



Telecom Regulatory Authority of India

Report on Activities

(1st Jan, 2012 to 31st Dec, 2012)

INDEX

	Page no.
I. CONSUMER INTERESTS	
-QUALITY OF SERVICE	1
-RETAIL TARIFFS	2
-TRANSPARENT SERVICE PROVISION	5
-MOBILE NUMBER PORTABILITY	8
-PREVENTING SPAM	9
-CONSUMER COMPLAINT REDRESSAL	11
-CONSUMER PARTICIPATION	12
II. INTERCONNECTION	13
III. DIGITIZATION OF CABLE TV SERVICES	15
IV. RECOMMENDATIONS ON SPECTRUM, LICENSING AND POLICY	17
V. REGULATORY ENFORCEMENT ACTION	24
VI. REGULATORY ACCOUNTING	28
VII. PUBLICATIONS	29

PREFACE

The Telecom Regulatory Authority of India (TRAI) is a statutory body established under the Telecom Regulatory Authority of India Act, 1997 for regulating the telecommunications and broadcasting sectors. TRAI is tasked to protect the interests of service providers and consumers and to ensure orderly growth of these sectors. Its main functions include laying down and ensuring the standards of quality of service provided to consumers, setting tariff policy, specifying policies with regard to the technical and commercial aspects of interconnection between service providers, and ensuring that service providers comply with the terms and conditions of their licences. TRAI also makes recommendations to the Government on a host of issues including conditions for entry of new service providers and terms and conditions of licences granted to service providers.

The year 2012 has been an extremely eventful year for the telecommunications and broadcasting sectors. In the telecom sector, activities centred around the Telecom Policy 2012, Spectrum Management, Spectrum Auction and Unified Licensing. In the broadcasting sector, based on the Authority's recommendations, a landmark decision has been taken by the Government to migrate to Digital Addressable Cable TV Services. The Authority has laid down an appropriate regulatory framework for the migration to take place. Besides, the Authority has taken a number of measures in the consumers' interest: these include steps in the areas of quality of service, tariffs, transparency in service provision, mobile number portability, protection of telecom consumers from the menace of unsolicited commercial communications and consumer complaint redressal.

This paper provides a gist of the work done by the TRAI in 2012. The objective of this compilation is to inform stakeholders of the activities of the Authority during the past year. Going ahead, the intention is to institutionalise this practice so that a synoptic account of the activities of TRAI

is placed for information in the public domain at the close of each calendar year. Activities have been classified under different functional heads for easier comprehension. All the recommendations, regulations, orders and directions referred to in the paper are available on the TRAI website www.trai.gov.in and can be consulted for detailed reference.

(Rajeev Agrawal)
Secretary

Report on Activities

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I. CONSUMER INTERESTS

Looking after consumer interests is one of the principal mandates of TRAI. The Authority has taken important measures for setting the regulatory framework in several areas that impinge on the welfare and interests of telecom consumers.

Quality of Service

To ensure good consumer experience and value for money, TRAI prescribes quality of service standards for service providers. Specific actions undertaken in this regard are listed below:

- 1.** *The Mobile Banking (Quality of Service) Regulations, 2012 – 17th Apr 2012:*

These regulations provide for faster and reliable communication to support banking through mobile phones. Service providers have been mandated to facilitate banks in the use of Short Messaging Service (SMS), (Unstructured Supplementary Services for Data (USSD) and/or Integrated Voice Response (IVR) for providing banking services to customers. The regulations also prescribe time frames for delivery of messages.

- 2.** *The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (Amendment) Regulations, 2012 - 7th May 2012:*

Through these regulations, the Authority has prescribed the network-centric Quality of Service parameters and benchmarks for Voice Services provided through 3G networks. These parameters help assessment of performance of 3G operators in critical areas such as call drop, voice quality, network congestion and network availability.

3. *The Standards of Quality of Service For Wireless Data Services Regulations, 2012 (26 Of 2012) – 4th Dec 2012:*

Service providers are rolling out 3G and BWA services. The Authority has laid down Quality of Service benchmarks for data services covering data transmission download/upload attempts, minimum download speed and average throughput for packet data covering all tariff plans and latency for data services. Benchmarks have also been prescribed for provision or activation of data services, PDP context activation success rate, and data drop rate. Service providers have been mandated to publish at their website details of all data services offered, along with tariff, clearly indicating the cities and towns where such data services and tariff plans are applicable.

Retail Tariffs

TRAI is mandated to decide the tariff policies for telecommunications and broadcasting services. TRAI looks after consumer interests through tariff regulation. Tariff regulation takes the form of ensuring clarity and transparency in tariff offers to consumers and fixing tariff charges where the market is not delivering optimal rates. The following specific measures taken in this direction were:

Transparency in Tariff Offerings

1. *Direction on Publication of Tariff Plans – 16th January, 2012:*

To enhance transparency in telecom tariff offers and to help telecom consumers access information on tariff plans and choose tariff plans that best meet their needs, a direction was issued mandating telecom service providers to publish all pre-paid and post-paid tariff plans in separate prescribed formats allowing easy comparison across tariff plans. Details of all tariff plans on offer have to be made available to subscribers in the prescribed formats at the customer care centres, points of sale/retail outlets as well as on the website of the service

provider. The tariff plans will also have to be published in the prescribed formats in at least one regional language and one English newspaper at an interval of not more than six months.

