Accelerating on the i-way
International Trends (Asia Pacific Region)

Significant Achievements for Year 2014-15

COAI Reports/Submissions

COAI Media Desk

Telecom Centres of Excellence (TCOE) India

Telecom Sector Skill Council (TSSC)

Legal Updates

A. Subscriber Base (in millions)
B. Subscriber Additions (in millions) during Sept 2013 – Sept 2014
C. Wireless Penetration
D. Average Revenue Per User (in USD)
E. Average Minutes of Usage Per Subscriber Per Month
F. Rate per Minute
G. Data as a % of ARPU
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As I conclude my tenure as Chairman of COAI and CEO & MD of Vodafone India, I would like to say that the last six years have been both fulfilling and challenging for me. It has been a pleasure and a privilege to be a part of this vibrant industry, operating in a very dynamic market.

A major development last year was the launch of the Digital India initiative, which aims to prepare the country for a “knowledge economy”, basically leveraging Information Technology for bringing in efficiency and transparency in the functioning of government departments. The key takeaways from the initiative would be increased uptake and penetration of the digital communications services via enriched broadband and massive outreach of the services while plugging the coverage gaps in the country at the same time.

One of the primary pillars of Digital India, the Broadband Highways or I-ways, envisages a nationwide National Information infrastructure and extensive coverage in both rural as well as urban areas by 2017. Connectivity is to be provided to more than 42,300 villages so that there are no coverage gaps in administrative implementation by the government. Simultaneously, Common Service Centres provided to more than 42,300 villages so that there are no gaps in the functioning of government departments. The key takeaways from the initiative would be increased uptake and penetration of the digital communications services via enriched broadband and massive outreach of the services while plugging the coverage gaps in the country at the same time.

With the expansion and capacity building of the mobile networks across India. The adoption of the DoT Tower Guidelines by all States is also the need of the hour, as several State governments have started devising independent state-specific bylaws towards the procedure for installation of towers. This leads to unwanted delay and complexities in rolling out the requisite network infrastructure at the state and local level.

COAI has been leading numerous initiatives in educating people and creating awareness on the facts related to the EMF emissions from mobile towers. A number of programmes have been organized by COAI in association with the Central & State Governments, Municipalities, medical professionals, academicians, RWAs and the media, to sensitize the stakeholders and the public at large. However, we believe that the industry efforts need to be complimented with equal participation and representation from the Government in order to reassure the citizens of their safety.

Use of wireless for providing last mile broadband access is critical. In addition to backhaul, such access requires a large number of towers and small cells. Non-discriminatory access to government land and street infrastructure (street lights, etc.) for putting up such towers and small cells is needed. In order to improve the efficiency of resources and reach the masses, such infrastructure should be allowed to be deployed, especially if it is shared among two or more broadband service providers.

The industry is facing acute issues with regard to installation of towers for our antennae, in addition to local guidelines which are restrictive in nature. The unattended fears of public health on telecom towers have played havoc: with the expansion and capacity building of the mobile networks across India. The adoption of the DoT Tower Guidelines by all States is also the need of the hour, as several State governments have started devising independent state-specific bylaws towards the procedure for installation of towers. This leads to unwanted delay and complexities in rolling out the requisite network infrastructure at the state and local level.

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While the Industry is more than willing to contribute and play its role in achieving the above, it would certainly require the Government’s enabling support for crafting a viable and sustainable industry structure. For this, a predictable and stable regulatory and policy environment that ensures an investor-friendly climate, protection of existing investments, service continuity, availability of adequate, appropriate and contiguous spectrum, etc. would be a pre-requisite. The sooner the government removes the policy obstacles on the I-way, the faster the country will move to “Digital India”.

As the Digital India programme is set on the basic platform of availability of quality broadband services, the government needs to look and resolve the issues pertaining to availability of contiguous spectrum, ROW issues, backhaul, etc. which are critical for the broadband proliferation (especially mobile broadband) in India. Operators in India have one-third spectrum than their peers globally who have achieved high mobile broadband penetration. Going forward, there is a need for a clear roadmap for future auctions/further release of spectrum in various bands. There also is an urgent need to harmonise site approvals/rights of way (RoW) procedures so as to lower the costs and expedite the process.

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To promote investments in the telecom sector, the Government of India liberalized the FDI to 100 percent in August 2013. The horizon for FDI now appears to be promising. During 2001-14, the telecom sector accounted for about seven percent of the total FDI inflows in the country. It has also been the 3rd highest contributor in FDI in the last decade with close to INR 59,000 crore FDI (Since Apr’00 till Oct’13).

However, investors have cited that the execution risk in India is much higher than in any other country. The M&A guidelines need to be revised as M&A Guidelines issued in February 2014, are unlikely to encourage consolidation due to unrealistic caps and step up of prices for spectrum allocated outside of the recent auctions. In addition, spectrum trading and sharing norms need to be issued expeditiously.

The government will also have to realise that there is an urgent need to rationalize the taxes and levies in the sector, which aggregate presently to 30 percent of the revenues earned by telecom companies, as compared to about 5% in other Asia-Pacific (APAC) countries. License fees and spectrum usage charge (SUC) account for about 12% of adjusted gross revenue (AGR). Introducing a flat SUC (Spectrum Usage Charge) of 1% should provide some relief to the operators. The USO Fund levy (Universal Service Obligation Fund) of 5% should also be gradually reduced to 1% as operators meet the revised contractual roll out obligations which now covers the rural areas.

Telecom has been the most transformational technology of recent times in India, and needs to be nurtured further for the benefit of the nation. Today, the Indian telecom sector accounts for the 2nd largest private sector investment in infrastructure with INR 1,53,000 Crore of investment (during 10th & 11th plan), apart from the two spectrum auctions held in February 2014 and March 2015, causing pay-outs from the industry of INR 81,200 crore and 1,16,000 crore respectively. Further, the industry is one of the highest contributors to the public exchequer with over INR 14,500 crore/annum by way of license fees and spectrum usage charge.

Moreover, the industry provides employment to over 7.3

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India has leapfrogged fixed line technology. Today, India has over 915 million mobile customers, but a mere 29 million fixed line customers. India will probably be the first mobile first Internet market. Delivered speeds are often less than 1 Mbps making the experience sub par.

Broadband services require at least 5MHz of contiguous spectrum. Today, much of the spectrum available with operators is non-contiguous. The Government must play a facilitating role in swapping of spectrum across operators so that the holdings can be made contiguous and the much needed broadband services can be rolled out in the spectrum available with the operators.
Notifying the guidelines for spectrum trading and sharing can further help maximize utilization of spectrum by ensuring that the operators with little traffic are able to monetize their unused spectrum. Further, the current M&A guidelines need to be revised, particularly those around caps on spectrum holdings and market share to ensure actual consolidation happens.

The industry has consistently urged the government to address these issues so as to enable a healthy growth of the industry. COAI has once again played a crucial role, and led the industry on issues of common and critical interest. Several representations and recommendations from the industry to the government and the stakeholders have been spearheaded by the Association, leading to fruitful and effective results. The Association will continue to pursue the industry’s common objectives and make representations to the government in the interest of sustainable and profitable growth of the industry.

With the exponential growth of data, we foresee a greater role for the Association in line with the evolving eco-system of telecom services, the convergence of different verticals relevant to the sector, and the growing number of our members from these verticals.

On a final note, I would like to convey my regards to all our member operators for working together towards all major industry issues, thus making significant contributions to the development of the industry and nation. Also, I would like to thank Marten for his bold leadership and commitment towards key issues, and his enthusiastic and tireless support throughout the year. Last but not the least, my utmost compliments and regards to the COAI team, ably steered and led by Rajan, to greater heights year after year.

GOPAL VITTAL
VICE CHAIRMAN

The year 2014-15 was an astounding mélange of increasing regulatory certainty but heightened business uncertainty for the telecom industry. On one hand, we witnessed forward looking recommendations from the Regulator on trading and sharing of spectrum, proposal on uniform SUC, Broadband, etc., which brought in additional clarity to new investments as well as action into the sector. However, we also witnessed a spectrum auction structured to extract maximum money from the industry, which has led to an increased financial burden on the industry. The operators have already invested billions of dollars in license fees, spectrum fees and network roll-outs, yet the industry makes negative returns on the capital invested. Post the auction, the financial situation has dimmed considerably.

In August 2014, the new government launched the Digital India initiative—a programme to transform India into a digital empowered society and knowledge economy. The industry estimates the country would need an additional capital outlay of about INR 500,000 crore over the next five years in spectrum, new technology, equipment, towers, optical fibre backbone, etc., to meet the PM’s vision of Digital India, and connect 1 billion Indians to the exciting world of Internet.

India has over 950 million mobile subscribers—the second largest in the world. This growth was enabled by innovation across the ecosystem—in our ever expanding complex networks, outsourcing models, infrastructure sharing, innovative pricing structures—that allowed operators to offer customers some of the most innovative and affordable call rates in the world. We need the same spirit to connect a billion Indians to the Internet under the Digital India programme. This means innovations across the ecosystem—affordable smartphones, more efficient networks, even more broad ranging applications (especially in areas such as education, health, governance) and pricing flexibility—that promotes greater digital inclusion. Only then can our citizens in rural India, or from a lower economic strata, be empowered through internet access.

Going forward, the industry will continue to labour hard to recuperate from the heavy financial burden due to the exorbitant winning prices of the spectrum auction as well as the investments needed to make significant progress towards the ambitious targets of Digital India set by the Government.

The need of the hour, therefore, would be to have policy and regulatory stability along with financial relief from
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Status on Policy and Regulatory issues
The major initiative of the Government this year was the announcement of Digital India, which is transformational in nature and would ensure that Government services are available to citizens electronically. There is a major thrust on exploiting the ICTs to empower the masses, which will have significant involvement of telecom industry and potential to further enhance business avenues. The DoT has also initiated discussions on measures to enable Digital India, including Broadband, Right of Way, Internet of Things, review of NOFN project, etc.

The Government will have an active role to facilitate these policy requirements so as to ensure sustained growth for the industry. With the new Government in place, the industry is hopefully looking towards efficient policy changes, open and transparent Government functions, along with effective implementation of the programs, in order to sustain growth in this critical sector.

COAI is committed to the Digital India story and will work towards inclusive and affordable Internet access for every Indian. We believe that our role is to enable all services to reach customers across the country. One of the key factors to enable this is that the same rules must apply to the same types of services, including Mobile and IP Voice services. This is the only way to ensure digital inclusion and bring about social and economic good to the common man.

COAI has made submissions to the Government stating that the Telecom sector can contribute meaningfully and substantially to the digitization drive. There are various processes at DoT which can be simplified to save on the resources, paper and man-hours and will directly help promote efficiency in faster clearances, lead to considerable customer convenience, transparency, simpler processes and cost savings through digitization initiatives. It was highlighted that despite having online systems for many approvals, DoT still has processes dominated by paper forms and hard copies. The efficiencies of an online process gets immediately negated the moment the whole process is duplicated through an offline mode, entailing submission of hard copy paper printouts. A paperless approach should be followed, e.g., paperless activation of telephone connections, e-bill instead of paper bill given to postpaid customers, online submission of EMF self-certificates and online SACFA and WPC clearances. We hope that the Government would fast track digitization of these initiatives.

On the regulatory front, the year saw recommendations from the Regulator on a host of issues like spectrum trading and sharing, Broadband, emergency communication, AGR, etc.

The industry is now awaiting these to result in favourable policy measures by the Government. In the coming year, we expect the same regulatory certainty to prevail to ensure that the sustained growth of the industry, which has translated into affordable consumer tariffs, innovative offerings, enhanced technology, increased rural penetration, and attraction of domestic and foreign investments; continues its previous growth story.

The auction of March 2015 was unprecedented in terms of the fact that the auction was designed in a manner wherein the operators were forced to bid exorbitantly high amounts, in order to get back their spectrum to ensure their business continuity. Apart from the 2100 MHz band, all other spectrum bands auctioned were already being used by operators and were being re-auctioned, hence, aggressive bidding from the operators, especially for the 900 MHz spectrum, was inevitable.

The resulting increased financial burden will lead to a drastic recasting of the financial structure and business plans of the industry. Since spectrum mortgage has not been allowed by the Government till date; and further, due to the dire financial straits of the industry, the banks/financial institutions are shying away from lending to the industry; making it extremely difficult for the industry to raise funds for pay-outs of the spectrum cost and network investment. Also, the government’s proposal for a Special Finance Arm to address the funding requirements of the sector has not materialized yet. Hence, the operators will not be left with much choice but to increase the tariffs so as to meet the financial commitments to the Government.

To enable the industry to get back on the growth trajectory, COAI is hopeful that the Government will rapidly move into implementation mode with the involvement of industry to address the key issues including spectrum sharing, trading, mergers and acquisitions, broadband initiatives, etc. COAI is committed to working with the Government in achieving this objective. The Government needs to provide a long-term, clear, stable, predictable, development oriented and investor friendly policy regime, which recognizes the long term nature of the investments and long project gestation horizon of the telecom sector.

We continue to emphasize that the Government and Regulator’s outlook should be to the benefit of all the stakeholders in the country and all policies should be drafted only after ensuring that the same is being fulfilled.

Industry Initiatives and Achievements
During the year, COAI dealt with various issues of importance to the industry.

SPECTRUM ISSUES: The Government garnered about INR 1,10,000 crore for the Government from the operators, in comparison to the INR 82,000 crore expected by the Government to be generated from the auction held in March 2015, leading to almost a 33% hike in the realized prices. While the auction process is completed, the final result of the auction will be subject to the Hon’ble Supreme Court’s verdict on matters relating to the auction that are presently pending with them.

COAI made several representations to the Government including PMO, DoT, TRAI and various other ministries regarding the shortage of spectrum and its repercussions. It was submitted that the spectrum offered for the auctions held in March was severely limited and unless immediate steps were taken on an urgent footing to make available adequate spectrum in the upcoming auctions, there would be a real danger as there will not be sufficient spectrum to meet the broadband objectives of the Government.

