



सत्यमेव जयते

Department of Telecommunications
Ministry of Communications
Government of India
New Delhi

Quarterly Newsletter

(September 2017 – December 2017)



India is now one of the fast growing telecom markets in the world with its unprecedented increase in tele-density and sharp decline in tariffs. Such vibrancy in the telecom market plays a significant role in the country's economic growth.

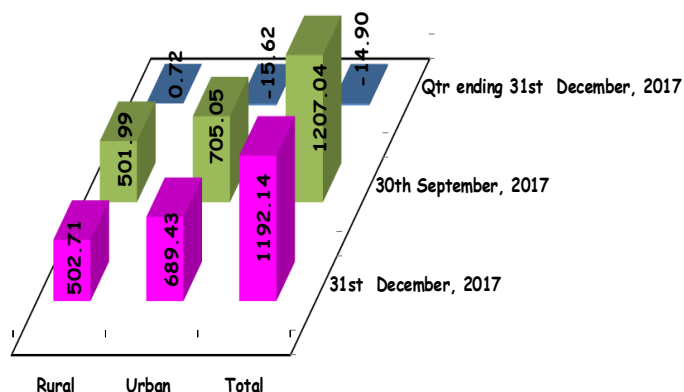
Highlights of major developments in the Telecom sector as well as initiatives by the DoT, during the quarter ending **December, 2017**, are given in the following sections.

I. TELEPHONE CONNECTIONS AND TELEDENSITY

(i) Indian Telecom Scenario

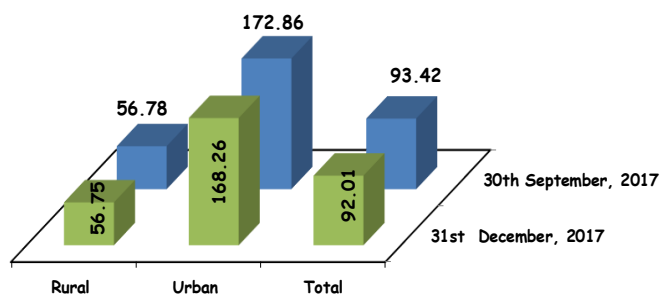
The number of telephones stood at 1192.14 million as on 31st December, 2017 from 1207.04 million on 30th September, 2017, registering a decrease of 14.90 million during the period. This decline is attributed decrease in number of telephones in the private sector by 16.35 million during the period.

Telephones



The tele-density, which was 93.42% in the beginning of the quarter decreased to 92.01% by the end of the December 2017.

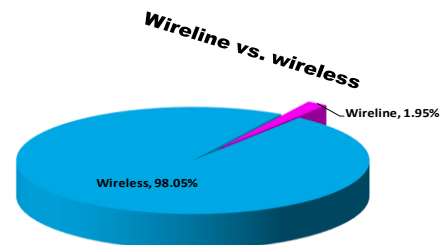
Tele-density



(ii) Compositional Changes

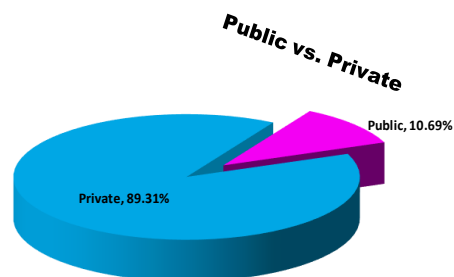
Wire line & Wireless

The preference for use of wireless is reflected in the rising share of wireless phones, which reached 98.05% (1168.91 million) as on 31st December, 2017. On the other hand, the share of wire line was 1.95% (23.23 million) as on 31st December, 2017.



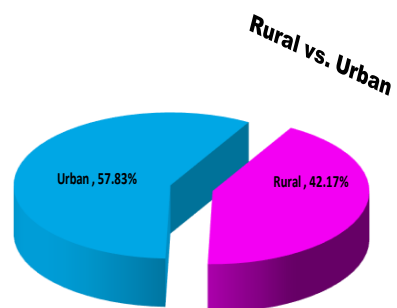
Public & Private

In public sector, there was an increase of 1.45 million phones during the quarter ending December, 2017. However, in private sector there was a decrease of 16.35 million phones during the same period as the total telephones in the country decreased by 14.90 million. The public sector having 127.45 million (10.69%) phones as against 1064.69 lakh (89.31%) phones of the private sector as on 31st December, 2017.