2. *Direction on Preventing Misleading Tariff Advertisements – 26th March, 2012:*

This direction mandates service providers to ensure that tariff advertisements published by them are transparent, unambiguous and not misleading, disclose all material information, and contain the website address and customer care number of the telecom service provider. Advertisements issued in vernacular languages need to carry all mandatory disclosures in the same vernacular language.

3. *Amendment to Telecom Tariff Order mandating, inter alia, provision of “per second pulse” in at least one tariff plan - 20th April, 2012:*

To facilitate consumer choice, the Telecom Tariff Order, 1999 (51st Amendment) mandates provision of a “Per Second Pulse Rate” by every service provider. After this amendment it has become mandatory for service providers to offer in each service area at least one tariff plan each for both postpaid and prepaid subscribers with a uniform pulse rate of one second.

This amendment, while also giving service providers a small margin of flexibility in applying revisions in International Long Distance (ILD) tariffs for subscribers of lifetime tariff plans, provides that any revisions that are made have to be applied uniformly for new as well as existing subscribers and existing subscribers will also remain eligible for subscribing to any special packs providing free or concessional ILD usage charges.

4. *Direction on ‘Guidelines on blackout days’ –14th Sep 2012:*

This direction prescribes additional measures to enhance transparency in the matter of charges levied on blackout days. Blackout days are certain days in a year designated by each service provider on which free or concessional calls/SMS offered under any tariff plan/package are not available to subscribers. Usually, these are days on which there is heavy call/SMS traffic on the network,

such as festival days. It was observed that there was no uniformity amongst service providers in the manner of communicating information to consumers about black out days and charging for SMS on such days. Through this direction, it has been mandated that tariff for SMS and calls shall not exceed the normal tariff offered for calls and SMS in the basic tariff plan applicable to the subscriber. The service providers have to inform the subscriber in clear terms about blackout days and applicable rates within 72 to 24 hours prior to any blackout day. The list of the blackout days has to be displayed on the website of the service providers as well as in the half yearly publication of the tariff plans through newspapers.

Fixing Tariff Ceilings

1. *Review of the Policy of Forbearance in Telecom Tariffs’ – 6th February, 2012:*

Tariffs for telecommunication services are currently under forbearance except for Rural Fixed Line Services, National Roaming Services and Leased Circuits. Over the years, telecom tariffs have exhibited a declining trend. However, in 2011 increases in tariffs were implemented by several major players, and further imminent increases were widely anticipated. In this context, TRAI sought views of stakeholders on the need to review the existing regime of tariff forbearance. Views were also sought on a suitable tariff framework for data services. Taking into account the feedback received from stakeholders, the Authority has decided to continue with the existing tariff regime for the time being.

2. *Amendment to the Telecommunication Tariff Order to streamline the levy of Processing Fees on talk time top-up vouchers – 1st Oct 2012:*

Top-up vouchers are used by mobile prepaid subscribers for addition of monetary value to their account. Through the 50th Amendment to the Telecom Tariff Order dated 19th April, 2012, the ceiling on processing fees had been enhanced from Rs.2/- to Rs.3/- for certain categories of top-up vouchers. In the resultant regime, there were fixed amounts of

Processing Fee across a range of denominations of top up vouchers, which, on review, was considered regressive. The 53rd Amendment to the Telecommunications Tariff Order (TTO) has mandated that the Processing Fee levied on top-up vouchers shall not exceed 10% of Maximum Retail Price or three rupees, whichever is less. In order to ensure that small value vouchers do not disappear from the market, the Authority through the 50th Amendment has mandated that service providers have to ensure availability of top-up vouchers of Rs.10/- denomination at their points of sale.

Another provision of the 53rd Amendment is to bring under forbearance, tariff for premium rate services relating to calls and SMS for participating in contests and competitions. An attempt was made to regulate the tariff for premium rate services through the Telecom Tariff Order, 1999 (51st Amendment) - 20th April, 2012 but the effort was abandoned due to difficulties in implementation and on a re-think on the applicability of the “essentiality” condition for intervention in respect of such services.

3. *Tariff for Roaming Services and the implications of Free National Roaming:*

A consultation process has commenced on 20th Dec 2012.

Transparent Service Provision

Ensuring transparency in service provision is an important dimension of consumer protection. TRAI has undertaken the following specific measures for ensuring such transparency:

1. *Telecom Consumer Protection Regulations, 2012 mandating inter alia access to information on usage and activation of services by consumers - 6th Jan 2012:*

These regulations incorporate a number of measures intended to enhance transparency in providing and charging for telecom services. Some key provisions are described below:

- At the end of each call made as well as each session of data usage, the consumer will have to be informed through SMS or USSD regarding the duration of the call, the quantum of data usage, the charges deducted and the balance available in the customer's account.
- A consumer can also obtain from the service provider an itemized usage of his account (for any period within the last 30 days) at a reasonable cost not exceeding Rs 50.
- A consumer can also obtain from the service provider details of his tariff plan, available balance in his account and details of any activation of VAS in his account free of charge at any time.
- On activation of any VAS by a consumer, he will receive information on applicable charges, validity period of the subscription and the procedure to unsubscribe from the service.
- Every SIM will have to be sold along with a start-up kit containing an abridged version of the telecom consumers' charter.
- To reduce consumer confusion on account of proliferation and overlap of types of vouchers by which talk time and tariff is sold to customers, tariff vouchers will now have to be offered in three separate categories: Plan Voucher, Top Up Voucher or Special Tariff Voucher (STV), each (when sold in paper form) bearing a different colour band.