The operational environment surrounding spectrum is still not clear as the Regulator has provided its recommendations on some of the issues like Spectrum sharing and trading, but the Government has not issued policies on these. Moreover, revised guidelines on Mergers & Acquisitions are also awaited from the DoT. COAI believes that the principle stated in NTP–2012 of “internationally harmonized spectrum” is the key going forward. COAI is also actively involved in the ITU activities on spectrum harmonization and identification of additional bands for IMT services.

EMF AND TOWER RELATED ISSUES: The issues related to activism against Mobile towers and the misconceptions associated with EMF emissions from antenna of mobile towers have escalated in the country and COAI committed greater resources and effort towards engaging the various stakeholders involved and educating them with the credible scientific facts on the issue. The Association was successful in reaching out to a number of relevant government departments, local civic authorities, medical professionals, academia, and media, and engaged them to help allay the misplaced fears of health effects of EMF.

COAI supported the Second International Conference on
“Health & Safety aspects of Mobile Telecommunications” organized by ASSOCHAM on November 17, 2014. The event was successfully conducted by aligning national and international stakeholders, experts from medical fraternity, and technocrats on one platform on EMF issues. COAI also conducted many EMF Advocacy workshops and medical fraternity workshops in various parts of the country including Hyderabad, Ahmedabad, Vijayawada, Mumbai, Pune, Delhi, etc. Several BWA meets were also organized to spread awareness on EMF exposure to the general public.

On the legal front also, there were favourable decisions from Kerala, Madras and Gujarat High Courts. Vide their orders, the courts clarified that there is no evidence to prove health hazards from mobile towers and allowed installation of towers in these states.

COAI also aligned with various state Governments including Kerala, Chandigarh, Madhya Pradesh, Maharashtra, Andhra Pradesh, etc. to align on their state tower policies.

GREEN TELECOM: DoT issued a Directive on January 23, 2012, on “Implementation of Green Technologies in Telecom sector” setting the RET deployment and the carbon footprint reduction targets for all the telecom operators. On the request of COAI, an Inter-ministerial committee, under the aegis of DoT, was constituted to examine the Renewable energy deployment in the Telecom sector.

The COAI team effectively coordinated with other associations and members with regard to the representation made to the Inter-Ministerial Committee (IMC) of DoT. Consequently, the IMC agreed to the request of the industry and recommended that the DoT Directive dated January 23, 2012, needs to be recalibrated. The IMC has also recommended that penalty should not be linked to the achievement of the RET Targets.

ADJUSTED GROSS REVENUE (AGR): The major issue faced in this matter was the different interpretation of the CCA/DoT on the determination of AGR and the logistical issues, i.e. their demand of various kinds of documents as a proof from operators for getting back the pass through money. The industry made detailed submissions to the Regulator in response to a Consultation Paper. TRAI has considered the request of the industry and agreed to the exclusion of the positive list from the GR (Gross Revenue) to arrive at ApGR (Applicable Gross Revenue) and to introduce a system of LID (License Fee deducted at Source) and develop an e-portal for submission of LF and SUC.

TERMINATION CHARGE FOR INCOMING INTERNATIONAL CALLS: COAI made several representations to TRAI regarding the increase of the termination charge for incoming international calls, submitting that the blended termination rate paid by Indian operators is around INR 3.50/min for outgoing international calls, compared to the 40 p/min termination rate received by them on international incoming calls. COAI also submitted that there is need to bridge the gap between the blended termination rate paid by Indian operators for outgoing international calls and termination rate received by them on international incoming calls. COAI suggested that the ILD termination charge needs to be increased from 40 paisa per minute. As a result of our representations, the TRAI increased the ILD termination rates to 53 paisa per minute vide its Regulation dated February 23, 2015.

PAYMENT BANKS: Since April 2011, COAI undertook a very active advocacy for the spread of financial inclusion and mobile banking services in the Indian Economy. COAI represented the industry concerns and positions on several occasions and at several forums such as TRAI, DoT, Ministry of Finance (MoF) and Reserve Bank of India, and undertook advocacy workshops organized by IndusInfo Analytics. We also engaged with NPCI and as a result, all the players across the industry have been able to sign uniform bilateral agreements with NPCI for provision of USSD based mobile banking services. We responded to the RBI draft guidelines on Payments Banks. Consequently, the RBI finally came out with the guidelines on Payment Banks and allowed cash out. All the major TSP members have applied for the Payment Bank licence.

FULL MOBILE NUMBER PORTABILITY: COAI spearheaded the industry sub-committee in the meetings with the DoT committee looking after various issues such as technical issues, test related issues, project plan & timelines. On the request of the industry, the DoT has agreed to do away with the call related testing. This has reduced a considerable amount of testing related costs for our members along with considerable logistical issues, e.g. sharing of numbers, sharing of SIMs, etc. Members have started the porting process testing and COAI is coordinating with all the members to get this completed. Full MNP will be shortly implemented in India.

AADHAAR BASED E-KYC: COAI had been taking up the issue of subscriber verification, based on Aadhaar authentication process, with the Government for many years. Due to various issues involved in the manual process, the industry advocated for a paperless approach for quite some time.

This year, the DoT finally issued detailed guidelines on conducting Proof-of-Concept on E-KYC for subscriber verification. It was recognized that the entire sales acquisition process should be made completely paperless by adopting Aadhaar based activation and using digital data to remove the dependence on paper forms. As a result, the digitized forms and related documents can be stored and retrieved very efficiently.

This paperless instant activation process will significantly enhance customer satisfaction as it will give them an added advantage of instant activation. The PoC has been successfully completed by the operators. We are now in discussions with DoT regarding the learnings from the PoC and the improvements required in the process. Post this evaluation, DoT would be issuing guidelines on E-KYC through Aadhaar for the country.

SECURITY ISSUES: COAI, along with AUSPI, under the aegis of ACT, has been successfully handling the issue of subscriber verification, Lawful interception and monitoring, and other security related issues. The license amendment on security issued by DoT in May 2011, suggested setting up of a TSCI (Telecom Security Council of India). The industry deliberated on the issue and the licensees unanimously agreed that the TSCI should be structured on the lines of the very successful model of ACT. A joint proposal for the same was submitted to DoT for setting up of a TSCI as a voluntary endeavour.

COAI also coordinated with DoT on security issues related to SIM card vulnerabilities as well as personalization of SIM cards. The industry viewpoints were clearly articulated with the Government.

This year, COAI also approached CERT-In to include the telecom service providers in the cyber drill conducted by them. The participating members of COAI were rated between Good and Excellent.

LEGAL ISSUES: This year most of the legal filings by the industry were due to ambiguity in DoT Circulars, leading to differential interpretations by the TERM Cells, and hence misplaced penalties. The industry did get some favourable orders from the Courts including BSNL demanding Bank Guarantees for IUC payments, where the Hon’ble TDSAT has directed BSNL to keep the impugned circular in abeyance. On the issue of EMF testing fees, the Hon’ble TDSAT stated that the fee should be per site and the present amount charged by DoT is too high, and also, the DoT cannot charge the operators on a notional or a retrospective basis.

On the issue of imposition of penalty for EMF on missing/absent signages, the Hon’ble TDSAT directed DoT not to take any coercive measure for enforcement of the im-
pugned demand notices/invocation of Bank Guarantee till the next date. On the Maharashtra tower policy, the Hon’ble Bombay High Court directed that no municipal or local authority, shall take any coercive action under the impugned Regulations and that all authorities shall accept applications in accordance with the DoT Guidelines.

FINANCE ISSUES: COAI made detailed representation to the Finance Ministry vide its Pre-Budget recommendations on both direct and indirect taxes. Recommendations on direct taxes included issues like, amendment in the definition of ‘Royalty’, applicability of TDS on margins of market intermediaries, Expenditure on Specified Business under section 35AD, Investment in new plant and machinery – Section 32AC, and Tax incentives to Telecom Infrastructure Service Providers. Recommendations on indirect taxes included issues like Cenvat Credit on business related expenses, statutory mandated expenses, removal of equipment used in telecommunication network, removal of goods as waste and scrap by provider of service, SIM Cards — as capital goods, and amendment of registration/declaration related compliances in respect of concessional rate of central sales tax in respect of goods used in telecommunication network.

COAI is also engaging with the Government on the matter of Goods & Service Tax (GST). Various representations have been made to facilitate the Government to come to the GST model which will be industry friendly and will benefit all the stakeholders. Several representations with regard to submission of documents in support of deductions claimed through Statements of Revenue and License Fee were made by COAI. It was highlighted that various CCAs are having their own interpretation on different matters, which is neither uniform nor consistent.

Other Activities of the Association
COAI continued in its endeavor to be at the forefront of national and international events held in the year 2014-15, including Mobile World Congress at Barcelona, ITU events, etc. that addressed issues and matters of interest to our members and industry.

One of the major events organized by COAI was the multi-stakeholder workshop in coordination with ITU. The ITU-T provided India with the opportunity to host the meeting of the SGS on “Environment and Climate Change”. The DoT organized the same in coordination with COAI, ICA and TAIPA. COAI organized a round table on “Mobile Telephony and Public Health” on EMF issues in the second half of December 2014. The CM of Kerala, Mr. Oommen Chandy inaugurated the event and IT Secretary of the State, Mr. PH Kurian presided over the panel discussion. Government officials were successfully engaged to align Government of India and industry with WHO, ITU and rest of the telecommunications industry on EMF issues, and to put forth the scientific and safety regime adopted by the Government of India and industry. COAI also engaged DoT and ITU to organize a session on “The other side of ICT convergence - EMF exposure and issues” and “Issues related to EMF and the potential role of standards and policies in EMF management” on December 15, 2014.

COAI also partnered in various Seminars and Workshops on issues of interest and benefit for its members and the industry and for creating awareness amongst the consumers. COAI and its members also continued active participation in Organizations such as CII, FICCI, ASSOCHAM, NASSCOM, GSCA, 3GPP, ITU among others, as well as activities of many telecom events in India.

This year, Reliance Jio Infocomm Ltd. joined COAI as its core member, taking the count to seven core members for COAI. To keep pace with the growing ecosystem of a converged communications industry, COAI continued to expand its Associate Membership by inducting new members such as Apple India Pvt. Ltd., Facebook India Online Services Pvt. Ltd., Google India Pvt. Ltd. and Microsoft Corporation India Pvt. Ltd. The COAI Executive Council headed by the Chairperson, Mr. Marten Pieters, Vice Chairman, Mr. Gopal Vittal and comprising senior representatives from all member operators, met several times over the last year to deliberate on a variety of issues impacting the industry. They were competently assisted by expert advice from the various Working Committees that had been set up in COAI.

In the end, I want to express my deep appreciation for all the Committees and Working Groups and their Chairmen and Vice Chairmen for their unstinted support and cooperation. We are grateful to you all for taking time out of your busy schedules to contribute towards various industry issues and helping the Association in representing them in a proficient and timely manner.

I would like to personally thank the Chairperson, Mr. Marten Pieters, for his personal involvement and support in all the activities and initiatives of the Association for the last year. We also bid adieu to him from the Indian telecom industry. His international perspective on all the industry issues helped us a lot in aligning our views and taking Indian telecom sector to a global arena. I also thank the Vice Chairman, Mr. Gopal Vittal, for all the support, guidance that he has provided during his tenure. Both of them have generously given their time and resources to provide personal support and guidance for the Association.

I would like to record my profound gratitude to the COAI Secretariat team which has always extended excellent support and assistance in all our endeavours. I appreciate their willingness and dedication in taking up new projects and contributing successfully towards it. I deeply appreciate all of their efforts in contributing significantly to all the achievements of COAI.
Growth Drivers for Future

Going forward, we expect 2015 to bring about consolidation, as well as restore vitality within the sector. The trends in 2015 are expected to include customized solutions for consumers along with availability of content and applications in vernacular languages.

The industry will also need to work closely with the Government, international standards bodies and the Civil Society in promoting security while also ensuring the legitimate rights of consumers for privacy. While the security interests of Government are paramount, the costs of such initiatives and programmes should not ride on the fragile financial shoulders of the service providers.

Increasing usage and demand for services from rural consumers will also drive interest and investments towards network expansion and upgrade of services. Rural inclusion will help bridge the urban-rural divide, developing the rural scenario, thereby presenting vast employment and investment opportunities in the sector.

In 2015, India is expected to step up aggressively towards achieving the Digital India dream of the new Government. All stakeholders of the telecom value chain — from telecom/broadband service providers to network equipment providers to end-user equipment providers — will have to be involved for successful implementation of the initiative. The private sector will have a significant role to ensure that all the requirements of the programme are made available.

The emergence of robust mobile broadband will help accommodate the emerging breed of services such as Converged services, M2M communications, cloud services, over-the-top services, etc.

Financial inclusion and direct transfer benefits will be driven by m-banking services. The m-governance agenda, once implemented, will also open new investment avenues as the common man is empowered through connectivity.

With the new Government in place, the industry is hopefully looking towards helpful policy changes, along with effective implementation of the same, in order to sustain growth in this critical sector.

With the Government setting ambitious GDP growth targets of 6-7%, implementation of Smart Cities, focus on tackling inflation, and facilitating a digital economy for the country, telecom operators in India have reason to be optimistic.

COAI is committed to working closely with the Government as well as other stakeholders to ensure that these targets of the Government are successfully met and the interests of the customers and the industry are developed.

RAJAN S. MATHEWS
DIRECTOR GENERAL
The COAI team includes dynamic, highly skilled professionals with a must-do attitude and remarkable proficiency in their respective verticals. Lean and yet highly competent, the Secretariat packs a punch in every activity undertaken towards the cause of the industry. Regular coordination with the Government, Regulator, relevant Centre and State Government departments, and other stakeholders, have established appreciation and recognition of the Secretariat's efficiency and professional prowess, both within, and outside the industry.