Rural & Urban

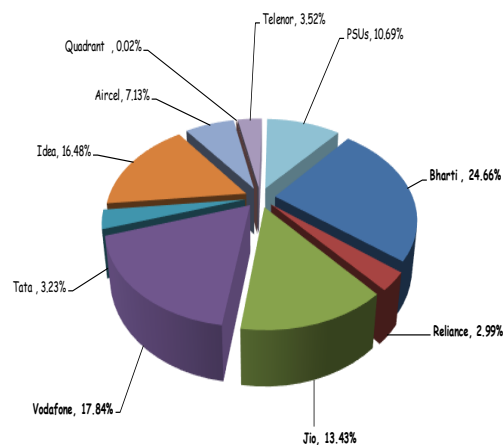
As on 31st December, 2017, the share of urban areas in the total connections was 57.83% (689.43 million) compared to 42.17% (502.71 million) of rural areas.



The rural tele-density stands at 56.75% as compared to the urban tele-density of 168.26% as on 31st December, 2017.

Operator wise performance

The operator-wise analysis indicates that PSUs' still have a large share of 68.06% in the wire line segment. Private operators, on the other hand, have a share of 90.45% in the wireless segment and 89.31% in total phones reported as on 31st December, 2017. Bharti has the highest share of 24.66% in the total telephones, followed by Vodafone (17.84%), Idea (16.48%), Jio (13.43%), and PSUs (10.69%).



Operator wise detail

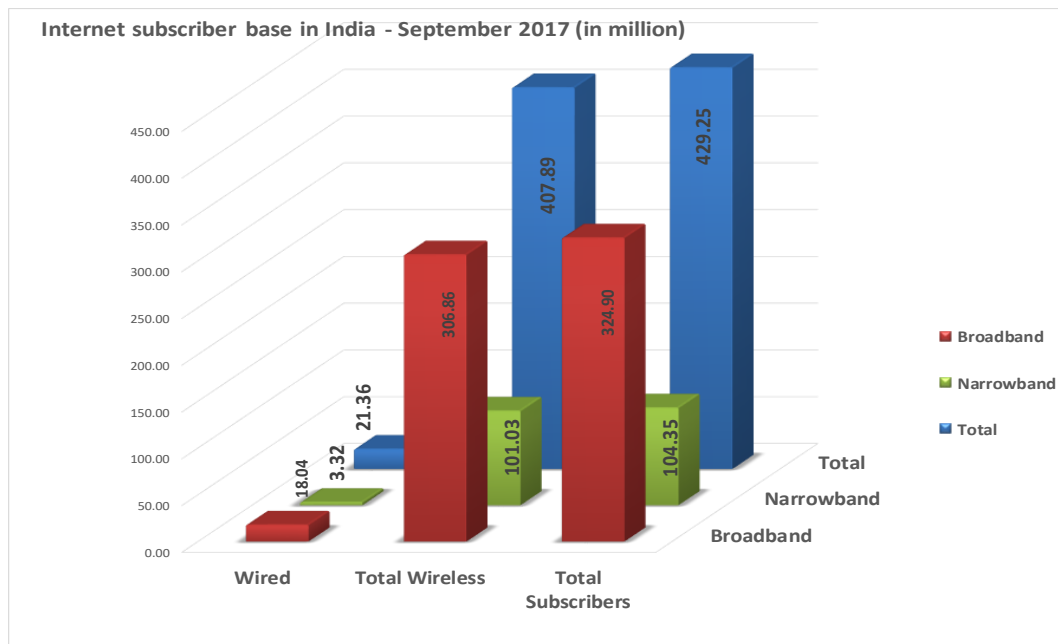
(iii) Internet Penetration

Internet usage in the country is on the increase. The number of Internet subscribers (both broadband and narrowband put together) which was 422.18 million at the end of March'17 has increased to 429.25 million by the end of September, 2017.

Trends of Internet Subscribers (in million)							
Total Internet Subscribers (Includes wired, fixed Wireless and Mobile Wireless)	Mar.'16	June'16	Sept.'16	December'16	March'17	June'17	September'17
		342.65	350.48	367.48	391.50	422.18	431.21
Quarterly Growth (in %age)	3.32	2.29	4.85	6.54	7.84	2.14	-0.45

The number of subscribers accessing internet via wireless phones etc. was 407.89 million and there were 21.36 million wired internet subscribers at the end of September, 2017. Wireless internet subscribers constitute 95.02% of the total internet subscribers.