2. *Combo vouchers permitted through amendment to Telecom Consumer Protection Regulation, 2012 - 22nd Oct 2012:*

Combo vouchers have been permitted as a fourth category of tariff voucher, to facilitate innovative tariff offers to consumers. This voucher will provide flexibility to service providers to offer innovative bundling of products based on market segmentation. Further, the subscriber will enjoy the convenience of purchasing additional monetary value as well as getting the benefit of special tariffs through a single transaction. For consumer protection, necessary safeguards relating to transparency in provision of combo vouchers have also

been mandated through the regulation. The monetary value available and restrictions if any, in the combo vouchers have to be clearly indicated. Combo vouchers shall not be offered in denominations of Rs.10 and multiples thereof, these denominations being reserved for plain talk time vouchers. Publications and promotional materials relating to combo vouchers shall also indicate the availability of standalone top up vouchers.

3. *Direction to service providers for transparent delivery of broadband services –27th Jul 2012:*

Service providers have been directed to deliver broadband services transparently by:

- Providing adequate information to broadband consumers about various plans and Fair Usage Policy (FUP),
- Ensuring that speed of broadband connections is not reduced below the minimum speed specified
- Alerting consumers when their data usage reaches 80% and 100% of the data usage limit bundled with the plan.

4. *Issue of Direction on missed calls (wangiri calls) originating from outside the country – 7th September 2012:*

It has come to TRAI's notice that consumers are receiving missed calls from international locations prompting them to respond. When the consumer tries to call back the number, a large amount of money is deducted from his account. This direction seeks to address issues relating to such missed calls (also known as wangiri calls). Service providers have been mandated to provide ISD connection to prepaid consumers only with their consent, inform consumers through SMS to give their consent for ISD facility within 60 days, discontinue ISD facility of those prepaid consumers who have not given consent and provide easy opt-in and opt-out facility for ISD. The direction has been challenged by service providers in TDSAT and the matter is sub-judice.

5. *Consultation on issues related to deactivation of SIMs due to non-usage – 30th November 2012:*

A large number of wireless connections are not used for long periods which results in avoidable blocking of scarce numbering resources. A consultation paper has been issued discusses various matters related to deactivation of SIMs by service providers due to such non-usage, with a view to framing regulatory guidelines that would protect the interests of consumers while seeking to ensure better utilization of scarce numbering resources.

Mobile Number Portability (MNP)

The mobile number portability arrangements instituted by TRAI and operated under its regulatory watch afford a telecom consumer the freedom to change his service provider if he is dissatisfied with the service provided to him, without having to change his telephone number. MNP is an instrument of consumer empowerment. TRAI takes measures from time to time to strengthen the MNP framework.

1. *Direction on cancellation/ withdrawal of MNP request by Donor Operators – 21st Feb 2012:*

As per the MNP regulations, withdrawal/ cancellation of MNP requests can be entertained only by the Recipient Operator (the service provider to whose network the consumer wishes to port in his number). It was observed by TRAI that some Donor Operators (the service provider from whose network the consumer wishes to port out) were accepting cancellation of porting requests from subscribers. Service providers were directed to stop this practice.

2. *Amendment to the Telecommunication Mobile Number Portability Regulations to facilitate porting of numbers from quashed licensees – 08th June 2012:*

Subsequent to Hon'ble Supreme Court's judgment dated 2nd Feb, 2012 declaring allocation of spectrum to certain licensees as illegal and

quashing their licenses, TRAI issued the 3rd Amendment to the Telecommunication Mobile Number Portability regulations to facilitate porting of numbers by the affected subscribers whose age on network is less than 90 days. The amendment is currently, however, under challenge in the TDSAT.

Preventing Spam

TRAI is actively involved in the protection of telecom consumers from the menace of unsolicited commercial communications (UCC). TRAI has instituted a techno-commercial framework for the prevention of such calls and messages. As in the case of MNP, steps are taken continuously to preserve and strengthen the operation of this framework.

1. *Direction on blocking of bulk international messages – 20th Jan 2012:*

This direction was issued to service providers to check the emerging practice of circumventing the TRAI's spam control provisions by routing commercial SMSs through the Internet from servers located outside the country.

2. *Further measures to curb UCC:*

i) *Amendment to the Telecom Commercial Communications Customer Preference Regulations for disconnecting resources to blacklisted telemarketers - 14th May 2012:*

The 9th Amendment to the Telecom Commercial Communications Customer Preference Regulations, 2012 provides that if a telemarketer is blacklisted for sending UCC through promotional resources, the telecom resources provided to it for sending promotional messages shall only be disconnected; however, in case a telemarketer is blacklisted for sending UCC through resources allotted for transactional messages, the telecom resources provided to it for sending transactional messages *and* promotional messages shall be disconnected.

