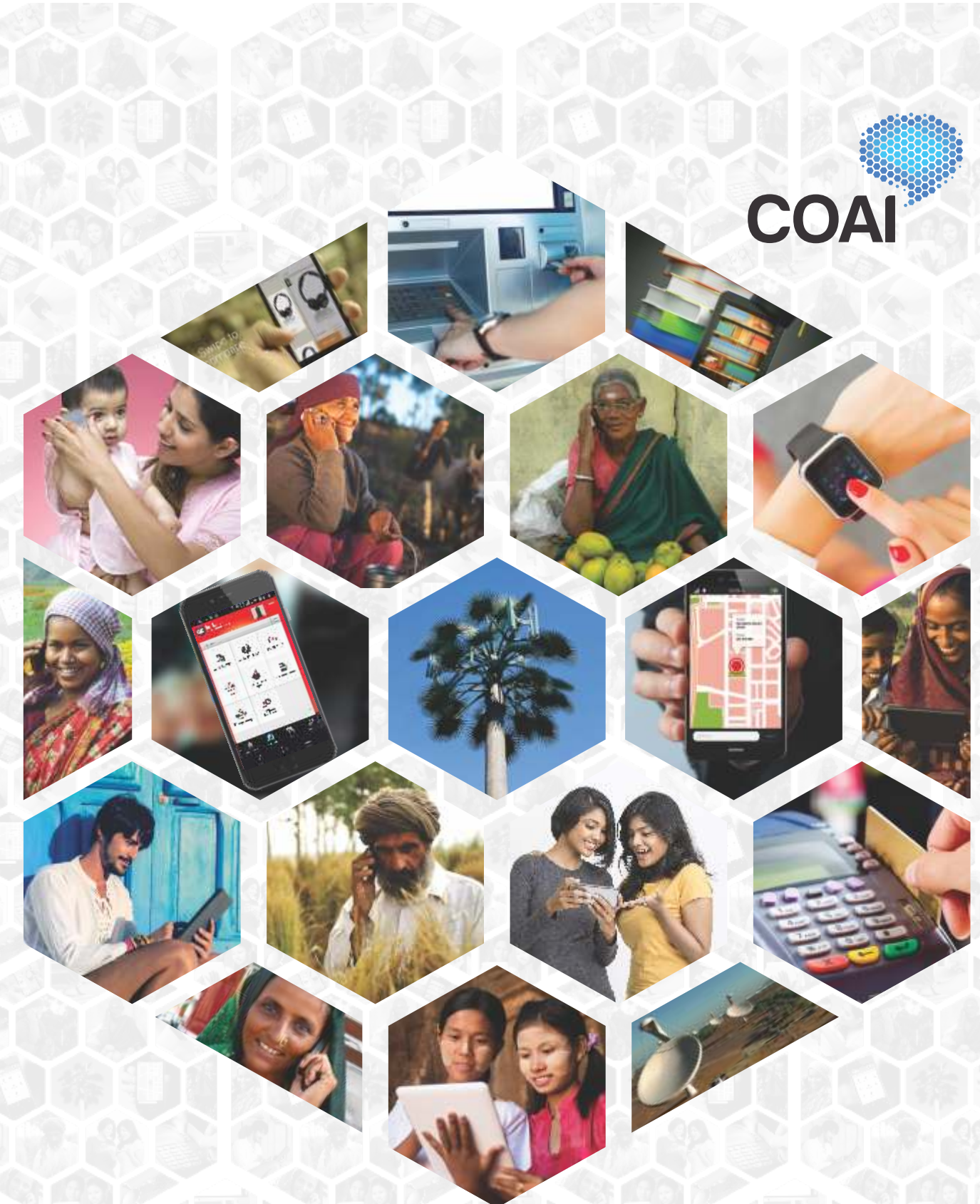




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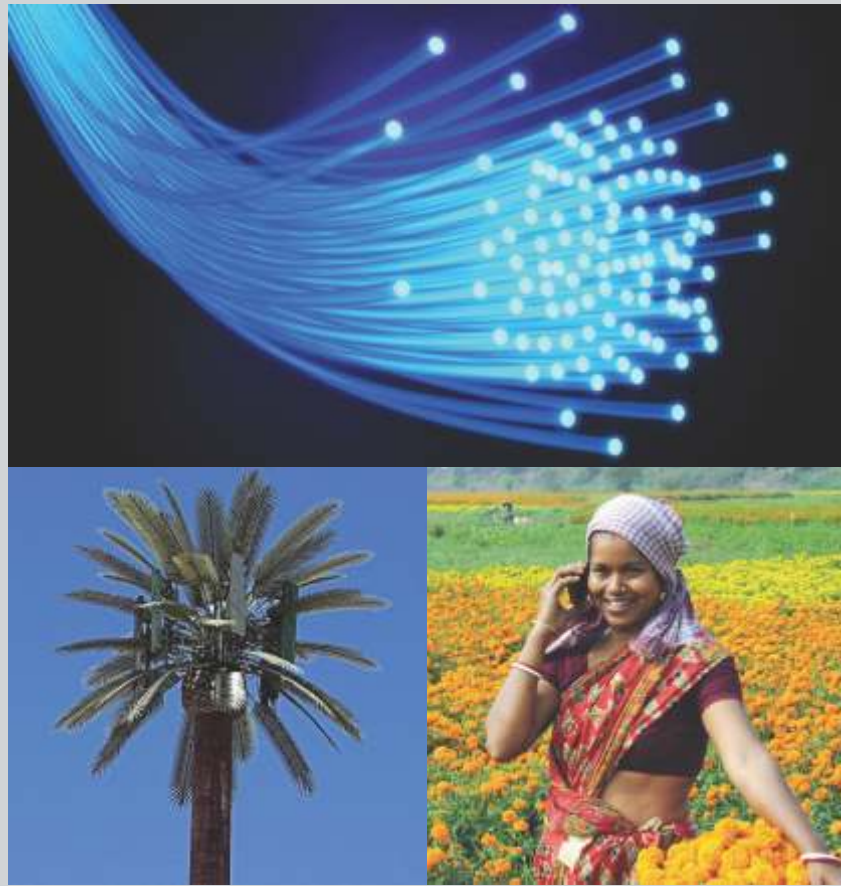
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ANNUAL REPORT 2015-2016



COAI

ANNUAL REPORT 2015-2016

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The image shows the COAI logo in large, light grey letters. To the right of the logo is a decorative graphic consisting of a cluster of hexagons of varying sizes, arranged in a roughly circular shape. The hexagons are light grey and have a subtle gradient. The entire graphic is set against a white background with a light grey border on the right side.



CHAIRMAN'S MESSAGE



The Indian Mobility Sector, the crown jewel in the success stories of India's economic liberalization and privatization efforts, **crossed the landmark figure of 1 billion subscriptions**. Over the last two decades, the wireless industry, especially the private sector, has built one of the finest and widest services infrastructures in form of a mobile voice highway connecting over 5 lac towns and villages across India.

India is on the cusp of a digital revolution, and the telecom industry is gradually transitioning from a pure voice market to a mix of voice and data services. Rapid growth in smartphone adoption, a growing ecosystem of digital services and applications, and improving mobile broadband coverage continue to drive demand for mobile broadband services in the country. Mobile Data services now constitute approximately 17% of mobility industry revenues, up by 4% over the last calendar year.

THE YEAR GONE BY

The past year has been an eventful and a challenging one for the industry.

A sluggish year for the Mobile Voice segment

The Indian mobile sector added **79 million active subscribers** in the voice services category during the course of calendar year 2015, compared to 71 million subscribers in calendar year 2014. Key regulatory interventions were made at the beginning of the financial year which included

- a) Reduction in Interconnect Usage Charges (IUC) from 20 paise per minute to 14 paise per minute
- b) 20–40% drop in headline tariffs for Roaming services.
- c) Reduction in ceiling tariffs for SMS while on national roaming by ~75%.

These **interventions resulted in a steep decline of an estimated 8–10% in the voice realization rates**. As a result, despite volume expansion in minutes and growth in subscriber base, the overall **mobile voice segment revenue recorded negative to near zero growth** for the first time in the history of Indian mobility sector. Given the large contribution of voice services, negative growth in this segment is bound to have far reaching implications for investments.

Massive investment in mobile broadband network but slow uptake from consumers

During the year, the industry witnessed several major initiatives to promote mobile broadband services in the country.

- a) Exponential expansion in mobile broadband services coverage resulting from
 - Roll out of fresh 19 3G networks on spectrum acquired during 2014/2015 auctions.
 - Expansion of the existing 68 3G networks rolled out on the vintage spectrum from 2010 auctions
 - Entry of 3rd operator in an earlier two player mobile data market across most service areas.

- b) Wide scale launch of 4G services by top 3 operators and roll out of 30 new 4G networks
- c) A steep drop of nearly 20% in pricing of mobile data services.
- d) Increased availability of Smartphones in the Rs. 3,000 – Rs. 5,000 price bracket

Despite all these steps, the consumer uptake of mobile broadband services was weak. While 79 million subscribers joined the voice category, **only 51 million new subscribers graduated to the mobile broadband category.** The overall penetration of mobile broadband services improved slightly to 9.5% to end at 120 million subscriptions at the end of calendar year 2015.

The low price elasticity for mobile data services resulted in the **segment revenue growth slowing down from its earlier triple digit levels in past years to ~40%** in the last calendar year. Weakening mobile data revenue growth and slow uptake of data services are going to be areas of concern for the wireless industry.

Continued High Scale of Investments

After committing Rs. 60,000 crores in the February 2014 auctions for spectrum acquisition, the Indian wireless operators continued to make massive investments in the sector during the financial year 2015-16.

- a) **Commitment of nearly Rs. 1.1 lac crores during the March 2015 auctions.** The estimated cumulative investment in the telecom sector crossed Rs. 8.5lac crores, and is only expected to go up in coming years.
- b) Besides high investments for spectrum procurement, the industry continued to invest significantly in network optimization and upgrading/installing new sites to improve coverage and capacity, and enhancing consumer experience. Moreover, the **industry continued to invest in voice services** and rolled out close to 37,000 new 2G sites during the course of the year.
- c) **~3X roll out of 3G and 4G sites** - The past year was also a pivotal year of investments in the mobile broadband networks, both on 3G and 4G technology. With a host of new 3G and 4G network launches, the top 3 operators deployed more than 125,000 new sites capable of supporting mobile broadband data.

After launching more than 175,000 sites in the last year, the entry of a new operator and expansion by incumbents will result in the industry adding another 300,000 – 350,000 sites, further stepping up on this massive scale of investment in the coming year.

Change in Business Model and increasing Balance sheet pressures

EBITDA margins have long been considered as the benchmark metric for comparing profitability across sectors. However, over the last two years, the cost structures and the business models of the Indian telcos have undergone a significant shift. With increasing spends on spectrum acquisition and higher capital expenditure in form of network roll outs, **much of the costs have shifted to below EBITDA levels.** In such a scenario, ROCE and ROE are becoming more relevant metrics to measure profitability for all telecom investors.

The net debt of the industry registered an estimated increase of 30% and swelled to nearly Rs. 4 lac crores. While operational profits for top operators have improved, the increased depreciation, amortization and interest charges are beginning to exert pressures on the balance sheets of the operators. These pressures are only expected to intensify further in the coming year. The industry continues to realize negative returns (as measured through ROCE) indicating the overall dismal financial health of the sector.

A combination of low returns and slow revenue growth environment has slowed the equity investors' active participation and contribution towards the growth of Indian mobility sector.

Policy Formulation

Last year saw various important and transformative developments in the telecom sector.

Nationwide Mobile Number Portability: The Nationwide Mobile Number Portability initiative was successfully implemented as we witnessed millions of mobile users in India, who move from one state to another, for professional or personal reasons, utilize the retention of the same number through use of the full MNP feature. Since the launch of Mobile Number Portability in 2011, operators have received over 205 million requests for porting of mobile numbers.

Spectrum Sharing and Trading Guidelines: The year also saw the sector entering into a consolidation phase with the introduction of Spectrum Sharing and Trading Guidelines. Select operators have already announced key Spectrum Sharing or Trading deals with other players in several markets across India.

Preparation of upcoming Spectrum Auctions: The Association was delighted to learn that the Government has decided to put to auction a huge quantum of spectrum across a wide frequency range including the 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz and 2500 MHz bands. However, both the Government and the Association need to work towards ensuring that the new device ecosystem supports all these frequency bands so that the full benefits of mobile broadband services can be realized.

Role of Mobile Telcos in Payments ecosystem

The Reserve Bank of India granted **in-principle approval to 11 applicants for launching Payments Bank, which included 5 telecom related applicants.** Given their omnipresence and reach, mobile telecom operators remain strong candidates to effectively deliver banking services to the un-served and underserved segments of Indian population.

WAY FORWARD

Over the years, the Indian mobile telecom operators have ably demonstrated their technological capabilities. Now, with the proposed increase in the availability of spectrum – the key raw material for delivering mobile telecom services - India would have all the ingredients to become a **1 Gbps society**, where every data connection has a minimum speed of 1 Gbps. However, turning this vision in to a reality is going to be a long, arduous process requiring immense cooperation between all stakeholders in the ecosystem.

To connect the next billion to Mobile Broadband and build sufficient capacity to meet the tsunami of mobile data demand, the country will need a minimum 20-25 MHz dedicated contiguous block of mobile data spectrum per operator for 3G and 4G services. **Creating a world-class 'Digital Highway' is going to require massive investments.** The need of the hour is to channel a larger portion of this investment towards building the physical infrastructure than for spectrum acquisition. Further, in order to garner the requisite investments, **Industry along with the Center Government, State and Local Government needs to work together** to resolve the issues pertaining to high Regulatory levies, availability of spectrum at reasonable prices, Right of Way (RoW) related issues, availability of power at concessional rates, a stable policy and regulatory environment and initiatives that ensure citizens have access to state of the art networks and affordable services.

As companies continue to build capacity and expand into the hinterland, **affordability and localized content will be critical for growth. Moreover, India has to invest heavily to educate the lower socio-economic consumers and bottom of the pyramid users, on the power of digital services.** Both Government and industry must work together to enhance digital literacy through educational and training forums, greater use of vernacular, easy to use applications and initiatives that helps new users navigate the internet and popular applications.

Over the next decade, banking services will evolve from HNI/Corporate segment focused to banking for the 'unbanked'. Mobile banking, digital payments, etc. will become an integral part of the mobile ecosystem. We also expect to see a sea change from human-led analogue services to machine to machine (M2M) services, including evolution of smart homes, smart cities that will transform Indian lifestyle to a higher order. M-education and M-health will see a far wider adoption amongst the masses.

Due to the information and data revolution, the world is becoming smaller and the developments on the global front will play a key role in defining the paradigms for India. Coupled with the impact of global economic changes, India is undergoing economic and structural changes which spell change for the telecom industry. Given these changing dynamics and the data revolution, it was important that the COAI position itself strategically to respond to and take advantage of these emerging changes in the years to come. With this imperative, COAI has adopted a strategic vision for the coming years which understands success and continuing relevance, based on its ability to embrace an increasingly converged and membership focused agenda. The vision is to elevate the Indian Telecommunications Industry towards a position of global leadership based on India's unique contributions and to establish COAI as a globally recognized, authoritative Communications Industry Association for India through its thought leadership and innovation initiatives.

To operationalize the broad COAI strategy, I look forward to the Association and its Secretariat working alongside the TRAI, Department of Telecom, Finance Ministry, Planning Commission and other expert bodies to continue this journey to build 'world class telecom infrastructure' and meet the aspirations of new age Indian consumers. I wish Mr. Gopal Vittal the very best as he takes over as the new Chairman of COAI at this vital juncture. Also, my best wishes to Rajan Mathews and his team to continue the good work and accelerate the pace in the journey the Association members have adopted, leading to transformation of lives of Indian consumers and benefiting Indian Society.

HIMANSHU KAPANIA

CHAIRMAN

VICE CHAIRMAN'S MESSAGE



There is a tremendous excitement around 'Digital India'. Today India has 312M internet users, 292M mobile data consumers and broadband wireless customers constitute 40% of the total internet subscriber base. Data consumption is on an increasing trend with the average data consumer using ~800MB/month. The societal benefits of these trends are immense. The proliferation of data enables the spread of financial services and improves access to education and health services.

Hence, the ambition to create a 'Digital India' through affordable and reliable broadband-on-demand is laudable. However, we have a lot to do to make this mission successful. Among the economies of the world, India ranks 131st in fixed broadband penetration and 155th in mobile broadband penetration.

Also, the state of broadband is looking weak. We as an industry are seeing a slowdown in the mobile data penetration. The growth in smartphones being shipped has tapered off. And out of every 6 new smartphones added, only 2 are now getting connected on data.

To drive the next phase of growth, we as an industry, need to do more to expand this category. A significant part of the population in rural India and especially women are unaware of the benefits of being connected to the internet. Our industry, along with all related stakeholders – startups, the government and NGO's – needs to come together to expand the reach of mobile data across the country. Mobile operators will need to eliminate barriers that prevent users from coming on to the ecosystem. It will be critical to offer content and use cases that are relevant to the rural population. The adoption of English might be a barrier, hence we must embrace vernacular options also.

The government has enabled much-needed policy reforms such as spectrum trading, spectrum sharing and active infrastructure sharing. Thanks to this, the Industry is already witnessing early signs of consolidation and this momentum is expected to continue in the future. Going forward, we urge the govt. to ensure that adequate and affordable spectrum is put on the block. We would also urge the govt. along with the regulator to play a facilitating role in swapping spectrum across operators. The spectrum held by operators could be made contiguous and much needed broadband services can then be rolled out.