The number of Broadband subscribers, which was 324.89 million at the end of 30th September'17, increased to 362.87 million as on 31st December with an increase of 37.98 million.



(iv) Foreign Direct Investment (FDI) Inflows

FDI in telecom sector has helped the expansion of telecom services in the country to a large extent. Cumulative FDI inflow in telecom sector "April 2000 to December 2017" is of the order of US\$ 30,082 million (Rs. 1,69,428 crore). During the period April - December 2017, Telecommunications Sector attracted FDI Equity inflows of US\$ 6136 million (Rs. 39,264 crore) accounting for 17.07% of total FDI Equity inflows of US\$ 35,941 million (Rs. 2,31,457 crore).

FDI Equity Inflows	(US\$ in million)		Share of Telecom in Total
	India	Telecom Sector	
2011-12	36,504	1,997	5.47
2012-13	22,423	304	1.36
2013-14	24,299	1,307	5.38
2014-15	30,931	2,895	9.36
2015-16	40,001	1,324	3.31
2016-17	43,478	5,564	12.80
2017-18 (April-December'17)#	35,941	6,136	17.07

Figures are provisional, subject to reconciliation with RBI.

Source: DIPP

(II) VIGILANCE

Training & Workshop

- One-day training on vigilance matters was conducted on 24th November, 2017 for Officer Trainees (OTs) of ITS -2015 Batch. Twenty-seven OTs attended the training.
- One-day training on vigilance matters was conducted on 08th December, 2017 for the Probationers of IP& TAFS - 2016 Batch. 13 Probationers attended the training.

Vigilance Excellence Awards

For the first time, CVC instituted "Vigilance Excellence Awards" to give recognition to the reforms and good work done by organizations in the field of Punitive, Preventive and Participative Vigilance, wherein the nominations were invited under various categories.

A nomination was submitted by Vigilance Wing of the DoT under caption "The systemic improvements and e-Auction of spectrum after 2G scam to bring in transparency and reduce scope for corruption".



DoT was awarded Vigilance Excellence Award- 2017 in 'Excellent category' by CVC. The award was conferred by the Hon'ble Vice President of India in the inaugural ceremony of Vigilance Awareness Week held on 30th October, 2017 at Vigyan Bhawan, New Delhi

(III) 5TH GLOBAL CONFERENCE ON CYBER SPACE (GCCS)

India hosted the 5th **Global Conference on Cyber Space (GCCS) in 2017**, one of the world's largest conference on Cyber Space and related issues on 23rd and 24th November 2017 in New Delhi. The theme for the GCCS 2017 was '**Cyber4All: An Inclusive, Sustainable, Developmental, Safe and Secure Cyberspace**'.

The Conference was inaugurated by Shri Narendra Modi, Hon'ble PM of India in New Delhi in the presence of H.E. Ranil Wickremesinghe, Hon'ble PM of Srilanka, Shri R S Prasad, IT Minister, Shri Manoj Sinha, Hon'ble MOSC(I/C), Shri K J Alphons, MOSIT & Dr Houlin Zhao, Secretary General, ITU.

The GCCS aimed to promote an **inclusive Cyber Space** with focus on policies and frameworks for **inclusivity, sustainability, development, security, safety & freedom**, technology and partnerships for upholding **digital democracy**, maximizing collaboration for strengthening **security and safety** and advocating dialogue for **digital diplomacy**'.



