of M/s Aircel Ltd., being turned off by its Infra-Provider in different LSAs across the country and causing disruption in the network.

➤ **Direction dated 16th March 2018 to all UASPs/BSOs/CMSPs regarding withdrawal of direction No. 406-1/2005-FN dated 9th June 2005**

A committee was formed in TRAI, comprising of telecom service providers and associations, for purging of infructuous/redundant regulations. The committee, in its recommendations dated 31st January 2018, recommended that Direction No. 406-1/2005-FN dated 9th June 2005 to be purged as no more complaints are being received on the issue and most of the TSPs are operating Pan India.

In accordance with the recommendations of the committee, TRAI, vide its Direction dated 16th March 2018 decided to withdraw its direction no. 406-1/2005-FN dated 9th June 2005.

➤ **Direction dated 20th March 2018 to all Access Providers, NLDOs & ILDOs on reporting of International Long Distance Traffic Minutes**

A committee was formed in TRAI, comprising of telecom service providers and associations, for purging of infructuous/redundant regulations. The committee observed regarding report on International Long Distance Traffic Minutes that the service providers, that do not provide switched voice services under NLD/ILD license, have been filing 'NIL' report.

In accordance with the recommendations of the committee, TRAI, vide its Direction dated 20th March 2018 directed Access Providers, NLDOs & ILDOs that do not provide switched voice services are exempted from submitting reports of the International Long Distance Traffic Minutes on monthly basis. However, these operators shall submit their reports in the prescribed format as and when they start providing switched voice service.

➤ **Direction dated 17thApril 2018 to M/s Aircel Ltd regarding extension of validity of UPCs**

Direction dated 17th April, 2018 was issued to M/s Aircel Group (M/s Aircel Ltd. and M/s Dishnet Wireless Ltd.), inter-alia, for extension of validity

of UPCs generated pursuant to direction dated 27th February, 2018 to facilitate Mobile Number Portability (MNP) for the subscribers of M/s Aircel Ltd. and M/s Dishnet Wireless Ltd. (together as M/s Aircel Group) in the licensed services areas of Andhra Pradesh, Assam, Bihar, Delhi, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Mumbai, North East, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh (East) and West Bengal.

➤ **Direction dated 23rd April 2018 to M/s Aircel Group regarding refund on unspent balance and security deposit**

In order to protect the interest of the telecom subscribers, Direction dated 23rd April 2018 was issued to M/s Aircel Group. (M/s Aircel Ltd and M/s Dishnet Wireless Ltd.) in the Licensed Service Areas of Gujarat, Haryana, Himachal Pradesh, Maharashtra and Uttar Pradesh (West), inter-alia, directing to: -

- (i) Process, in case of postpaid mobile subscribers the refund of the security deposits of all the post-paid subscribers and submit to the Authority the licensed service area wise compliance indicating the number of subscribers whose security deposit have been successfully refunded and number of subscribers along with details of the amount of security deposits unclaimed/ undelivered;
- (ii) For all the pre-paid subscribers ported out during the period from the 1st December 2017 to 10th March 2018, transfer the unspent balance in the account of the subscribers at the time of porting to the recipient operator and furnish to TRAI the details of refund made;
- (iii) Process refund to the prepaid mobile subscribers, who have not been able to port out by 10th March 2018.

➤ **Direction dated 23rd May 2018 and 20th December 2018 to all Access Service Providers regarding online filling of tariff offers**

Direction dated 23rd May 2018 was issued to all Access Service Providers regarding online filling of tariff offers wherein all Telecom Access Service Providers (TSPs) were directed to report to the Authority all the tariffs offered to the consumers, with effect from 30th June 2018, through XML API web service, in addition to the existing Tariff Reporting requirements. A corrigendum dated 1st June 2018 was also issued wherein minor correction in the XML API Document was informed, since considerable time elapsed conducting the parallel run and the telecom service providers built their infrastructure and were equipped with the tools for online submission of tariffs. Moreover, the TSPs at various platforms had also requested for discontinuation of the physical submission of their tariffs as they were filing in electronic form.

The Authority initiated the process of filing tariffs in electronic form along with physical submission and to do away with the physical copy filing of tariffs entirely, albeit in a phased manner.

Therefore, considering all the aspects, the Authority decided that there shall not be any requirement of filing physical copy of tariffs and the same shall not be considered for the purpose of tariff filing except for ISD tariffs and International Roaming tariffs, electronic filing of which will be enabled in next phase;

Hence, the Authority, in exercise of powers conferred upon it under section 13 read with sub-clauses (i) and (v) of clause (b) of sub-section (1) of section 11 of the TRAI Act, 1997 and clause 9 of the Telecommunication Tariff Order, 1999 directed all the Telecom Access Service Providers vide Direction dated 20thDecember 2018 the following:

- (i) to file tariffs online w.e.f. 1stJanuary 2019;
- (ii) to comply with the reporting requirement as per clause 7 of the Telecommunication Tariff Order, 1999 while filing tariffs through online mode;
- (iii) that the URL for filing online tariffs in HTML response format is <https://tariff.trai.gov.in/API/xmlapi.aspx> and XML response format is <https://tariff.trai.gov.in/API/xmlapi2.aspx>.

➤ **Direction dated 13th June 2018 regarding submission of periodical reports on revenue & usage and tariff plans**

Direction dated 13th June 2018 was issued to all TSPs regarding submission of periodical reports on revenue and usage and tariff plans.

The Authority directed all the TSPs to:

- (a) submit the report on Revenue & Usage to the Authority on quarterly basis within forty five days from the date of respective quarter ending except fourth quarter of the financial year for which the report shall be submitted within sixty days from the date of quarter ending in prescribed Format-A (for wire-line services), Format-B (for limited mobility services) and Format-C (for full mobility services). The reports may also be sent electronically to e-mail IDassteco2@tra.gov.in or may be uploaded on TRAI's web portal;
- (b) submit the report on Tariff Plans for wireline and wireless services separately to the Authority on quarterly basis within twenty one days from the date of respective quarter ending in the format annexed as Annexure-I (Prepaid) and Annexure-II (Postpaid) electronically to e-mail ID assteco2@tra.gov.in;

- (c) Submit the performance reports for basic services, cellular mobile services, internet services, PMRTS services and VSAT services to the Authority on quarterly basis within thirty days from the date of respective quarter ending.
- (d) Ensure the submission of correct and complete information within the prescribed timeline.