Our industry would benefit from a reduction in taxes and levies. Simplifying and reducing spectrum usage charges would enable further investments. In addition, we need clarity on the 'same service same rules' policy framework. Finally we need support on uniform and simplified rules for the grant of 'right of way', allocation of UHF/VHF bands through auction, and automated approvals that will make it easier to do business.

As an association we have always urged the government to address these issues and support this industry. The COAI has played a crucial role in advancing the interest of the member operators. Several key issues have been taken up by the association and have benefitted the industry immensely. 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. We see the association having substantial and meaningful role to play in the future too.

To conclude, I would like to appreciate the efforts of all our member operators for working together to resolve major industry issues - thus making it possible to collaborate for the development of the industry and the nation. Also, I would like to thank Mr. Himanshu Kapania for his bold leadership and commitment towards industry issues and the enthusiasm that he provides. Last but not the least, I would like to thank Mr. Rajan Mathews for his able guidance and mentorship of the dynamic secretariat which has helped us in achieving so much.

GOPAL VITTAL
VICE CHAIRMAN

FROM THE DIRECTOR GENERAL'S DESK



The year 2015-16 was an inflection year for the industry having weathered spiraling spectrum costs post auction, network optimization issues, large scale introduction of 3G/ 4G networks and services besides having faced serious challenges including call drops arising out of difficulties in locating cell towers and obtaining Right of Way.

Having emerged from this rather difficult period, the industry is geared to move forward to roll out the next big "Digital Revolution" in India. The Government of India, on its part has established a bold policy framework of building 'Broadband Highways' as part of the

visionary, empowering and ambitious 'Digital India' program, which requires long-term and extensive investments in telecom resourcing and infrastructure. As per the commitments made by the Government of India, the Digital India Programme is envisaged to require investments to the tune of more than 113,000 crore.

COAI and its member companies fully support and endorse the vision of the Hon'ble Prime Minister to build a Digitalized India – an imperative vision of digital inclusion and bridging the digital divide. These would invariably include important governance aspects including financial inclusion through mobiles (Jan Dhan Aadhar Mobile – the JAM trinity), e/m-Governance services, empowering all citizens by unleashing higher speeds of broadband services over the coming year and thereafter. We expect to expand to serve the larger unconnected populace and reach the remotest unconnected geographies, to enliven Digital India into action for which we anticipate and invite members of the telecom ecosystem to engage in collaborative innovation. The industry has sought to partner and coalesce with application developers, content providers and info-solutions builders to develop solutions in the areas of governance, health, education, banking etc. This will ensure that these are interoperable so that benefits which flow to consumers are not restricted and they enjoy the best customer experience possible.

Amidst these transformative times, I present the Annual Report for the year 2015-2016.

STATUS ON POLICY AND REGULATORY ISSUES

It must be acknowledged and appreciated that the Indian mobile telecom services industry, while charging the world's lowest voice call tariffs, continues to make large investments for network upgradation, procurement of hardware, and software for the benefit of evolving consumer choices. Thus, it is important that the actions of all stakeholders are coordinated in a harmonized manner in an environment of trust and co-operation.

It is essential to allow the mobile telecom services industry the requisite freedom to innovate on its service offerings, explore newer levels of technological advancements that might benefit consumers and enable India's advancement across the global telecom landscape. On a broader scale, we look forward to a consistent and balanced perspective on the issues of the industry that hopefully is devoid of any unexpected and less than happy upheavals. This will only help the cause of furthering the common agenda of digital development and revolution, while ensuring protection of consumer interests as well as that of all stakeholders including that of Governments at Union and State level.

With a view to encourage consolidation in the telecom sector for more efficient use of spectrum and other

resources, the Government of India issued guidelines on spectrum sharing and trading that allow telecom companies to buy and sell rights to spectrum among themselves. This enables more competent network operations, leading to an improved offering of both voice and data services to the customers. The industry has been commending this vital and strategic move as it believes that increased efficiencies in network performance, along with superior revenue performances of operators will boost investor confidence in the sector and which expectedly might substantially enhance the attractiveness of the sector as the most desired business vertical for direct foreign investment in the country.

We are happy to note that another round of spectrum auctions will take place in the year ahead, which we hope shall remove supply constraints. However, as we and other sector analysts perceive it, the benchmark/baseprices of the 700 and 2,100 MHz are way too steep for the industry. The Indian mobile telephony industry currently has a cumulative debt of over INR 300,000 crore with many operators even making negative returns on their investments. We are hoping that the Government will take this into account while pricing the spectrum so that such levies as License Fees (8%) and Spectrum Usage Charge (upto 5.6 % on average) are reduced in line with TRAI Recommendation.

Another issue on which the industry is expecting clarity from the Government is on the unregulated OTT sector. The industry, which has invested heavily in licence fees, spectrum, telecom equipment and security apparatus, is now on an unequal footing with unregulated OTTs that are offering voice services using technologies that are spectrum inefficient. The fact that these OTTs are not subject to any licence fee and do not conform to national security requirements is a matter of concern and therefore constitutes a matter requiring greater national interest. In this context, the industry has put forth a simple demand of 'Same Service, Same Rules' principle in order to allow the industry to compete fairly and evenly. If not applied, it will have an adverse impact on the telecom Industry, the economy and cause significant loss of revenue to the exchequer and therefore do expect better traction and support from the Union Government. Our argument of "Same Service, Same Rules" does not call for enhanced regulations, but the removal of conditions and regulations that will allow for a "level playing field" among all service providers.

On the regulatory front, the industry did face many operational issues relating to some TRAI regulations, on which considerable resources were consumed. A "light touch regulation" approach that allows market forces to develop business growth would be beneficial for the industry, as opposed to focusing on micro-management of the sector which, as we have seen in the recent past, often leads to counterproductive results.

INDUSTRY INITIATIVES AND ACHIEVEMENTS

During the year, COAI dealt with various issues of importance to the industry.

Spectrum Issues: One of the biggest achievements of the year gone by was the identification of additional bands for IMT at the World Radio Conference (WRC) - 2015. COAI had been in regular conversation with DoT and WPC and made a call at the WRC to insist upon recognition of globally harmonized mobile bands to ensure a good choice of low cost devices for their citizens through major economies of scale in manufacturing. Government of India has provided support on the 1427 – 1452 MHz, 1452 – 1492 MHz, 1492 – 1518 MHz, 3300 – 3400 MHz and 3400 – 3600 MHz for IMT services. Further in this respect, no consensus was arrived at on the subject of 470 – 698 MHz band amongst stakeholders present at WRC despite COAI having made various submissions to DoT and WPC to support this band too at the forum. We are given to believe that DoT has arrived

at an understanding with the Ministry of I&B for allocation of this band for IMT at the National level.

A long pending demand of the industry has been the issue of harmonization of 1800 MHz which was auctioned by the DoT this year. After extensive meetings held amongst all the stakeholders, the re-alignment for all 22 circles was completed and the industry is working towards completion of the harmonization process shortly. Resultantly, operators' spectrum will become contiguous, suitable for LTE deployment, and DoT will be able to find additional contiguous spectrum in every circle for the next auction. 1800 MHz band is the core band for LTE, as the band is widely used by many countries throughout the globe. This makes this band ideal for supporting affordable devices on account of large economies of scale and amortization of device costs over larger volumes. Harmonization of this band will enable efficient usage of this band for 4G, and thus unlocking its full potential. We stand grateful to the DoT Secretary, Shri J. S. Deepak for pushing to get this initiative concluded.

The TRAI has given comprehensive recommendations on various spectrum bands and it is expected that DoT will be conducting this auction sometime in the second half of the year. Since the focus now is on LTE and data speeds, it is important to explore the option of more backhaul spectrum. Both E and V bands are understood to be unallocated in India, resulting in a key enabling infrastructural resource that can be used to achieve the vision of Digital India lying unutilized. In the interest of maximum benefit to masses and millions of consumers in every nook and corner of India, and efficient usage of spectrum, COAI submitted to the DoT that these frequencies be opened up for allocation immediately, as India is expanding coverage and capacities for 3G and 4G in urban cities and taking broadband to rural India.

EMF and Tower Related Issues: COAI took a more direct approach in reaching out to activists and media and creating counter voices against the activists on the topic of EMF through credible resources. COAI continued its dedicated efforts towards mitigating the negative activism and misconceptions on emissions from mobile towers and creating awareness amongst the general public. The Association was successful in reaching out to a number of relevant Government departments, local civic authorities, medical professionals, academia, and media to garner support and engagement in the advocacy activities. We stand grateful to the Minister of Telecom & IT, Shri Ravi Shankar Prasad, the TRAI Chairman, Shri R. S Sharma, the DoT Secretary, Shri J. S Deepak, for the bold communications they undertook in various fora to reiterate that the EMF safety norms adopted by the Government of India were safe for everyone, were based on scientific evidence available and more stringent than most other countries.

The Indian telecom network is witnessing introduction of low power Base Transceiver Station (BTS) having effective radiated isotropic power (EIRP) limited to 100 Watts. These BTSs, also known as micro BTS, are likely to be mounted on walls, rooftops, and on the roadside electric/telecom poles, street furniture. Due to the fact that such BTSs are small in size and radiate lower power vis-a-vis regular BTS, they require different treatment from the point of view of audit of EMF radiation limits already laid down by the DoT. COAI worked with the DoT and TEC to get suitable instructions issued on the subject.

On the legal front also, there were favourable decisions from the Hon'ble TDSAT on many of the operational issues adjudicated before it. 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 at the site TDSAT stated that penalty for non-submission/delayed submission by non-upgrading operator shall not be enforced. In another petition on imposition of penalty on non-EMF impacting parameters, 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.

This year we saw increased interaction with various state Governments and municipal corporations on tower and Right of Way issues.

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. DoT after considering the IMC Recommendations and request of COAI referred its Directive on “Implementation of Green Technologies in Telecom Sector” to TRAI for fresh Consultation on Methodologies for measuring carbon emission and Calibration with respect to RET Targets. This is a positive development as there was a large financial impact on the Industry with respect to meeting the RET deployment Targets.

Full Mobile Number Portability: 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 and timelines. On the request of COAI the testing requirement for the Full MNP was reduced to almost 1/10th of the intra-circle MNP. 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. Industry implemented Full MNP within the timelines as prescribed by DoT. DoT appreciated the effort of the industry on the timely implementation of Full MNP.

Reduction of Regulatory Levies: Industry made several representations to DoT on the reduction of the levies. COAI has also made representations to Revenue Secretary on this issue including reduction of the USO levy to 3% to start-with, with ultimate objective of ending this subsidy in next 2-3 years in line with TRAI Recommendations and uniform SUC rate across all the spectrum bands, reduction to start from 3% and go down 1% in a phased manner over next 1-2 years glide path. Also accept the Recommendations of TRAI on AGR which includes introduction of system of LfDS, LF and SUC to continue to be computed based on AGR, no netting of amounts paid to other entities and reduction in the SUC and USOF. Telecom Commission has approved Uniform SUC for the future spectrum auctions.

Review of Interconnect Agreement with BSNL: Industry has been facing interconnection related problems with BSNL since last 15 years. The major issue has been non-reciprocity of the terms and conditions of the Interconnect agreement in favour of BSNL. In order to resolve the issue, COAI requested BSNL to constitute a committee to review the Interconnect agreement based on current telecom environment in India, in terms of market share of various TSPs and the contribution of different services. COAI also submitted with BSNL the draft Interconnect agreement for the review under the said committee. BSNL after various representations from COAI agreed to form a committee to review the interconnect agreement and has also agreed industry representative to be part of the committee. In the discussions held in the committee meeting Industry highlighted its priority issues along with the detailed clause wise issues on which industry sought reciprocal treatment from BSNL. BSNL agreed to look into the priority issues and revert within a month's time on all the interconnection related issues. This is a positive development as Industry has been requesting BSNL since last

5 years to the review of Interconnect agreement with the operators.

Issues Related to Subscriber Verification: The industry had been working very closely with the Government, TERM Cells and LEAs on the issues related to subscriber verification. The industry has also been involved in discussions with Police Departments in various states to align them to the DoT guidelines on the subject. In the series of regional workshops on ACT and EMF issues, three workshops were held last year, viz., Eastern region on April 9-10, 2015 at Port Blair, Southern region on June 8-9, 2015 at Ooty and Northern region on February 18-19, 2016 at Udaipur. The workshops were well attended by DoT officials and officials from the State Governments of related states as well as the LEAs. They served as a platform for interactive discussions between all the attendees. Several operational issues were discussed and DoT appreciated many issues raised by the industry. The DoT and TERM Cells were very positive and there have been many positive outcomes out of these workshops in terms of clarifications and policies from the DoT. Many important issues were resolved subsequent to discussions in these workshops. The industry also worked with the DoT and MHA to work on Aadhaar based E-KYC process. The Pilots were conducted by some of the operators. We expect that these guidelines in paperless form will be issued shortly by the Government, which will herald a new era and help the industry gear up at a pan-India level for an early rollout which will have multi-faceted benefits for all stakeholders – the Government, the people of the country as well as the industry.

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. COAI and AUSPI together have formed a T-ISAC (Telecom – Information Sharing and Analysis Centre) portal. In the T-ISAC system, the information shall be shared anonymously by broadcasting to members through a customized portal/ mailing service, whose development, web and server administration shall be entrusted to a professional third party developer and administrator. The Portal is functional since October 2015 and is being actively used by members to share information. COAI worked with TEC on the report on the issues related to SIM Personalization. COAI has in the past taken up this issue with DoT stating that this requirement of security certification of telecom equipment only from authorized and certified agencies/labs within India is inconsistent with the mutual recognition provision of the international certification practice. DoT has provided an extension on the same till April 2017.

Legal Issues: This year the industry obtained many favourable orders from the Courts in several high worth cases. On the issue of BSNL demands for Bank Guarantee for IUC payment, TDSAT directed BSNL to withdraw all such letters demanding bank guarantees from the TSPs by determining net payable status of TSPs qua BSNL separately for Basic and Cellular Mobile Services. 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 at the site TDSAT stated that penalty for non-submission/delayed submission by non-upgrading operator shall not be enforced. In another petition on imposition of penalty on non-EMF impacting parameters, 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.

Finance Issues: COAI has made detailed representation to the Finance Ministry vide its Pre Budget recommendations on both direct and indirect taxes and obtained favourable response on many of these which will provide long term benefits to the industry. COAI is also engaging with the Government on the matter of

Goods and Service Tax (GST). Various representations have been made to facilitate the Government to come with the GST model which will be industry friendly and will benefit all the stakeholders. A workshop was held on April 7-8, 2016 with the CCAs and DoT representatives to discuss differential interpretations and additional documentation requirements from the CCAs. It resulted in better understanding amongst all the stakeholders.

This year, the proposal made in the Union Budget of 2016-17 to impose Service Tax on the spectrum used by telecom operators is expected to increase the cost of provision and which will have a direct impact on the common man. It is expected that such a move will unintentionally render itself as a punitive tax on the service and will evidently result in material distortion and discrimination to the industry. This will also materially dent the ability of operators to participate and acquire spectrum in future auctions while impacting some of them from a survival perspective itself.

OTHER ACTIVITIES OF THE ASSOCIATION

COAI continued its endeavor to remain at the forefront of national and international events held in the year 2015-16, including Mobile World Congress at Barcelona, ITU events, etc. that addressed issues and matters of interest to our members and industry.

COAI has participated and partnered other entities in the co-organization and co-creation of various **Seminars and Workshops** on issues of common interest and benefit to its members and for generating subject matter awareness amongst consumers. COAI and its members also continued active participation in Organizations such as CII, FICCI, ASSOCHAM, NASSCOM, GSMA, 3GPP, TSDSI among others, as well as activities of many telecom events in India.

The CEOs of the member companies of COAI decided to focus on the future aspirations of COAI to leverage the COAI Membership to establish the converged Indian Telecommunications Industry as the global industry leader and COAI as the globally recognized authoritative Industry Association of India. For this, it was important to understand the history of COAI, carry out SWOT analysis and identify the future aspirations of COAI. The gaps between the present and future aspirations are the opportunities which help us to articulate the way forward for COAI and identifying the guiding principles which will help us achieve our Mission. With this objective a **Strategic Plan** for five years (2015 – 2020) has been developed which has defined areas of focus for the Association for these five years.

The **COAI Executive Council** headed by the Chairperson, Mr. Himanshu Kapania, 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 ably assisted by proficient advice from the various **Working Committees** that had been set up in COAI.

I would also like to thank all the Committees and Working Groups and their Chairmen and Vice Chairmen for their proficient leadership and sincere contribution towards various industry issues. We are grateful for their contributions towards various industry issues and for helping the Association in representing these issues in an expert and timely manner.

I would like to personally thank the **Chairman, Mr. Himanshu Kapania**, for his personal involvement and support in all the activities and initiatives of the Association for the last year. His vigor and contribution has helped us in taking the Association to the next level and planning the strategic mission for the coming years. We

request his continued support and guidance in future as well. I also thank the **Vice Chairman, Mr. Gopal Vittal** for all the support and guidance that he has provided during his tenure.

I would especially like to record my deep appreciation to the persistent efforts and support of the **COAI Secretariat** team who have always been fully committed to the task before us and have always been ready to take up new challenges for the Association and execute them smoothly, efficiently and with excellence. I deeply appreciate all of their efforts in contributing significantly to all the achievements of COAI.

RAJAN S. MATHEWS
DIRECTOR GENERAL



CONNECTING THE NEXT BILLION

ENSURING BROADBAND ACCESS TO BRING ALIVE DIGITAL INDIA

THE VISION

The Government of India has envisioned and shared its lofty ambition of the Digital India initiative to connect every single unconnected Indian citizen, providing data, internet and online services access to all those constituents of the Indian population who have hitherto not had either the social or the economic benefit that broadband and internet access can provide.