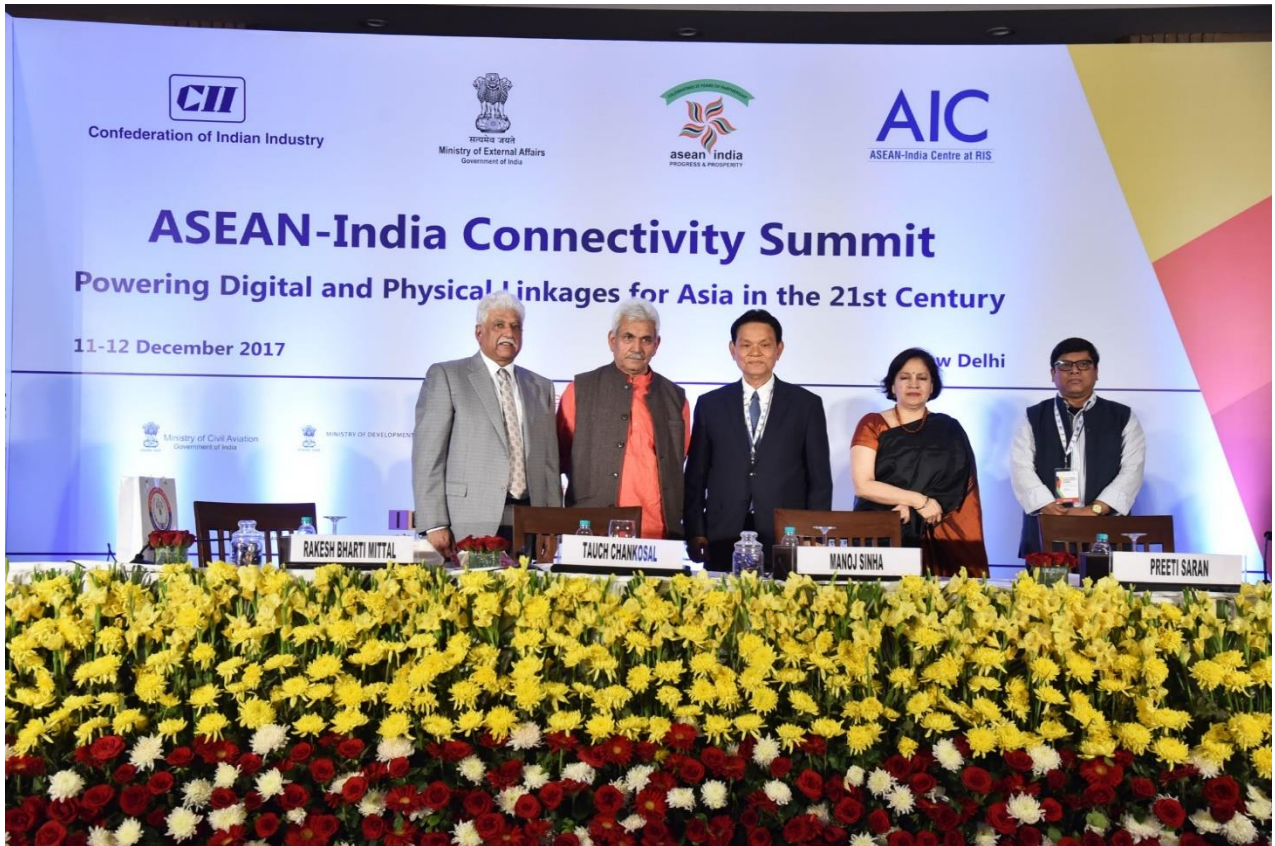
(IV) 5G CONGRESS 2017

The 5G Congress 2017 was organised on December 8, 2017 in New Delhi, with specific focus on “4G/5G – the future of mobile broadband”.



(V) THE ASEAN INDIA CONNECTIVITY SUMMIT (AICS)

AICS was held on 11-12th December 2017 at New Delhi on the theme of Powering Digital and Physical Linkages for Asia in the 21st Century.



(VI) MAJOR ACHIEVEMENTS, ACTIVITIES AND PERFORMANCE OF TRAI

TRAI initiated various measures to promote the growth and development of the telecom and broadcasting sectors during the third quarter of financial year 2017-18 i.e. October - December 2017. These measures have resulted in overall benefits to the consumers and industry in terms of choice of services, affordable tariff, and better quality of services etc, as reflected in significant improvements in these areas.

During the third quarter of financial year 2017-18 i.e. October - December 2017, the Authority, in discharge of its functions assigned under the Telecom Regulatory Authority of India Act, 1997, has

given Recommendations, issued Directions and made policy initiatives to protect the interests of the consumers which are discussed in the following paragraphs:

A. RECOMMENDATIONS

Recommendations dated 23rd October 2017 on “Approach towards Sustainable Telecommunications”

The Authority after due consultation process formulated and forwarded its recommendations to DoT on “Approach towards Sustainable Telecommunications” on 23rd October 2017. The salient points of the recommendations are as under:

- The formula for calculation of Carbon foot print has been revised.
- Only the target for overall Carbon footprint reduction has been recommended and no sub targets for induction of RET has been recommended.
- Directives of DoT dated 4th January 2012 has been calibrated and targets for reduction in Carbon Emission has been set as 30% by year 2019-20 and 40% by the year 2022-23 taking base year as 2011-12.