This year, Ms. Deepa Ahya joined the COAI team as Receptionist, adding to the Secretariat's strength.

The Secretariat is thankful to all its members and highly appreciates their valuable guidance, mentoring and constant support towards its efficient functioning and productivity.
COAI Members

**COAI CORE MEMBERS**

- Aircel Cellular Ltd
- Bharti Airtel Ltd.
- Idea Cellular Limited
- Reliance Jio Infocomm Ltd
- Telewings Communications Services Pvt. Ltd
- Videocon Telecom
- Vodafone India Ltd.

**COAI ASSOCIATE MEMBERS**

- Alcatel-Lucent
- Apple India Pvt. Ltd.
- Cisco Systems India Pvt. Ltd.
- Ericsson India Pvt. Ltd.
- Facebook
- Google India Pvt. Ltd.
- IBM India Pvt. Ltd.
- Intel Corporation
- Indus Towers Ltd.
- Microsoft Corporation
- Nokia Networks
- Qualcomm India Pvt. Ltd.
- ZTE India Pvt. Ltd.
Indian Wireless Industry - An Overview

Wireless Industry in India

Wireless Tele-density Across Telecom Circles – Dec 2014

All India Total Cellular and GSM Cellular Subscriber

Source: TRAI and COAI

Source: TRAI Subscription Data and Performance Indicator Report

Source: TRAI and COAI Source: TRAI - Performance Indicator Report
Indian Wireless Industry - An Overview

All India GSM Cellular Subscriber Base – Circle wise

All India GSM Cellular Subscribers – Annual Net Additions

All India GSM Cellular Subscribers – Metros

Tele-density (%)

Source: COAI

Source: TRAI
Indian Wireless Industry - An Overview

Wireless Rural Subscribers as % to Wireless Subscriber Base

![Bar chart showing wireless rural subscribers as % to wireless subscriber base over years 2008 to 2014.]

Source: TRAI (Year Ending – December)

Market Share of Wireless Operators – Mar 2015

![Pie chart showing market share of wireless operators for March 2015.]

Source: TRAI Subscription Data

Average Revenue Per User

![Chart showing average revenue per user with values from 2005 to 2014.]

Source: TRAI Performance Indicator Report (Year Ending – December)

Minutes of Usage Per Subscriber Per Month

![Chart showing minutes of usage per subscriber per month from 2005 to 2014.]

Source: TRAI Performance Indicator Report (Year Ending – December)
Indian Wireless Industry - An Overview

Composition of Internet Subscribers – Dec 2014

- Mobile wireless: 93%
- Wired: 7%
- Fixed wireless: 0%

Source: TRAI Performance Indicator Report


- Wireless (Dongle + Phone): 83.9%
- Wired: 0.4%
- Fixed Wireless: 15.6%

Source: TRAI Subscription Data

Total Wireless Subscribers - Future Projections

- 2013: 886
- 2014: 944
- 2015: 990
- 2016: 1040
- 2020: 1100

Source: TRAI, COAI Estimates (Year Ending December)

India IP Traffic Growth/Top-Line

- 2012: 0.5 Gbps
- 2013: 0.7 Gbps
- 2014: 1 Gbps
- 2015: 1.4 Gbps
- 2016: 2 Gbps
- 2017: 2.7 Gbps

Source: CISCO (Year Ending December)
Indian Wireless Industry - An Overview

Capital Expenditure

Source: Ovum (Year Ending December)

Debt of Telecom Industry

Source: Annual Reports, Ministry of Corporate Affairs

International Trends (Asia Pacific Region)

Subscriber Base (in millions) – Sept 2014

Source: Merrill Lynch Global Research Sep-2014

Subscriber Additions (in millions) during Sept 2013 – Sept 2014

Source: Merrill Lynch Global Research Sep-2014
International Trends (Asia Pacific Region)

Wireless Penetration

Source: Merrill Lynch Global Research Sep-2014

Average Minutes of Usage Per Subscriber Per Month

Source: Merrill Lynch Global Research Sep-2014

Average Revenue Per User (in USD)

Source: Merrill Lynch Global Research Sep-2014

Rate per Minute

Source: Merrill Lynch Global Research Sep-2014
International Trends (Asia Pacific Region)

Data as a % of ARPU

![Graph showing data as a % of ARPU for various countries.](image)

Source: Merrill Lynch Global Research Sep-2014

Smartphone Penetration – Sept 2014

![Graph showing smartphone penetration for various countries.](image)

Source: Merrill Lynch Global Research Sep-2014

Global IP traffic Growth/Top-Line

![Graph showing global IP traffic growth/top-line from 2012 to 2017.](image)

Source: CISCO

Herfindahl–Hirschman Index (HHI) – Sept 2014

![Graph showing Herfindahl–Hirschman Index (HHI) for various countries.](image)

Source: Merrill Lynch Global Research Sep-2014
Security and Subscriber Verification Related Issues

AADHAAR NUMBER TO BE MENTIONED ON THE CAF: DoT had issued instructions to the TSPs to collect Aadhaar numbers along with CAFs of mobile phone applications and store the same in the database. There were certain clauses in the instructions on which COAI sought clarifications from the DoT. The DoT provided clarifications and accepted the industry request, which included a time period of three months for modification in the CAF for capturing Aadhaar number at a designated place. It was also clarified by DoT that in case the subscriber provides an incorrect Aadhaar number, the telecom service provider will not be held liable for the same.

PROOF OF CONCEPT ON E-KYC FOR SUBSCRIBER VERIFICATION: COAI had been taking the issue of subscriber verification, based on Aadhaar authentication process, with the Government for many years. Due to various issues involved in the manual process, the industry advocated for a paperless approach. This year, the DoT finally issued detailed guidelines on conducting Proof-of-Concept on E-KYC for subscriber verification. It was recognized that the entire sales acquisition process should be made completely paperless by adopting Aadhaar based activation and using digital data to remove the depend-ence on paper forms. As a result, the digitized forms and related documents can be stored and retrieved very effi-ciently. This paperless instant activation process will sig-nificantly enhance customer satisfaction as it will give them an added advantage of instant activation. We are now in discussions with DoT regarding the learnings from the PoC and the improvements required in the process.

Policy Issues

SPECTRUM ISSUES: COAI took up various spectrum is- sues with the Government in the past year. This included responses to TRAI Consultation Papers on 2100, 1800, 900 & 800 MHz spectrum. The issue of shortage of spectrum was taken up at the level of the PMO also. The issue of non-allocation of microwave carriers for previous auc-tions was raised with the Government as well. The issue of spectrum swap in the 2100 MHz band with Defence de-partment was extensively taken up with various min-istries. The TRAI and Defence agreed to the proposal of swapping 15 MHz in the 2100 MHz band and the same has been freed by the Defence. DoT had issued instructions to the TSPs to collect Aadhaar numbers along with CAFs of mobile phone applications and store the same in the database. There were certain clauses in the instructions on which COAI sought clarifications from the DoT. The DoT provided clarifications and accepted the industry request, which included a time period of three months for modification in the CAF for capturing Aadhaar number at a designated place. It was also clarified by DoT that in case the subscriber provides an incorrect Aadhaar number, the telecom service provider will not be held liable for the same.

DoT earmarking the frequencies in 900 MHz and 1800 MHz spectrum acquired by TSPs in the February 2014 auctions, stated that the SUC would be based on the clause as per the NIA. The NIA was issued prior to the Cabinet decision on SUC and envisaged an escalating SUC as a percentage of AGR. The Cabinet decision of January 31, 2014, stated that the spectrum acquired in the current auction will be charged at 5% of the AGR. In cases of combination of existing spec-trum in this band and spectrum acquired through the auc-tion, the weighted average will apply to the entire spectrum held by the operator in 900 MHz and 1800 MHz band. COAI submitted to the DoT for confirmation, that the SUC on spectrum won in the recent auction would be applied based on the Cabinet decision. As a caution before the conduct of the auction in 2015, COAI requested to the Government to issue the details of chargeable SUC on all bands so that there is clarity to the TSPs before the auction. DoT clarified that the SUC would be applicable as per the Cabinet decision. DoT also issued the final SUC regime on February 5, 2015, before the March spectrum auction.

NUMBER SERIES: There is a shortage of number series and DoT decided to allocate MSC codes of the quashed licenses of 2012, in the same circle, to the fresh applications received from different TSPs for meeting their requirements for busi-ness continuity. It was submitted to DoT that the 60 million numbers of the fresh number series available with DoT should be allocated to TSPs where the above option is not feasible. However, this can meet the requirement of MSC Codes for a limited short term period only and it is imper-ative that a long term solution be found for the industry. Based on industry submissions, DoT issued fresh MSC codes to the operators. However, for long term, suggestions were made to the DoT on the need for reorganizing the ex-isting Numbering Plan, and implementing the TRAI recom-mendations of 2010 to create new mobile series, so as to reorganize the fixed line series and remove exclusivity of levels, so as to get the number series made available for mo-bile services. Based on industry submissions and continu-ous follow ups, the DoT replaced the allocated MSC codes with fresh MSC codes.
Regulatory Issues

GREEN TELECOM: DoT issued a directive dated January 23, 2012, on “Implementation of Green Technologies in Telecom sector”. Vide this directive, the DoT set the RET deployment and the carbon footprint reduction targets for all the telecom operators. On the request of COAI, an inter-ministerial committee, under the aegis of DoT, was constituted to examine the Renewable energy deployment in the Telecom sector. The COAI team effectively coordinated with other associations and members with regard to the representation made to the inter-ministerial committee (IMC) of DoT. Consequently, the IMC agreed to the request of the industry and recommended that the DoT directive dated January 23, 2012, needs to be recalibrated. The IMC has also recommended that penalty should not be linked to the achievement of the RET Targets.

ADJUSTED GROSS REVENUE (AGR): The major issue faced in this matter is the different interpretation of the CCA/DoT on the determination of AGR and the logistical issues, i.e., their demand of various kinds of documents as a proof from operators for getting back the pass through money. In order to resolve the above issues, various representations were made to TRAI to suo-moto take up a consultation process on AGR. TRAI agreed to our request and released the consultation paper. Our team built the consensus among the members on a common approach to be adopted for determination of the AGR.

Being a complex issue, every member and association had a different choice of methodology for the determination of AGR. Bringing each member on to a common approach was a challenge. The industry, in the response, made the following key submissions:

- Gross Revenue (GR) should be explicitly defined to exclude the “Negative list” of revenue/income/gain.
- For avoidance of double levy, the GR should be adjusted by all pass through charges payable by one TSP to another, and pass through charges for inter-operator termination costs and roaming charges paid to international operators.
- For administrative convenience, and to avoid the arduous mechanism of verification/validation of the credit adjustment, use the principle of Licence fee Deduction at Source (LDSD); and to be posted in a central repository portal like the NSDL (similar to TDS as adopted by the Income-tax department) with payment details.
- TRAI has considered the request of the industry and made the following positive recommendations:
  - It agreed to the exclusion of the positive list from the GR to arrive at ApGR.
  - To introduce a system of LDSD and develop an e-portal for submission of LD and SUC.

FULL MOBILE NUMBER PORTABILITY (MNP): COAI spearheaded the industry subcommittee in the meetings with the DoT committee looking after various issues such as technical issues, testing related issues, project plan & timeline related to full MNP. On the request of the Industry, the DoT has agreed to do away with the call-related testing. This has reduced a considerable amount of testing related costs for our members. For the implementation of intra-circle MNP, the cost of the industry was around INR 25 crore for call routing testing. In the intra-circle MNP implementation, the call related testing not only amounted to extra cost for members, but also had considerable logistical issues, e.g., sharing of numbers, sharing of SIM cards, getting approx. 1000 people at PAN India level per operator, getting approx. 1000 handsets for making calls, approx. 1.6 lakh calls to be made by each operator, issues pertaining to the assessment testing to be done by TEC cell, etc. As per the TEC testing procedure, around 63 lakh and 6.3 lakh calls respectively were required to be made for exhaustive and sample testing, which is around 60 times and 6 times of the testing done for the intra-circle MNP. Further, the same would have required around 660 days and 63 days respectively, in completing the testing based on the exhaustive and sample test scenarios, with the work force of 1000 personnel. The above testing procedure, if insisted on by the DoT, would have created a major issue for our members and the industry.

PAYMENT BANKS: Since April 2011, COAI had undertaken a very active advocacy for the spread of financial inclusion and mobile banking services in the Indian Economy. COAI represented the industry concerns and positions on several occasions and at several fora such as TRAI, DoT, Ministry of Finance (MoF) and Reserve Bank of India, and undertook advocacy at workshops organized by Indicus Analytics. We also engaged with NPCI and as a result, all the players across the industry have been able to sign uniform bilateral agreements with NPCI for provision of USSD based mobile banking services. We responded to the RBI draft guidelines on Payment Banks. Consequently, the RBI finally came out with the guidelines on Payments Banks and allowed cash out. All the major TSP members have applied for the Payment Bank licence.

TERMINATION CHARGE FOR INCOMING INTERNATIONAL CALLS: COAI had made several representations to TRAI regarding the increase of the termination charge for incoming international calls. In this regard, COAI submitted that the blended termination rate paid by Indian operators is around INR 3.50/min for outgoing international calls, compared to the 40 p/min termination rate received by them on international incoming calls. COAI also submitted that there is a need to bridge the gap between the blended termination rate paid by Indian operators for outgoing international calls and termination rate received by them on international incoming calls. COAI suggested that the ILD termination charge needs to be increased from 40 paisa per minute. As a result of our representations, the TRAI increased the ILD termination rates to 53 paisa per minute vide its Regulation dated 23rd February 2015.