India's economic progress has over recent times been, in part, attributed to the accelerated growth of the internet economy. This in turn has been facilitated by the evolving mobile and fixed line broadband services with all operators and service providers alike investing substantially in infrastructure, spectrum, network, applications, new technologies, etc.

To realize the Government's vision of a Digital and Connected India, the Indian Telecom industry will work as an eager and equal partner to develop resources, infrastructure and to boost quality of services. This would form an imperative work agenda to utilize all available critical resources in order to drive the growth of broadband, eventually leading to connectivity for the next one billion.

To understand the magnitude and scale of the vision and its accompanying challenges, we must look at the key elements and constituents that make up the Digital India initiative. The program not only plans to strengthen India's digital and knowledge economy, but seeks to enhance digital infrastructure access to every citizen by providing high speed internet access to the level of gram panchayats, cradle-to-grave digital identities for citizens and prepare citizens for knowledge based transformation to deliver good governance.

Given the scale and magnitude of this initiative, COAI and the Indian telecom industry envisages that Mobile Broadband and wide deployment of broadband will be the core platform on which the 'Digital India' vision can be realized.

So going further, one must also assess the current levels of broadband and internet adoption, readiness and data consumption patterns, besides mapping the immediate requirements and needs of the industry.

CURRENT STATE OF THE BROADBAND & INTERNET ADOPTION IN INDIA

India currently has nearly 145 million broadband subscribers as on February 28, 2016, including 128 million mobile broadband subscribers. This is unlike developed countries where broadband services are delivered through multiple technologies and channels, whereas in India, broadband services are primarily delivered by mobile using 3G and 4G technology.

Figure 1: Broadband subscriptions in India

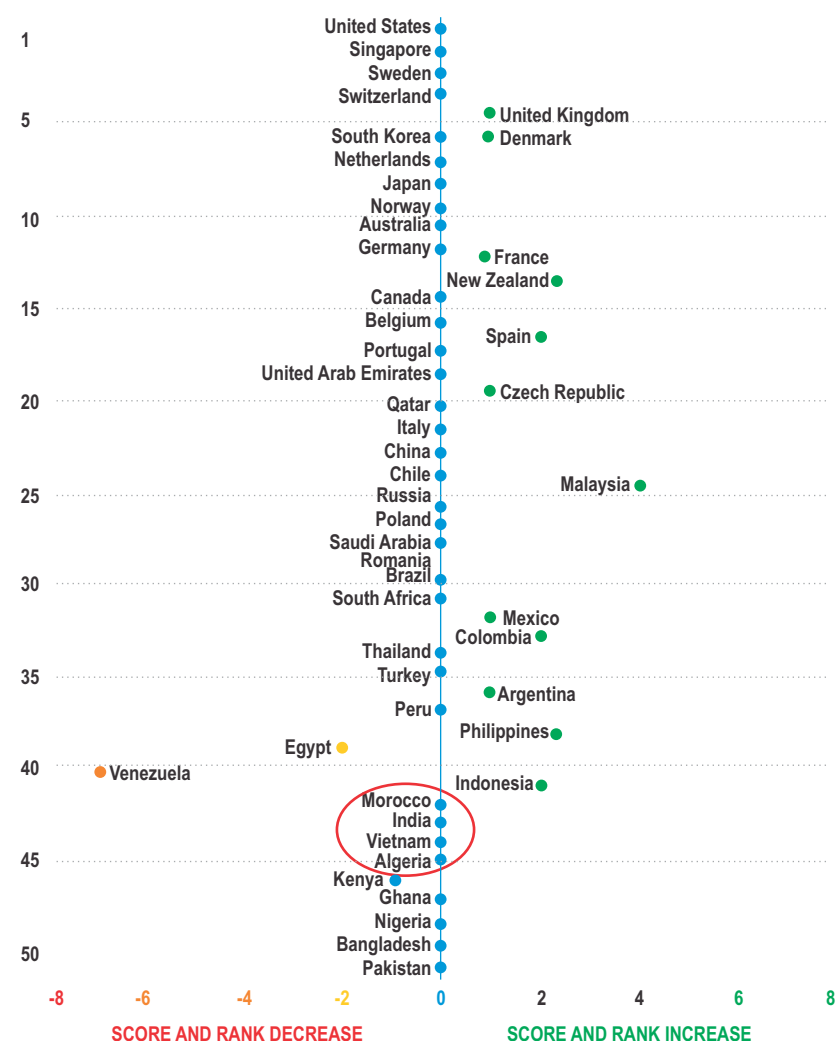


Source: TRAI subscription report

COAI

Slow growth for broadband in India: As per the Huawei's Global Connectivity Index (GCI) 2016 which measures how 50 nations are progressing with digital transformation using Information and Communications technology (ICT), India ranks 44th (among 50) which depicts the state of low penetration of broadband services in India.

Figure 3: Ranking – Digital Transformation using ICT



Source: Huawei GCI (2016)

Given the low penetration of Broadband services in India, there exists tremendous potential for spread of Broadband in India.

FUTURE OF MOBILE BROADBAND SERVICES IN INDIA

a. **Addressable Market for the Mobile Broadband (MBB) in India:** As per Indicus Analytics the addressable Market for the Mobile Broadband will increase from 720 million in 2015 to 879 million in 2020.

Figure 3: Addressable Market for the Mobile Broadband in India



Source: Indicus Analytics

MBB target market includes top 3 income brackets in the above pyramids

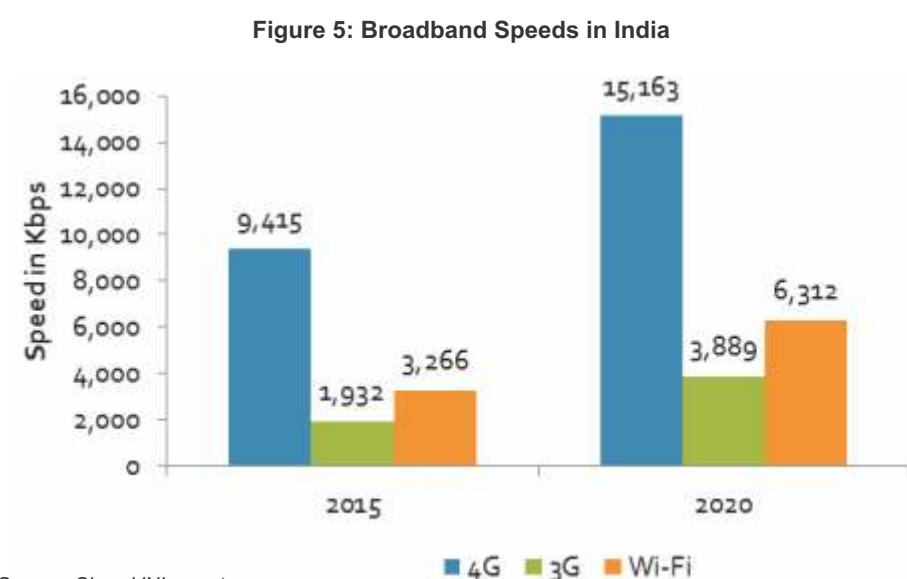
b. **Mobile Broadband Infrastructure:** In next 5 years telecom Industry in India will be looking to move from deeply penetrated Voice Infrastructure to world class Mobile Broadband Infrastructure. Operators will be laying more emphasis on coverage expansion, Network roll outs, enhanced customer experience, expanded application choices and capacity creation.

Figure 4: Initiatives for building Mobile Broadband Infrastructure

<p>Coverage Expansion 800 million Indians to be covered by wireless broadband services by 2020 from current 250 million</p>	<p>Network Rollout Around 3 times more Network Rollouts by top 3 operators</p>
<p>Wireless Broadband users There will be around 500 million Mobile Broadband users in 2020</p> <p>About 100 MHz of spectrum required (4 operators with 5 MHz of Pan-India 700 MHz, 10 MHz of 900 MHz and 10 MHz of 1800 MHz) at total cost of about INR 4 lakh crores (at base price as per TRAI recommendations on spectrum valuation and reserve price, 2016)</p>	<p>Massive Capacity creation Industry to put in around 500K sites on 3G / 4G platform by FY2018</p> <p>Capacity to be increased to 50 – 60 Peta Bytes/day i.e. around 20 times current capacity</p>

Source: COAI estimates

- c. **Broadband Speed:** The Mobile Broadband speeds will increase substantially in next 5 years. 3G speed will grow 2-fold (15% CAGR) from 2015 to 2020, reaching 3,889 kbps by 2020, while 4G speed is projected to reach 15,163 kbps (10% CAGR). Further, Wi-Fi Connection speeds are also to grow 2-fold (14% CAGR) from 2015 to 2020.



Source: Cisco VNI report

There are obvious impediments which double as the challenges of today to create the opportunities for tomorrow.

CHALLENGES FOR THE GROWTH OF BROADBAND IN INDIA.

I. Policy, taxes, and operational barriers

Levies on the Telecom sector: The Indian Telecom sector is one of the most heavily taxed sectors when compared to benchmark taxation, levies and surcharges that are levied on telecom service providers in South Asia and ASEAN countries. As seen in table 1 below, the estimated total levy on the Indian telecom sector ranges from 24.5% to 28.5% which is one of the highest. China on the other hand has just 11% as the total levy. One of the provisions of the Union Budget of 2016-17 includes imposition of service tax on the payments of fees including SUC (Spectrum Usage Charges) and License Fees which has burdened the already heavily taxed the Indian telecom sector.

Table 1: Comparison of Levy on telecom sector

Regulatory Charges	Pakistan	Sri Lanka	China	Malaysia	Bangladesh	India
Total levy	20.5% to 22.0% + Cost Recovery + SIM Tax	27.55% + IDD Levy	11%	12.5%	25.95% + BDT 50mn per license + SIM Tax	24.5% to 28.5%

Source: Analysys Mason (2016)

The burden of taxes, surcharges and levies on the operators reduces the ability of telecom service providers to invest in developing requisite broadband services infrastructure and to therefore enhance broadband coverage.

- ii. **Right of Way (RoW) and other local municipal body levies and fees:** Obtaining RoW permissions for locating cell sites and rolling out Fibre Optic networks is expensive to the extent that RoW charges in some states go as high as 12.7 million per kilometre. Currently, only 15 % of mobile sites are connected through fibre. Local municipalities are also levying exorbitant fees for approving cell sites, leading in many instances, to protracted litigation, shut down of towers and roll out delays. With the advent of technologies such as LTE which can deliver speeds of 100 Mbps over the air, it is imperative that cell sites are connected to the core network on fibre to fully realize the potential of and benefit of newer technology.
- iii. **Uninterrupted Power Supply as a core resource to ensure round the clock infrastructure sustenance:** Power shortage has been a challenge that poses a massive operational challenge for telecom operators to provide uninterrupted and consistent quality of broadband services. While telecom service providers have ensured installation of the most energy efficient equipment and green technologies that have low carbon footprint, it is important that the Government at Union and State administration levels enables uninterrupted and consistent quality of power supply, that eventually reduce dependence of infrastructure providers and cell sites on battery or diesel powered generator sets.
- iv. **Creation of alternative broadband access solutions:** Unlike global markets where broadband services are delivered through multiple platforms including fixed line, mobile, cable, fibre, wi-fi and closed short range networks, Broadband services in India are heavily dependent on mobile telecom services to deliver high quality services at high downlink/uplink speeds. That in itself is a poser and a challenge given that existing network capacity and spectrum is rather stretched. Furthermore, the consumption pattern of data / internet based services has changed dramatically over the past few years with mobile applications including app-based service delivery portals video, music/podcast content and other graphical content such as social media networking apps being used extensively by a rapidly growing smartphone population. Networks have had to rapidly adapt to these shifting market paradigms.

As per E Y's Report on the Future of Digital Content Consumption in India (Jan 2016), "India will have more than 350 million smartphones by end FY17. Inexpensive smartphones and the rollout of 3G and 4G broadband infrastructure are rapidly coming together to leapfrog traditional distribution and democratize online access."

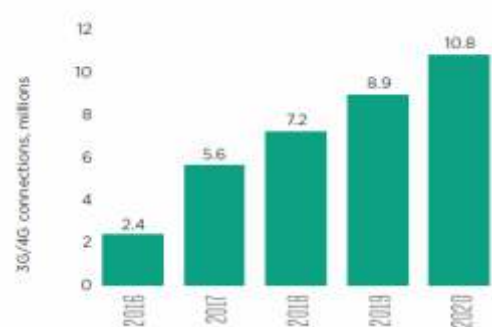
The report continues to state "Smartphone penetration in India is expected to grow to 520 million by 2020, making India one of the largest smart phone economies in the world. Broadband penetration will increase from 14% today to 40% by 2020. The rapid up-take of connected devices and broadband connectivity will be instrumental in media consumption shifting beyond traditional media formats such as broadcast and cable TV towards digital mediums"

ENABLERS TO THE GROWTH OF BROADBAND IN INDIA

- a. **Reduction in Regulatory Levies:** As per the recent report released by GSMA – “Digital Inclusion and mobile sector taxation in India” there are opportunities to further extend connectivity, both mobile as well broadband connections by reducing regulatory fees, whilst delivering revenue-neutrality to the Government.

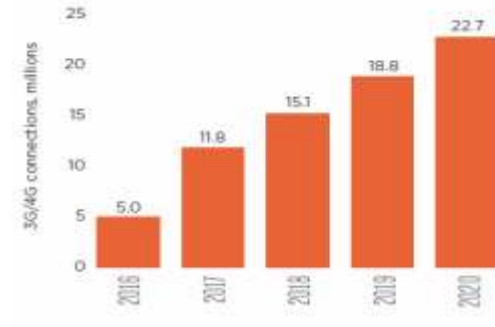
GSMA has calculated the impact on the total Mobile Penetration and Total Mobile Broadband Penetration in scenarios where License fee and SUC is decreased.

FIGURE IV A - Impact on Mobile Broadband Penetration



Source: Deloitte analysis based on operator, GSMA, IMF and World Bank data

FIGURE IV B - Impact on Mobile Broadband Penetration



Source: Deloitte analysis based on operator, GSMA, IMF and World Bank data

Figure 6: Impact in case Reducing spectrum usage charges (SUC) from 3%-8% to 1%.

- b. **Strong and consistent Policy and Regulation:** A stable and consistent Regulatory and Policy framework can go a long way in facilitating growth of Broadband in India. As India is heavily dependent on mobile broadband, the health of Indian mobile Telecom operators is critical to the growth of broadband in the country. Voice still contributes over 75 percent of the revenue of the mobile telecom players even though share of data is steadily rising. Therefore, any adverse changes in regulatory mechanisms and policy for voice or data business can have a serious negative impact on the health of the sector. Any further impact on revenue makes it harder for the Industry, which is already laden with the net debt of INR 380,000 Crore (US\$ 63 billion), to invest further for deploying or upgrading networks.
- c. **Spectrum Pricing Levels:** It is a market accepted reality that the broadband revolution in India will be spearheaded by mobile (wireless) broadband and therefore it is imperative that stakeholders are seized of the need for urgent resolution of Spectrum related issues that continue to plague the sector.

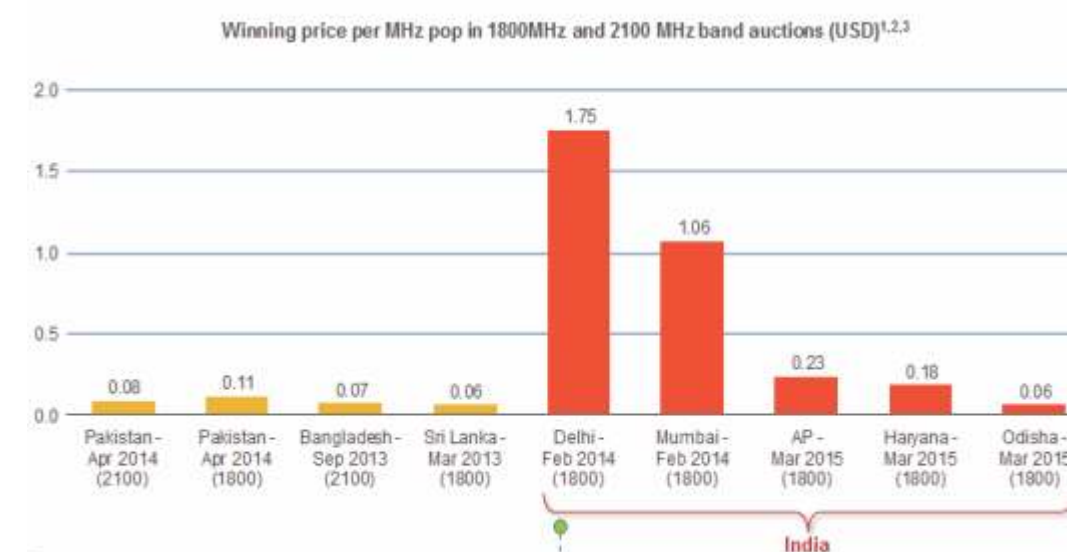
Of late, several steps have been undertaken by the Government of India to make maximum possible quantum spectrum available to the telecom services industry – a most appropriate step towards moving India from being a spectrum deficient country to the spectrum enriched country. However, spectrum pricing continues to be a major constraint. Figure IV C below shows the pricing for 1 carrier (5 MHz/ 20 MHz) on pan India basis:

FIGURE IV C: Spectrum pricing by bands

	700MHz	800MHz	900MHz	1800MHz	2100MHz	2300MHz	2500MHz	Total
Pricing (Rs. Cr)	57,425	29,095	45,583	14,365	18,730	16,340	16,340	1,97,878

Source: TRAI, COAI (2016)

FIGURE IV D: Spectrum pricing comparison



Source Analysys Mason (2016)

Figure IV D implies that a quantum of 65 MHz (25 MHz FDD + 2x20 MHz TDD) in all 22 circles will cost ~ Rs. 2 lac crores. The Industry has consistently said that high of spectrum makes it unaffordable for the service providers, besides limiting the financial leverage and capacity of telecom companies to invest in infrastructure. As shown in the Figure IV D below, Spectrum in India is more expensive as compared to countries like Pakistan, Bangladesh and Sri Lanka.