➤ **Directions dated 31st July 2018 on Quality of Service (QoS) for Voice Calls for LTE users via Circuit Switched Fall Back (CSFB) option**

This direction mandated the cellular mobile telephone service providers, to conduct tests, collect data and report to TRAI on regular basis.

The salient features of the directions are:

- (a) To measure call set up delay for mobile originating and terminating calls on sample basis in the networks where LTE has been launched but Voice over LTE (VoLTE) is yet to be launched.
- (b) Measurements are to be taken by the access providers in every quarter of the year and reported to TRAI. Measurements to be made in various locations of the identified cities or districts in the service area.
- (c) Service providers are required to conduct such tests on at least 20 locations in each identified cities or districts. At least 5 cities or districts are to be identified for carrying out these tests.

Purging of in-fructuous Directions

- Direction dated 7th September 2018 to all Access Service Providers withdrawing Direction dated 21st August 2006 on annual compliance reporting.
- Direction dated 7th September 2018 to all Access Service Providers/M/s BSNL withdrawing Direction dated 28th October 2005 regarding reporting of various activities to Administrator, USOF, DoT.

A Committee was formed under the Chairmanship of Pr. Advisor (NSL): senior officer of TRAI; representatives from TSPs and Associations as Members, to identify in-fructuous/ redundant Regulations, which could be deleted/withdrawn. The Committee submitted its report on 31st January 2018 giving its recommendations to purge certain Regulations and to do away with the compliance reporting.

The Committee recommended purging of Direction No.101-41/2006-MN dated 21st August 2006 which relate to submission of annual compliance on the following Directions:

- (i) Posting of information pertaining to USO related activities on website (Direction dated 28th October 2005 to UASPs and BSNL);
- (ii) Opening of allotted codes (Direction dated 6th January 2005 to all TSPs);
- (iii) Auto roaming services to all Pre-paid subscribers (Direction dated 16th June 2004 to all CMSPs); and
- (iv) Include standard terms and conditions of all tariff plans for pre-paid cards (Direction dated 11th July 2002 to all CMSPs).

After considering the recommendation of the Committee, TRAI issued the following two Directions on 7th September 2018:

- (a) to withdraw Direction dated 21st August 2006 on annual compliance reporting; and
- (b) to withdraw Direction dated 28th October 2005 regarding reporting of various activities to Administrator, USOF, DoT.

➤ **Direction dated 18th October 2018 on Provision of Interconnection**

TRAI had earlier issued Direction No.409-9/2005-FN dated 7th June 2005 and its corrigendum No.409-9/2005-FN dated 28th July 2005, in order to ensure compliance of terms and conditions of license and effective interconnection between service providers and to protect consumer interest. Through this Direction, TRAI directed all service providers to provide interconnection on the request of the interconnection seeker within 90 days of the applicable payments made by the interconnection seeker.

Thereafter, with the issue of “The Telecommunication Interconnection Regulations, 2018” dated 1st January 2018 and “The Telecommunication Interconnection (Amendment) Regulations, 2018” dated 5th July 2018, the framework for provisioning of ports has been revised from 90 days of the applicable payment made by the interconnection seeker to 42 working days, upon receipt of the request of ports from interconnection seekers, to ensure provisioning of ports for initial interconnection and augmentation of ports at POIs.

In view of issue of TRAI’s regulations mentioned above, the Authority issued Direction No.6-6/2017-BB&PA dated 18th October 2018, through which it has withdrawn its earlier Direction dated 7th June 2005.

➤ **Direction dated 3rd December 2018 to all Access Service Providers regarding providing Telephone Bills to Persons with Disabilities as ICT Accessible**

TRAI issued a recommendation dated 9th July 2018 to the Government of India on “Making ICT Accessible for Persons with Disabilities underlining

the need for service providers to provide telephone, mobile, broadband and DTH bills to persons with disabilities (PwD) in accessible form based on their choice e.g. for the persons with low vision, telephone or mobile bills may be provided in large font size; visually impaired persons may opt to get the telephone bill in Braille script; persons with such disability may opt for electronic bill in machine readable form etc.

Therefore, TRAI vide direction dated 3rd December 2018 directed all the Access Service Providers to provide telephone, mobile and broadband bills to PwDs in accessible form based on the choice of PwDs.

➤ **Direction dated 5th December 2018 to M/s Quadrant Televentures Ltd. for non-compliance of the provisions of the TCCCPR, 2010**

TRAI vide direction dated 5th December 2018 directed M/s Quadrant Televentures Ltd to:

- submit to the Authority a list containing the details of the Telemarketer against each complaint;
- submit to the Authority a list containing the (i) details of registered telemarketer against whom complaints have been made by customers, (ii) details of number of data-wise complaints; and total penalty payable based on the complaints as per the regulations and agreements entered into with such telemarketers.
- deduct the applicable amount of penalty from the security deposit maintained by these registered telemarketers with them and deposits the same with TRAI;
- instruct the registered telemarketers involved in the complaints to deposit additional amount of security deposit, depending on number of complaints;
- disconnect the telecom resources of such telemarketers who failed to deposit the additional security deposit or who have committed six violations;
- furnish compliance report to the Authority within one month from the date of this direction.

➤ **Direction dated 12th December 2018 regarding specifying common test of announcement played to subscribers across all Unified Access Service Providers**

This direction directs all Access Service Providers to make arrangements to have common text for announcement played by TSP's networks to subscribers for 16 identified events as per list of events and common

announcement text. All Access Service Providers are directed to play common text of announcement to their subscribers for above mentioned 16 identified events, with effect from the 1st day of March 2019.

Broadcasting Sector

➤ **Direction dated 3rd December 2018 issued to broadcasters and distributors of television channels relating to display of television channels on Landing Page**

The Telecom Regulatory Authority of India Act, 1997 in order to protect the interest of service providers and consumers and ensure orderly growth of the sector, directed all broadcasters and distributors of the television channels to restrain from placing any registered satellite television channel, whose TV rating is released by TV rating agency, on the landing LCN or landing channel or the boot-up screen with immediate effect. In case of previously entered agreements, efforts may be made to implement these directions as soon as possible and it shall be implemented in all cases by 31st March 2019.