- ii) *Amendment to the Telecom Commercial Communications Customer Preference Regulations for implementing technical solutions to prevent spam, early lodging of complaints, restraints in bulk SMS tariffs etc. – 5th Nov 2012:*

The 10th Amendment seeks to check proliferation of UCC from unregistered telemarketers. The following measures were taken:

- Service providers have to implement within 3 months a solution in their networks which will ensure that no commercial SMSs having same or similar characters or strings or variants are sent from any source or number. The solution will also ensure that not more than 200 SMSs with similar ‘signature’ are sent in an hour.
- Consumers can lodge UCC complaints easily by forwarding the UCC SMS to 1909 after appending the telephone number and date of receipt of the SMS. To make UCC complaint lodging easier and more effective, service providers have to put in place an additional framework to register UCC complaints through website and/or dedicated e-mail.
- To create awareness about the consequences of using telephone connections for sending UCC, Access Providers are mandated to send SMS blasts on periodic basis, at least twice in a year, advising consumers not to send any commercial communications.
- Access Providers are to take an undertaking from the subscriber, at the time of selling a new telephone connection, that the SIM purchased by him shall not be used for telemarketing purpose.
- Access providers are to disconnect resources of transactional message sending entities on instructions from TRAI.
- To prevent unregistered telemarketers from misusing SMS packs or tariff plans for sending bulk promotional SMSs, a price restraint has been placed on sending of more than one hundred SMS per day per SIM at a concessional rate. The subscriber is free to send SMSs beyond this number, however, all such SMSs beyond one hundred SMS per day per SIM shall be charged at a rate not lower than 50 paise. The Telecommunication Tariff Order has also

accordingly been amended (Fifty Fourth Amendment) to reflect this tariff requirement.

Consumer Complaint Redressal

It has been the endeavour of TRAI to ensure that consumer complaints are speedily and effectively addressed. Major steps were taken in 2012 to strengthen the complaint redressal mechanisms and procedures adopted by service providers.

1. *Telecom Consumer Complaint Redressal Regulations 2012- 5th Jan 2012:*

Through these regulations, the framework for redressal of consumer grievances by service providers was reviewed so as to improve its effectiveness. Significant provisions include:

- Service providers have to establish a Complaint Centre with a toll-free “Consumer Care Number”,
- Complaints are to be registered with a unique docket number which is to be communicated to the consumer through SMS,
- The complaint redressal mechanism will consist of two tiers- Complaint Centre and Appellate Authority.
- There will be a two-member Advisory Committee in each service areas of a service provider, comprising one member from consumer organizations registered with TRAI, and another from the service provider, to advise the Appellate Authority at the appeals level.
- Time lines for resolution of complaints by the service provider have been prescribed,
- A Citizens’ (later renamed Telecom Consumers’) Charter will be brought out by the service provider containing details of time frames for resolution of complaints, details of complaint redressal mechanism, procedures with regard to various services such as mobile number portability, amounts that can be deducted by the

service provider as administrative expenses, rights of consumers etc.

- A Web-based complaint monitoring system is to be established by service providers.

2. *Telecom Consumers Complaint Monitoring System (TCCMS) Portal:* TRAI has launched the portal www.tccms.gov.in to help telecom consumers to lodge their complaints online with their service providers and also to monitor the status of redressal of their complaints. The portal provides bilingual support.

Consumer Participation

TRAI has in place a procedure for registration of consumer bodies and organizations. These organisations are expected to co-ordinate and articulate consumer responses to TRAI's activities, and also assist TRAI in consumer education.

1. *Draft Registration of Consumer Organisations Regulations, 2012 proposing a revised framework for registration of consumer organisations with TRAI -26th Nov 2012:*

This Regulation has been placed on the website for consultation with stakeholders.

II. INTERCONNECTION

Under the TRAI Act, the Authority is mandated to fix the terms and conditions of interconnectivity and to ensure technical compatibility and effective interconnection between service providers. Interconnection lies at the core of the telecom business in a multi-operator environment. The terms and conditions of interconnection need to be regulated to ensure a level playing field among service providers.

Interconnection charges

The following interconnection charges were prescribed by TRAI:

1. *Amendment to the International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2012 – 19th Oct 2012 and fixation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations- 21st Dec 2012:*

Submarine cables, a vital international telecommunication link between countries, terminate in a country through cable landing stations. Access Facilitation Charges are charges payable by International Long Distance Operators/ Internet Service Providers to the owners of cable landing stations for leasing/ acquiring international bandwidth in a submarine cable. To enable access to this bottleneck facility at Cable Landing Stations on fair and non-discriminatory terms and conditions, suitable provisions have been made in the regulation so that Access Facilitation Charges, Co-location Charges and other related charges like cancellation and restoration charges are now specified by the Authority. With the charges thus specified: a) competition in the International Private Leased Circuit segment will receive a boost, which will benefit Business and Knowledge Process Outsourcing and enterprises that need international connectivity and b) there will be a reduction in the cost of international bandwidth for Internet and broadband services.

2. *Amendment to the Telecommunication Interconnection (Port Charges) Regulations reducing the level of port charges – 18th Sep 2012:*

A port is an essential element for establishing interconnection between two networks. Port charges have now been aligned to current costs. This will reduce the costs of interconnection of telecom service providers. The revised Port Charges have come into effect from 1st October, 2012.

Interconnection Terms and Conditions

TRAI took the following step to settle interconnection issues between Intelligent Network (IN) service providers:

1. *Amendment to the Intelligent Network Services in Multi Operator and Multi Network Scenario Regulations to help service providers to enter into agreements for provision of IN services – 18th Sept 2012*

This amendment will help service providers to enter into agreements for provision of IN services in a time bound manner. This will be useful for Virtual Calling Cards (VCC) issued by long distance providers. After the agreement between service providers for VCC services, subscribers can make Subscriber Trunk Dialling (STD)/International Subscriber Dialling (ISD) calls using calling cards issued by National Long Distance Operators(NLDOs) / International Long Distance Operators (ILDOS).