COAI STRUCTURE

- d. **Spectrum Harmonization:** 1800 MHz band is the core band for LTE, as the band is widely used by many countries throughout the globe. In India, presently the exercise of harmonization is being carried out. It brings significant advantages to all stakeholders. Operator's spectrum will become contiguous, suitable for LTE deployment, and DoT will be able to find additional contiguous spectrum in every circle for the next auctions, which will bring precious revenue to the government while also providing the needed spectrum and capacity to the industry.
- e. **Investments required to achieve broadband access for the next billion:** We estimated that investment of around Rs. 9.6 Lakh Crore will be required for achieving the target of next 1 billion broadband subscribers. We believe that the major operator investment will be on the Spectrum acquisition

Table 3: Break-up of the Investments required in achieving the target of next 1 billion broadband subs:

Cost Components	Required to connect the next 1 bn	Rate per unit	Total Cost (in Cr.)
Spectrum (MHz)	100 Mhz*	At base price of 2016**	4,10,000
BTS (No.)	6,00,000	10,00,000	60,000
Optical fibre (R km)	8,25,000	3,00,000	24,750
Microwave			1,12,500
Total			6,07,250

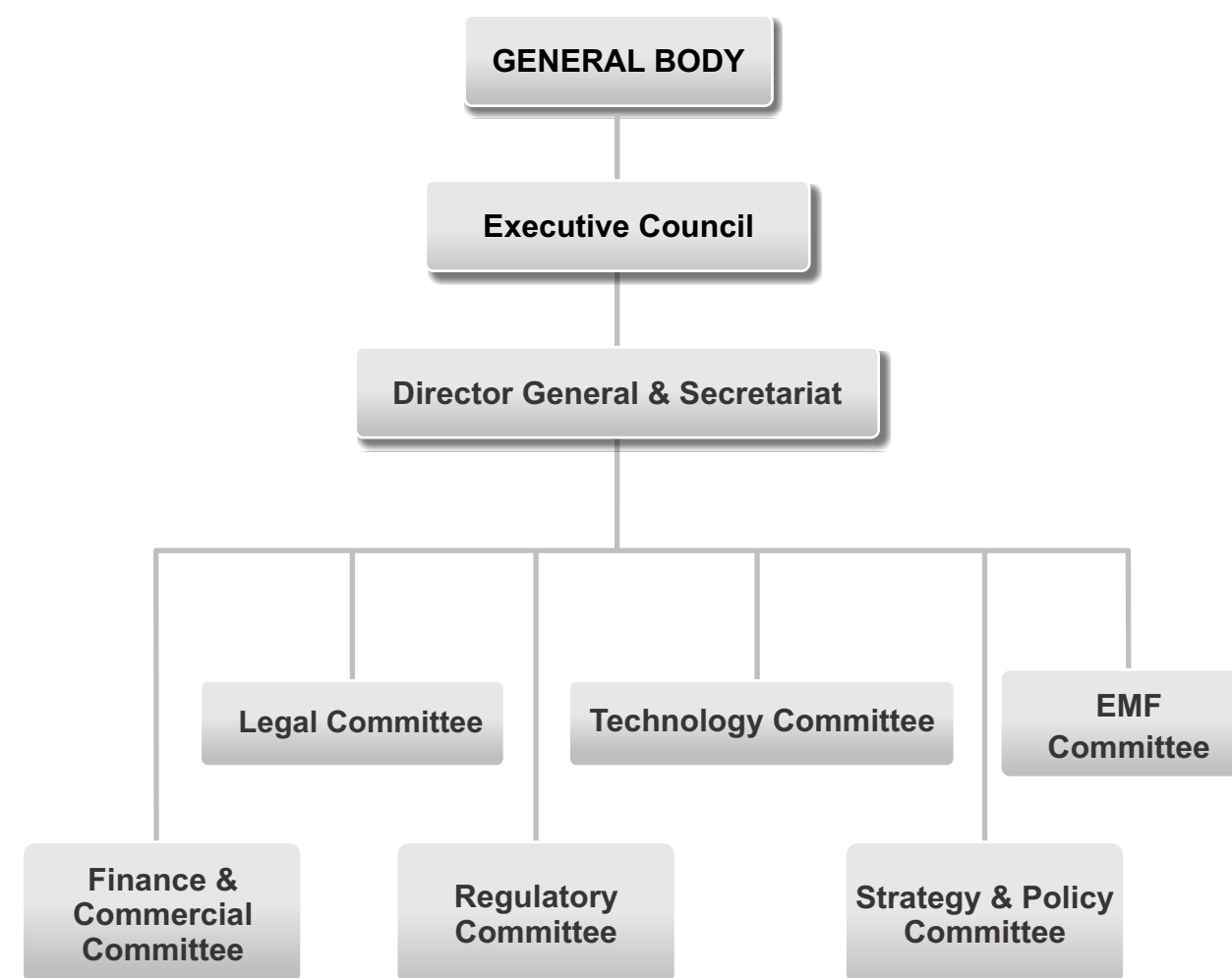
* Assumptions - 4 operators with 5 MHz of Pan-India 700 MHz, 10 Mhz of 900 MHz and 10 MHz of 1800 MHz
 ** Where 2016 base price is not available calculation is based on previous auction price

Source: TRAI, DoT, Operator Annual Results, COAI Estimates

CONCLUSION

Broadband is a critical infrastructure pre-requisite for the economic and social development of nations. Broadband acts as a significant enabler to a number of businesses and is a cornerstone of digital empowerment. The Government of India has set an ambitious target of providing broadband connectivity to 2.5 lakh Gram Panchayats spread over six lakh villages across India over the next three years.

However, the Broadband connectivity, both wireline and wireless, is far less developed than the voice connectivity. The diffusion factor of broadband in India is around 8% which far less than the mobile services i.e. around 80%. Once the Government and industry resolve to work together to remove some of the key barriers in the uptake of broadband services the returns, viability and sustenance of business will fall in line. Consequently, we will be able to see a more efficient and financially viable service ecosystem evolve and flourish.



Working Groups and Special Projects

- ACT (Apex Advisory Council for Telecom in India)
- EMF Portal Working Group
- Sub Group on Green Telecom

Mr. Rajan S. Mathews, Director General

Mr. Vikram Tiwathia, Deputy Director General

Mr. J. Jena, Deputy Director General

Mr. Saurabh Puri, Director - Research & Analysis

Mr. Gopal Mittal, Director - Commercial & Finance

Mr. Sudeep Sengupta, Director – PR & Communications

Ms. Vertika Misra, Deputy Director – Technology & Security

Ms. Garima Kapoor, Senior Manager - Research & Analysis

Mr. Kshem Kapoor, Senior Manager - Regulatory Operations & Analysis

Ms. Amrita Anand, Senior Manager - Legal & Regulatory

Mr. Lokesh Kewalramani, Manager - Research & Analysis

Ms. Ankita Mittal, Manager

Mr. S. S. Poriya, Manager - Administration

Ms. Sugandha Berry, Deputy Manager - Technology & Security

Ms. Neeti Mathur, Assistant Manager - PR & Communications

Ms. Anandhi Nair, Assistant Manager – DG Office

Ms. Sanki Lalwani, Assistant Manager - Technology & Security

Mr. Abhishek Jha, Senior Executive - Legal & Regulatory

Ms. Anshita Sharma, Senior Executive- PR & Communications

Ms. Neetu Sharma, Senior Executive - Commercial & Finance

Ms. G Lalitha, Senior Office Executive

Ms. Deepa Ahya, Reception

TEAM COAI



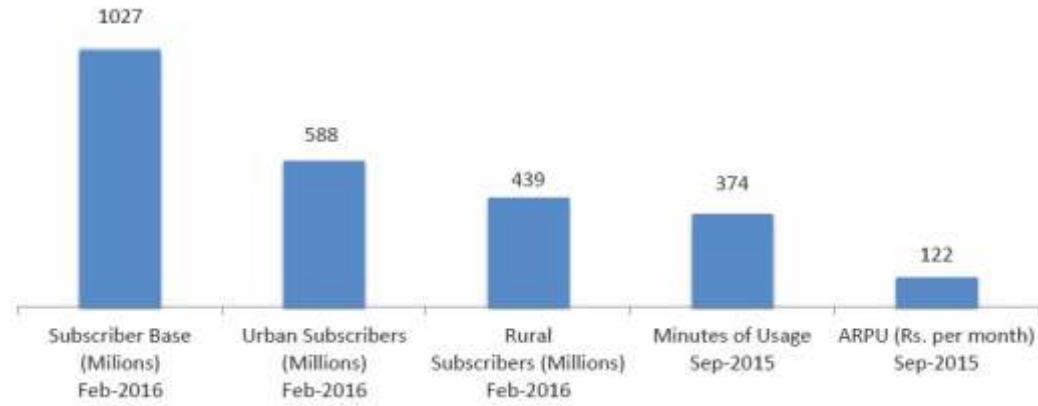
The COAI team includes dynamic, highly skilled professionals with a pro-active attitude and remarkable proficiency in their respective verticals. The highly competent Secretariat works diligently for every activity undertaken towards the cause of the industry. The Team regularly coordinates with regulators and government at all central and state levels along with other stakeholders. The Secretariat has earned a credible reputation in the telecom sector through its impressive efficiency and professional prowess.

This year, a number of industry professionals joined COAI, Mr. Sudeep Sengupta joined as Director – PR & Communications, Mr. Lokesh Kewalramani as Manager- Research & Analysis, Ms. Ankita Mittal as Manager, Mr. S. S. Poriya, as Manager Administration, Mr. Abhishek Jha as Senior Executive - Legal & Regulatory and Ms. Anshita Sharma as Senior Executive - PR & Communications respectively 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 CORE MEMBERS	
 Aircel Cellular Ltd.	 Bharti Airtel Ltd.
 Idea Cellular Limited	 Reliance Jio Infocomm Ltd.
 Telenor Group	 Vodafone Mobile Services Limited
 VIDEOCON mobile services Videocon Telecom	

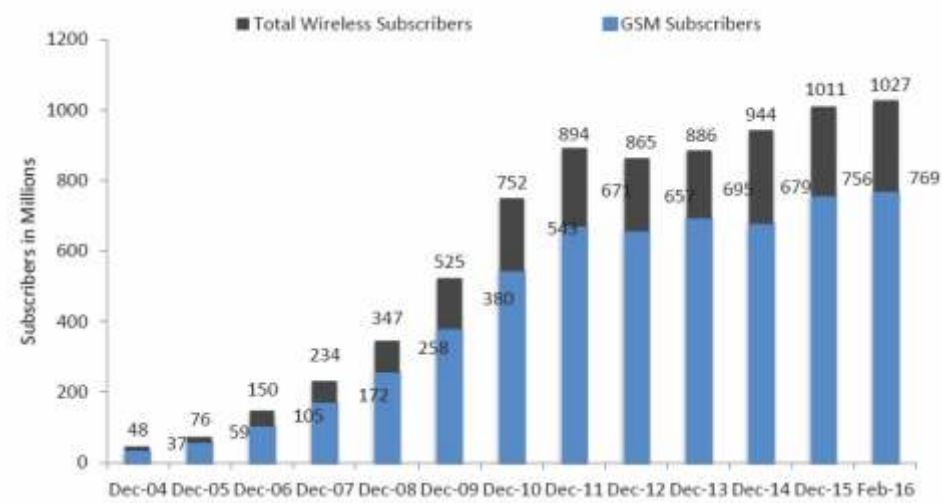
COAI ASSOCIATE MEMBERS		
 Apple India Pvt. Ltd.	 CISCO Systems India Pvt. Ltd.	 Ericsson India Pvt. Ltd.
 Facebook	 Google India Pvt. Ltd.	 GTL Infrastructure Ltd.
 HUAWEI Huawei Technologies Co. Ltd.	 IBM India Pvt. Ltd.	 indus TOWERS Indus Towers Ltd.
 Intel Corporation	 Microsoft Microsoft Corporation India Pvt. Ltd.	 NOKIA Nokia Networks
 QUALCOMM Qualcomm India Pvt. Ltd.		

A. Wireless Industry in India



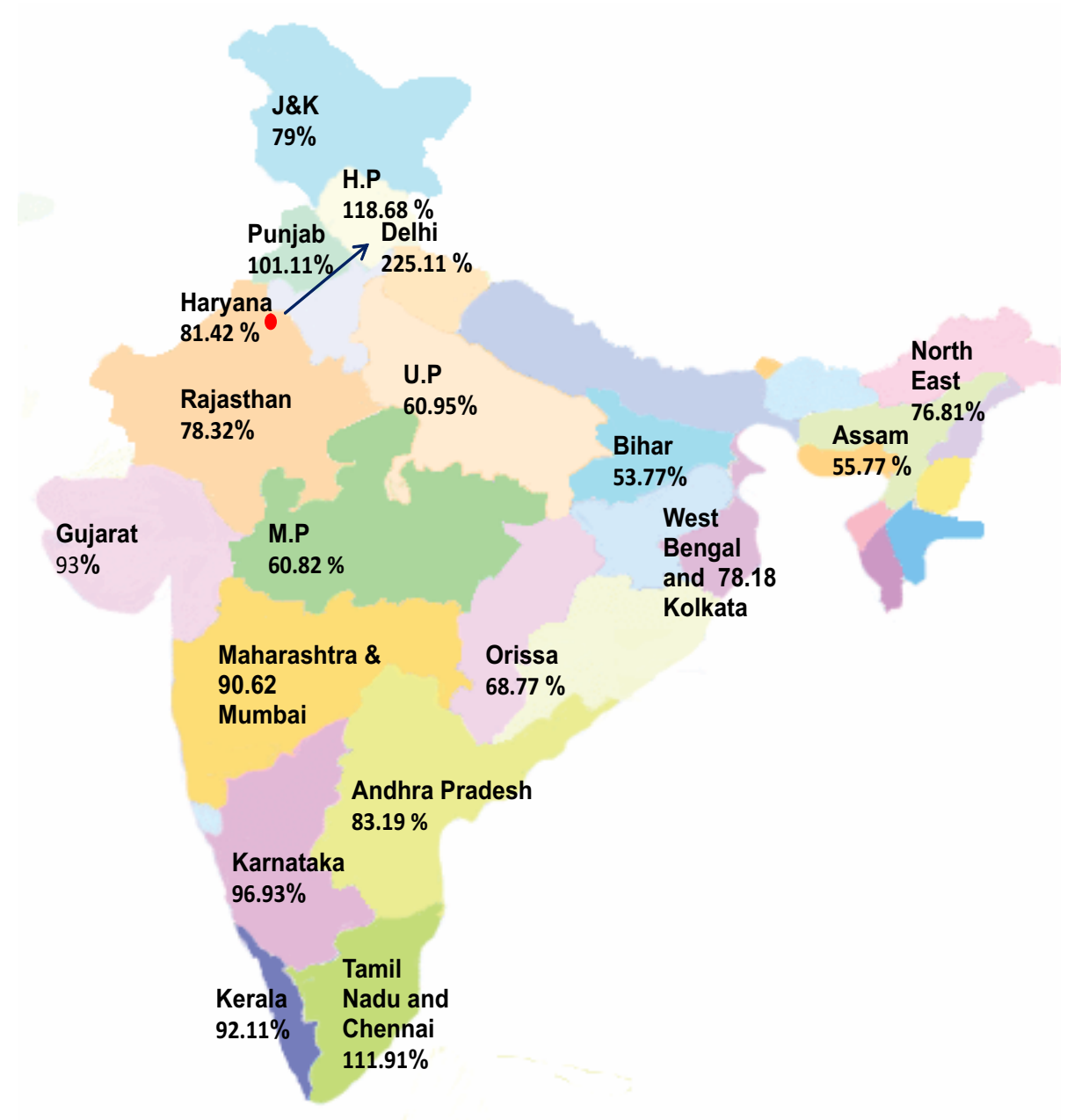
Source: TRAI Subscription Data and Performance Indicator Report