VI. CONSULTATIONS

Telecom Sector

- **Consultation Paper dated 8thFebruary 2018 on “Method of allocation of spectrum for Public Mobile Radio Trunking Service (PMRTS), including auction, as a transparent mechanism”**

Public Mobile Radio Trunking (PMRT) service is a niche service having wide-spread application in sectors such as Public Safety, Manufacturing, Oil & Gas, Mining, Construction, Courier, Emergency Services (for logistics and fighting natural calamities), Utilities (like Municipal services, electricity, water etc.), Transportation (Road, Airports, Harbors), Energy & Communication (for efficient service & maintenance), and service industry. In the past, as an alternative, PMRT services have been often used for communications by agencies involved in protection of life and property, disaster relief and emergency responses.

The Department of Telecommunications (DoT) through its letter No. L-14027/08/2016-NTG dated 13thJuly 2017 requested TRAI to provide its recommendations under section 11(1) (a) of TRAI Act, 1997 i.e. on method of allocation of spectrum for Public Mobile Radio Trunking Service (PMRTS) including auction, as a transparent mechanism.

In this regard, a Consultation Paper was issued on 8thFebruary 2018 for seeking comments of the stakeholders. The Consultation Paper, apart from the aspects of methodology of allocation of spectrum also elaborated on the issues viz. duration of license, assignment of spectrum (throughout the license area or city-wise), preferable frequency bands for PMRT services, block size, reserve price, spectrum cap etc. The practices adopted in few countries had also been discussed.

- **Consultation Paper dated 26thFebruary 2018 on “Voice Services to LTE users (including VoLTE and CS Fallback)”**

This consultation paper deliberates the following issues:

- LTE is an all-IP, data-only transport technology based on packet switching.
- Voices services in LTE network is mainly carried by two technologies viz. Voice over LTE (VoLTE) and Circuit Switch Fall Back (CSFB).
- VoLTE allows carriers to transmit voice calls over LTE network and controlled through their IP Multimedia Subsystem (IMS). This means that voice calls and data sessions travel side-by-side over LTE. Whereas in CSFB, LTE network is used only for data traffic and voice services

are provided on traditional circuit switched technologies of 2G and 3G.

- CSFB redirects a device registered on the LTE network to the 2G/3G network (i.e. fallback) prior to originating or receiving a voice call.
- Both, VoLTE and CSFB techniques to provide voice services via LTE may face some quality of service issues due to different network scenarios. Such scenarios may result into silence period or voice mute observed by the users. Extent to which this is experienced by the user during a call before dropping of call may also be implementation specific.
- Paper also highlighted KPI parameters, which can measure various cause of degradation in quality of Voice calls with LTE network and can lead to poor customer experience.

➤ **Consultation Paper dated 6thApril 2018 on “Review of Mobile Number Portability (MNP) process”**

TRAI issued the Telecommunication Mobile Number Portability (MNP) Regulations 2009 dated 23rd September 2009 laying down the basic business process framework for implementation of MNP in the country. In a continuous endeavour to make MNP process more subscriber friendly, based on feedback from the stakeholders and its own analysis, TRAI issued various Directions and amendments to the MNP regulations.

The reports submitted by Mobile Number Portability Service Providers (MNPSPs) are monitored periodically to study the pattern of rejection of porting requests by the Donor Operator (DO). Analysis of the reports suggests that the rejections on the grounds of “Unique Porting Code (UPC) Mismatch” and “Unique Porting Code (UPC) expired” constitute about 40% of the total rejections. Accordingly, to address the issues faced by the telecom mobile subscribers, draft Telecommunications Mobile Number Portability (seventh amendment), Regulations 2017, were issued on 16th August 2017 for seeking comments of the stakeholders. The proposed amendment was envisaged to result in reduction of rejection of porting requests leading to increased subscriber satisfaction.

The comments received from the stakeholders were examined and analysed. Through the comments it was observed that in addition to the amendments as proposed in the draft MNP regulations as mentioned in para above, various other issues were also raised by stakeholders and new mechanisms for UPC generation were suggested.

Due to recent closure/discontinuation of wireless access services by some of the Telecom Service Providers (TSPs) in few or all the Licensed Service

Areas (LSAs), substantial number of subscribers were forced to port their mobile number to other TSPs. Consequent upon closure/discontinuation of the services, TRAI has received large number of complaints related to the difficulties faced by the subscribers of these service providers in porting their mobile numbers. The major issues were non-generation of UPC by the Donor Operator or non-receipt of UPC by the subscriber, multiple times rejection of porting requests by donor operators on various grounds of rejections prescribed in regulation 12 of the MNP regulations, instances of fraudulent porting, issuance of interim bills for postpaid subscribers, non-refund of the prepaid balance and security deposits of postpaid subscribers. These issues caused inconvenience and dissatisfaction to the mobile subscribers.

The suggestions/comments submitted by the stakeholders during consultation on draft 7th amendment had necessitated further consultation among all the stakeholders. Due to recent closure of services by some of the operators, new issues as mentioned in para above have also emerged. In view of this, TRAI issued a Consultation Paper on “Review of Mobile Number Portability (MNP) process” covering all the existing issues with a vision to review and revamp the existing MNP process and make it more efficient and convenient for the telecom subscribers.

➤ **“The Draft Telecommunication Interconnection (Amendment) Regulations, 2018” dated 8th May 2018**

TRAI on 8th May 2018 brought out “The Draft Telecommunication Interconnection (Amendment) Regulations, 2018” which prescribes amendment in Regulations 6, 8 & 9 of “The Telecommunication Interconnection Regulations, 2018” dated 1st January 2018 for consultation of the stakeholders.

➤ **Draft Regulation dated 29th May 2018 on “The Telecom Commercial Communications Customer Preference Regulations, 2018” for seeking the comments of the stakeholders**

The important new features of this regulation are:

- a) Adoption of Distributed Ledger Technology (or block chain) as the Reg Tech to enforce regulatory compliance while allowing innovation in the market.