III. DIGITIZATION OF CABLE TV SERVICES

Digital Addressable Systems (DAS) Implementation

The Central Government after accepting the recommendations of the Authority to implement DAS had notified timelines for the implementation. To ensure smooth implementation of DAS as per the timelines notified, the Authority put in place the required regulatory framework. This paved the way for finalization of tariff, interconnection arrangements between broadcasters and Multi System Operators (MSOs), and establishment of quality of service norms and consumer complaint redressal systems for all DAS operators. The first phase of DAS implementation covering four metro cities has been successfully completed (except for Chennai Metropolitan area where the matter is sub-judice in the Madras High Court).

1. *Amendment to Tariff Order for DAS- 30th Apr 2012:*

This tariff amendment order prescribes wholesale and retail tariff and revenue share between MSOs and local cable operators, the manner of offering of channels at wholesale and retail levels, composition and tariff of the basic service tier, provisions for consumer protection and reporting requirements for service providers.

2. *Telecommunication (Broadcasting and Cable Services) Interconnection (Digital Addressable Cable Television Systems) Regulations- 30th Apr 2012:*

Following the decision to implement DAS in the country, interconnection arrangements between broadcasters and MSOs had to be put in place. TRAI notified the Telecommunication (Broadcasting and Cable Services) Interconnection (Digital Addressable Cable Television Systems) Regulations on 30th Apr 2012. These regulations cover 'must provide', 'must carry', carriage fee etc., Reference Interconnect Offers of broadcasters and MSOs, rules for disconnection of signals of TV channels, provisions pertaining to conversion of channels from pay to Free to Air (FTA) and vice-versa, and reporting requirements for the service providers of DAS areas.

These regulations were amended on 14th May 2012, clarifying details for calculating the quantum of carriage fee, bar on placement fee, and declaration of channel genres by broadcasters.

3. *The Standards of Quality of Service (Digital Addressable Cable TV Systems) Regulations, 2012 – 14th May 2012:*

These regulations prescribe quality of service norms for DAS operators. They cover norms for connection/disconnection /transfer/re-connection of services, timelines for redressal of consumer complaints, billing, placement of nodal officers, technical parameters to be ensured by service providers, manner of offering of set top boxes (STBs) to the consumers, audit of complaint centre of the service provider by the Authority etc.

4. *Notification of the Consumers Complaint Redressal (Digital Addressable Cable TV Systems) Regulations, 2012 –14th May 2012:*

These regulations prescribe the mechanism for redressal of consumer complaints to be followed by DAS operators. It covers setting up of the complaint centre, provision of toll-free number for registering of complaints, setting up of web-based complaint monitoring system, publication of a consumer charter by service providers with details of terms and conditions, complaint centre number, designating a nodal officer etc.

5. *Consumer awareness for smooth transition to DAS*

i. *Frequently Asked Questions (FAQs) for DAS:*

A bilingual comprehensive set of consumer centric FAQs on the DAS regulatory framework covering applicable retail tariff to be paid by consumers in DAS areas, norms of quality of service for cable operators and the mechanism for redressal of consumer complaints was placed on the TRAI website for information of consumers.

ii. *Consumer outreach programme:*

Consumer outreach programmes in the form of talk shows and interactive phone-in programmes on DAS and its benefits were organised on Doordarshan, All India Radio (AIR) and private TV channels.

IV. RECOMMENDATIONS ON SPECTRUM, LICENSING AND POLICY

An important aspect of TRAI's functions as mandated under the TRAI Act is to make recommendations to the Government on diverse subjects including market structures and entry of new operators in the sector, the licensing framework, management of scarce resources such as spectrum, consumer safety and security. Under this mandate, TRAI took action on the following matters during the year:

1. *Guidelines for Unified Licence/Class Licence and Migration of Existing Licences - 16th Apr 2012:*

In its recommendations on "Spectrum Management and Licensing Framework" dated 11.05.2010, TRAI had recommended that all future licenses should be unified licenses and that spectrum should be delinked from the licence. DoT requested TRAI to recommend Unified Licence guidelines including, *inter alia*, guidelines regarding entry/eligibility, Performance and Financial Bank Guarantees etc., as also modalities & guidelines for enabling existing licensees in various categories to migrate to Unified Licences. Accordingly, TRAI issued recommendations on "Guidelines for Unified Licence/Class Licence and Migration of Existing Licences" on 16th April 2012. DoT referred back the recommendations to TRAI in May 2012 with its comments. TRAI after consideration of DoT's reference re-released its recommendations on 12th May 2012. Salient features are:

- In the new regime, spectrum has been delinked from the licence.
- There shall be three levels of Unified Licences; National level, Service Area level and District level.
- The one-time non-refundable Entry Fee for Unified Licence shall be (a) Rs. 15 crore for a National level Unified Licence; (b) Rs. 1 crore for each Service area level Unified Licence except for Jammu & Kashmir and North East Service areas where Entry fee will be Rs. 50 lakh each, and (c) Rs.10 lakh for each District level Unified Licence.

2. *Exit-Policy for telecom licencees – 18th Apr 2012:*

DoT had requested TRAI for recommendations on an exit policy for all types of telecom licences. TRAI initiated a consultation process. In the meanwhile, on 2nd Feb, 2012, the Hon'ble Supreme Court in its judgement *inter-alia* ordered for cancellation of UAS licenses given on and after 10th January, 2008 with effect from four months from date of the order. In view of this development, comments received from stakeholders and its own analysis, TRAI recommended that there is presently no need for a separate Exit Policy for telecom licences and the present conditions in various licences for surrender of licence, whereby a licensee can surrender the licence by giving a notice of at least 60 calendar days (30 calendar days in case of ISP license) in advance, will continue to be applicable.