Recommendations dated 24th October 2017 on “Regulatory framework for Internet Telephony”

TRAI made its recommendations to DoT on “Regulatory framework for Internet Telephony” on 24th October 2017. The salient points of the recommendations are as under:

- As per Authority’s understanding of present Access service licences, Internet Telephony service is un-tethered from the underlying access Network. In other words, Internet Telephony Service can be provided by Access service provider to its subscriber who may be using Internet of other Access service providers. DoT should issue a clarification to the effect.
- The UL (VNO) licensee with access service authorisation should also be allowed to provide un-tethered Internet Telephony in the designated service area.

- The mobile numbering series should be used for providing Internet Telephony by a service provider. TSPs should be allowed to allocate same number to the subscriber both for Cellular Mobile service and Internet Telephony service.
- The SDCA linked numbering series may also be used for providing Internet Telephony by a service provider. However, in this case, mobility should be limited to consumer premises.
- The access service licensee should use private ENUM in its network for Telephone number mapping from E.164 to SIP/H.323 addresses and vice-versa.
- In case of provision of Internet Telephony by VNO with access service authorisation, the numbering resource allocation should be done by the parent NSO.
- The access service providers providing Internet Telephony service may be encouraged to facilitate access to emergency number calls using location services; however they may not be mandated to provide such services at present.
- QoS on Internet Telephony may be left to the market forces. The service providers must inform QoS parameters supported by them for Internet Telephony so that the subscribers can take an informed decision. The Authority shall review the decision regarding mandating QoS to Internet Telephony service providers at appropriate time.

TRAI's Response dated 21st November 2017 on the issues relating to Spectrum Cap as follow up of Inter-Ministerial Group report

An Inter-Ministerial Group (IMG) was constituted by the Government to look into the issue of “Stress in balance sheet in Select Sectors”. The IMG, along with other others issues, reviewed the spectrum cap applicable for Telecom Service Providers (TSPs). IMG, in its report, stated that the issue of spectrum cap merits detailed examination and variety inputs from sectoral regulators. In light of IMG report, DoT, through its letter dated 29th September 2017, requested TRAI to provide its views on spectrum cap. In response, the Authority after due consultation expressed following views:

- The overall spectrum cap should be revised from the current limit of 25% to 35%.

- The current intra-band cap should be removed. Instead, there should be a cap of 50% on the combined spectrum holding in the sub-1 GHz bands (700 MHz, 800 MHz and 900 MHz bands).

Recommendations dated 28th November 2017 on “Net Neutrality”

TRAI made its recommendations to DoT on “Net Neutrality” on 28th November 2017. The salient points of the recommendations are as under:

- The licensing terms should be amplified to provide explicit restrictions on any sort of discrimination in Internet access based on the content being accessed, the protocols being used or the user equipment being deployed.
- The “discriminatory treatment” in the context of treatment of content would include any form of discrimination, restriction or interference in the treatment of content, including practices like blocking, degrading, slowing down or granting preferential speeds or treatment to any content.
- The service providers should be restricted from entering into any arrangement, agreement or contract, by whatever name called, with any person, natural or legal, that has the effect of discriminatory treatment based on content, sender or receiver, protocols or user equipment.
- Specialised services shall be exempted from the principles of discriminatory treatment.
- Content Delivery Networks (CDNs), which enable a Telecom Service Provider (TSP) to deliver content within its network without going through the public Internet, are exempted from the scope of any restrictions on non-discriminatory treatment.

Recommendations dated 30th November 2017 on "Ease of Doing Telecom Business"

TRAI made its recommendations to DoT on "Ease of Doing Telecom Business" on 30th November 2017. Some of the key recommendations are:

- The entire process of SACFA clearance as well as grant of all licences/approvals, should be made paper-less and executed end-to-end through online portal.

- DoT should spell out a definite timeline, not exceeding 30 days post NCLT approval, for providing written approval to transfer/merger of licences by the Licensor and it should be made a part of the M&A Guidelines.
- DoT should devise a suitable matrix, linking the penalty to the severity of the incident and recurrence of the violation for imposition of financial penalties.