RIGHT OF WAY ISSUES IN ANDHRA PRADESH (AP): There were issues in the RoW charges being imposed by the state government in AP. These issues were taken up by COAI with the AP state government, stating that it is contrary to all the present efforts at coordination of RoW between the DoT, NOFN, the industry and the State Government. Further, the exorbitant costs being proposed are certain to bring the roll out of Broadband services to an immediate halt. This would be a major setback to the Hon’ble Prime Minister’s effort to roll out Broadband to all of the Gram Panchayats of the country and make Broadband services available to all the citizens of India. We asked the state government to have proper policies in place for this issue and include all telecom services irrespective of the spectrum bands. Due to consistent efforts made by COAI, the issue has been resolved in the state of AP and revised circulars have been issued by the Government.
Technology Issues

TECHNICAL SOLUTION FOR PONDICHERRY JAILS:
Pondicherry Jail authorities had installed Cellular Mobile phone Jammers within the jail premises to prevent the usage of mobile phones by inmates. They had installed three powerful jammers on three towers in various parts inside the prison. This caused major interferences in all the cell sites situated around the Pondicherry Jail area for all the telecom service providers, resulting in severe disruption of services to common citizens around Kalapet zone. Trials of the proposed technical solution were conducted on 31st May, 2014. These trials were conducted successfully and were satisfactory to the expectations of the Government officials and jail authorities. The industry worked closely with the Government and has been successful in getting all the towers de-sealed. The Jail authorities also granted permission for installation of permanent structures inside the jail premises while the Government of Pondicherry has initiated a tower policy for the state.

3G & BWA ROLLOUT: Spectrum for 3G and BWA was auctioned in 2010 and the timeline for meeting the rollout obligations for both will end in September 2015. The issue has been taken up with DoT for the past one year, stating that in the absence of TSTP for both these spectrum, it would not be possible for the operators to meet the rollout obligations, and extension has been sought from DoT for both. In the meanwhile, DoT issued the TSTP for 3G spectrum which was quite complex. The same was represented to DoT and a suitable method for testing the rollout of 3G has been suggested to both DoT and TEC. On BWA, no TSTP was provided by DoT. The industry thus worked out a TSTP and the same has been submitted to DoT. However, for both the spectrum, the industry has submitted that the rollout period should start from the date when the TSTP is finalized and issued by DoT. The DoT has now issued TSTPs for both 3G and BWA spectrum bands, however, no time extension has been provided by DoT as of now.

Legal Issues

JOINT INDUSTRY PETITION CHALLENGING BSNL DEMAND FOR BANK GUARANTEES FOR IUC PAYMENTS (TDSAT): A joint industry petition was filed challenging BSNLs circular dated 21.10.2014, instructing the BSNLs field offices to demand renewal of bank guarantees based on an ‘average billed amount basis’ as per the Interconnect Agreement, and not as per ‘net payable basis’ as was mutually agreed between BSNL and the TSPs earlier. On March 19, 2015, the Tribunal directed BSNL to keep the impugned circular in abeyance.

JOINT INDUSTRY PETITION ON EMF TESTING FEE (TDSAT): A joint industry petition was filed on the issue of EMF testing fee imposed by TDCM Cells retrospectively and for testing more than 10% of the total BTS sites of the service provider. On November 20, 2014, the Tribunal directed that DoT is not entitled to demand: a fee of INR 10,000/- per site on the basis of notional testing and/or on a retrospective basis.

JOINT INDUSTRY PETITION CHALLENGING MAHARASHTRA TOWER POLICY (BOMBAY HIGH COURT): A joint industry petition was filed challenging the applicability and viability of the regulations dated March 4, 2014, for setting up of Cell phone towers in Maharashtra, issued by the state Govt. On August 25, 2014, the High Court directed that no municipal or local authority, shall take any coercive action under the impugned regulations and that all authorities shall accept applications in accordance with the DoT Guidelines.

JOINT INDUSTRY PETITION CHALLENGING IMPOSITION OF PENALTY FOR EMF ON MISSING/ABSENT SIGNAGES (TDSAT): A joint industry petition was filed on the issue of levy of penalty retrospectively on account of improper/missing/absent signages on towers. On April 29, 2014, TDSAT directed that DoT shall not take any coercive measure for enforcement of the impugned demand notices/invocation of Bank Guarantee till the next date.
Media & Advocacy

EMF ADVOCACY: The issues related to activism against Mobile towers and the misconceptions associated with EMF emissions from antennae from mobile towers have escalated in the country and COAI took an expanded effort towards engaging the various stakeholders involved and educating them with the credible facts on the issue. The Association was successful in reaching out to a number of relevant government departments, local civic authorities, medical professionals, academia, and media; and engaged them to help allay the misplaced fears of health effects of EMF. The major initiatives undertaken by the Association in this regard were:

a. Delhi Pollution Control Committee (DPCC) Engagement: Meeting held with DPCC to sensitize them on the issue and tower complaints received by COAI on a monthly basis; to dispel the fear psychosis created by some people who are oblivious to the science and safety regime behind the technology and to put forth the scientific and safety regime adopted by the Government and industry. COAI suggested DPCC to organize quarterly meetings to address such complaints, wherein they can invite representatives from COAI and TERM (DoT) to address the same. Consequently, post an incident involving a Delhi complaint on telecom towers, the Central Pollution Control Board (CPCB) has passed an order to refer tower related complaints to the TERM cells henceforth.

b. Letter to Chief Secretaries of States: A joint letter from AUSPL, COAI and TAIPA on “Support required to provide quality cellular services in the state” was sent to the Chief Secretaries of Orissa, Andhra Pradesh, Anam, Goa, Gujarat, Haryana, Kerala, Karnataka, Madhya Pradesh, Madhy Pradesh, Puducherry, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal, Arunachal Pradesh, Himachal Pradesh, Jammu & Kashmir, Bihar, Jharkhand, Sikkim, Meghalaya, Ut-
Nalagonda, Vishakhapatnam, Raajahmundry, Narasapur, Guntur, Warangal, Sangareddy, Suryapet, Medak, Gadhwal, Khammam, Bhadrachalam, Palancha, Kothagudem and Machilipatnam. The Police Commissioner/SP of the region conducted live testing of random sites and the reports were shared with the media. The test reports showed compliance to norms and the same was reported widely by the media, both mainlines and regionals. Numerous queries from common citizens on cancer and other issues were addressed and cleared, including getting instant approvals for members to construct towers. The program was highly successful and the AP state DGP has started a weekly review of these EMF checks.

**EMF Advocacy Workshop in Hyderabad:** A Workshop on ‘Govt. of India guidelines on Installation and Safety regime of Telecom Towers’ was held on 13th August, 2014, in Ahmedabad. The workshop was successfully conducted by engaging key influencers like Mr. A K Tiwari, DDG TERM, Mr. D P Desai, Deputy Municipal Commissioner, Mr. Ravi Bhundari, CEO of Shalby Hospitals; Prof. Rekha Jain, IIM-A; Dr. Chinnababu, Oncologist, Apollo Hospitals and media. With INR 10, 94, 416 worth of media coverage, the key messages of the workshop have been carried in national and regional media including electronic channels.

**Multi-stakeholder EMF Advocacy Workshop at Vijayawada:** COAI, ICA and TAIPA organised a Workshop on ‘Mobile Telecommunications: Digital Inclusion and Health Aspects’ at Vijayawada on 20th February 2015. Over 124 guests, 15 government officials, 30 doctors and 41 media attended the event. The guests included State Health Minister, City Mayor, Commissioner of Police, Local MLAs, IT advisor for the State, Commissioner and Director of Municipal Administration, TERM cell and renowned doctors from the city. News was carried by 10 leading publications and 9 leading local channels in Vijayawada.

**Medical Fraternity Engagement in Delhi NCR:** Heads of Delhi, South Delhi, Noida and Faridabad state branches of the Indian Medical Association (IMA) were approached to organize/participate as speakers on the ‘EMF issue’ in their planned events to create awareness amongst the Medical Fraternity of India, that tower erection in residential areas is not harmful. COAI was offered speaking slots in the 57th Annual Delhi State Medical Conference and the 35th Annual Convention of IMA, South Delhi on 11th Jan 2015 and 18th Jan 2015 respectively. COAI representatives made presentations and engaged the audience in the respective events. Informal exchanges and positive outlook from the participating medical professionals were observed.

**Medical Fraternity Engagement in Bangalore:** A one day Continuous Medical Education (CME) program on ‘Public Health & Cell Tower Radiations’ was organized by Medknow in association with IMA Bangalore and COAI at Indian Medical Association conference hall, Bangalore to align the medical community on the science behind the alleged fears about tower and mobile emissions. 134 doctors (Oncology, Radiology & General Medicine) attended the event. The intended message of effects of Mobile Tower radiation being non-harmful was successfully conveyed. The Director of Medical Education, Karnataka, sent an invitation to Dr. Suresh Artili to address his department doctors in other cities of Karnataka on the issue.

**Government official engagement in Rajasthan:** Meetings were held with the Chief Secretary and Urban Development Secretary of Rajasthan to apprise them on the tower related issues and situation. A letter was sent to the Chief Secretary, Rajasthan, to request support for providing quality cellular services in the state and enabling sanction for installing Telecom Towers on Government Land and Buildings.
“Cell Towers Radiation: A scientific perspective”. The session was attended by 40-42 well-known doctors of IMA Juhu branch & committee members including the IMA Branch President, Dr. Sanghi. This speaker placement proved beneficial for COAI as this created a platform to connect with senior doctors from an important part of Mumbai, i.e. Juhu & Santacruz.

p. Medical Fraternity Engagement, 7 Hills Hospital, Mumbai: 7 Hills Hospital had organized a CME on 15th March 2015. On behalf of COAI, Dr. Chinnababu Sunkavalli made a presentation on “Cell Towers Radiation: A scientific perspective”. The session was attended by 40 well known doctors of 7 Hills Hospital & from Andheri East area. The activity helped COAI connect with senior doctors from Andheri, an important part of Mumbai.

q. Engaging Dept. of Radio-diagnosis, AIIMS, New Delhi: On behalf of COAI, a 20-minute presentation was made by Mr. Ravi VS Prasad during a pre-conference workshop organised by Dept. of Radio-diagnosis, AIIMS on February 27, 2015, at JIPNA Trauma Centre (AIIMS) to create awareness amongst approx. 60 doctors, that till date there is no proof of any impact of emissions from antennae on mobile towers and handsets on human health. A Q&A session was held post the presentation to answer the queries of the doctors.

r. Media and Marketing Influencers Engagement: Mr. Rajan S. Mathews, Director General, COAI, made a presentation on “Electro-Magnetic Fields (EMF) Public Awareness Campaign by COAI – A Case Study” during the 9th Global Communication Conclave on March 13, 2015. Over 75 Professionals from Public Relations, Corporate Communications, Advertising, Media and Academia backgrounds were engaged and handed over the EMF Advocacy Kit.

s. Rotaract Club Outreach programmes, Mumbai: As part of the effort to engage members of the Rotaract Club in different parts of the city, Dr. Mehol Mehta, Radiologist and Mr. P Ramakrishna, Advisor, COAI, made presentations and held discussions to bust the health-related myths surrounding mobile towers. In most meetings, members seemed satisfied with the industry responses to their queries. The facts and data shared with them were also received constructively and had a positive impact. The Rotaract Club offered to support more such seminars by hosting them in different parts of the city. Details of the various meetings held are:

- 19th October 2014, at the Deaf N Mute Institute, Mazgaon, Byculla for approximately 24 Rotaract members.
- 27th November 2014 at the Rotary Club of Deonar for 20 Rotaract members.
- 11th December 2014, and 19th December 2014, at the Rotary Clubs of Mandvi (Matunga) and Pareshwar (Vile Parle) for over 40 Rotaract members.
- 9th January 2015, presentation was made to the members of the Rotary Club of Andheri.

r. East Delhi RWA Meet under RWA Bhagidari Resident Group: 20 RWA office bearers (including problematic RWAs) of East Delhi assembled under one umbrella RWA body called RWA Bhagidari at IMA East Delhi hall, wherein COAI expert and doctor educated them on myths and realities related to mobile towers/handsets radiation, followed by Q&A session. Doubts/Myths of the RWA and participants about EMF were successfully addressed. In fact, there was a request for tower installation from one of the participants. The same was shared with Indus Towers for further action.

u. RWA Engagements in Delhi: Meetings were held at Shanti Mohalla, Baghupuram, Secunderpur, Noida Sector 56, East Delhi and Eka Garden, Patpar Ganj, East Delhi with over 100 residents to address the fears on EMF in the colonies. Residents of Eka Garden were positive and had been further advised inspection of the radiation levels in their area by TERB Cell to convince them further. Residents of Shanti Mohalla were unwilling to listen to any scientific fact mainly due to low literacy rate of the residents. Details of the meeting were shared with Indus Towers Ltd. for further action. At Nagarjunas Apartments, EMF radiation limits were tested in front of the residents. The test results were shared with them and also displayed on their RWA notice board. The society residents were convinced of antennae emitting EMF within limits specified by the government. At Doctor’s Park, Vasundhara, Ghaziabad, sentiments of the residents could be successfully converted from negative to positive. At CR Park (March 15, 2015), an expert team of Doctor, Academician, COAI and Industry representatives addressed over 50 RWA representatives at EBD office, C R Park, New Delhi for EMF Advocacy. Not only were the residents convinced on the industry position and facts related to the EMF issue, further, requests were received for placement of 4 towers in the vicinity.

v. RWA Engagements in Mumbai: RWAs across Mumbai were engaged to address the misplaced fears of health effects of EMF emissions from mobile towers. A meeting was held at Machhimar colony with 60-70 residents to address the fears on EMF in the colony of fishermen. A local doctor was engaged to address the meeting. With tests of the signals and modifications, there was positive conclusion to the resident’s issue with tower installations in the colony. At BPT Colony, Worli, the residents wanted to know the guidelines for installation of towers which was intimated to them by the industry team. The meeting helped save 5 tower sites and further regular interventions were suggested to sustain the sites. Meetings were also held at Mukund - Teakwood Society, and Ghakorpur - Amrut Nagar - Marathon Cosmos Society, to address concerns of health and educate the youth. A panel of Doctor, PR Agency representatives and COAI representatives convinced the residents to eliminate their fear regarding EMF issues. The meeting helped save 5 tower sites. Due to media reports and concerns in HVB Academy, EMF Advocacy session was organised and testing of EMF emissions were carried out at HVB Academy, Marine Drive, Mumbai on 18th Nov 2014. The event was successfully coordinated. Influencers (Teachers, parents, etc.) were convinced and 1 tower site was saved. At Tilak Nagar, Chembur, Mumbai (8th March, 2015), approximately 137 RWA residents of the area were addressed on facts regarding EMF.
in order to carry out the activity in a more objective way
different matters, which is neither uniform nor consis-
that various CCAs are having their own interpretation on
and License Fee were made by COAI. It was highlighted
of deductions claimed through Statements of Revenue
process being followed towards verification of deduction
industry views on the issues, and in the matter of the
COAI also met with the officials during the meetings held
industry would participate, understand and discuss the
issue so as to resolve them on real time basis.
COAI also met with the officials during the meetings held
at DoT HQ / workshops conducted in few circles, to share
the industry views on the issues, and in the matter of the
process being followed towards verification of deduction
towards access charges and related assessment of License
Fees. In response to the representation made by COAI, the
DoT issued clarifications on the points mentioned by us.
However, many of the issues are still unresolved and being
followed up with the DoT.