3. *Minimum Channel Spacing in FM Radio -19th Apr 2012:*

The minimum channel spacing - the frequency separation between the adjacent channels' carrier frequencies- is an important parameter which determines faithful reception of individual channels in the listener's FM radio receiver set. With improvement in the quality of radio receivers, alternate designs of FM radio transmitter setups and penetration of digital devices such as mobile sets amongst the masses, it is now both technically feasible and useful to transmit a larger number of FM radio channels with reduced channel spacing in a given license service area. This would ensure effective utilization of scarce radio frequency spectrum. TRAI's main recommendation was that frequency for FM radio channels, within a license service area, could be released with a minimum spacing of 400 KHz, and radiated from effectively co-located sites and transmitted with equal power.

4. *Auction of Spectrum -23rd Apr 2012:*

The Hon'ble Supreme Court of India in its Judgment dated 2nd February, 2012, had directed TRAI to make fresh recommendations for grant of licence and allocation of spectrum in the 2G band in 22 service areas, by auction. On 3rd February 2012, DOT sought the recommendations of TRAI. TRAI's recommendations on 'Auction of

Spectrum' were issued on 23rd April 2012. The issues covered include auction format, eligibility, spectrum block size, spectrum cap, reserve price, spectrum mortgage, rollout obligations, spectrum usage charges, validity period, spectrum trading, availability of spectrum in the 700/800/900/1800/2100/2300 MHz bands, liberalisation of spectrum, re-farming of spectrum etc. DoT referred back the recommendations to TRAI in May 2012 with its comments. TRAI after consideration of DoT's observations responded through its recommendations of 12th May 2012. On 25th Oct 2012, DOT again sought certain clarifications regarding TRAI's earlier recommendations on prescribed limit for spectrum, retention of spectrum on renewal of licences and re-farming of spectrum. The Authority collectively considered all the recommendations made between 2010 and 2012 and provided a response to the issues posed by DoT on 30th Oct 2012.

5. *Priority routing of calls during Emergencies/Disasters - 10th May 2012:*

During emergencies/disasters, repeated call attempts or partial network failures congest telecom networks. This causes problems for emergency responders, law and order agencies and entities that carry out monitoring, relief and rescue operations as they are not able to communicate using public telephone and mobile networks. The Authority suo motu initiated a consultation on "priority call routing in telecom networks for persons engaged in 'response and recovery' work during emergencies". A seminar was also held with service providers and equipment vendors on 21st November 2012 to discuss the modus of implementation of such a system.

6. *Efficient Utilization of Numbering Resources - 11th May 2012:*

On 20.08.2010, TRAI had sent to DOT its recommendations on 'Efficient Utilisation of Numbering Resources'. On 21.03.2012, DOT provided its comments and observations on TRAI's recommendations and sought the response of TRAI. In its response, the Authority has strongly reiterated its earlier recommendations that the country should migrate to an integrated 10 digit numbering scheme in a time bound manner. In the interim, for creating extra numbering space, 0 can be

pre-fixed in fixed to mobile intra-circle calls and existing SDCA codes starting with 2, 3, 4 and 6 can be used for mobile services by suffixing with 0, 1, 8 and 9.

7. *Auction of Spectrum: Analysis of Effects on Costs, Tariffs and Financial Returns – 12th May 2012/21st Jun 2012:*

Financial analysis was carried out using modeling and forecasting techniques to assess the impact on operator costs, returns and retail tariffs in the wireless service segment, of the recommended reserve price for auction of spectrum contained in TRAI's Recommendations on Auction of Spectrum dated 23.4.2012. The results were communicated to DOT.

8. *Support for Rural Wireline Connections – 14th May 2012:*

Up to July 2011, Bharat Sanchar Nigam Limited (BSNL) had been receiving subsidy support from the USO Fund for its rural wireline connections installed prior to 1.4.2002. DoT sought the recommendations of the Authority regarding continuation of this support. After careful consideration of inputs received from BSNL and consultation with stakeholders, the Authority recommended that support to BSNL from the USO Fund for sustenance of rural wire-line connections installed before 01.04.2002, could continue for a further two years from July 2011, at the rate of Rs.1500 crore for the first year and Rs.1250 crore for the second year.

9. *Customer Acquisition Form (CAF) verification guidelines:*

On directions of the Hon'ble Supreme Court, an expert group consisting of two experts each from TRAI and DoT finalised the customer verification guidelines for prepaid and post-paid mobile services, based on which guidelines on CAF verification were issued by DoT on 9th August, 2012.

10. *Import of Mobile Handsets/Devices with unauthorised International Mobile Equipment Identity (IMEI) – 29th Aug 2012:*

IMEI is a unique number given to each GSM mobile handset for its identification. It had come to the notice of TRAI that there has been a proliferation in the market of mobile devices (e.g. mobile phones, laptop

data cards, etc.) with duplicate/fake/non IMEI numbers. The use of such devices can pose threats to national and personal security as they are difficult to trace on the network. They can also be inimical to consumer safety and wellbeing, as such devices are manufactured in non-standard conditions and lack safety features. The growth of a grey market in such phones adversely impacts organized trade and denies the government legitimate revenue. A letter was addressed to Commerce Secretary on 29th August 2012, advising that only such mobile devices / handsets should be allowed to be imported as have been certified as having genuine, unique and non-duplicated IMEIs, and a common database should be maintained in all ports of entry for such devices so that duplicated/fake/non IMEI mobile devices are not allowed to enter the country.