Recommendations dated 4th December 2017 on “Network Testing Before Launch of Commercial Services”

TRAI made its recommendations to DoT on “Network Testing before Launch of Commercial Services” on 4th December 2017. Some of the key recommendations are:

- The number of test subscribers that can be enrolled by a TSP in an LSA should be limited to 5% of its installed network capacity for that LSA. The service provider will submit the detailed capacity calculations of the network to DoT and TRAI at least 15 days before commencing enrolment of test subscribers.
- There should be a limit of 90 days on the test phase involving test subscribers. However, if the TSP fails to conclude network testing due to valid reasons, it may make a representation to the Licensor, seeking additional time for network testing giving detailed justification, which may be decided by the Licensor on case to case basis.
- All licensing provisions related to the security and privacy such as ensuring adequate verification of each and every customer before enrolling him/her as a subscriber, protection and privacy of communication, maintaining Call Detail Record (CDR)/IP Detail Record (IPDR), Confidentiality of Information, Lawful interception & monitoring etc. must be complied with by the licensee.

B. DIRECTIONS

Direction dated 14th December 2017 issued to all TSPs for publishing information relating to performance with respect to Quality of Service benchmarks on the website of service providers.

Vide direction dated 14th December 2017, all the unified access service providers and cellular mobile service providers including BSNL & MTNL were directed to publish on their website on quarterly basis the performance with respect to the benchmark of Quality of Service parameters specified in the Regulation 5 of the Regulations, in the revised format within forty five days after the end of every quarter.

Direction dated 14th December 2017 issued to all TSPs to submit compliance reports of benchmarks of Quality of Service parameters.

Vide direction dated 14th December 2017, all the unified access service providers and cellular mobile service providers including BSNL & MTNL were directed to submit their compliance reports within a period of twenty one days of the end of each quarter in writing and also in the electronic format duly signed by the authorized signatory of the service provider, on quarterly basis.

C. CONSUMER PROTECTION AND EMPOWERMENT

Policy initiatives of TRAI, over the years, have been to protect the interests of the consumers. TRAI recognize the importance of reaching out to the consumers not only to inform them of the measures taken to safeguard their interests, but also to obtain feedback, and to involve them in the decision-making processes of the TRAI.

In consonance with the vision of digital India, TRAI places greater reliance on technology to communicate with consumer base of over 1 billion spread across its vast geography. TRAI has launched couple of Mobile Apps last year with this vision in mind. Encouraged by their success and acceptance by consumers, TRAI has developed more consumer oriented Mobile Applications and also a new Portal. Certain key features of these new technological platforms are as follows:

(a) TRAI MyCall App

TRAI MyCall is an Android & iOS app for Crowd sourced Voice Call Quality Monitoring. The Application will help Mobile phone users rate their experience about voice call quality in real time and help TRAI gather customer experience data along with Network data.

The app is intuitive and user friendly. A pop up requests the user to rate the call after it ends. (The frequency of the popup can be configured by the users.)

Callers simply select their rating in the form of stars and indicate if the calls were made in indoor, outdoor or while travelling. Callers can also provide additional details such as noise or audio delay or mark a call-drop, if they believe that's how the call got terminated.

(b) TRAI MySpeed App [Auto Test]

The MySpeed App is popular App on the Play Store with more than a million downloads. It allows customers to measure 3G/4G cellular data speed and send the results to TRAI. The app does not collect any personal user information.

The new version of TRAI MySpeed App being launched will enable TRAI to obtain test-data from users in all service areas, without any action by the users. These tests would be brief, very infrequent for a specific device, free to the user and anonymous. The user may also do a test and submit the results, as before.

The crowd sourced data so collected can be viewed in aggregated form on the interactive map-based portal (www.myspeed.trai.gov.in).

(c) DND App

DND (Do Not Disturb) Services App enables smart phone users to register their mobile number under DND to avoid Unsolicited Commercial Communication (UCC)/ Telemarketing Calls / SMS. This is based on TRAI, "Telecom Commercial Communication Customer Preference Regulations, 2010". The App is available on Google Play Store.

The new release (built ground up) has the following additional features:

- An intelligent spam detection engine (for SMS only) to assist the subscriber in reporting
- Crowd sourcing of data about offending messages and calls to speed up detection of unregistered telemarketers
- Updates about action taken on complaints within the App

- Easier interface and set up

(d) Service Providers Portal

TRAI also regulates the broadcasting and cable sector, which consists of large number of service providers including broadcasters, DTH operators, HIT operators, multi-system operators and local cable operators. The regulatory framework for broadcasting and cable services prescribed by TRAI stipulates various reporting requirements by these service providers. In order to effectively communicate and educate service providers about the regulatory framework, this Service Providers Portal has been launched. This portal will harness the strength of ICT to create consolidated database of service providers of Broadcasting and Cable Sector.

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