Block chain has proven useful where the objective is to cryptographically secure information and make it available only on need to know basis. Yet none may deny their actions or tamper with records, once recorded on the distributed ledger, which uniformly enforces compliance.

It appears to be the first instance anywhere in the world to use this technology at such a scale in the telecom sector.

- b) Co-regulation where Telecom Service Providers/ Access Providers establish and arrange framework, which is legally backed by regulation.

Since the telcos can be expected to guard the interests of their subscribers, TRAI has opted for co-regulation to develop the solutions that can better serve the needs of all stakeholders. This would, of course, be allowed only within the framework prescribed in the regulations.

- c) Enabling compliance through innovation in technology solution that are demonstrated in a regulatory sandbox.

Since the Authority has opted for a technology driven solution and allowed continual development, it's been decided to permit a regulatory sandbox where these solutions can be demonstrated to everyone, including the regulator, before they are deployed.

- d) Provision of better control over all entities in the ecosystem and in the flow of commercial communications.
- e) Detection of unregistered telemarketers through collaboration and in a more intelligent manner.

➤ **Draft Telecommunication Mobile Number Portability Regulations 2009 (Seventh Amendment), 2018 dated 25th September 2018**

In order to devise mechanism for reducing the rejections on the grounds of “Unique Porting Code (UPC) Mismatch” and “Unique Porting Code (UPC) expired”, the Authority initiated draft Telecommunications Mobile Number Portability (seventh amendment), Regulations 2017, on 16th August 2017 for seeking comments of the stakeholders. The comments received from the stakeholders were examined and analysed. Through the comments it was observed that in addition to the amendments as proposed in the draft MNP regulations as mentioned above, various other issues were also raised by stakeholders and new mechanisms were suggested.

Pursuant to the suggestions/comments submitted by the stakeholders during consultation on draft 7th amendment, the Authority on 6th April 2018, initiated the Consultation Paper on “Review of the Mobile Number Portability (MNP) process” for the comments of the stakeholders. Through the Consultation Paper, it had been envisaged to review all the existing issues with a vision to make the MNP process more efficient and convenient for the telecom subscribers.

Written comments on the issues raised in the consultation were invited from the stakeholders. An Open House Discussion was convened on 11th June 2018.

Based on the comments/counter-comments received, Draft Telecommunication Mobile Number Portability (Seventh Amendment) Regulations 2018 were released on 25th September 2018 for consultation on TRAI's website www.traigov.in for seeking comments of the stakeholders.

➤ **Consultation Paper dated 10th October 2018 on “Methodology for levy of Spectrum Charges for provision of Satellite based Services using Gateway installed in India under ‘sui-generis’ category”**

The Department of Telecommunications (DoT), through its letter dated 13th August 2018, informed that based on the TRAI recommendations dated 12th May 2014 on “Provisioning of INMARSAT/Satellite Phone Services”, M/s BSNL had been granted a service license dated 25th August 2014 for ‘Provision and Operation of Satellite based services using gateway installed in India’ under “Sui-generis” category by DoT. Presently, the annual spectrum charges for the Gateway and user terminals are levied on formula basis (proportional to the number of terminals and frequency bandwidth used). M/s BSNL had been requesting to change the present methodology of spectrum charging from formula based to Adjusted Gross Revenue (AGR) based for provision of this service in line with the commercial VSAT service. Therefore, DoT requested TRAI to provide its recommendations on the method of levy of annual spectrum charges.

In view of the above, a Consultation Paper on “Methodology for levy of Spectrum Charges for provision of Satellite based Services using Gateway installed in India under ‘sui-generis’ category” was released on 10th October 2018 to discuss the issues involved and possible solutions.

➤ **Consultation Paper dated 18th October 2018 on “Estimation of Access Facilitation Charges and Co-location charges at Cable Landing Stations”**

TRAI issued a Consultation Paper on “Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations”.

Access Facilitation Charges (AFC) are the charges, which are payable by International Long Distance Operators (ILDO)/ Internet Service Providers (ISP) to the owner of the cable landing station to access the acquired international bandwidth in a submarine cable. Submarine cables provide vital international telecommunication links between countries across the world. Submarine cables terminate in the country through cable landing stations.

TRAI issued “The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-Location Charges Regulations, 2012” on 21st December 2012. The AFC Charges and Co-location Charges specified in the Regulations dated 21st December 2012 were to be effective from 1st

January 2013. However, it was challenged in the Hon'ble Madras High court by two of the Owners of Cable Landing Station (OCLS). The Single Judge Bench of the Hon'ble Madras High Court on 11th November 2016 had dismissed the writ petitions. But appeals were filed by these two OCLS before a Division Bench of the Hon'ble Madras High Court. The Hon'ble Division Bench of Madras High Court vide its final Judgment and order dated 2nd July 2018 had quashed the Schedules I, II and III of 'The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-location Charges Regulations, 2012 dated 21st December 2012 and directed that TRAI shall redo and re-enact the aforesaid schedules.

Subsequently, TRAI filed Special Leave Petition in the Hon'ble Supreme Court against the judgment of the Division Bench of Hon'ble Madras High Court. Similar, Special Leave Petitions were also filed by other stakeholders in the Hon'ble Supreme Court. The Hon'ble Supreme Court vide its Order dated 8th October 2018 directed the Authority to re-work the figures on both counts within a period of six weeks. Both the counts, 'Utilization factor' and 'Conversion factor' were used for estimation of the Access Facilitation Charges.

In view of the above, Consultation Paper was released to re-work the figures of 'Utilization factor' and 'Conversion factor' used to estimate the Access Facilitation Charges and Co-location Charges in compliance to the Hon'ble Supreme Court order dated 8th October 2018.

➤ **Consultation Paper dated 12th November 2018 on "Regulatory Framework for Over-the Top (OTT) communication Service"**

This consultation paper deliberates following issues:

- to analyse and discuss the implications of the growth of OTTs; the relationship between OTT players and TSPs;
- the similarity, if any, between services provided by the TSPs and OTT players;
- changes that may be required in the current regulatory framework to govern these entities; and
- the manner in which such changes should be brought into effect.
- The last date for written comments by stakeholders was 10th December 2018 and counter comments, if any, by 24th December 2018.