11. *Emergency Communication System (ECS)– 31st Oct 2012:*

In India, different emergency response systems accessed through different numbers are in place for police, ambulance, fire, civil defence and disaster management. Some countries (Australia, New Zealand, UK, USA) have a centralized Emergency Response System. When an emergency number is dialed, the call gets routed to a centralized emergency service answering point along with user details and location information, and these answering points inform the nearest police, fire, ambulance or any other emergency helping unit to take appropriate action. TRAI brought together representatives of State Governments, Ministry of Home Affairs, National Disaster Management Authority, and service providers at a workshop on “Issues involved in implementation of Emergency Communication System” on 31st Oct 2012 at New Delhi.

12. *Allocation of Spectrum Resources for Residential and Enterprise Intra - Telecommunication Requirements/ Cordless Telecommunications Systems (CTS) – 12th Oct 2012:*

A large chunk of mobile calls are initiated by subscribers from their homes or offices and a substantial number of such calls are intra-enterprise calls. For providing satisfactory indoor coverage, the service providers have to either provide a large number of Base Transceiver

Stations (BTSs) or deploy in-building solutions. Digital CTS technology can complement cellular mobile technology for more efficient use of scarce spectrum resources and also aid in indoor coverage requirements. However, due to interference issues with various ISM band devices, particularly Wi-Fi devices, CTS devices are hampered in delivery of good quality services in existing unlicensed bands. The Authority has recommended that the 1880-1900 MHz band should be de-licensed for low power operations of CTS for private and indoor (not for commercial) use. Certain etiquettes for CTS devices that will be operating in the un-licensed spectrum band of 1880-1900 MHz band have also been recommended.

13. *ISP Licence terms and conditions for use of Broadband Wireless Access (BWA) spectrum – 22nd Nov 2012:*

DoT sought TRAI's recommendations for amendment to the ISP Licence Agreement to incorporate the terms and conditions mentioned in the NIA for use of Broadband Wireless Access (BWA) spectrum. TRAI sent recommendations to DoT on 22.11.2012 to ensure uniform and equitable application of terms and conditions of the NIA to all licensees viz. UAS, CMTS and ISP, who have obtained BWA spectrum in the auction.

14. *Entry of State and Central Governments and related entities into Broadcasting and Distribution of TV channels- 28th Dec 2012:*

Ministry of Information and Broadcasting sought recommendations of TRAI as to whether Government Departments, Government agencies/ companies/ funded entities/joint venture of Government and private sector should be permitted to enter into business of broadcasting and or distribution of TV channels, and whether any change is required in any extant rules, regulations and guidelines. The Authority, in the spirit of its earlier recommendations on the subject, has recommended that State and Central Governments and related entities should not enter into the business of broadcasting and distribution of TV channels and Government should keep an arm's length relationship with Prasar Bharati.

15. *Definition of Adjusted Gross Revenue (AGR) in Licence Agreements for provision of Internet Services – 28th Dec 2012:*

TRAI has received a reference from the DoT seeking recommendations on definition of Adjusted Gross Revenue (AGR) in ISP License Agreements for provision of Internet Services, amendment in ISP licenses, and applicability of minimum presumptive AGR and value, if applicable, for BWA spectrum holders under Internet Service/Access Service licenses. TRAI has initiated a consultation process.

V. REGULATORY ENFORCEMENT ACTION

Regulatory enforcement is an integral aspect of the functioning of TRAI. We discuss it in two parts: enforcement of regulations and orders issued by TRAI and the enforcement of terms and conditions of the licence issued by the Department of Telecommunications (DOT).

Enforcement of Regulations and Orders issued by TRAI

Framework to ensure better enforcement

1. *Prescription of Financial Disincentives:*

For better enforcement of various regulations and orders issued by TRAI, financial disincentives for infringements have been prescribed in the following Regulations / Orders:

- i. *Telecommunication Mobile Number Portability Regulations – through 4th Amendment of 19th Sep 2012* prescribes financial disincentives for wrong rejection of porting requests.
- ii. *Telecommunication Tariff Order– through 52nd Amendment of 19th Sep 2012* prescribes financial disincentives for service providers who fail to comply with tariff reporting requirements or levy excess charges on consumers in violation of the provisions of the Telecommunications Tariff Order (TTO).
- iii. *The Reporting System on Accounting Separation Regulations, 2012 – through Amendment of 15th Oct 2012* prescribes financial disincentives for telecom service providers for delay in submission of, or for submission of false information in Accounting Separation Reports.
- iv. *Standards of Quality of Service of Basic Telephone Service (Wire line) and Cellular Mobile Telephone Service – through 2nd Amendment of 8th Nov 2012* prescribes financial disincentives for Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service operators for non-compliance with the benchmarks for Network Service Quality Parameters and Customer Service Quality Parameters.