B. All India Total Cellular and GSM Cellular Subscriber Base



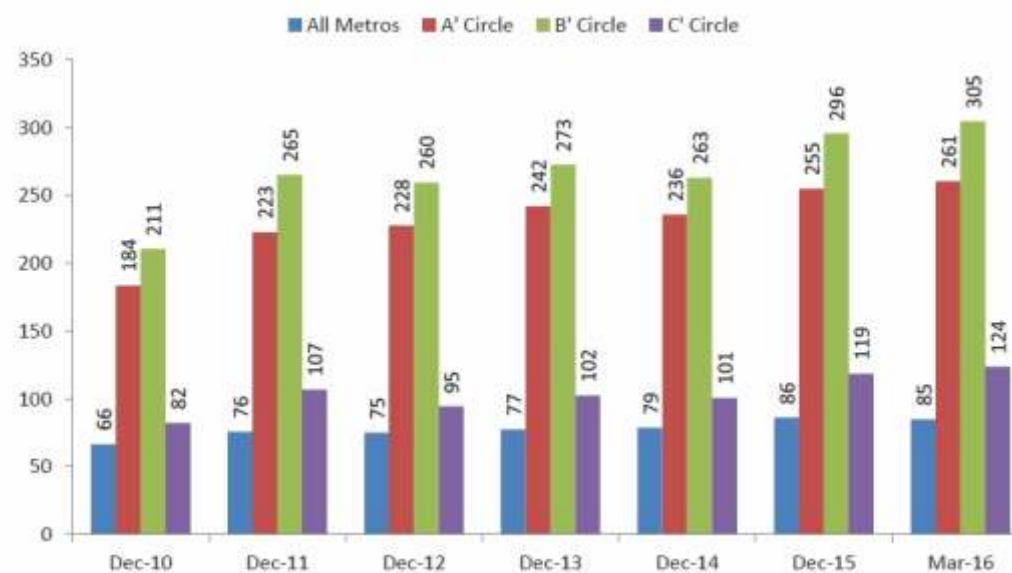
Source: TRAI and COAI

C. Wireless Tele-density Across Telecom Circles – Sep 2015



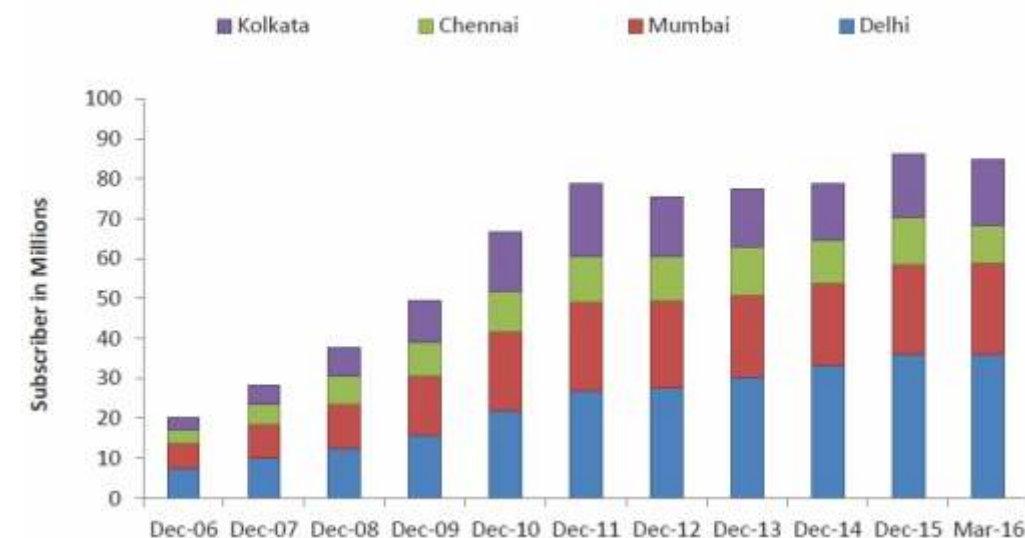
Source: TRAI - Performance Indicator Report

D. All India GSM Cellular Subscriber Base – Circle wise



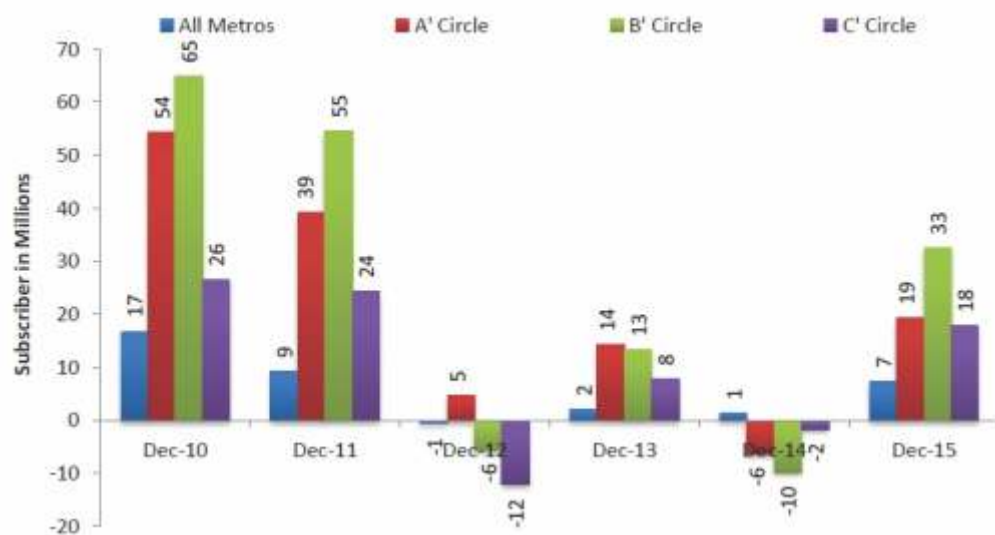
Source: COAI

F. All India GSM Cellular Subscribers – Metros



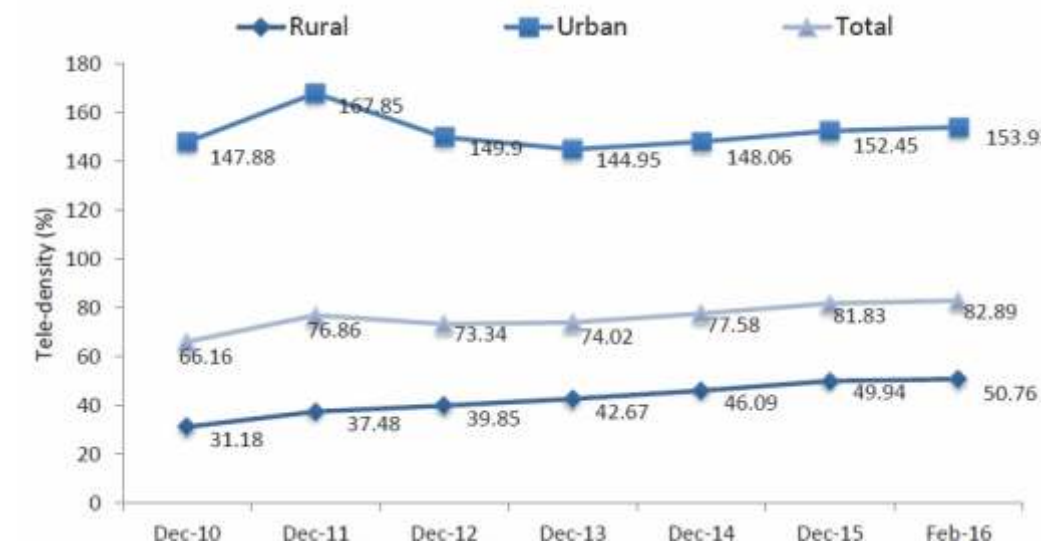
Source: COAI

E. All India GSM Cellular Subscribers – Annual Net Additions



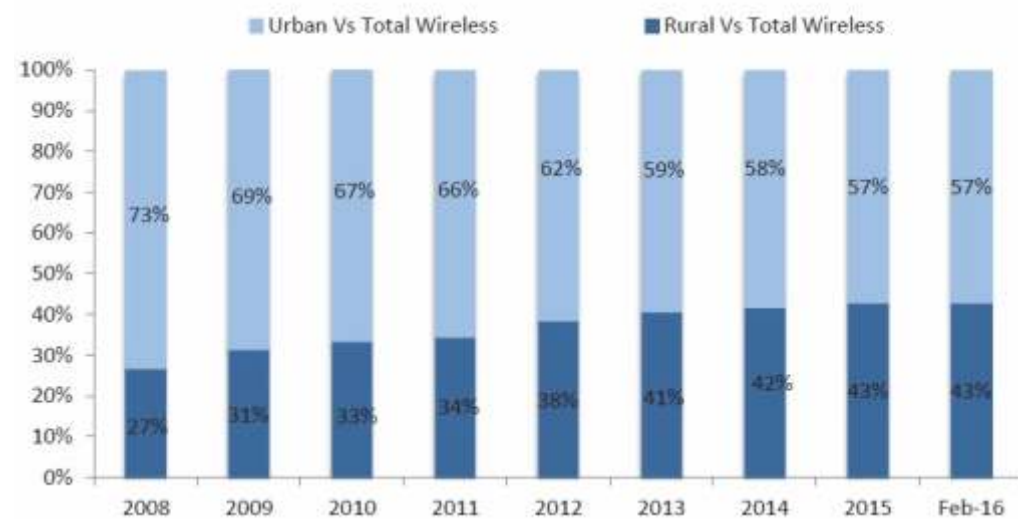
Source: COAI

G. Total Tele-density (%)



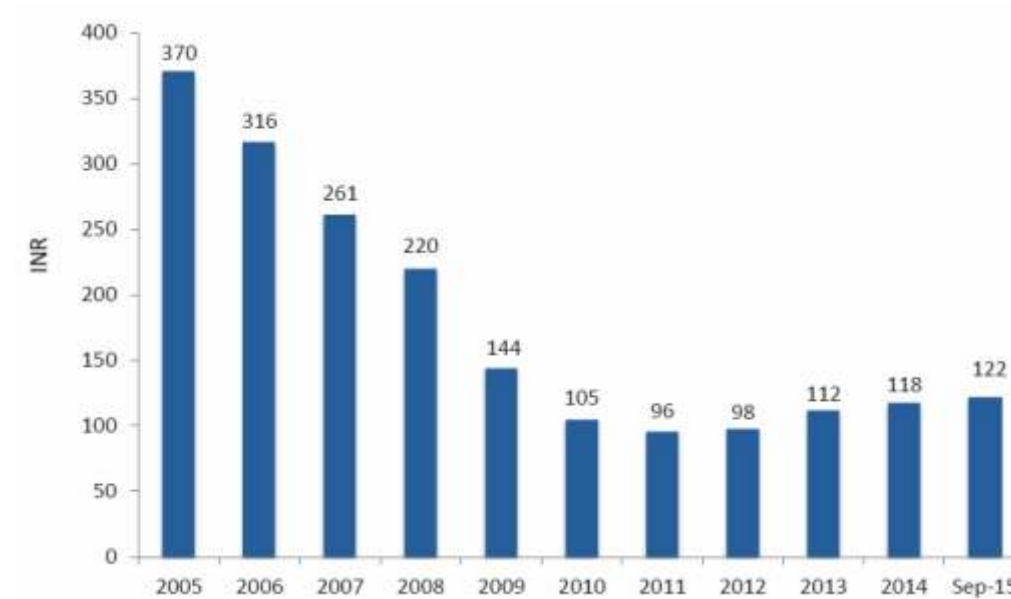
Source: TRAI

H. Wireless Rural Subscribers as % to Wireless Subscriber Base



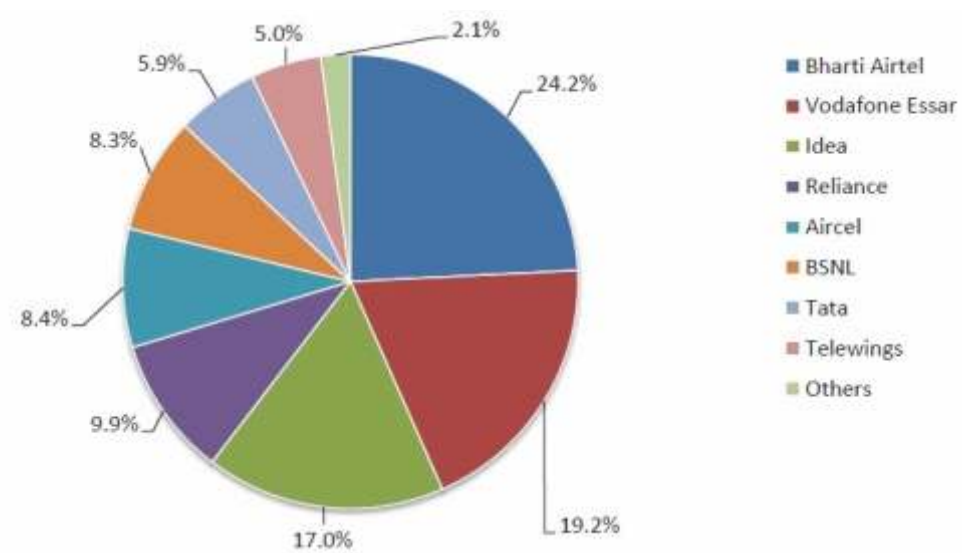
Source: TRAI (Year Ending – December)

J. Average Revenue Per User



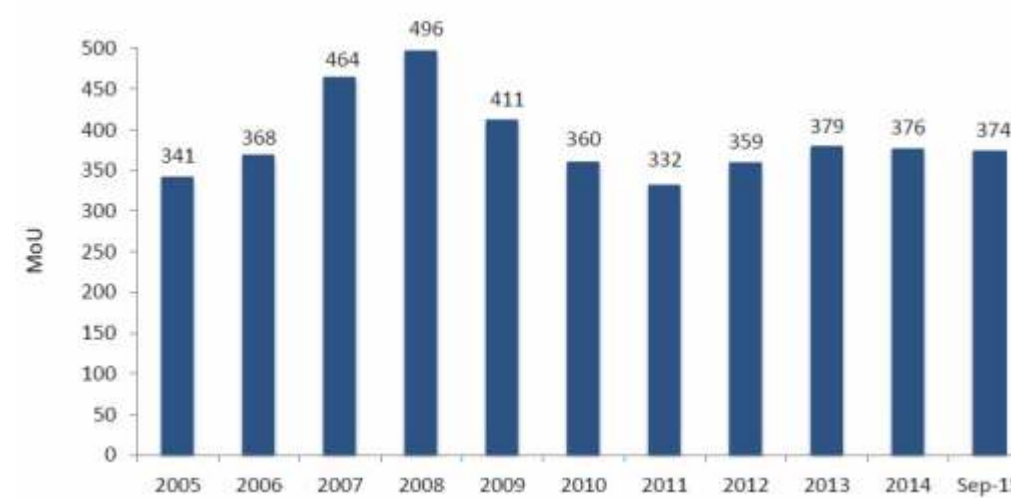
Source: TRAI Performance Indicator Report (Year Ending – December)

I. Market Share of Wireless Operators – Feb 2016



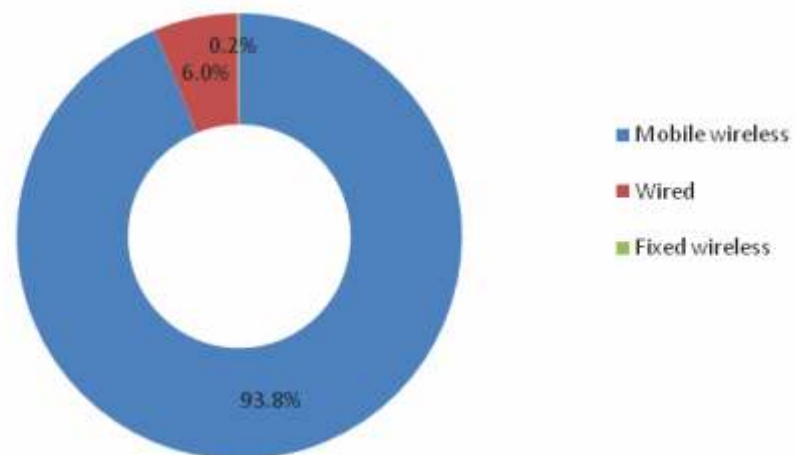
Source: TRAI Subscription Data

K. Minutes of Usage Per Subscriber Per Month



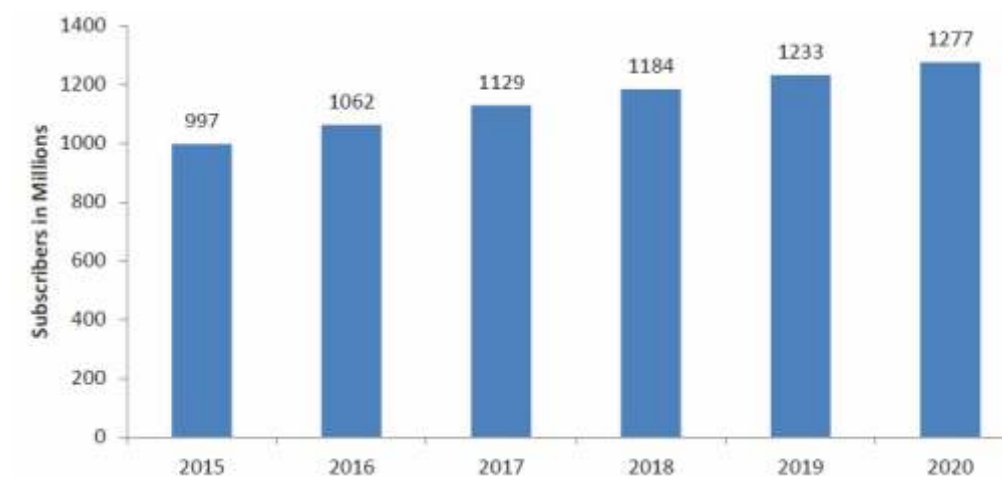
Source: TRAI Performance Indicator Report (Year Ending – December)

L. Composition of Internet Subscribers – Sep 2015



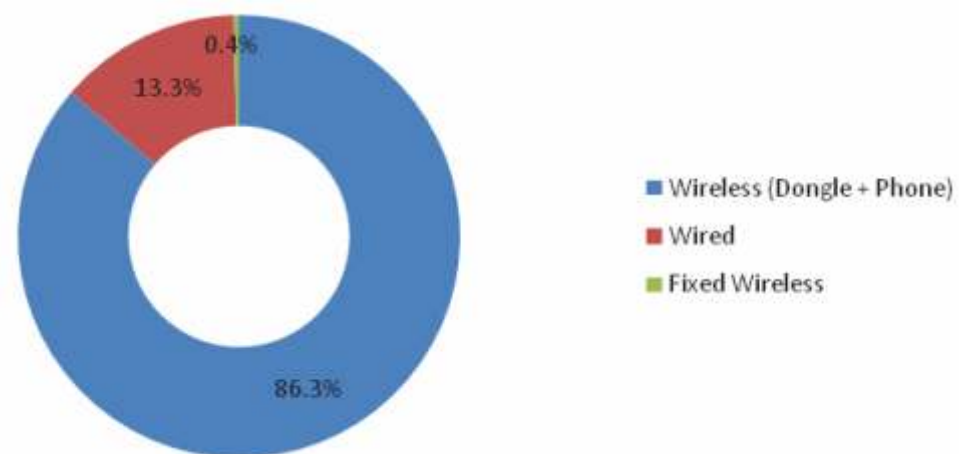
Source : TRAI Performance Indicator Report