➤ **Consultation Paper dated 15th November 2018 on "Review of extant provision for sending the printed bills to consumers of landline and postpaid mobile subscribers"**

TRAI released a consultation paper on Review of extant provision of sending the printed bills to postpaid subscribers of (i) landline and (ii) Mobile services as default option.

TRAI vide Telecommunication Tariff (46th Amendment) Order, 2008 mandates the service providers to provide hard copy of the bill to its postpaid subscribers free of cost as a default option. However, if any customer opts for receipt of the bill through e-mail, instead of hard copy, the services provider can supply the same after obtaining explicit consent from the subscribers.

TRAI received representations including from Telecom service providers requesting removal of the mandate of providing hard copy of the bill as the default option for postpaid subscribers.

TRAI on 15th November 2018 released a consultation paper on Review of extant provision of sending the printed bills to postpaid subscribers of landline and mobile services as default option inviting the comments of all the stakeholders on the existing provisions on the subject by 10th December 2018 and counter comments by 24th December 2018 which was further extended up to 8th January 2019. The comments and counter comments were uploaded on TRAI website. This will be followed by an Open House Discussion with the stakeholders. TRAI will then form an appropriate view after taking into account the inputs received in the consultation process.

Broadcasting Sector

➤ **Consultation Paper dated 3rd April 2018 on “Issues related to Placing of Television Channel on Landing Page”**

TRAI on 3rd April 2018 issued a Consultation Paper on “Issues related to Placing of Television Channel on Landing Page” with the aim to protect the interest of the consumer, to ensure fair growth of the sector, and to ensure unbiased TRP ratings. It raises various issues related to placement of television channels on landing page providing an opportunity to all the stakeholders to deliberate on the issues and to provide comments / suggestions thereof.

➤ **Consultation Paper dated 3rd December 2018 on “Review of Television Audience Measurement and Ratings in India”**

Several concerns relating to neutrality and reliability of the existing rating system have been raised by stakeholders, which necessitated a need to review the existing Television Audience Measurement and Ratings system in India. Accordingly, TRAI suo-motu floated consultation paper dated 3rd December 2018 on “Review of Television Audience Measurement and Ratings in India” for seeking comments of stakeholders on the issues related to review of existing system.

VII. OTHER ISSUES (TELECOM SECTOR)

➤ **Monitoring and ensuring of Quality of Service (Performance Monitoring Reporting of TSPs, Audit and Assessment of Quality of Service of various TSPs and Customer Perception Reports offered by TSPs)**

TRAI monitors the performance of service providers through quarterly Performance Monitoring Reports, Point of Interconnection congestion reports submitted by service providers.

For ensuring quality of service, TRAI has been closely monitoring the performance of service providers against the quality of service benchmarks through Performance Monitoring Reports. TRAI also has regular interactions with service providers for improving quality of service. Further, TRAI has engaged independent agencies for auditing and assessing quality of service through independent agency. The results of the audit and assessment of quality of service are published for the information of stakeholders. TRAI has also been imposing financial disincentive on service providers for failure to comply with the quality of service benchmarks. TRAI also issues Show Cause Notices/Orders to service providers.

➤ **Audit**

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

A Tender for Drive test was floated and work has been awarded to M/s Phimetrics Technology Pvt. Ltd., in all the four zones. Till date 64 reports of Cities of IDTs have been uploaded on TRAI web site. Further, the contract for the second year has also awarded to the same company.

Further a separate tender for Audit & Assessment was floated and the work has been awarded to M/s Phimetrics Technology Pvt. Ltd., in all the four zones.

➤ **Miscellaneous**

1. NCCP Portal: TRAI launched the portal www.nccptrai.gov.in to monitor the implementation of TCCCP Regulations, 2010. The portal is being used for monitoring the UCC Complaints.

2. An amount of Rs. 3.07 Crores has been received till date towards Penalty on Telemarketers.
3. EOI of Auditors for 2018-19 is finalized and the panel is published on TRAI Website.

Open House Discussion (OHD)

- **Open House Discussion dated 18th January 2018 at New Delhi on the Consultation Paper on “Auction of Spectrum in 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300-3400 MHz and 3400-3600 MHz Bands”**

An OHD was held on 18th January 2018 at New Delhi on the Consultation Paper on “Auction of Spectrum in 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300-3400 MHz and 3400-3600 MHz Bands”.



➤ **Open House Discussion dated 1st February 2018 on the Consultation Paper on “Privacy, Security and Ownership of the Data in the Telecom Sector”**

TRAI conducted an Open House Discussion (OHD) on 1st February 2018 in New Delhi on the Consultation Paper on “Privacy, Security and Ownership of the Data in the Telecom Sector”. The OHD was attended by various stakeholders like TSPs, Telecom Associations, individuals etc.

➤ **Open House Discussion dated 15th February 2018 at New Delhi on the Consultation Paper on “Next Generation Public Protection and Disaster Relief (PPDR) communication networks”**

An Open House Discussion was held on 15th February 2018 at New Delhi on the Consultation Paper on “Next Generation Public Protection and Disaster Relief (PPDR) communication networks”.



➤ **Open House Discussion dated 14th March 2018 on the Consultation Paper on “Promoting Local Telecom Equipment Manufacturing”**

TRAI conducted an Open House Discussion (OHD) on 14th March 2018 in New Delhi on the Consultation Paper on “Promoting Local Telecom Equipment

Manufacturing”. The OHD was attended by Telecom Service Providers, Associations of Telecom Service Providers Manufactures, Manufacture’s Associations International Business Organizations, Consumer Advocacy Groups, Consultants, Academicians and Experts.

➤ **Open House Discussion dated 16th May 2018 at New Delhi on the Consultation Paper on “Method of allocation of Spectrum for Public Mobile Radio Trunking Service (PMRTS)”**

An Open House Discussion was held on 16th May 2018 at New Delhi on the Consultation Paper on “Method of allocation of Spectrum for Public Mobile Radio Trunking Service (PMRTS)”.



➤ **Open House Discussion dated 11th June 2018 at New Delhi on the Consultation Paper on “Review of Mobile Number Portability (MNP) Process”**

An Open House Discussion was held on 11th June 2018 at New Delhi on the Consultation Paper on “Review of Mobile Number Portability (MNP) Process”.