GOODS & SERVICE TAX (GST): Various representations
were made on the issue of GST at centre as well as state
level and COAI is playing a supportive part in helping the
Government to introduce and implement a GST model
which will be industry friendly. During the meetings with
the government, we emphasised various points such as:
(a) Lower GST rate for telecom services, (b) Specific Place
of supply rules for Telecom services under the proposed
GST. (c) Seamless availability of Cenvat credits on Passive
Infrastructure such as towers, etc.

ANTI-DUMPING MEASURES RECOMMENDED BY THE
DIRECTORATE GENERAL OF ANTI-DUMPING AND AL-
LIED DUTIES (DGAD): The Anti-dumping measures re-
ommended by the DGAD in respect of import of
Synchronous Digital Hierarchy (SDH) transmission equip-
ment imported from China/Israel have adverse impact on
the industry. COAI sent a representation to the govern-
ment, stating that Higher Import Duties resulting in in-
crease in costs and imposition of anti-dumping duties will
adversely affect our member companies. We also in-
formed them that Telecom Operators in India need better
technology at competitive prices to make telecom services
available to rural and remote areas, which is in the greater
good of the country and would consequently boost the
country’s socio economic growth. It was conveyed that
while India is the world’s second-largest telecommunications
market; the industry is not devoid of its own internal
challenges such as fierce competition, security challenges,
consistent broadband connectivity, and consistent capital
influx requirement for technological up gradation.

SERVICE TAX
a. Time limit of six months for availing of Cenvat credit:
COAI had represented to the Finance Ministry that
imposition of restriction of six months for availing
Cenvat credit should be withdrawn/rescinded, or al-
ternatively the time limit of six month be increased to
at least eighteen months. Post our representations
and follow-ups, the credit Rules were amended w.e.f.
March 1, 2015, and the time limit of six months has
been increased to twelve months. The amendment
gives relief to industry for processing of invoices
within twelve months (instead of six months), includ-
ing those which are generally disputed.
b. Clarification on condition of six months for availing
Cenvat credit not being applicable to re-credits taken:
COAI had also requested that clarification be issued
by the government that the condition of six months
for availing Cenvat credit is not applicable to re-cred-
ts taken. Consequently, a Circular was issued on No-
ember 19, 2014, clarifying that the condition of six
months for availing Cenvat credit is not be applicable
to re-credits taken. If the amendment was not made,
then all the invoices in respect of partial reverse charge,
would be required to be paid within six
months, so as to avail CENVAT Credit of amount paid
by service receiver to the Government treasury, im-
pacting the working capital of our members and/or
causings financial loss (due to loss of CENVAT Credit).
c. Partial reverse charge mechanism (Provso (2) to
Rule 4(7) of CCR): We had requested the Finance Min-
istry that CENVAT Credit be allowed to be taken on re-
cipt of invoice and if payment is not made within 3
months, re-credit related conditions be extended
to such invoices. As a result, the Credit Rules were
amended w.e.f. April 1, 2015, and under a partial re-
verse charge mechanism, the suggestion from COAI
was accepted and enabled.

PRE-BUDGET RECOMMENDATIONS: Apart from the
above, COAI F&C Committee made representation to the
Finance Ministry by way of Pre Budget recommendations
and requested to consider the following points:
Issues Related to Direct Tax

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<tr>
<th>S.No.</th>
<th>Issue</th>
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<tr>
<td>1</td>
<td>Tax withholding on margins of intermediaries</td>
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<tr>
<td>2</td>
<td>Amendment in the definition of ‘Royalty’</td>
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<td>3</td>
<td>Tax benefit under section 80-IA not available to companies undergoing amalgamation or demerger after 31.03.2007</td>
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<td>4</td>
<td>Amendment in provisions of section 40(a)(ia) of the Act</td>
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<td>5</td>
<td>Expenditure on Specified Business under section 35AD</td>
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<td>6</td>
<td>Investment in new plant and machinery – Section 32AC</td>
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<td>7</td>
<td>Tax incentives to Telecom Infrastructure Service Providers</td>
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Issues related to Indirect Tax

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<th>S.No.</th>
<th>Issue</th>
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<tr>
<td>1</td>
<td>Amendment of registration/declaration related compliances in respect of concessional rate of central sales tax in respect of goods used in telecommunication network</td>
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<tr>
<td>2</td>
<td>Eligibility of Cenvat credit on all business related expenses</td>
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<td>3</td>
<td>Availability of Cenvat credit on statutorily mandated expenses</td>
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<td>4</td>
<td>Cenvat credit on removal of equipment used in telecommunication network</td>
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<td>5</td>
<td>Cenvat credit on removal of goods as waste and scrap by provider of service</td>
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<td>6</td>
<td>Cenvat credit on SIM Cards – as capital goods</td>
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<td>7</td>
<td>Ambiguity regarding Cenvat credit retention in case of impairment of assets</td>
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<td>8</td>
<td>Dual levy – Entertainment tax and Service tax</td>
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<td>9</td>
<td>Exchange rate to be applied in case of import of service</td>
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<td>10</td>
<td>Exorbitant interest rate applicable only for service tax</td>
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COAI Reports & Papers for Year 2014-2015

COAI POSITION PAPER ON TV WHITE SPACES: COAI had prepared a position paper on TV white spaces in March 2015. The paper describes what TV white spaces are, provides a global outlook on the topic, gives details about spectrum bands in India and finally provides the COAI position on the topic. It states that any spectrum that is to be used for commercial licensed services based access services, should be auctioned. In light of this, the TVWS should not be made available to a section of service providers in any other manner. It is important to maintain a level playing field amongst service providers facilitating similar services. Internationally, there is no standard on TVWS as of now. Lack of availability of a single, well-standardized technology solution, usable in all nations/regions, leads to lack of economies of scale and related high costs for network and user equipment due to needed customization of proprietary solutions, e.g. for a single or few markets. The risks of adopting an unproven approach are too high. Operations on such secondary unlicensed basis would require careful interference, avoidance towards primary users, as well as services in adjacent bands. Internationally, there is no standard on TVWS as of now.

COAI POSITION PAPER ON NATIONAL OPTICAL FIBRE NETWORK (NOFN): COAI had prepared a position paper on NOFN in March 2015. The paper describes what the Government’s vision on NOFN was, why it did not work in the first phase, what the Government has planned in the second phase, and finally, provides the COAI position on the topic. It states that as the extensive fibre network is already available with the TSPs, they would be willing to share the same with the DoT for NOFN, on mutually agreeable & commercially viable terms and conditions. Exact commercial terms & conditions will vary from location to location, depending on topography, availability, and market conditions, which may be discussed at the time of implementation at various locations. NOFN should aggregate and offer both dark fibre as well as the bandwidth. It was also stated that besides laying out the NOFN or similar such projects, what will be equally important is an accompanying institutional mechanism that will enable cost based, non-discriminatory access to NOFN. The physical access to the network should be enabled through a single window mechanism with stipulated time frames that will ensure increased usage from all operators and higher usage of NOFN. It is important to take these steps right now so that a viable and sustainable model is created which is usable, otherwise, the NOFN will keep lying idle with no takers.

COAI Submission to PMO

AVAILABILITY OF SPECTRUM: COAI made several representations to the Government including PMO, DoT, TRAI and various other ministries regarding the shortage of spectrum and its repercussions. It was submitted that the inventory of spectrum for the auctions held in March was severely depleted and unless immediate steps were taken on an urgent footing to make available adequate spectrum in the auctions, there would be a very real danger that there will not be sufficient spectrum on offer at the auction to meet the broadband objectives of the Government or even, in fact for the extension licensees to enable cost based, non-discriminatory access to NOFN or similar such projects, what will be equally important is an accompanying institutional mechanism that will enable cost based, non-discriminatory access to NOFN. The physical access to the network should be enabled through a single window mechanism with stipulated time frames that will ensure increased usage from all operators and higher usage of NOFN. It is important to take these steps right now so that a viable and sustainable model is created which is usable, otherwise, the NOFN will keep lying idle with no takers.

COAI Submission to TRAI

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COAI Submission to Ministry of Defence

AVAILABILITY OF SPECTRUM: COAI made several representations to the Government including PMO, DoT, TRAI and various other ministries regarding the shortage of spectrum and its repercussions. It was submitted that the inventory of spectrum for the auctions held in March was severely depleted and unless immediate steps were taken on an urgent footing to make available adequate spectrum in the auctions, there would be a very real danger that there will not be sufficient spectrum on offer at the auction to meet the broadband objectives of the Government or even, in fact for the extension licensees to enable cost based, non-discriminatory access to NOFN or similar such projects, what will be equally important is an accompanying institutional mechanism that will enable cost based, non-discriminatory access to NOFN. The physical access to the network should be enabled through a single window mechanism with stipulated time frames that will ensure increased usage from all operators and higher usage of NOFN. It is important to take these steps right now so that a viable and sustainable model is created which is usable, otherwise, the NOFN will keep lying idle with no takers.
FEE AND SPECTRUM USAGE CHARGES:

In its response to TRAI CONSULTATION PAPER ON DEFINITION OF REVENUE BASE (AGR) FOR THE RECKONING OF LICENCE FEE AND SPECTRUM USAGE CHARGES, COAI submitted its response to the consultation paper and the key points highlighted by COAI were:

a. Regulator needs to move towards a regime of forbearance with regard to QoS for Mobile & Fixed line services.
b. TRAI should move towards light touch regulation with regard to QoS and aim to progressively reduce the QoS parameters being reported by Mobile operators.

d. Subsequently, credit shall be allowed for LfDS (Licence fee Deduction at Source) paid by a TSP, for its termination costs and roaming charges paid to international operators.

c. For avoidance of double levy, the GR should be adjusted by all pass through charges payable by one TSP to another, and pass through charges for inter-operator termination costs and roaming charges paid to international operators.

d. Subsequently, credit shall be allowed for LfDS for Mobile & Fixed line services issued on May 21, 2014:

TRAI CONSULTATION PAPER ON DEFINITION OF REVENUE BASE (AGR) FOR THE RECKONING OF LICENCE FEE AND SPECTRUM USAGE CHARGES: In its response to TRAI CONSULTATION PAPER ON DEFINITION OF REVENUE BASE (AGR) FOR THE RECKONING OF LICENCE FEE AND SPECTRUM USAGE CHARGES, COAI made the following submissions:

a. Gross Revenue (GR) should be only from licensed activities.
b. GR should be explicitly defined to exclude the “Negative list” of revenue/income/gain listed.
c. For avoidance of double levy, the GR should be adjusted by all pass through charges payable by one TSP to another, and pass through charges for inter-operator termination costs and roaming charges paid to international operators.
d. Subsequently, credit shall be allowed for LfDS (Licence fee Deduction at Source) paid by a TSP, for its expenses payable to other TSPs. (This would be GR for the other TSP).
e. For administrative convenience, and to avoid the arduous mechanism of verification/validation of the credit adjustment, use the principle of Licence fee Deduction at Source (LfDS) and with payment details to be posted in a central repository portal like the NSDL (similar to TDS as adopted by the Income-tax department).
f. Adjustment for credit would only be eligible on payment of LfDS and to international telecom operators; as discussed in point (e) above.

g. The above highlighted administration (filing of returns, payment of licence fees and the submission of proof of payments) done centrally, shall bring in uniformity of the procedures across the service area.
h. Setting up rules for assessment proceedings in line with other financial Acts and define the governance process.

COMMON INDUSTRY MECHANISM FOR DE-ACTIVATION OF DATA SERVICE: On September 19, 2014, the Industry submitted an option for a customer friendly mechanism to deactivate data service through a common short code to TRAI. A common short code for deactivation of data services was made available by all the operators, which is accessible through any of the commonly used self-service options like SMS or IVR.

TRAI’S DRAFT AMENDMENT TO THE TELECOMMUNICATION TARIFF ORDER (TTO), 1999: ON EXEMPTION FOR SMALL INTERNET SERVICE PROVIDERS (ISPs) FROM TARIFF REPORTING REQUIREMENT: In its response to the TRAI draft TTO, COAI made the following submissions:

a. TRAI needs to make the current tariff filing regime simpler for all the licenses in general.
b. There should not be any financial disincentive on delayed tariff filing.

Consequently, TRAI is to issue a fresh TTO which would include all the amendments till date.