N. Total Wireless Subscribers- Future Projections



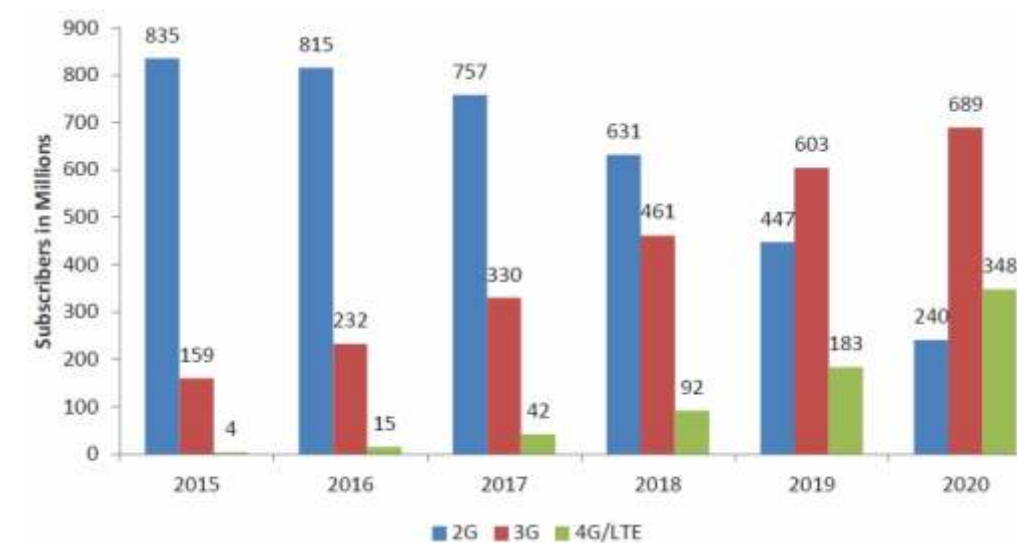
Source: TRAI, Ovum, COAI Estimates (Year Ending December)

M. Broadband Access: Share of Different Technologies – Sep 2015



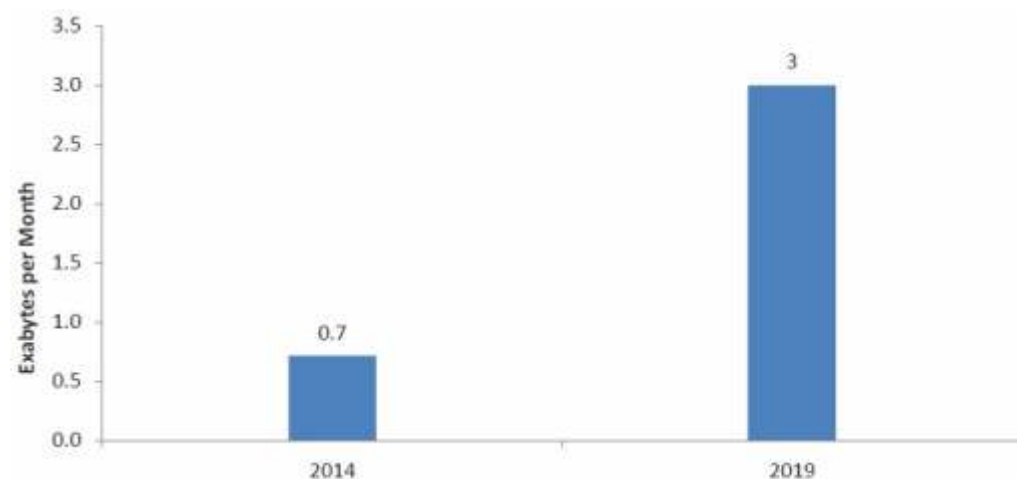
Source: TRAI Performance Indicator Report

O. 2G, 3G, 4G/LTE Subscribers- Future Projections



Source: TRAI, Ovum, COAI Estimates (Year Ending December)

P. India IP Traffic Growth/Top-Line



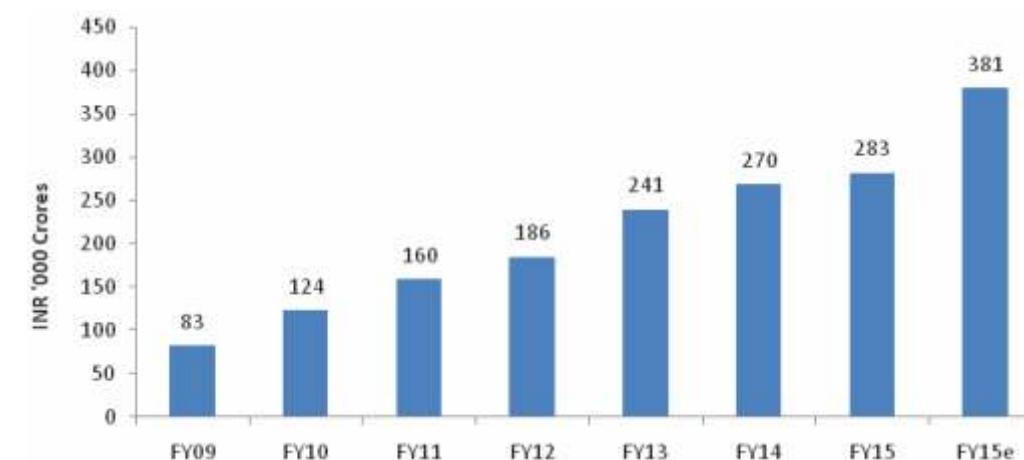
Source: CISCOVNI - 2015 (Year Ending December)

Q. Spectrum Allocation in India

Countries	MHz Band					
	700/800	850/900	1800	2100	2300	2500
India		2x33.1	2x44.9	2x23.6	1x40	1x12.7
Turkey	2x30*	2x34.8	2x74.8	2x60		2x60 & 1x40
South Korea		2x35	2x20 & 2x50**	2x60	1x57	2x20
Philippines		2x45	2x75	2x35		1x95
Indonesia		2x46	2x75	2x50**	1x30	
Cambodia		2x40.4	2x75	2x60		
Taiwan	2x45	2x30 & 2x35***	2x60	2x60		Planned 2x70 & 1x50
Vietnam		2x45.8	2x75	2x60		

- Best Practice
- Average
- Below average
- * European band plan
- ** Additional 2x10 MHz will be auctioned
- *** Assymmetric assignment for uplink and downlink frequencies

R. Debt of Telecom Industry



Source: Annual Reports, Ministry of Corporate Affairs

S. Count of Networks across Telecom Circles

Networks	2G	3G	4G
Existing	217	94	38
New Launches	0	1	50

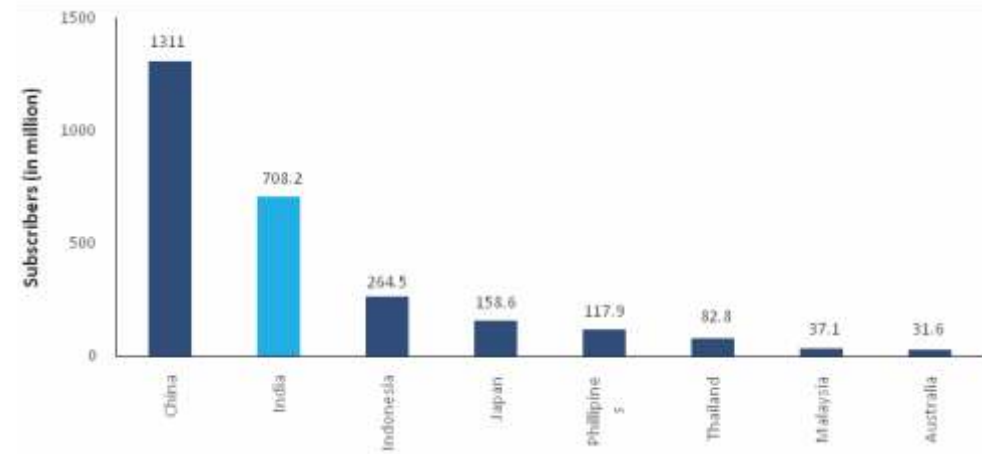
Note: 4G counts excludes BSNL, MTNL, Tikona Networks
Source: TRAI, operators

T. Total Telecom Sites (BTS)

Networks	2G Sites	3G Sites	4G Sites	Total Sites
Total	696788	268682	192179	1157649

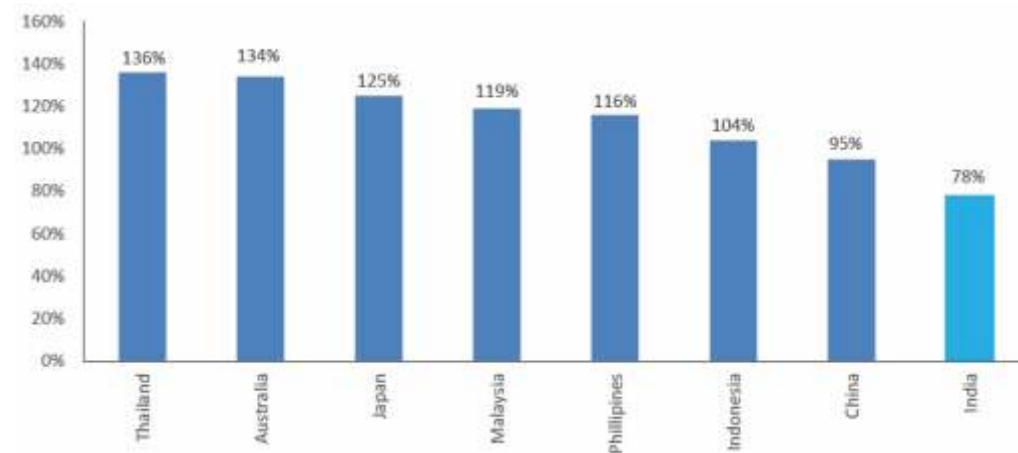
Source: NEP Portal

A. Subscriber Base (in millions)



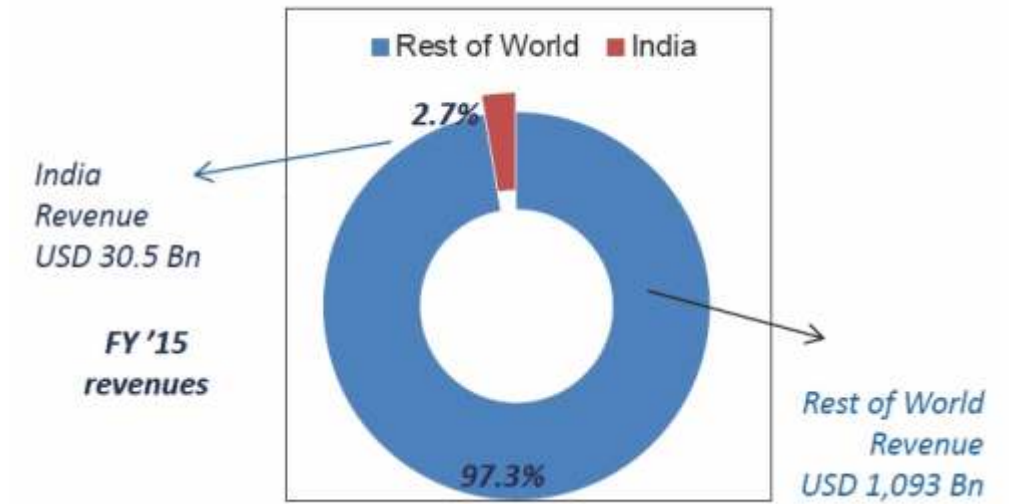
Source: Merrill Lynch Global Research Sep-2015

B. Wireless Penetration



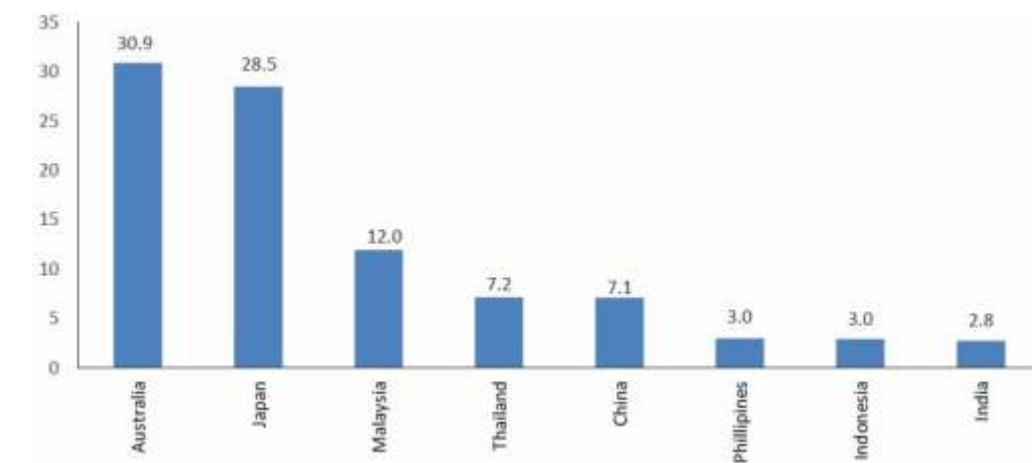
Source: Merrill Lynch Global Research Sep-2015

C. India Revenue Share



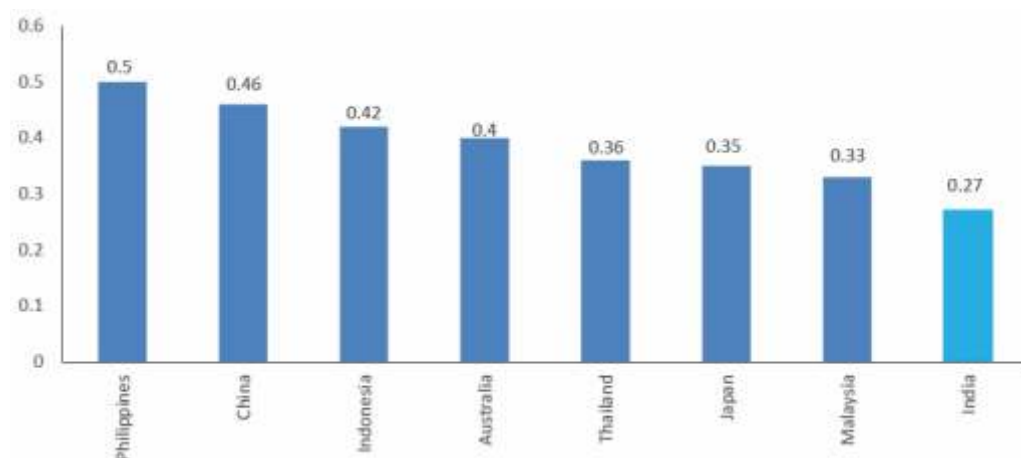
Source: TRAI, Operators

D. Average Revenue Per User (in USD)



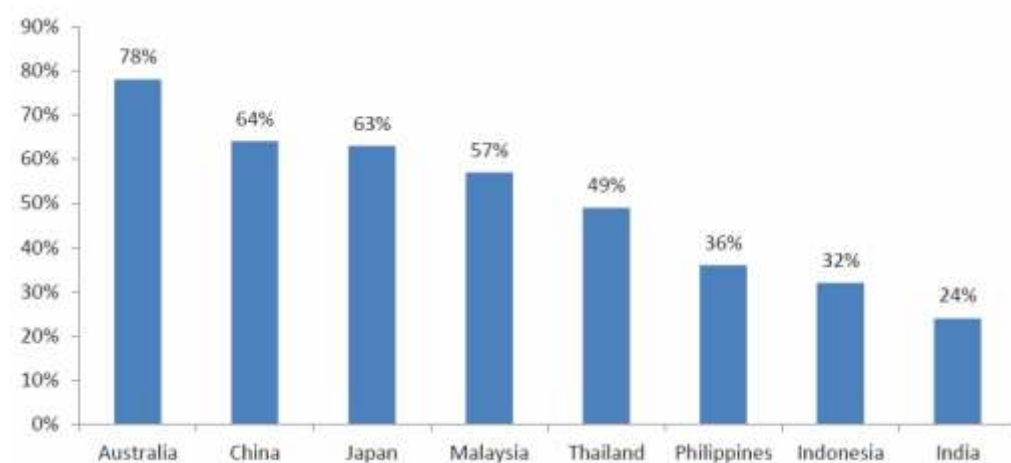
Source: Merrill Lynch Global Research Sep-2015

E. Herfindahl–Hirschman Index (HHI)



Source: Merrill Lynch Global Research Sep-2015

F. Smartphone Penetration



Source: Ovum Estimates, December 2015

G. Cost of Spectrum



Source: Analysys Mason Consulting

- 1: China: In Dec 2013, 2.3GHz and 2.6GHz TDD spectrum was allocated to China Mobile, China Unicom and China Telecom – price not available
- 2: Malaysia: In Mar 2006, 2100MHz spectrum was allocated to Time dotCom and MiTv Corporation at the price of USD 14.94mn (for 2x15MHz + 5MHz unpaired); Price per MHz pop: USD 0.02
- 3: For calculation of price per MHz, paired spectrum has been considered as 2x (For example, 2x5MHz has been considered as 10MHz of spectrum)