- **Open House Discussion dated 5th November 2018 on Consultation Paper on “Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations”**

TRAI conducted an OHD on 5th November 2018 in New Delhi on the Consultation Paper on “Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations”. The OHD was attended by various stakeholders i.e. Telecom Service Providers, Telecom Associations and Individuals etc.

- **Open House Discussion dated 26th November 2018 on Consultation Paper on “Methodology for levy of Spectrum Charges for provision of Satellite based Services using Gateway installed in India under ‘sui-generis’ category”**

TRAI conducted an OHD on 26th November 2018 in New Delhi on the Consultation Paper, “Methodology for levy of Spectrum Charges for provision of Satellite based Services using Gateway installed in India under ‘sui-generis’ category” dated 10th October 2018.

Workshop

- **Workshop held on 7th June 2018 on “Implementation Strategy for Interoperable Wi-Fi Hotspot Architecture for Digital India”**

TRAI organized a workshop on “Implementation Strategy for Interoperable Wi-Fi Hotspot Architecture for Digital India” at Bengaluru on 7th June

2018. The workshop was graced by Shri Manoj Sinha, Hon'ble Minister of State for Communications (Independent Charge) and other dignitaries from Telecom sector.

The event saw huge participation from the Telecom and IT space who shared their views on proliferation of Wi-Fi hotspots in India. The attendees deliberated the issues which would promote the large-scale deployment of Wi-Fi hotspots in the country. The Workshop ended with a resolve to establish a strong interoperable Wi-Fi hotspots architecture in India so that common people can have affordable access to broadband and reap the benefits of technology.

➤ **Brief on Report titled “Telecommunications in Select Countries Policy- Statistics” dated 5th November 2018**

A compilation/report titled “Telecommunications in Select Countries Policy- Statistics” was uploaded on TRAI website on 5th November 2018. The compilation covers 23 countries across continents viz. India, Australia, Brazil, Canada, China, Egypt, France, Germany, Indonesia, Italy, Japan, Malaysia, Mexico, New Zealand, Nigeria, Pakistan, Philippines, Russia, South Africa, South Korea, Turkey, United Kingdom and United States of America. The report is prepared with an objective to understand trends of telecom development, policies and practices in the selected countries. The report provides a quick comparative over-view of the state of telecom service sector worldwide.

The compilation is divided into four chapters, chapter 1 covers the telecom parameters like tele-density, number of subscribers, Information and Communication Development Index etc. for the last four years ending 2016-17. The second chapter covers the quality of services across the selected 23 countries and chapter 3 covers the practices followed by 15 countries out of the selected 23 countries for spectrum management. Chapter 4 covers the financial results of the 25 leading telecom companies including Indian companies operating in the 23 countries.

The study was planned with an objective to understand the comparative evolution of telecom sector over a period of four years (2013-14 to 2016-17) in selected 23 countries. The material for the study was collected from websites of Telecom Regulatory Authorities of the selected countries and other websites that may have related information/data (eg. ITU.in, GSMA, RBI, TSPs website, Websites of Regulatory Authorities of various countries, World bank.org etc.).

Other Issues

➤ **Monthly Lecture Series**

From January this year, TRAI started a monthly lecture series by inviting Experts from ICT related fields. The objective of this new initiative has been to keep abreast TRAI Officers with development in the field of ICT and its applications across various social and economic activities. These Sessions also serve as a platform for engagement between TRAI officers and ICT Policy/ Technical Experts from within and outside the country on contemporary, regulatory and technical issues.

During the Year 2018, 11 (Eleven) such Talks/Presentations were organized on topics as indicated below:

Sl.No.	Topic
1	Internet Governance & Cyber Security
2	5G Technology
3	Artificial Intelligence
4	Cloud Computing & Big Data
5	Free Space Optical Communications (FSOC)
6	E-Payments Eco System
7	(i)5G & IoT (ii)e-SIM
8	Data Analytics & Start ups
9	FTTH Technology
10	Building Secure Financial Services on Mobile Devices
11	Data Visualization through Tableau Software

➤ **“Proliferation of Broadband through Public Wi-Fi Networks”**

Telecom Regulatory Authority of India (TRAI) brought out a Consultation Paper on “Proliferation of Broadband through Public Wi-Fi Networks” on 13th July 2016, with a view to examine the need of encouraging public Wi-Fi networks in the country from a public policy point of view, discuss the issues in its proliferation, and find out solutions for the same. After considering the comments from the stakeholders and further analysis, the Authority came out with its Recommendations on “Proliferation of Broadband through Public Wi-Fi Networks” on 9th March 2017.

The recommendations envisaged a new framework for setting up of Public Data Offices (PDOs) which in agreement with Public Data Office Aggregators (PDOAs) should be allowed to provide public Internet access. PDOAs may be allowed to provide public Internet access subject to specific registration/license requirements (to be prescribed by the DoT) which will include obligations to ensure the e-KYC authentication and record-keeping requirements (for customers, devices and PDOs enlisted with the PDOAs).

On the basis of recommendations, TRAI initiated a Pilot to demonstrate a proof of concept on 16th October 2017. After successful completion of the Pilot, a report was submitted to Hon'ble Minister of State for Communications (Independent Charge) on 5th April 2018. The report elaborates the purpose, planning, and outcomes of the pilot as well as the way forward in the implementation of viable and affordable public Wi-Fi network for the proliferation of broadband in the country.

VIII. OTHER ISSUES (BROADCASTING SECTOR)

- **Open House Discussion held on 11th April 2018 on Consultation Paper on “Issues relating to Uplinking and Downlinking of Television Channels in India”**

An Open House Discussion (OHD) on Consultation Paper on “Issues relating to Uplinking and Downlinking of Television Channels in India” was held on 11th April 2018 at TRAI Headquarters, New Delhi.

- **Open House Discussion held on 12th April 2018 on the Consultation Paper on “Empanelment of Auditors for Digital Addressable Systems”**

An Open House Discussion (OHD) on Consultation Paper on “Empanelment of Auditors for Digital Addressable Systems” was held on 12th April 2018 at TRAI Headquarters, New Delhi.