DRAFT TELECOMMUNICATION MOBILE NUMBER PORTABILITY (SIXTH AMENDMENT) REGULATIONS, 2015:

COAI made a joint submission along with AUSPI to TRAI on the draft Regulation of MNP. The key submissions are as below:

a. The implementation date for the Implementation of Full MNP in India be to 8 months from the release of the final Regulations by TRAI. Accordingly, TRAI may kindly modify the date of the compliance to the said Regulation, i.e. “May 3, 2015”.
b. TRAI to kindly prescribe for the 30 days’ notice period to be given by the RO to the subscriber for the payment of the dues to the DO.
c. With regard to the handling of the ownership related issues, there is no need to take the undertaking from the customer as the current CAP already has provision for the customer liability for the correct information.
d. We also recommend that the Port-in (activation by RO) & Port-out (deactivation by DO) TAT should be revised to include slabs such as:

- i. >95% in 2 hours TAT
- ii. >98% in 3 hours TAT

TRAI CONSULTATION PAPER ON MIGRATION TO IP BASED NETWORKS: COAI made the following key submissions on the TRAI consultation paper on IP networks:

a. COAI has consistently maintained that migration to IP based interconnection is an ongoing process, and that this evolution/progression should be allowed to take place naturally based on the business plans and strategies of respective TSPs.
b. COAI has also consistently maintained that any forcible or mandatory migration to IP based networks/interconnection is not desirable as investments have been made, agreements signed and interconnection established based on the classical TDM based networks.
c. COAI maintains that TDM and IP based networks should be allowed to co-exist and operators be given the flexibility to migrate/evolve to IP based networks based on their own commercial and business strategies.
d. COAI believes that Wholesale interconnect costs and charges include an entire range of elements and costs, of which IP based interconnection is only a very minuscule element. We therefore do not expect IP interconnection to have any significant impact on any IUC cost.

c. Domestic Network Charges

CoAI believes that there is no need to review the QOS framework at this stage and the existing regulatory framework should be allowed to continue.

COAI Submissions to TRAI

TRAI CONSULTATION PAPER ON ‘REVIEW OF THE STANDARDS OF QUALITY OF SERVICE OF BASIC TELEPHONE SERVICES (WIRELINE) AND CELLULAR MOBILE TELEPHONE SERVICES’ ISSUED ON MAY 21, 2014: COAI made the following key submissions:

a. Regulator needs to move towards a regime of forbearance with regard to QoS for Mobile & Fixed line services.
b. TRAI should move towards light touch regulation with regard to QoS and aim to progressively reduce the QoS parameters being reported by Mobile operators.

c. For avoidance of double levy, the GR should be adjusted by all pass through charges payable by one TSP to another, and pass through charges for inter-operator termination costs and roaming charges paid to international operators.

d. Subsequently, credit shall be allowed for LfDS (Licence fee Deduction at Source) paid by a TSP, for its termination costs and roaming charges paid to international operators.

c. Domestic Carriage Charge

The charge should be uniform across geographies.

d. Domestic Call Charges

ii. This will help enhance foreign exchange earnings.

ii. The charge should be uniform across geographies.

c. Domestic Carriage Charge

Given the prevailing competition in the market and the fact that rates are already below the ceiling, the Authority should continue with the uniform carriage charges ceiling of 65 paisa.
In its re-
SIXTIETH AMENDMENT) ORDER, 2015”:
TRAI “THE DRAFT TELECOMMUNICATION TARIFF submitted there is no need for TRAI to further reduce the response to the TRAI draft TTO on Roaming charges, COAI
AMENDMENT) REGULATIONS, 2014”:
COAI in its re-
SIXTIETH AMENDMENT) REGULATIONS, 2012 – MINIMUM DOWNLOAD SPEED: TRAI had issued a paper specifically on Amendment for minimum download speed to be communicated to the customers. It was submitted that the concept of “minimum download speed” cannot be there in a multiple access scenario due to the technical problems of clutter, interference, fading, path losses, etc., and the same cannot be communicated to subscribers. Moreover, communication of such minimum download speed, if advertised, will create confusion in the market leading to customer dissatisfaction. Despite similar comments from all the stakeholders, TRAI mandated a certain minimum download speed vide a regulation. A letter from COAI as well as a joint letter from CEOs of all AUSPI & COAI members were sent to TRAI stating that publishing the minimum download speed would create
TRAI DRAFT “THE STANDARDS OF QUALITY OF SER-
VICE OF BASIC TELEPHONE SERVICE (WIREFLINE) and CELLULAR MOBILE TELEPHONE SERVICE (FOURTH AMENDMENT) REGULATIONS, 2014”: COAI in its re-
SIXTIETH AMENDMENT) ORDER, 2015”:
TRAI CONSULTATION PAPER ON “DELIVERING BROADBAND QUICKLY: WHAT DO WE NEED TO DO”: In its response to the TRAI consultation paper on “ Delivering Broadband Quickly: What do we need to do”, COAI submitted that it supports the TRAI’s vision to achieve accelerated, affordable & ubiquitous broadband access across the length and breadth of the country. We believe that all citizens of India should have access to broadband and the transformative opportunities it offers. It is to be kept in mind that although taking broadband to rural areas is challenging; an even bigger challenge is the lack of broadband in key Tier 1 cities where there is an existing demand. The immediate requirement is to bring in the synergies to live up to the expectations set by the Government. For this, the first and foremost step is to do a reality check on where the sector is now and the targets that are to be met. Consequently, realistic measures are to be devised to meet these targets. COAI also submitted detailed response on all the issues including impediments to growth of wireless technologies, demand issues, RoW challenges and the critical need for spectrum for growth of broadband in the country.
AMENDMENT IN STANDARDS TO THE QUALITY OF SERVICE FOR WIRELESS DATA SERVICES REGULA-
TIONS, 2012 – MINIMUM DOWNLOAD SPEED: TRAI had issued a paper specifically on Amendment for minimum download speed to be communicated to the customers. It was submitted that the concept of “minimum download speed” cannot be there in a multiple access scenario due to the technical problems of clutter, interference, fading, path losses, etc., and the same cannot be communicated to subscribers. Moreover, communication of such minimum download speed, if advertised, will create confusion in the market leading to customer dissatisfaction. Despite similar comments from all the stakeholders, TRAI mandated a certain minimum download speed vide a regulation. A letter from COAI as well as a joint letter from CEOs of all AUSPI & COAI members were sent to TRAI stating that publishing the minimum download speed would create
TRAI also requested TRAI to engage with the Industry on re-visiting some of the Network Related and Con-
sumer related Benchmarks, through a holistic con-
sultation process.
TRAI “THE DRAFT TELECOMMUNICATION TARIFF SIXTIETH AMENDMENT) ORDER, 2015”: In its re-
response to the TRAI draft TTO on Roaming charges, COAI submitted there is no need for TRAI to further reduce the ceiling for national roaming tariffs.
COAI Submissions to DoT
AVAILABILITY OF INTERFERENCE FREE CLEAN SPECTRUM: There was heavy interference in the 2100 MHz spectrum, allocated to our member operators in certain LSAs through auction in April 2010. COAI submitted to the DoT that the delay in resolution of this interference issue is adversely affecting the desired 3G expansion/roll out plans of the TSPs in these areas, which means considerable and con-
tinuous drain of the operational cost and huge potential revenue loss. The industry also requested the DoT that before putting the 3G blocks for auction, the interfered spectrum of existing operators needs to be resolved and these opera-
tors be allocated an equal amount of interference free band for providing adequate quality of 3G services in these service areas. Despite TRAI advising that spectrum being put to auc-
tion should be free from interference, the DoT has wrongly stated that spectrum is being auctioned on an ‘as is where is’ basis. In its responses to the queries raised by the stake-
holders, DoT again stated that the spectrum being auc-
tioned is on ‘as is where is’ basis. It was submitted that the DoT is obliged to allot clean, interference free and usable spectrum to the operators. In fact, the NFAP which is for-
mulated in line with the Radio Regulations of the ITU in order to cater to newly emerging technologies as well as to ensure equitable and optimum utilization of the scarce lim-
ited natural resource of radio frequency spectrum, also states that interference issues need to be resolved.
ALLOCATION OF MICROWAVE SPECTRUM: Our mem-
ers faced the problem of non-allocation of microwave backhaul spectrum post the auctions. The issue was taken up with the DoT stating that timely and adequate allocation of microwave access and backhaul spectrum is critical to faster and comprehensive telecom rollouts across the coun-
try. It was highlighted that microwave carriers are support infrastructure for radio spectrum. Any delay in allocation of microwave carriers leads to delay in rollout of services too, which are very stringent for operators and are also time bound. In the absence of microwave carriers, it is becoming very difficult for operators to meet the rollout obligations in a timely manner. The delay in allotment/reallocation of ex-
isting microwave carriers is hampering the roll-out of net-
work, impacting the quality of service to existing customers and leading to demurrage charges on account of non-avail-
ability of import licenses, etc. The Government was re-
quested to expedite the allocation of microwave access and backhaul spectrum and thus, request allocation of mi-
crowave carriers associated with auctions at an early date.
TELECOM SECURITY COUNCIL OF INDIA (TSCI): The li-
ence amendment on security issued by DoT in May 2011, suggested setting up of a TSCI. The industry deliberated on the issue and the Licensees unanimously agreed that the TSCI should be structured on the lines of the very suc-
cessful model of ACT (Apex Advisory Council for Telecom in India). ACT has been working very effectively since many years, resolving issues related to subscriber verifica-
tion and security, between various stakeholders like TSPs, DoT & MHA. The aim of the TSCI is to be a voluntary forum for increasing the telecom network security assur-
ance levels and share common issues as appropriate. All the licensees who have a clause in their license suggesting the setting up of a TSCI would voluntarily endeavor to par-
ticipate in this forum. The TSCI will constitute committees and working groups, as and when required. The partic-
pants will include all licensed telecom service providers including DoT and Government nominated members. Ac-
cordingly, a proposal on these lines has been submitted to DoT jointly by ACTO, AUSPI, COAI and ISPBI.
The DoT has recently formed an eight-member expert committee on NOFN to accelerate the project and connect all Gram Panchayats by December 2016. The committee members include: J Satyanarayana, former Secretary, Deity; Kiran Karnik, former President, NASSCOM; Som Mittal, former President, NASSCOM; Rajat Moona, Director, CDAC New Delhi; Prof S Sadagopan, Director, IIIT Bangalore; Anil Bhargava, Member- In-Charge, Technology, DoT; Aruna Sundararajan, Administrator, USO Fund; and V Umashankar, Joint Secretary, DoT. The committee will perform the following tasks:

a. Consult with state governments, industry and other stakeholders on suitable technology options, relevant business model and timely implementation of NOFN.

b. Suggest measures for augmenting the current design and architecture of NOFN in line with the vision and objectives of Digital India.

c. Recommend implementation strategy so that provisions of broadband connectivity are accelerated to connect all gram panchayats by December, 2016.

d. Recommend suitable technology options for fast track and cost effective implementation. It will also recommend an effective and empowered structure and mechanism for implementation of NOFN in mission mode.

e. Assess relevant business model for effective utilization of bandwidth created under NOFN. All this will help all stakeholders and will also help NOFN project completion on time.

COAI, in a joint submission along with AUSPI, has submitted its response to the queries raised by the Committee.

**PROPOSED NATIONAL BROADBAND POLICY:**

The DoT sought inputs from the industry on the Proposed Right of Way Policy that the Government is working on. COAI, along with AUSPI and TAIIPA, made a detailed submission to the Government on the issue. The DoT has set the Agenda for Digital India recently and the NTP-2012 also enunciates the need to review and simplify sectoral policies on Right of Way for laying cable network and installation of towers, etc. for facilitating smooth coordination between the service providers and the State Governments/local bodies. Details were provided to the DoT on the charges imposed by different State Governments for OFC as well as installation of towers. Also, detailed submissions along with actionable suggestions were made on erection/installation of towers, laying of OFC, and installation of telecom infrastructure in all real estate developments, buildings and town planning.

**DIGITIZATION INITIATIVES IN TELECOM SECTOR:**

A sub-committee was made to the Government stating that the Tele- com sector can contribute meaningfully and substantially in the digitization drive. There are various processes at DoT which can be simplified to save on the resources, papers and man-hours, and will directly help promote efficiency in faster clearances, lead to considerable customer convenience, transparency, simpler processes, and cost savings. The digitization of these initiatives have been long overdue and is the need of the hour. It was highlighted that despite having online systems for many approvals, DoT still insists for duplication of the process through prints and submission of paper. The efficiencies of an online process gets immediately negated the moment the whole process is duplicated through an offline mode, entailing submission of hard copy paper printouts. A paperless approach should be followed in paperless activation of telephone connections, e-bill instead of paper bill given to postpaid customers, online submission of EMF self-certificates and online SACFA and WPC clearances.

**3G INPUT POWER:**

BTS Transmit power guidelines for the mobile networks were introduced in 1995, when GSM was the most common network. Since then, technologies have evolved. However, the transmit power regulation has not been reviewed and the same norms are being followed for all new technologies such as 3G and LTE. The current guidelines of RF power from DoT on transmit power (RF) from the BTS is 20W at the output of the BTS port. This is a common guideline for all types of technologies deployed in the network like GSM, CDMA, WCDMA and LTE (reference DoT letter number L-14035/08/2010-BWA, dated 15th Sep 2010). In addition, strong EMF regulations (1/10th of ICNIRP values) have been released for compliance by TSPs to ensure radiations from the base stations are kept under limit. These guidelines also govern the transmission power of the base station, thus creating dual conditions of compliance. Given that the new broadband technologies introduced beyond 2010 are having different characteristics like frequency band, MIMO, wide band spectrum usage, etc., it is pertinent for these regulations to be revised by the DoT. A paper was submitted to DoT/TEC to allow higher transmit power & EIRP limits for 3G & 4G base stations as they operate on wider carrier bandwidth & discontinuous transmission modes, and at the same time EMF (EIRP/EIRPb) emitted from 3G & 4G BTS is much lower than GSM technology.