- v. *Standards of Quality of Service of Broadband Services - through 1st Amendment dated 24th Dec 2012* prescribes financial disincentives for failure to meet the prescribed Quality of Service benchmarks for broadband services.
2. *Direction on 12th Jun 2012 regarding overcharging due to wrong configuration of number series and tariff plans:*

Instances of wrong charging by service providers on account of wrong configuration of number series and tariff plans in the billing systems have come to the notice of TRAI. Through this direction, the Authority mandated service providers to implement certain measures for metering and billing. Service providers will have to maintain two Master Tables, one for configuration of new number series and another for configuration of new tariff plans. These tables will help to avoid delay in configuration of new number series and tariff plans and thereby reduce incidences of wrong charging of consumers. They will also be useful for providing an audit trail to auditors for billing verification.
3. *Review of the Code of Practice for Metering & Billing Accuracy for service providers – 27th Nov 2012:* A consultation has been initiated for a review of the existing system of metering and billing audit as contained in the Quality of Service (Code of Practice for Metering & Billing Accuracy) Regulations, 2006. Some of the proposals put forth are for imposing financial disincentives for non-refund of excess charges levied to consumers, and late submission of audit reports and action taken reports on the audit observations. It also proposes a review of the framework of audit.

Action taken for Regulatory Enforcement

1. *Direction was issued to 7 service providers for disconnection of ported mobile numbers without valid Unique Porting Code (UPC) from a telecom service provider whose license was quashed by the Hon'ble Supreme*

Court - 15th October 2012. Service providers were porting premium/fancy numbers in this manner. The direction aims at curbing this malpractice.

2. *Direction was issued to a service provider to refund migration charges collected from subscribers for migrating them between prepaid and postpaid tariff plans, in violation of the provisions of the Telecommunication Tariff Order – 15th Oct 2012.*
3. *To ensure compliance of the provisions of the Intelligent Network Services in Multi Operator and Multi Network Scenario Regulations, 2006, a direction was issued to 3 access service providers - 6th Nov 2012. This is intended to help subscribers of each of these access providers to access the IN and Free Phone Services provided by other service providers.*

Enforcement of Licence Terms & Conditions

Another function of the Authority is to ensure compliance of the terms and conditions of the licenses issued to the service providers by the licensor viz. the Department of Telecommunications (DOT). Directions for compliance of terms and conditions are issued by TRAI. Recommendations for action are also sent to DOT.

1. *Direction to 2 service providers for ensuring compliance of the terms and conditions of the Unified Access Service License, restoring network connectivity, maintaining quality of service and ensuring continuity of service to subscribers – 11th Apr 2012:*

This was in the context of these service providers unilaterally closing down their services citing the orders of the Hon'ble Supreme Court, quashing their licenses. However, Hon'ble Supreme Court's order was to take effect from a prospective date and the service providers were therefore to comply with license terms and conditions till that date. The direction was intended to protect the interest of customers as long as the licenses of these service providers remained operational.

TRAI also recommended to DOT that necessary action should be taken against these service providers for violation of UAS license terms and conditions by unilaterally shutting down services in some service areas- 28th Aug 2012/19th Sep 2012.

2. *Direction to inform subscribers about closure of service pursuant to completion of spectrum auction by the Central Government- 17th Dec 2012:*

Mobile operators whose licenses are slated to be cancelled under the orders of the Hon'ble Supreme Court and who have not acquired spectrum in the recently concluded auction, are required to close down their mobile services on or before 18th January, 2013. Accordingly directions have been issued to such service providers to inform the date of discontinuance of services to all their existing subscribers in the concerned service areas, either in writing or through SMS. They are similarly obliged to inform every new subscriber at the time of enrolment. This was intended to make subscribers aware of the impending closure of services and enable them to make alternate arrangements.

VI. REGULATORY ACCOUNTING

TRAI mandates the service providers to submit financial data and accounting separation statements indicating revenues, costs and results by service segment. This data is used in regulatory exercises.

1. *Accounting Separation - 11th Apr 2012:*

The Reporting System on Accounting Separation Regulations, 2012 puts in place an updated, rationalized and standardized reporting system and strengthens audit and accountability provisions. The salient features are:

- All service providers with aggregate turnover of not less than rupees one hundred crore during the accounting year need to submit reports.
- Classification of services, products and network elements has been revised to capture the latest trends in technology, innovation and consumer demand.
- Formats in which information is to be submitted have been rationalized and standardized.
- To strengthen accountability, the reports need to be adopted by the Board of Directors of the company.

Guidelines for System on Accounting Separation Regulations, 2012 were issued on 22nd Aug 2012 for guidance to service providers on the broad methodology and principles for accounting separation to help them prepare Operator Specific Accounting Separation Manuals.

2. *Beta of Telecom Service Sector and Market Rate of Return- 18th Sep 2012:*

The objective of the study paper by the National Institute of Banking Management, Pune was to determine the beta and market rate of return and ideal debt equity ratio for the telecom service sector. This data will be used in regulatory costing exercises.

VII. PUBLICATIONS

1. *Telecommunications in select countries: policies-statistics – 2nd May 2012*: A study report on telecommunications policies and statistics in 23 countries including India was compiled. The report provides a quick overview of trends of telecom development, growth and penetration of telecom services, quality of service, policies and practices across the world and financial performance of leading telcos.
2. *Telecom Sector in India: A Decadal Profile – 3rd May 2012*: TRAI, in collaboration with National Council of Applied Economic Research (NCAER) undertook a study of the growth story of the telecom sector in India during the years 2001 to 2011. The study report presents the evolution of the telecom sector in India in the last decade and is a comprehensive reference document on the sector.