- **Open House Discussion held on 28th May 2018 on the Consultation Paper on “Issues related to Placing of Television Channel on Landing Page”**

An Open House Discussion (OHD) on Consultation Paper, “Issues related to Placing of Television Channel on Landing Page” was held on 28th May 2018 at TRAI Headquarters, New Delhi.

- **Press Note dated 3rd July 2018 on “TRAI’s Regulatory framework for Broadcasting and Cable TV Sector”**

TRAI on 3rd July 2018, released a Press Note on TRAI’s Regulatory framework for Broadcasting and Cable TV Sector, notified on 3rd March 2017. This press note kick-starts the process of implementation of the new regulatory framework for Broadcasting and cable Services provided through addressable systems, which include Direct to Home (DTH) Systems, Cable TV Systems provided through Digital Addressable Systems (DAS), Head-end In The Sky (HITS) and Internet Protocol TV (IPTV) w.e.f. 3rd July 2018. The regulatory framework comprises of the following:-

- The Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017 dated 3rd March, 2017, as amended on 30th March, 2017 [the Tariff Order 2017].
- The Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017 dated 3rd March, 2017 [the Interconnection Regulations, 2017].

- The Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017 dated 3rd March, 2017 [the QoS Regulations, 2017].

➤ **Implementation of New Regulatory Framework - Schedule of Activities issued on 27th December 2018**

In order to have a smooth transition of subscribers from old to new framework across the country, TRAI had issued a list of activities and requested service providers to adhere to the following schedule of activities.

All existing packs/plans/bouquets to the subscribers will continue uninterrupted till 31st January 2019.

No service provider to disconnect any signal/feed to any MSO/LCO/ subscriber till 31st January 2019, on the pretext of implementation of new regulatory framework.

Inter-service provider commercial settlement to continue as per their inter-se agreements in-force prior to 19th December, 2018, till 31st January, 2019.

DPOs to devise their own mechanism to reach out to all the subscribers and seek options from subscribers. Data pertaining to consumers' choice etc. should be maintained in such a manner that it is easily verifiable and should be reported to TRAI from time to time.

DPOs to migrate all the subscribers, who have exercised their choices, to new framework w.e.f. 1st February, 2019.

DPOs to adhere to the following schedule for reaching out to the consumers:

S. No	Activity
1	Reach out to at least 30% of the average subscribers base by 7 th January 2019
2	Reach out to at least 60% of the average subscribers base by 14 th January 2019
3	Reach out to 100% of the average subscribers base by 21 st January 2019

➤ **Advisory to All Distribution Platform Operators (DPOs) of Broadcasting and Cable Services for providing bills to the Persons with Disabilities (PwDs) in accessible form**

TRAI issued its recommendations on "Making ICT Accessible for Persons

with Disabilities” to the Government on 9th July, 2018. In its recommendations, the Authority has, inter-alia, underlined the need for Service Providers to provide bills to the PwDs in accessible form based on their choice. In this regard, DPOs need to seek option from the subscriber(s) and once the option is obtained as indicated in para 2 below, DPOs may send the printed bill in the accessible format. In addition, the subscribers who demand bill in electronic format, the same may be provided by the DPOs on email ID of the subscriber in accessible format.

In view of the above, all DPOs are advised that:-

- Suitable changes in the Consumer Application Form (CAF) for providing bills in accessible form may be made seeking type of disability from the subscriber;
- A mechanism may be devised to provide accessible bills to the subscribers as per PwD subscriber’s requirement;
- Bills for persons with low vision should be provided in large font size;
- Bills for blind persons may be provided in Braille script;
- Bills for persons with hearing disabilities may be provided in machine readable form;
- Bills in any other format as deemed fit for PwDs under RPWD Act, 2016 may be provided; and
- In no case bills are to be sent in picture format (.jpg, .png etc).

Activities related to New Regulatory Framework for Broadcasting & Cable Services

➤ **Half-day Interactive Session on "New Regulatory Framework for Broadcasting & Cable Services" at New Delhi**

Telecom Regulatory Authority of India (TRAI), over the years, has been regulating Telecom & Broadcasting Services, mainly driven by the objective of protecting the interests of service providers and consumers. TRAI played an important role in shaping the regulatory and policy framework governing the sector by making timely interventions through regulations, tariff orders, directions and recommendations to the Government. Keeping the mandate of TRAI Act in focus, TRAI conducted a half-day Interactive Session on “New Regulatory Framework for Broadcasting & Cable Services” at New Delhi.

➤ **Frequently Asked Questions on New Regulatory Framework**

Frequently Asked Questions (FAQs) on New Regulatory Framework (NRF) for B&CS in English & Hindi have been made available on the TRAI website. <https://channeltariff.trai.gov.in>. The same is being updated continuously.

IX. ISSUES RELATED TO GENERAL ADMINISTRATION

1. Workshop on Health Hygiene and Sanitation

Under Swachhta Action Plan 2017-18, a workshop was conducted on 24th February 2018 for Health, Hygiene and Sanitation for 62 Multi-Tasking Staff (MTS) working in TRAI. A swachhta kit was distributed and it was stressed to maintain health and hygiene during day to day work of cleanliness.



2. International Women's day

TRAI celebrated the International Women's day on 8th March 2018 by organising a function for all the female employees of TRAI.





3. Commemoration of Yoga Day

4th International Yoga day was celebrated in TRAI. Yoga session were organised in TRAI office from 20th to 21st June 2018. A Seminar was also organised on the occasion.

4. Commemoration of Sadbhavna Diwas in TRAI

The birth anniversary of Late Prime Minister Shri Rajiv Gandhi is celebrated all over the country as Sadbhavana Diwas. The occasion was also commemorated in TRAI by organizing a pledge taking ceremony.



5. Commemoration of Rashtriya Ekta Diwas (National Unity Day)

The birth anniversary of Sardar Ballabh Bhai Patel is celebrated all over the country as Rastriya Ekta Diwas. A pledge taking ceremony was organised in TRAI office on 31st October 2018.