**STANDARD FORMAT OF SUBMISSION OF SELF-CERTIFICATES FOR EMF COMPLIANCE BY THE TELECOM SERVICE PROVIDERS TO THE TERM CELLS:**

Many Circle TERM Cells were demanding additional inputs over and above the recommended standard format for self-certificates in the reference TEC Test procedure. It was submitted to the DoT that DoT and the Telecom Industry together are involved in the development of a National Portal to automate the entire EMF compliance certification and compliance process. The portal would generate an automated certificate in a standard format recommended by the DoT. It is imperative that we have a standard format to be followed uniformly across all circles in the country in order to facilitate automation of certificate generation by the National EMF Portal. A standard format to be followed was submitted to the DoT and TEC to be followed uniformly across all the circles.

**EXEMPTION OF TELECOM COMPANIES FROM CORPORATE SOCIAL RESPONSIBILITY (CSR) SPENDING AS MANDATED UNDER THE COMPANIES ACT:**

Following submissions were made by COAI on the issue:

a. The telecom sector has emerged as a key driver of economic and social development in India in the last decade and will continue to be so in the future.

b. DoT too recognizes telecommunications as an essential service and its role in socio-economic development of the nation, and has in fact termed telecom infrastructure as lifeline installation and a critical infrastructure.

c. Further, GOI, through the Ministry of Finance has recently granted the telecom infrastructure industry a status of Infrastructure and added it in the Harmonized Master List of Infrastructure. Telecom and Tele- com services have also been included in the harmonized master list of infrastructure sub-sector.

d. However, the sector is facing huge financial and growth challenges which have to be addressed for the overall socio-economic growth of the country.

e. Huge investments are required to meet the unfinished connectivity & the broadband agenda of the Government.

f. In view of the above, COAI requested the DoT to approach the Corporate Affairs Ministry for exempting telecommunication companies from Corporate Social Responsibility (CSR) spending as mandated under the Companies Act.
ISSUES PERTAINING TO THE INTERNATIONAL TELECOM TARIFF FOR SAARC COUNTRIES: COAI made the following key submissions on the issue:

a. The blended termination rate paid by Indian operators is around INR 3.50/min for outgoing international calls compared with the INR 0.40/min termination rate received on international incoming calls from SAARC countries. Thus, the Indian operators’ cost towards termination charges is much higher in comparison to the revenue earned by them in the form of termination charges paid by foreign operators. Indian operators are constrained to recover the same from outgoing ILD calls. This has been projected to the TRAI.

b. Further, there is traffic imbalance between the incoming and the Outgoing minutes with the international traffic in the order of 5:1. The low termination charge of INR 0.40/min is the cause of significant imbalance in payments in international settlements. Rationalizing the termination charges for the incoming international calls will also increase India’s foreign exchange flows.

TRAI should review and consider an increase in the termination rate for the incoming international calls. The increased termination rates of the ILD calls will help to reduce the pricing arbitrage currently existing in favour of operators in the SAARC region which has built up over the years. This will reduce the pricing arbitrage currently existing in favour of operators in the SAARC region which has built up over the years.

DRAFT NATIONAL TELECOM M2M ROADMAP: COAI made the following key submissions on the draft national Telecom M2M Roadmap issued by the DoT:

a. Registration of M2M Service Provider: To avoid fragmentation in the market, care should be taken that M2M Service Providers (MSP) should not be a separate category of service providers. The entity providing the M2M services should be treated as the VAS provider.

b. KYC Norms for M2M services: M2M SIM will primarily be used for data transfer using private APNs. M2M SIM will interact only with the IP address of a fixed server(s) configured in the system by the TSP. The M2M SIM, if using SMS or Voice, would be ring fenced to be able to communicate only to a fixed number. If Voice is enabled it would only be outgoing. With the above set of guidelines the M2M SIM would be incapable of being misused. Therefore the KYC guidelines need not be as stringent as for the P2P/Human SIMs.

c. Permanent International Roaming: There is no need to make a new distinction between temporary roaming vs. permanent roaming.

d. SIM Transfer: System Integrator (SI) plays a key role in the M2M eco-system, who may deploy M2M SIMs on behalf of another entity. The TSP’s CA & Billing arrangement would be with the SI. This arrangement should be permitted and should not be considered as the SIM being transferred. Further, in case of a B2B M2M deployment, the further sale of the larger unit, the CA & Commercial terms would be between the TSP and the entity (and not the individual custodian of the M2M SIM).

e. Security issues: COAI suggests that all B2B/organized (known) B2C. M2M devices should be connected either at MPLS/VPN or should have the restricted communication capabilities to avoid any unauthorized access to the devices from the rest of the public communication networks. Further, there is a need to dis-incentive such kind of M2M usage which may lead to overload of signaling resources/ networks. The TSPs should also be allowed to block any/all such activities from M2M machines to protect their QoS in the network. There should be a mechanism for testing and certification of M2M devices to ensure that such devices are safe to connect.

f. Location and Connectivity guidelines: As M2M market landscape is connected with various global platforms to analyze machine data, the data should be permitted to be allowed to reside in the servers within India as well as abroad. While COAI encourages that the location of the servers should be India, it would like to submit that the same should not be mandated.

M2M Spectrum requirement: COAI feels having a dedicated network for M2M will not be commercially viable and therefore M2M services have to be part of the presently rolled out commercial network by various TSPs. So, there is no justification for allocation/reservation of any spectrum for M2M services.

h. M2M Numbering Plan: COAI is of the view that to resolve the shortage of ten digit numbers, the M2M SIMs can be identified on the basis of IMSI only. This will give enormous capacity of numbering series for use in M2M communication.

i. M2M national Roaming requirements: With regard to the roaming charges for inter-circle roaming, COAI would like to submit that TRAI has already released its regulation on National Roaming, wherein TRAI has mandated the telecom service providers to offer special plans for roaming subscribers, in which, such subscribers can avail of partially free roaming, or fully free roaming in lieu of payment of fixed charges. Thus, we are of the view that the same should be left for the determination by TRAI.

j. M2M MVNO: MVNO requires full-fledged telecom license. TRAI is already in a process of consultation on MVNO. COAI believes that this is not a requirement for creating a separate category of MVNO for M2M services. M2M providers, acting as B2B customers, can always buy/lease bulk SIMs and install those into the devices and pay for it to the licensed service providers. Thus, if a consumer electronics manufacturer wants to install SIMs into the home appliances, they can procure the bulk SIMs from any of the license service providers and pay for the services on any of the terms.

Submission to ITU

IDENTIFICATION OF ADDITIONAL BANDS FOR IMT: The discussions have been taking place at various ITU forums regarding identification of additional bands for IMT services. With the increase in data services around the world, there is an increasing need to make more spectrum available for IMT services. COAI has been actively involved in this and had been making papers along with Indian Government for submission at ITU level and also aligning other countries of our region to adopt a common approach for harmonization. The new bands that have been proposed for this are:

- Sub-700 MHz (470-698 MHz)
- L band: 1350-1400 MHz and 1427-1518 MHz
- 2.7-2.9 GHz
- C band: 3.4-4.2 GHz

Submission to DoT

DRAFT INTERNET OF THINGS (IOT) POLICY DOCUMENT: COAI made the following key submissions on the draft IoT policy document issued by DoT:

a. Government needs to facilitate the resolution of the immediate/short term regulatory and policy related issues, for e.g. current guidelines for the telecom services are defined based on human centric communication, this might act as a bottleneck for the take up of the IoT/M2M services having limited human intervention and wherein the current guidelines will not be applicable.

b. Policy should lay emphasis that a Light touch regulatory approach is followed for the IoT/M2M services.

c. IoT policies that would restrict trade in telecommunications equipment and disrupt the global trading system need not be adopted. Both domestic and foreign players to be treated equally.

d. There should be flexibility to innovate and the use of voluntary consensus-based standards. Country-specific standards should be avoided.

e. There is no “one size fits all” solution to addressing needs across the diverse applications that fall under the IoT. Hence, the government should not play a role in determining the future design and development of technology for IoT.

f. International best practices should be recognized as the necessity of the success of the IoT.

Emphasis for infrastructure sharing for optimum usage of resources and to reduce the cost. Emphasis should be on convergence of services/devices/networks.

h. Synchronization of policy frame work on the same subject from various departments/ministries involved so as to avoid any confusion.

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COAI Media Desk

COAI's role as the leader of the industry has been further strengthened, with the Association leading the industry issues at all relevant forums for the member companies. Increasingly, COAI is becoming the most sought after information repository for telecom related data. The Association has emerged as an amiable and approachable entity, with proficiency and expertise in any and every aspect of the telecommunications sector and its technologies. From, media, to government, analysts to common people, COAI is increasingly being approached with all kinds of queries related to the industry; ranging from 3G-4G, to budget implications, addressing queries related to EMF providing insights on the critical spectrum requirements of the country, projecting the outlook for the sector and its performance in the future, etc.

The most significant activity for the industry in the FY was the spectrum auction, which garnered an amount of INR 1098.74 billion (US$ 17.54 billion). COAI was actively involved throughout the auction process and several representations were made by the Association on behalf of the industry, chiefly on the pricing and quantum of spectrum being offered for auction. While the recommendations of the Association did not materialize as the government went with its own thought process on the auction, the industry’s representations were found to be rational and true, as they were seconded by several credible industry analysts and experts, and above all, reverberated by the Trai itself in its recommendations.

At the same time, COAI also played the leading role in reaching out to various stakeholders in order to address and allay the misplaced fears in the minds of people regarding the EMF emissions from the antennae on mobile towers and handsets. The Association doubled its efforts to reach out to the people at the ground level and engage the relevant govt. departments, media, medical professionals, academia and consumer representative groups, to engage and educate them on the facts associated with the issue. In joint efforts with the government and other industry associations, COAI was successful in establishing a line of communication with the various important stakeholders and convince them on the more than adequate safety regime adopted by the Govt. and ensured by the industry. Ranging from Multi-Stakeholder Seminars to grass-root level RWA meetings, the industry, led by COAI, has been at the forefront of the efforts to dispel the myths created by misguided activism fuelled by vested interests. Further, the Association has initiated a perception study on the issue across India in order to understand the public concerns and address them thereon.

Few of the significant activities wherein COAI has achieved widespread media attention are as follows

SPECTRUM AUCTIONS (MARCH 2015): COAI expressed disappointment over the exorbitant winning price points for the operators at the latest spectrum auctions and stated that the increased financial burden will lead to the industry’s cost structure being changed drastically. Hence, the operators will not be left with much choice but to increase the tariffs so as to meet the financial commitments to the government. Further, in response to the government’s statement that the industry’s indicated rise in tariffs is a “misplaced notion” and that tariffs will not increase beyond 1.3 paise per minute, COAI stated that it is confusing for the industry, that after taking all the factors such as inflation, high spectrum costs, high cost for equipment and substantial regulatory costs, combined with low returns; how a hike of 1.30 paise/minute in tariffs would address the industry’s financial woes, and how it will be a sustainable solution for the industry. The association further stated that while the industry would be happy to review and understand the numbers presented by the Government, the industry position on the matter remains consistent. COAI received wide media coverage valued at over INR 2.8 crore.

SCREENING OF ‘EMF ADVOCACY FILM’ AND ‘EXPERT SPEAK VIDEOS’ IN PUNE: COAI organised media screening of ‘EMF Advocacy Film’ and ‘Expert Speak Videos’ in Pune on 26th Aug 2014. Dr. Mehool Mehta, leading oncologist from Mumbai and Mr. T R Dua of TAIPA were present as speakers. Shri Vineet Kumar Mathur, DG (TERM), DoT also participated and interacted with the media. 32 media exposures were achieved.

DOORDARSHAN PROGRAMME ON EMF IN TELUGU: A 45 min program was recorded for further telecast by Doordarshan Hyderabad in Regional language with Dr. T H Chowdhary, DG (TERM) - Mr. Kiran Kumar and COAI. A positive message was communicated through the program that COAI’s role as the leader of the industry has been further strengthened, with the Association leading the industry issues at all relevant forums for the member companies. Increasingly, COAI is becoming the most sought after information repository for telecom related data. The Association has emerged as an amiable and approachable entity, with proficiency and expertise in any and every aspect of the telecommunications sector and its technologies. From, media, to government, analysts to common people, COAI is increasingly being approached with all kinds of queries related to the industry; ranging from 3G-4G, to budget implications, addressing queries related to EMF providing insights on the critical spectrum requirements of the country, projecting the outlook for the sector and its performance in the future, etc.

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EMF compliance has been followed by all operators and India has one of the best standards globally. The discussion was broadcast on 16th August 2014 in DD Telugu.

PANEL DISCUSSION ON TOWER INSTALLATION WITH ACTIVISTS: A panel discussion on ‘Is Reliance Jio killing Mumbai’s open spaces?’ was held in Mumbai on 3rd March 2015. Mr. P Ramakrishna from COAI represented the industry in a panel consisting of Nayna Khatpalia, P.K. Das, Justice S. Radhakrishnan and Prakash Munshi. More than 10 media came for the event. News appeared in 6 publications.

RELIANCE JIO JOINS COAI AS CORE MEMBER AND FACEBOOK JOINS AS ASSOCIATE MEMBER: COAI announced the strengthening of its membership with Reliance Jio Infocomm Limited joining the Association as a Core Member; and Facebook joining in as an Associate Member.

INDUSTRY EFFORTS TO RESTORE CONNECTIVITY IN VIZAG AFTER CYCLONE HUDHUD: The industry united in its efforts towards restoring connectivity in the affected parts of Andhra Pradesh, post the destruction caused by the cyclone Hudhud. The industry shared the initiatives taken by the industry and made the media aware of the status and progress in connecting the distressed people in the affected areas.

TRAI RECOMMENDATIONS ON SPECTRUM AUCTIONS: COAI welcomed the TRAI’s recommendations for the spectrum auctions which were clearly beneficial to the consumers and the future developments for the mobility industry in the country; and in line with the industry representations for the same. TRAI’s acknowledgement of the primary necessity of adequate quantum of spectrum for the development of the communications services and effective deployment of mobile broadband technologies in India was deeply appreciated by the industry, along with other rational considerations by the regulator.