H. Tax and Levies

Regulatory Charges	Pakistan	Sri Lanka	China	Malaysia	Bangladesh	India
Service Tax, GST	18.0%-19.5% (Sales Tax)	25.51% Telecom Levy ² (VAT + MSL + NBT ⁴ + ECL ⁵)	11.0% (VAT)	6.0% (GST)	19.45% (Supplementary duty + VAT + Surcharge)	14.0% (Service Tax) + 0.5% (Swachh Bharat Cess) + 0.5% (Krishi Kalyan Cess)
License Fee	0.5% LF + 0.5% R&D	2.04%	-	0.5% ⁸	5.5% Adjusted Gross Revenue + BDT 50 mn (per 2G & 3G license)	8%
SUC	Cost Recovery	-	-	-	-	2% to 6%
USO Fund	1.5% of Gross Revenue	-	-	6.0% of Weighted Net Revenue	1.0% of Adjusted Gross Revenue	5% included in License Fees
Other taxes	Sales Tax of PKR 250 on new or replacement SIM	LKR 3 per min IDD Levy ⁶	-	-	SIM Tax of BDT 100 on new or replacement SIM	-
Total levy	26.5% to 22.0% + Cost Recovery + SIM Tax	27.55% + IDD Levy	11%	12.5%	25.95% + BDT 50 mn per license + SIM Tax	25% to 29%
Telecom specific levy	2.5% + Cost Recovery + SIM Tax	-12.04% + IDD Levy	-	6.5%	6.5% + BDT 50 mn per license + SIM Tax	10.0% to 14.0%

- 1: Varies across province; 2: For voice / SMS / VAS, only 10.2% for data related services; 3: Mobile & fixed subscribers levy; 4: Nation Building Tax levied on multiple sectors; 5: Environment conservation levy applicable to multiple sectors; 6: Levy on international voice and video calls 7. Telecom levy includes 10% MSL; 8: 0.5% or RM 50,000 whichever is higher; 9 Effective from June 1, 2016

Source: Analysys Mason Consulting, TRAI, Country Regulator Websites, Operators

SIGNIFICANT ACHIEVEMENTS FOR YEAR 2015-2016

TECHNOLOGY & SECURITY RELATED ISSUES

IDENTIFICATION OF ADDITIONAL BANDS FOR IMT AT WRC: COAI had been coordinating with DOT and WPC for identification of additional bands for IMT at the World Radio Conference (WRC) - 2015. The government should insist at WRC for recognition of globally harmonized mobile bands to ensure a good choice of low cost devices for their citizens through major economies of scale in manufacturing. Indian Government has provided support on the following bands for IMT services:

Summary of Indian Support for Agenda Item 1.1 (Identification for IMT) for WRC 15

S. No	Band (MHz)	Amount (MHz)	Remarks
1	1427 – 1452	25	Support
2	1452 – 1492	50	Support
3	1492 – 1518	26	Support
4	3300 – 3400	100	Support
5	3400 – 3600	200	Support

There was no consensus on the 470 – 698 MHz band amongst the stakeholders. COAI had made various submissions to DoT and WPC to support this band too at the WRC. Though DoT did not support this band at WRC, however, they have made a deal with the Ministry of I&B for allocation of this band for IMT at the National level. DoT has supported identification of various additional bands for IMT at the World Radio Conference – 2015 and 470 – 698 MHz band at National level.

SIMPLIFIED ASSESSMENT PROCEDURE FOR LOW POWER BTS: The Indian telecom network is witnessing introduction of low power Base Transceiver Station (BTS) having effective radiated isotropic power (EIRP) limited to 100 Watts. These BTSs, also known as micro BTS, are likely to be mounted on walls, rooftops, and on the roadside electric/telecom poles, street furniture. Due to the fact that such BTSs are small in size and radiate lower power vis-a-vis regular BTS, they require different treatment from the point of view of audit of EMF radiation limits already laid down by the Department of Telecommunications (DoT). The audit requirement for these types of BTS will be called Simplified Assessment Criteria (SAC). COAI along with AUSPI submitted to the DoT a detailed document on the inherently EMF compliant nature of these low transmit power & low EIRP 3G & 4G micro sites as they operate on wider carrier bandwidth & discontinuous transmission modes and simplified audit by the TERM Cells under SAC. TEC has issued guidelines for different slabs between 10W & 100W.

INDIAN TEST LAB FOR IN-COUNTRY SECURITY TESTING OF TELECOM EQUIPMENT: COAI had been taking up the issue with DoT stating that this requirement of security certification of telecom equipment only from authorized and certified agencies/labs within India is inconsistent with the mutual recognition provision of the international certification practice. There are longstanding internationally accredited/ recognized laboratories conducting testing in this area and the location where the test is performed, in accordance with global best practice. While in some cases, it may be desirable for a vendor to test their product in labs located in

India, it may be impractical in some cases where the same product is already being tested and a security certificate is obtained from an internationally accredited laboratory. Providing flexibility in terms of where products are tested is critical for maintaining a trusted global market for telecommunications and ICT products. It is also believed that DoT is working on developing telecom security standards. COAI thus requested that the date of certification from authorized and certified agencies/labs in India should only be specified after the release of requisite telecom security standards which are a pre-requisite for the lab to conduct the tests. DoT has provided an extension on this account till April 1, 2017.



ACCEPTANCE OF SRI LANKAN REFUGEE CARD AS VALID POI & POA: This issue was raised by COAI during the ACT workshop for Southern Region held at Ooty in June 2015, post which a detailed submission was also made to the DoT. It was submitted that a thorough check is conducted on these refugees. Photo identity cards are being issued to such refugees which enables them for various kinds of subsidies and the same is also used for obtaining different other Government documents like ration card, driving license, etc. Hence, these refugee cards should be allowed as valid proof of identity and address for obtaining mobile connections too. DoT on January 15, 2016 issued instructions to allow Sri Lankan Refugee Card as valid proof of Identity and Address for obtaining mobile connections with immediate effect.

INTERFERENCE IN THE SPECTRUM ASSIGNED FOR TELECOM USAGE ON ACCOUNT OF ILLEGAL REPEATERS AND JAMMERS: The issue of the interference being faced by our member operators in the current spectrum assigned to them for telecom usage on account of illegal repeaters, boosters, jammers etc. was raised with the DoT. It was submitted that the interference issues related to out of band emissions and illegal repeaters, boosters & jammers have increased manifold and the resolution of such issues takes considerable time due to limited manpower and infrastructure with the WMO wings. It was submitted that since, the TERM Cells are present at circle level and also equipped with technical manpower to handle such issues, it is requested that the job to ensure resolution of interference issues pertaining to illegal repeaters, boosters & jammers be entrusted to the TERM Cells along with the WPC Wing. This will help in speeding up resolution of the issues. The issue was also raised at the Udaipur workshop, where the DoT instructed the TERM Cells to take strict actions against the users of these illegals jammers and repeaters. DoT has given the responsibility of resolution of issues related to illegal repeaters, boosters and jammers to the TERM Cells.



VARIATION IN AMSL VALUES IN SACFA CLEARANCE CERTIFICATES FOR MRO TESTING: Coverage testing and issuance of service test certificates have been put on hold by some TERM cells in their service

areas on account of small variation in AMSL values (Above Mean Sea Level) of the BTS sites with respect to the values indicated in SACFA Clearance Certificate and actual values measured at the time of TERM cell testing. It was highlighted that the actual accuracy users attain in measurement of elevation by GPS handsets depends on various factors, including atmospheric effects, sky blockage, and receiver quality i.e. make and models of the GPS equipment. It was submitted that the AMSL value when measured at different point of times will not be same and will vary due to the various factors as enumerated above. The AMSL value mentioned in SACFA clearance certificate can never be same as measured at a later date at the time of testing of coverage for roll out obligation and, therefore, its cross verification is not desirable. Thus, the service Test Certificate for MRO Testing by TERM cells should not be withheld due to variations in AMSL value. In fact there is no relationship between AMSL and coverage testing, thereby there is no requirement of rechecking the AMSL value at the time of testing for MRO compliance. DoT issued an office memorandum to all the TERM Cells stating that the field Tower Height AMSL should be deleted from the MRO testing document. DoT has issued an office memorandum to all the TERM Cells stating that the field Tower Height AMSL should be deleted from the MRO testing document.

ACT-EMF WORKSHOP: In the series of regional workshops on ACT and EMF issues, the following workshops were held:

- a. Eastern region on April 9-10, 2015 at Port Blair
- b. Southern region on June 8-9, 2015 at Ooty
- c. Northern region on February 18-19, 2016 at Udaipur



The workshops were well attended by DoT officials and officials from the state governments of related states as well as the LEAs. They served as a platform for interactive discussions between all the attendees. Many operational issues were discussed and DoT appreciated many issues raised by the industry. The DoT and TERM Cells were very positive and there have been many positive outcomes out of these workshops in terms of clarifications and policies from the DoT.

Following are some of the major issues which were resolved in the ACT – EMF Workshops:

- i. Sri Lankan refugee as approved POI & POA
- ii. Requirement of Embedded Scanned Coloured Photo in Subscriber Database
- iii. Review of EMF related Penalty on account of procedural & non substantive deviations
- iv. DoT Guidelines on Installation of Towers
- v. RMS Value of Power Density/ EF to be considered in place of peak value for BB & FSM

BSNL PARTICIPATION IN THE EMF PORTAL: COAI had been discussing the issue of BSNL participation in the EMF Portal for the past year with DoT as well as BSNL. Finally, the BSNL has responded on the issue. They have nominated a central nodal officer for the EMF Portal as well as MNP. They have also nominated nodal officers in each circle to coordinate on the Portal efforts. Their SPOCs have started participating in the

discussions at the circle levels. They have also started uploading the data on the Portal. BSNL has also started the process of signing the contract with Ramboll. BSNL is participating in the EMF Portal. They have nominated SPOCs in circles and have started the process of signing the contract with Ramboll.

TERROR ACTIVITIES ON MOBILE OPERATORS IN SOPORE, J&K: In Sopore, J&K on May 1, 2015, wherein some miscreants entered the franchisee stores of some telecom operators and asked the staff to return the equipment which they had installed at one of the telecom towers. They manhandled the staff and threatened them with fire arms. On May 15, 2015, an organization calling itself Lashkar-e-Islam warned the telecom operators through posters to either completely stop the services in one week or face the bullets. They also got in touch with the landlords of the telecom sites and asked them to shut down the sites. With this threat, many sites were shut down in the area. COAI took up the issue with DoT as well as MHA seeking their support to the telecom operators so that the telecom services may continue operations at Sopore without any hindrance. COAI also met the CM & CS, J&K to get the issue resolved. They were very cooperative and the issue was actively taken up with MHA and the issue was resolved shortly. The DoT and CM, J&K took up the issue actively with MHA to get it resolved so that mobile operations could run smoothly in the area. The issue was resolved shortly by the MHA.



NEW DATA CDR FORMAT FOR 2G/3G/LTE ROLLOUT TESTING: DoT issued a new format for reporting of data CDR by operators with regard to rollout testing for 2G/3G/LTE. COAI submitted that the new stringent criteria for the Data CDRs prescribed at this stage by DoT will offset the focus of operators from performing respective rollout obligations. It was also submitted that such material change in CDR format is not possible to implement in the prescribed period of 3 months. Many technical difficulties in implementing this were quoted and it was stated that operators have initiated steps in this regard, however the same can only be provided around end December 2015. On the above request of COAI, DoT has provided an extension till November 2015 to the operators to implement the new data format.

TSTP FOR FDD LTE: COAI worked with DoT to issue a Test Schedule Test Procedure (TSTP) for FDD LTE. Earlier the DoT had only issued TSTP for TDD LTE which currently is only being deployed in 2300 MHz band. Operators would be deploying FDD LTE in 800, 900 or 1800 MHz bands. It was also submitted that the rollout obligations, in terms of coverage area, as defined in the NIAs or the license, should be persisted with and the same should not be linked to individual mobile technologies. DoT took note of the submissions made by COAI and issued a TSTP for FDD LTE on July 14, 2015.

INSTALLATION OF TOWERS ON GOVT. LAND AND BUILDINGS: COAI has made submissions to the DoT on the availability of Government land / buildings for installation of towers. DoT has taken up the issue with the UDD. The industry has also given a list of towers to be installed on UDD managed buildings in Delhi along with lead SPOCs to the DoT. Due to continuous involvement of COAI with the DoT on this issue, the Hon'ble MoC&IT

has written a letter to the Chief Ministers of all the states to allow installation of mobile towers on Government lands and buildings. The Postal Department has also shown interest in getting mobile towers installed on the Post Offices across India. The Hon'ble MoC&IT has written a letter to the Chief Ministers of all the states to allow installation of mobile towers on Government lands and buildings.

INSTALLATION OF TOWERS ON GOVT. LAND AND BUILDINGS IN LUTYENS ZONE, NEW DELHI: COAI has made submissions to the DoT on the availability of Government land / buildings for installation of towers in the Lutyens zone stating the issue of coverage gap in this area. DoT has taken up the issue with the UDD. The industry has also given a list of towers to be installed on UDD managed buildings in this along with lead SPOCs to the DoT. Due to continuous involvement of COAI with the DoT on this issue, DoT has finalized a list of 66 buildings in this area for installation of towers and is in discussion with the building owners for installation of towers on these buildings. DoT has finalized a list of 66 buildings for installation of towers in Lutyens zone in Delhi and is also in talks with the building owners for clearances.

REGULATORY ISSUES:

GREEN TELECOM: DoT issued Directive dated January 23, 2012, on "Implementation of Green Technologies in Telecom sector". Vide its said Directive 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 Telecom sector.

COAI team effectively coordinated with other associations and members with regard to the representation made to the inter-ministerial committee (IMC) of DoT. IMC agreed to the request of the industry and recommended that the DoT Directive dated January 23, 2012, needs to be recalibrated.



IMC has also recommended that penalty should not be linked to the achievement of the RET Targets. DoT after considering the IMC Recommendations and request of COAI referred its Directive on "Implementation of Green Technologies in Telecom Sector" to TRAI for fresh Consultation on following issues:

- a. Methodologies for measuring carbon emission
- b. Calibration with respect to RET Targets

DoT vide its letter dated March 9, 2016, shared with COAI, their letter sent to TRAI in this regard.

This is positive development as there was huge financial impact on the Industry with respect to meeting the RET deployment Targets.

FULL MOBILE NUMBER PORTABILITY (MNP): COAI spearheaded the industry subcommittee in the meetings with DoT committee looking after the various issues such as technical issues, testing related issues, project plan & timelines. On the request of COAI the testing requirement for the Full MNP was reduced to almost 1/10th of the intra-circle MNP. Industry implemented Full MNP within the timelines as prescribed by DoT. DoT appreciated the effort of the industry on the timely implementation of Full MNP.

TRAI REGULATION ON CALL DROP (TCP REGULATION 9TH AMENDMENT): TRAI issued a Regulation on Call Drops on October 16, 2015. The Regulation mandated TSPs to compensate the customers for the dropped calls within their networks. As per the Regulation, TRAI asked the operators to

- to credit Re.1/- for each call drop
- with the maximum of 3 call drop per day
- within 4 hrs of the occurrence of call drop

Implementation of the Regulation:

- i. In the Regulatory Committee meeting held in December, 2015 it was decided that the Industry should come adopt a uniform approach towards the implementation of the Regulation in case of no relief from the Court.
- ii. Accordingly, a focused group of technology teams was formed for the implementation of the Regulation covering representatives from Regulatory & Technology Teams.
- iii. In the Meeting of the focused group, following was undertaken
 - Finalization of Scenarios - Roaming / On-NET / ICR / Toll-free excluded
 - Finalization of Cause Codes-Finalization of Cause Codes (for OEMs Nokia, Ericsson, Nokia and Huawei)

Members are ready to implement the TRAI Regulation based on set of assumptions:

- Members will take at most 10 days for implementing the Regulation
- Around 20 days' time for processing of backdated CDRs

JOINT COMMITTEE FORMED IN BSNL TO REVIEW THE INTERCONNECT AGREEMENT: Industry has been facing interconnection related problems with BSNL since last 15 years. The major issue has been non-reciprocity of the terms and conditions of the Interconnect agreement in favour of BSNL. In order to resolve the issue, COAI requested BSNL to constitute a committee to review the Interconnect agreement based on current telecom environment in India, in terms of market share of various TSPs and the contribution of different services. COAI also submitted with BSNL the draft Interconnect agreement for the review under the said committee.

BSNL after various representations from COAI agreed to form a committee to review the interconnect agreement and has also agreed industry representative to be part of the committee. In the discussions held in the committee meeting Industry highlighted its priority issues along with the detailed clause wise issues on which industry sought reciprocal treatment from BSNL.

BSNL agreed to look into the priority issues and revert within a month's time on all the interconnection related issues. This is a positive development as Industry has been requesting BSNL since last 5 years to the review of Interconnect agreement with the operators.



REDUCTION OF REGULATORY LEVIES: Industry made several representations to DoT on the reduction of the levies. COAI has also made representations to Revenue Secretary on this issue. Following requests were made in the representations to DoT & Revenue Secretary:



- a. **USO:** Reduce the USO levy to 3% to start-with, with ultimate objective of ending this subsidy in next 2-3 years in line with TRAI Recommendations.
- b. **SUC:** Industry made two representations to DoT and TRAI on the issue of SUC requesting for the following:
 - Uniform SUC rate across all the spectrum bands
 - Reduce the SUC to 3% to start with
 - Bring SUC down to 1% in a phased manner over next 1-2 years glide path.
- c. **AGR:** Accept the Recommendations of TRAI on AGR which includes following.
 - Introduce system of LfDS
 - LF & SUC to continue to be computed based on AGR.
 - No netting of amounts paid to other entities
 - Reduction in the SUC and USOF

As per the media reports, Telecom Commission has approved Uniform SUC for the future spectrum auctions.