6. Swachhta Pakhwara

In the year 2018, Swachhta Pakhwara was organised from 16th November 2018 to 30th November 2018. As per the action plan approved by DoT, a number of activities promoting swachhta were carried out. One of such activities was taking up sensitisation campaign in nearby school and market. The campaign

was organised at North MCD Co-Ed, Model School, Turkman Road No. 1, Chandni Chowk Zone, Ward No. 88, Delhi Gate New Delhi - 02. This activity was appreciated by Hon'ble Minister in his press conference after completion of the Swachhta Pakhwara.

7. Observation of Armed Forces Flag Day

The Armed Forces Flag Day (AFFD) was observed in TRAI on 7th December, 2018. All the employees were requested to take initiative to this noble cause and contribute towards AFFD Fund. An amount of Rs. 40,500/- was collected from TRAI Headquarters & Regional Offices and was sent to AFFD Fund.

**List of COPs during the period from 1st January 2018
to 31st December 2018**

S. NO	PLACE OF COPs	Date
1	Akola (Maharashtra)	10.01.2018
2	Sitapur (Uttar Pradesh)	18.01.2018
3	Tiruchirapalli (Tamilnadu)	19.01.2018
4	Haldia (West Bengal)	31.01.2018
5	Dahod (Gujarat)	01.02.2018
6	Chikballapur (Karnataka)	05.02.2018
7	New Delhi	07.02.2018
8	Patan (Gujarat)	08.02.2018
9	Chandrapur (Maharashtra)	15.02.2018
10	Bhongir (Telangana)	16.02.2018
11	Dhanbad (Jharkhand)	22.02.2018
12	Shaheed Bhagat Singh Nagar (Punjab) (Formerly Nawanshahr)	23.02.2018
13	Firozabad (Uttar Pradesh)	23.02.2018
14	Bhimavaram (Andhra Pradesh)	27.02.2018
15	Datia (Madhya Pradesh)	08.03.2018
16	Panchkula (Haryana)	13.03.2018
17	Durg (Chhatisgarh)	15.03.2018
18	Gondia (Maharashtra)	16.03.2018
19	Cooch Behar (West Bengal)	22.03.2018
20	Jharsuguda (Odisha)	22.03.2018
21	Alibaug (Maharashtra)	23.03.2018
22	Dwarka (Gujarat)	28.03.2018
23	Chikmagalur (Karnataka)	28.03.2018
24	Imphal (Manipur)	28.03.2018
25	Kavaratti (Lakshadweep)	09.04.2018
26	Surendra Nagar (Gujarat)	11.04.2018
27	Neemuch (Madhya Pradesh)	12.04.2018
28	Tezpur (Assam)	26.04.2018
29	Gurgaon (Haryana)	27.04.2018
30	Baran (Rajasthan)	03.05.2018
31	Bilaspur (Chattisgarh)	10.05.2018

S. NO	PLACE OF COPs	Date
32	Machilipatnam (Andhra Pradesh)	17.05.2018
33	Kathua (Jammu & Kashmir)	23.05.2018
34	Mount Abu, Distt.Sirohi (Rajasthan)	25.05.2018
35	Kanpur (Uttar Pradesh)	31.05.2018
36	Almora (Uttarakhand)	14.06.2018
37	Nandurbar (Maharashtra)	14.06.2018
38	Dhule (Maharashtra)	15.06.2018
39	NUH, Mewat (Haryana)	21.06.2018
40	Bardhaman (West Bengal)	21.06.2018
41	Madhupur (Jharkhand)	21.06.2018
42	Jagatsinghpur (Odisha)	28.06.2018
43	Dalhousie (Himachal Pradesh)	29.06.2018
44	Ranchi (Jharkhand)	05.07.2018
45	Rishikesh (Uttarakhand)	10.07.2018
46	Jalore (Rajasthan)	26.07.2018
47	Kothagudem (Telangana)	30.07.2018
48	Dhamtari (Chhattisgarh)	02.08.2018
49	Morbi (Gujarat)	02.08.2018
50	Noida (UP)	03.08.2018
51	Namakkal (Tamilnadu)	07.08.2018
52	Golaghat (Assam)	09.08.2018
53	Samba (J&K)	24.08.2018
54	Nellore (Andhra Pradesh)	28.08.2018
55	Jowai (Meghalaya)	29.08.2018
56	Charkhi Dadri (Haryana)	30.08.2018
57	Bhagalpur (Bihar)	30.08.2018
58	Betul (Madhya Pradesh)	11.09.2018
59	Mysore (Karnataka)	17.09.2018
60	Chamarajanagara (Karnataka)	18.09.2018
61	Barnala (Punjab)	20.09.2018
62	Nirmal (Telangana)	20.09.2018
63	Rajgarh, Sirmour (HP)	24.09.2018
64	Vrindavan (Uttar Pradesh)	27.09.2018
65	Sindhudurg (Maharashtra)	28.09.2018

S. NO	PLACE OF COPs	Date
66	Udaipur (Tripura)	04.10.2018
67	Faridkot (Punjab)	16.10.2018
68	Kochi (Kerala)	26.10.2018
69	Pratapgarh (Uttar Pradesh)	29.10.2018
70	Vyara, Distt. Tapi (Gujarat)	30.10.2018
71	Katra (J&K)	05.11.2018
72	Kalimpong (West Bengal)	15.11.2018
73	Namchi (Sikkim)	15.11.2018
74	Hardoi (Uttar Pradesh)	15.11.2018
75	Nasik (Maharashtra)	16.11.2018
76	Bokaro (Jharkhand)	20.11.2018
77	Jaipur (Rajasthan)	20.11.2018
78	Kolkata (West Bengal)	22.11.2018
79	Hyderabad (Telangana)	27.11.2018
80	Nizamabad (Telangana)	29.11.2018
81	Erode (Tamilnadu)	29.11.2018
82	Bhopal (Madhya Pradesh)	04.12.2018
83	Kalaburagi (Karnataka)	06.12.2018
84	Yadgiri (Karnataka)	07.12.2018
85	Cuttack (Odisha)	07.12.2018
86	Mumbai (Maharashtra)	10.12.2018
87	Fatehabad (Haryana)	11.12.2018
88	Prayagraj (Allahabad)	21.12.2018
89	Una (Himachal Pradesh)	27.12.2018



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