ACADEMIC COMMUNITY APPEAL TO GOVT. FOR FACILITATING RESEARCH AND ENTREPRENEURSHIP IN TELECOM: COAI endorsed the appeal by Professors from IITs, IIM, and IISc to the Government of India, to urgently set up and operationalise Telecom Research and Development Fund (TRDF) and Telecom Entrepreneurship Development Fund (TEDF) to encourage research and entrepreneurship in the Indian Telecom industry.

GOVERNMENT OF KERALA’S DECISION TO SANCTION INSTALLATION OF TELECOM TOWERS ON GOVERNMENT LAND AND BUILDINGS: COAI welcomed the Kerala Government’s decision to permit installation of telecommunication towers on government land and buildings in the State. COAI stated that the decision from the Kerala government is in keeping with the recent Kerala High Court decision stating that mobile tower installations, when confirming to the DoT safety norms, are safe. COAI also thanked the Kerala Government for its visionary leadership to make Kerala one of the leading IT destinations for the country.

MADRAS HC JUDGEMENT AND MOC&IT’S STATEMENT ON GOVERNMENT SAFETY NORMS FOR EMISSIONS FROM MOBILE TOWERS AND HANDSETS SAFE: COAI hailed the judgement from the Madras High Court, which refused to order stalling of growth of mobile phone towers stating that in the absence of evidence to prove health hazards from mobile phone towers, courts cannot pass any order. COAI also welcomed the statement of the Hon’ble Minister for Communications and IT in the Rajya Sabha, clarifying that fears of mobile towers being hazardous to health are not true. A press release was issued on the same which was well covered by the media with over INR 57 lakhs worth of coverage.

UNION BUDGET 2015-16: COAI, through a press release and media interactions, expressed disappointment over the Union Budget proposals for 2015-16, stating that they do not address the requirements of the Indian Telecom sector. The Association stated that while a few proposals in the Union Budget may help growth of telecom and broadband, overall, the industry’s concerns and submissions have been left unanswered. With the Government’s thrust on the Digital India initiative, a more supportive budget was expected for the Telecom sector.

MULTISTAKEHOLDER WORKSHOP IN COORDINATION WITH ITU: The ITU-T provided India with the opportunity to host the meeting of the SG5 on “Environment and Climate Change”. The DoT organised the same in coordination with COAI, ICA and TAIPA. COAI organised a round table on “Mobile Telephony and Public Health” on EMF issues in the second half of 14th December 2014. Select media from Delhi and Mumbai, apart from Kochi media, were successfully engaged. Positive media coverage worth over INR 1 crore was achieved and more than 1 lakh Netizens reached through positive news flashed on 110 websites.
Media Coverage Snapshots

Telecom Centres of Excellence (TCOE) India

Telecom Centres of Excellence (TCOE) India, set up in a Public Private Partnership (PPP) Mode with the Government, Telecom Service Providers and Academia as Primary Stakeholders, have transitioned the telecom sector ecosystem in the country over the years.

With 8 TCOEs spread across 6 IITs and 1 each at IISc Bangalore & IIM Ahmedabad, it has elevated itself from blue sky research to ‘Mind to Market’ ideology.

TCOE India has entered in its Eighth Year of existence, continuously striving to create a sustainable Telecom R&D Ecosystem in the country. It has been widely accepted within the country as a potential platform for undertaking Research and Innovation Projects, Standardization Activities and Entrepreneurship promotion.

Recently, the TCOE India General Body, under the Chairmanship of Secretary (T), Department of Telecommunications, Government of India, has approved a New Project Management Framework for TCOEs. The New Framework draws a methodology for access to projects by the TCOEs through a competitive process. A central Steering Committee headed by a visionary person of national eminence will steer the new framework. These projects or Research Problems can be given by Industry, Academia, Entrepreneurs and Government through an online submission process. The mechanism is put in place to maximize the effectiveness and efficiency of the research outcomes which can be taken up by the Manufacturers and Entrepreneurs to the market. A New Website of TCOE India incorporating the new framework has been developed. You can visit the website at www.tcoe.in for more information.

Meanwhile, TCOEs have remarkably contributed to the Indian Telecom Industry. Some of the highlights from the year 2014-15 are as below:

a) In over 80 Projects, TCOEs have added 1 more US Patent taking the total to 20 Patents including 6 US patents. The total IPRs stand at 14 IPRs while 41 Research Papers aiding Policy Advocacy have been released so far.

b) 42 Commercialization Ready Technologies developed by TCOEs are now available to the Manufacturers and Entrepreneurs for productization.

c) Network Opex Optimization developed by TICET - IIT Bombay, was incubated into a company named “Panchsheel Research Pvt. Ltd.” Its Business Analytical Tool won the Aegis Graham Bell Award under the Green Technology solution category. The technology aims at optimizing the Operational Expenses of the Wireless Networks of the Service Providers.

d) TCOE India conducted the 2nd Telecom Summit on “Rural Broadband Technologies and Applications for Citizen’s Services” during the Convergence India Expo on 23rd January, 2015.

e) The New Brochure of TCOE India was also launched during the 2nd Telecom Summit 2015, by Special Secretary (T), DoT and the soft copy of the same is available at the TCOE India website.

f) The 8th TCOE India General Body Meeting (GBM) was held under the Chairmanship of Secretary (T), DoT on 24th March, 2015.
The Telecom Sector Skill Council, registered as a not-for-profit society, completed its 2nd year of operation on 8th Feb 2015. In its last year of operation, TSSC trained 2,12,458 candidates in 12 job roles, thus certifying 1,47,299 candidates through 245 Training Partners covering 24 states/UTs & 161 cities/Towns. TSSC is a major contributor in skill building activities and acceptance of TSSC certified manpower for employment.

Introduction of skilling in Universities has been a path-breaking milestone for TSSC considering the fact that Vocational Skilling is only implemented by Training Partners. TSSC courses like Field Maintenance Engineer is now part of the 4th Year B.Tech programme of Amity University (AITEM), Noida. Some other technical universities and ITI have also adopted the TSSC Qualification Packs to be included in their regular curriculum. Another such initiative includes collaboration with placement agencies like Shine.com, Manpower Group & Teamlease India Pvt. Ltd to maintain a data bank of all certified candidates to facilitate placements.

As the TSSC team moves to the third year of operation, with active support from its distinguished Governing Body Members representing major Telecom companies, Govt, Academia & NSDC, it is now venturing into skilling of disabled and minorities as also, focusing on north-east, manufacturing roles, Recognition of Prior Learning (RPL) & online skilling with the ground work having been established in the previous years. With more and more enrolments taking place through its 245 Training Partners, team TSSC will ensure that the good work is carried forward to ensure the betterment of the Telecom fraternity in India.

**Telecom Sector Skill Council (TSSC)**

**Legal Updates**

A joint industry petition was filed on the issue of levy of penalty by DoT for alleged non-submission/delayed submission of Self Certificate upon upgrade of a BTS by another sharing Telecom Service Provider (TSP) at the site. On April 30, 2015, TDSAT issued notice in the petition and directed that in the meanwhile, penalty for non-submission/delayed submission by non-upgrading operator shall not be enforced.

**JOINT INDUSTRY PETITION ON EMF PENALTY ON UP-GRADATION**

A joint industry petition was filed on the issue of EMF testing fee imposed by TERM Cell retrospectively and for testing more than 10% of the total BTS sites of the service provider. The petition also contended that DoT is not entitled to demand INR 10,000/- as cost of test for audit of EMF exposure at a site. Alternatively, it was also prayed that the DoT is not entitled to demand;

i) A fee of INR 10,000/- from each sharing Telecom Service Provider on testing of a shared site;

ii) A fee of INR 10,000/- for each of the BTS installed by a Telecom Service Provider at a site for catering to different technologies like 2G, 3G etc.;

iii) A fee of INR 10,000/- per site for more than 10% of the total BTS sites of the service provider, whether individual or shared, annually from a Telecom Service Provider;

iv) A fee of INR 10,000/- per site on basis of notional testing and/or on a retrospective basis.

On November 20, 2014, the Tribunal granted stay on points (i) to (iv) mentioned above.

**JOINT INDUSTRY PETITION CHALLENGING IMPOSITION OF PENALTY FOR EMF ON SHARED SITES:**

A joint industry petition was filed challenging the levy of penalty upon each and every Telecom Service Provider (TSP) sharing a Base Trans-receiver Station (BTS) site even
though the emission from the BTS Antenna of a particular TSP was within the limits for general public exposure to Electromagnetic Fields (EMF) as prescribed by the DoT and the DoT, through measurements, is able to determine the TSP whose BTS Antenna emission is making the site non-compliant to the exposure norms.

On May 6, 2015, TDSAT restrained DoT from imposing penalties or taking any coercive steps for seeking recovery of such penalties from TSPs which have been levied on the sharing TSPs or on BTS that are otherwise compliant with EMF exposure norms laid down by DoT.

JOINT INDUSTRY PETITION CHALLENGING BSNL DEMAND FOR BANK GUARANTEES FOR IUC PAYMENTS: TDSAT
A joint industry petition was filed challenging BSNL’s circular dated 21.10.2014 instructing the BSNL’s field offices to demand renewal of bank guarantees based on an ‘average billed amount basis’ as per the Interconnect Agreement and not as per ‘net payable basis’ as was mutually agreed between BSNL and the TSPs earlier.

On March 19, 2015, the Tribunal directed BSNL to keep the impugned circular in abeyance.

JOINT INDUSTRY PETITION CHALLENGING IMPOSITION OF PENALTY FOR EMF ON MISSING/ABSENT SIGNAGES
A joint industry petition was filed on the issue of levy of penalty retrospectively on account of improper/missing/absent signages.

On April 29, 2014, TDSAT directed that DoT shall not take any coercive measure for enforcement of the impugned demand notices/invocation of Bank Guarantee till the next date.

The matter is coming up on board for final hearing.

SUBSCRIBER VERIFICATION MATTER: PATNA HIGH COURT
On September 11, 2014, telecom service providers in Bihar were directed by Hon’ble Patna High Court through local TCRM Cell to attend a hearing of a habeas corpus petition filed by Balinder Singh whose son was missing. The kin received a call from a mobile number for ransom. However, the identity of the person who made the ransom call from a particular mobile number could not be traced as the name address given on CAF was found to be fake.

On November 21, 2014, the Hon’ble Court impelled COAI and AUSPI and directed DoT to interact with TRAI, COAI and AUSPI for providing supplementary guidelines to supplement the guidelines already existing for physical verification of the data entered in the Consumer Application Forms.

On January 9, 2015, DoT filed an affidavit stating that the opinion formed after due consultation is that physical verification of each of the mobile subscribers will be a cumbersome and resource intensive process and therefore it is not feasible, implementable and practical.

On January 27, 2015, DoT Counsel handed over a letter by MHA to the High Court which reiterated DoT’s position that physical verification and security concerns have already been considered in detail by the Hon’ble Supreme Court. The matter has been reserved for judgment.

JOINT INDUSTRY PETITION CHALLENGING MAHARASHTRA TOWER POLICE: BOMBAY HIGH COURT
A joint industry petition was filed challenging the vires, applicability and viability of the regulations dated March 4, 2014, for setting up of Cell phone towers in the State of Maharashtra, issued by Maharashtra Government.

On August 25, 2014, Hon’ble High Court directed the following:

a. No municipal authority, local authority, etc. shall take any coercive action under the impugned Regulations;

b. All authorities shall accept applications in accordance with the DoT Guidelines.

The Court also granted time to the Respondents to file reply. The next date of hearing is awaited.

DIFFERENTIAL TARIFF IN FOUR STATES: SUPREME COURT
COAI filed an Appeal in Supreme Court against the Hon’ble TDSAT’s judgment of 22.12.2006, in the Four States matter.

On 22.3.2007, TRAI directed all operators to calculate the excess charged from customers on this account from 20.5.2005, & to keep the same in a separate account which could only be used for making refunds to the customers.

On January 30, 2015, the Hon’ble Supreme Court dismissed the appeal while stating inter alia:

a. The appellant could have made use of the similar leased lines as they had between their networks and asked for Pops from the BSNL for the MSCs located in these four service areas which were not done. No effort was made by the appellants to create this direct connectivity and they took recourse to the easier way of banding the traffic to the BSNL as National Long Distance Operator and continued charging the consumers higher tariffs.

b. The access providers have the option to continue with the existing inter-connected routing of the class of service areas but that cannot be a ground to discriminate in any manner, between the subscribers of the same class.

c. The classification of the subscribers into two categories on the basis of calls made by them from private network to another private network and from private network to BSNL/MTNL network is arbitrary as it fails to satisfy the twin test for reasonable classification.

COAI SLP on CAG: Supreme Court
COAI filed an appeal in Supreme Court against the Delhi High Court judgment dated 06.01.2014, on the jurisdiction of CAG to audit telecom companies.

The judgment in this matter was pronounced on April 17, 2014, dismissing the appeals filed by COAI challenging the jurisdiction of CAG to audit telecom companies while stating inter alia:

i. CAG is not carrying out any statutory audit of the accounts of the service providers, but for the limited purpose of ascertaining whether the Union is getting its legitimate share by way of “Revenue Sharing”. Service providers are, therefore, bound to provide all the records and documents called for by the CAG.

ii. CAG has a duty to examine and satisfy himself that all the rules and procedures in that behalf are being met not only by the Union but also the service providers.

iii. CAG’s function is, therefore, separate and independent, which is not similar to the audit conducted by the DoT under Clause 22.5 or special audit under Clause 22.6. CAG’s function is only to ascertain whether the Union of India is getting its due share, while parting with the right to deal with its exclusive privilege to the Service Providers, who are dealing with national wealth.