POLICY ISSUES:

VOICE CALLING APPLICATION ISSUES: A voice application by the name “Ringo” announced its services on November 26, 2016. Ringo app misused the Arbitrage created due to the Telecommunication Interconnection Usage Charges (11th Amendment) Regulations, dated February 23, 2015, which inter-alia prescribed the zero termination charge for all calls made to and from Landline.

COAI made several representations to DoT and TRAI through COAI Letters dated December 1, 2015, December 8, 2015, January 12, 2016 and February 5, 2016. Ringo has stopped its National Calling facility after our representations. Further, TRAI has sent a detailed note to DoT for further action in this regard.

On March 17, 2016, BSNL announced that it is going to launch a Voice Calling Application from April 2, 2016. Vide the published media reports, BSNL stated that through this voice calling application, its mobile customers travelling abroad will be able to use their BSNL landline phones to make calls. The service named as Fixed Mobile Telephony was to be provided to the customers on a payment of monthly rent.

On April 1, 2016, in a letter submitted DoT, TRAI and BSNL, COAI stated that this Application violated licensing and regulatory principles. The various issues related to the modus operandi of the Application which were highlighted in these letters were

- a. Loss to Exchequer in form of License fee
- b. Modification of Caller Line Identification (CLI) and Security Issues
- c. Violation of routing principles and numbering plan:
- d. Breach of the interconnect Agreement
- e. Creation of Arbitrage opportunities in termination rates

Ringo has been asked to stop its services. Industry needs to be cautious with respect to further advent of these kinds of apps which are exploiting the arbitrage formed due to zero fixed line terminations rates. BSNL has not launched its Application following submissions from COAI. COAI is monitoring the situation and will take up the matter with DoT, TRAI and other Government Agencies in case such an app. is launched by BSNL.

TRAI DIRECTION ON UPLOADING OF CELL LEVEL PARAMETERS THROUGH WEB SERVICE: TRAI issued a direction on 12th January, 2016 asking TSPs to submit various Cell Level parameters on a Daily Basis on the TCCMS Portal. Some of the data sought through this Direction was strategic & confidential in nature to the TSPs and there was a risk of formation of negative perception against the Industry from the results derived from these parameters. Joint Industry letter dated 21st January, 2016 was sent to TRAI highlighting concerns of the Industry. Further, meeting was called by TRAI on 2nd March in which discussion was held on each parameter that was sought through this Direction. On 4th April, 2016, TRAI issued an amendment to the Direction. In the amendment, TRAI accepted the submissions made by Industry on the parameters which cannot be provided due to the strategic and confidential nature of those parameters. Accordingly, these parameters were removed from the revised list of parameters. Further, in a Joint Industry Letter dated April 19, 2016, it was submitted to TRAI to consider our request for uploading of data for four sample days per month instead of fifteen days' data twice a month. Further, it was suggested that same can be uploaded as one day's data per week or two days' data after every fifteen days. Representation by Industry was well received by TRAI. TRAI issued Amendment to the Direction with updated list of parameters. This will benefit the Industry as confidential & strategic parameters were removed from the list of sought parameters.

LEGAL ISSUES

JOINT INDUSTRY PETITION ON TRAI'S REGULATION ON CALL DROP: SUPREME COURT: A Special Leave Petition was filed challenging the TRAI Regulation dated October 16, 2015 making it mandatory for telecom operators to compensate subscribers for the very first three calls dropped per day at the rate of Re.1 per dropped call with effect from January 01, 2016. On May 11, 2016, the Supreme Court allowed the industry petition and set aside the TRAI Regulation while holding them as ultra vires, manifestly arbitrary, non-transparent and violative of Article 14 and 19(1)(g) of the Constitution of India.

JOINT INDUSTRY PETITION CHALLENGING PENALTY ON EMF (DELAY IN SUBMISSION OF SELF-CERTIFICATES) : TDSAT: A joint industry petition on EMF penalty for delayed submissions was filed in TDSAT praying that DoT cannot levy any penalty on the basis of Circulars dated 13.08.2010, 27.08.2010, and/or 03.11.2010 or any other circular on ground of delay in submission of the Self Certificates for the BTS sites installed prior to 11.10.2012. On March 29, 2016, the Tribunal allowed the petition fully and set aside the impugned penalty demands while holding that the circular dated 11.10.2012 is unreasonable, unjust and unfair and no penalty in terms of the scheme can be sustained.

JOINT INDUSTRY PETITION CHALLENGING HIKE IN INFRASTRUCTURE CHARGES BY BSNL: TDSAT

:A joint industry petition was filed challenging the validity of Circular dated March 30, 2015 by which BSNL has revised the Infrastructure and Space Charges for Active Links of Licensed Telecom Service Providers with effect from April 1, 2015. BSNL has sought to bring back the same charges as were sought to be levied by it in terms of its Circular dated June 12, 2012, which was set-aside by the Hon'ble TDSAT by way of its Judgment dated August 20, 2014. On February 12, 2016, TDSAT issued notice in the matter and directed BSNL not to take any coercive steps in pursuance to its Circular dated March 30, 2015.

PETITION ON EMF IN THE NATIONAL GREEN TRIBUNAL: NGT:

An application was filed in the National Green Tribunal praying for directions to DoT to implement Inter Ministerial Committee Recommendations and to restrain SEBI from allowing the telecom companies to raise money through IPOs while setting up towers. On December 10, 2015, the judgment was pronounced in this matter and NGT dismissed the application for want of jurisdiction and held that radiation i.e. emission of electromagnetic waves from the towers does not fall within the ambit, scope and jurisdiction vested in this Tribunal under the provisions of the NGT Act.

**COAI APPEAL CHALLENGING NGT BHOPAL**

JUDGMENT: SUPREME COURT: COAI filed a Civil Appeal before the Hon'ble Supreme Court challenging the final Judgment passed by NGT, Bhopal directing the Local Authorities to carry out a fresh survey to identify whether the mobile towers, which are located within its jurisdiction, are found within the prohibited zone in accordance with Judgment of the Justice I.S. Israni (Retd.) Vs. UOI passed by the High Court of Rajasthan and further directing that the said towers should be made non-operational and de-activated by the Service Providers. The Civil Appeal also challenged the order dated August 13, 2015 passed by NGT Bhopal dismissing COAI's Review Application. On October 16, 2015, Hon'ble Supreme Court issued notice in the matter and stayed the operation of impugned judgments and orders dated May 28, 2015 and August 13, 2015.

JOINT INDUSTRY PETITION CHALLENGING BSNL DEMANDS FOR BANK GUARANTEE FOR IUC

PAYMENT: 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 September 09, 2015, an application was filed praying for an order restraining BSNL from demanding bank guarantee from the Telecom Service Providers (TSPs) by determining net payable status of the TSPs qua BSNL separately for the Basic and Cellular Mobile Services and from threatening disconnection of Point of Interconnection or non-commission of new Point of Interconnection for non-furnishing the bank guarantee on the above basis. On September 10, 2015, TDSAT directed BSNL to withdraw all such letters demanding bank guarantees from the TSPs by determining net payable status of TSPs qua BSNL separately for Basic and Cellular Mobile Services.

JOINT INDUSTRY WRIT PETITION CHALLENGING CHANDIGARH TOWER POLICY: PUNJAB &

HARYANA HIGH COURT: A Joint Industry writ Petition was filed before the High Court of Punjab and Haryana

at Chandigarh challenging the Chandigarh Policy dated March 09, 2015 on installation of towers for Mobile Telephone and Data Services and notices issued thereunder directing the TSPs to remove/relocate their towers from certain areas specified in the notices, including residential areas. On August 04, 2015, the Counsel appearing for Chandigarh Administration assured that no coercive steps shall be taken by the Chandigarh Administration till the next date of hearing.

JOINT INDUSTRY PETITION ON SHORTFALL IN SUC AND ADJUSTMENT OF EXCESS PAYMENT:

TDSAT: A joint industry petition has been filed challenging the validity of DoT Circular dated 11.11.2014 in so far as it provides in Clause 4(vi) that excess payment of Spectrum Usage Charges (SUC) as on 31st March of any financial year will not be carried forward to the next financial year till the final assessment of Spectrum Usage Charges. The Petition also challenges the levy of interest by DoT on the alleged shortfall of payment of Spectrum Usage Charges by the TSPs on the basis of self-assessment. On August 03, 2015, the Tribunal indicated that they are not inclined to stay the impugned Circular but will stay the demand notes received by the TSPs seeking interest on shortfall of SUC arising out of the impugned Circular.

JOINT INDUSTRY PETITION CHALLENGING PENALTY ON EMF (SHARED SITES): TDSAT:

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 PENALTY ON COLOUR SCAN PHOTOS AND MISSING

DATE ON PROOF OF IDENTITY (POI) / PROOF OF ADDRESS (POA): TDSAT:

A joint industry petition was filed on the issue of imposition of penalty on non – submission of scanned coloured photograph in the Subscriber Database and absence of date on documents of PoI/PoA by Rajasthan TERM Cell. On May 6, 2015, the judgment in this matter was pronounced and TDSAT restrained DoT from realising penalty and stated that such penalty imposed on the TSPs for non-compliant CAFs (for the reason that on the Poles and PoAs attached therewith the signatures of the customers were undated) is unreasonable, unfair and invalid. On imposition of penalty on non – submission of scanned coloured photograph of the subscriber in the subscriber database, the judgment records that DoT has amended their circular dated August 9, 2012 to substitute "Scanned photograph (coloured) of the subscriber" with "Scanned photograph (greyscale / black & white) of the subscriber".

JOINT INDUSTRY PETITION CHALLENGING PENALTY ON EMF (UPGRADATION): TDSAT:

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 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.

FINANCE & COMMERCIAL RELATED ISSUES

REGIONAL WORKSHOP OF CCA AND MEMBERS: Each CCA seems to be having their own interpretation on different matters, which is neither uniform nor consistent and results in varied Interpretations of Guidelines

We requested DoT to arrange regular interaction between CCA's and Industry to achieve the following.

- Timely resolution of outstanding issues between CCA and Operators.
- Reduce cost of compliance
- Reduce amount of disallowances
- Strengthening the Process by Standardization

Regional workshop was arranged on issues Related to Assessment of License Fees & Verification Process, from April 07 – 08, 2016 at GOA. Issues were discussed in detail. Clarification is expected on couple of issues which will help the Industry as well as the Government for smoothening the process.



ANTI-DUMPING: Sunset Review Investigation initiated for anti-dumping duty in respect of import of Synchronous Digital Hierarchy ('SDH') transmission equipment imported from China/Israel. The status update is as follows;

With the object to reduce burden of Anti- Dumping duty from SHD & PTN to enable the members to apply the customs rule appropriately and to reduce input cost of the members, various representations were sent. We also had couple of meetings with DGAD mentioning that Higher Import Duties resulting in increase in costs and imposition of anti-dumping duties will adversely affect the industry. To support our representation, we also took clarification from TEC mentioning that PTN and SDH are not same and sent to DGAD DGAD issued notification in February 2016 and changed rate of Anti Duping Duty which will result in reduction in reduction of cost.

PRE-BUDGET RECOMMENDATIONS 2016-17: On the following points clarification was issued by the MoF.

Service Tax.

- Exorbitant interest rate @ 30% was applicable only for service tax. Representation was made to reduce the same. MoF reduced interest rate for delayed payments of tax reduced to 15% as against slabs of 18/24/30%. Interest @24% to be paid in cases where tax is collected but not paid.
- Representation was made to the MoF to allow full credit on low value capital goods in the year of receipt / purchase.

MoF clarified that capital Goods having value up to Rs. 10,000/- per piece, will now be treated as Inputs. Credit of 100% of excise duty paid on procurement of small value items such as SIM cards, Dongles, Set top box etc. shall be available in the year of purchase as against currently available over the period of two years. This will help in reducing administrative burden of the members as well as will be helpful in financial lost.

- With effect from 1 March 2015, a deeming provision was introduced for determining the manner of

utilization of CENVAT Credit. The utilization is deemed to occur in the following manner –

- Opening balance of the month has been utilized first
- Credit admissible taken during the month has been utilized next
- Credit inadmissible taken during the month has been utilized thereafter

However, with introduction of the provision [Rule 14(1)(I) of the CENVAT Credit Rules] for recovery of credit wrongly taken, though not utilized, the deeming fiction for utilization was unjustified. If the credit which is inadmissible/ disputed can be recovered under Rule 14(1)(i) of the CENVAT Credit Rules, deeming such credit to have been utilized so that interest can also be recovered, was a too harsh provision, especially when such credit has not been used at all. Now the same rule providing manner of utilization of credit on FIFO basis has been withdrawn. This will help in reducing the amount of interest / penalty of the members.

POST-BUDGET RECOMMENDATIONS 2016-17

- The Union Budget proposed to levy service tax on spectrum assignment. Further, telecom operators shall be liable to discharge service tax on services received from Government (including spectrum assignment), under reverse charge basis. Incrementally, credit of service tax so paid by telecom operators would be available as credit over the period of 20 years (i.e. period for which spectrum is assigned).
- In this connection, detailed representations were filed with the Ministry of Finance and Department of Telecom highlighting potential adverse impacts of the Budget proposals on the health of telecom sector. We have summarized below key points of the representation:
 - Proposed section 35ABA of the Act should be amended to provide that the benefit of amortization be available from the 'date of acquisition' of such right, irrespective of the timing of payment or payment methodology adopted.
 - Service tax should not be applicable retrospectively on instalments payable on or after 1 April 2016 with respect to spectrum assignments prior to 1 April 2016.
 - Service tax should be applicable only when instalments due to the Government are paid by telecom operators, and not at the time of assignment of spectrum.
 - Deferral of credit results into denial of credit ranging from 47% to 59% considering time value of money at cost of capital of 15%.
 - The grant of rights to/ assignment of spectrum being a sovereign function of the Government, imposition of tax on the same is unprecedented.
 - Service tax should be applicable only when instalments due to the Government are paid by telecom operators, and not at the time of assignment of spectrum.
 - Additionally, clarity was also sought in terms of valuation, credit admissibility and determination of point of tax in case of spectrum trading transaction.
- The above issues were represented before the Government, and meetings were held with the Telecom



Secretary, Member (F), DoT, Revenue Secretary, JS, Director (TRU), Director and many other senior officials of the Ministry.

Achievement: Subsequent to representation filed by COAI, CBEC clarified in respect of the following:

- The definition of 'payment has actually been made' under Explanation (iii) of the proposed section 35ABA of the Act has been amended to include 'payable in such manner as may be prescribed.
- No Service tax on instalments due after 1 April 2016 in connection with spectrum assigned prior to 1 April 2016
- Service tax would not be applicable retrospectively on instalments due after 1 April 2016 in connection with spectrum assigned prior to 1 April 2016.
- In case of financing arrangement with DoT for auctions held on or after 1st April 2016, service tax will be applicable as and when instalments due to the Government are paid i.e on amount of instalment (inclusive of interest).
- Deferral of credit period reduced to 3 years instead of the original proposal of deferral over 20 years. Credit of service tax paid under reverse charge mechanism should be available for utilisation over the period of three years (instead of previous proposal of 20 years).
- Service tax would not be applicable on spectrum usage charges and license fees pertaining to FY 2015-16 payable on or after 1 April 2016.

MEDIA AND ADVOCACY

COAI CEOs MEDIA BRIEFING SESSION ON NET NEUTRALITY: A media briefing session on Net Neutrality was organised by COAI on 24th April 2015, wherein the CEOs of all COAI member TSPs addressed the media queries on the industry position on Net Neutrality and the industry vision to connect the next 1 billion Indian citizens to the internet through its campaign "Sabka Internet, Sabka Vikas". Coverage appeared in all leading mainlines, financials, wires, vernaculars, electronic channels and online portals. The event was widely covered by media with an ad value worth of over INR 3.9 crores. The key industry messages were conveyed and carried by the media in its reports. A press release was issued by COAI announcing the results of the public perception survey on Net Neutrality, which was initiated as part of the "Sabka Internet, Sabka Vikas" campaign. It was shared that over 40 lakh citizens had supported the industry campaign, in less than a week.

TWEETINAR WITH DR. CHINNABABU ON EMF AND PUBLIC HEALTH: A Tweetinar was organised with Dr. Chinnababu on 22nd April, 2015, to address the public queries related to EMF and Public Health. 8 lakh Netizens were engaged for awareness on facts regarding EMF and to put their apprehensions with

respect to health concerns (on account of EMF) pertaining to mobile telephony to rest. Over 106 queries were answered and over 2000 tweets were made. This activity was trending among the top 10 conversations across India on Twitter from 3:30PM – 4:30PM.



MEDIA BRIEFING BY DR. CHINNABABU IN 3 CITIES OF ANDHRA PRADESH: Dr. Chinnababu Sunkavalli, addressed the media on the Myths of Cell Tower Radiation in 3 cities in Andhra Pradesh – Guntur (11th April 2015), Vijayawada (12th April 2015) and Nizamabad (18th April 2015). The media briefing sessions were covered by major dailies, satellite channels and various cable channels in their bulletins. The events were well covered by leading electronic channels of the region like TV9, ETV, HMTV, TV5, NTV, 10TV, etc. TV9, the leading Telegu news channel, did a 1-1 live Doctor Discussion programme on Myths about Cellphones and Cell Tower Radiation on 19th April 2015 between 1530 and 1630 hrs.

NOIDA TOWER CRISIS: The NOIDA authority had issued notices to tower landlords in the area to remove mobile towers from residential areas, or else face cancellation of their property lease. This resulted in the tower landlords of Noida, represented by the Noida Residents' Tower Association (RTA) shutting down the towers in their premises, resulting in severe network outage issues faced by the mobile telephony users in the area. The RTA members had demanded written communication from the NOIDA Authority stating that the Noida Authority will not carry out any further action of lease cancellation due to location of cell towers on their premises. COAI assisted the RTA in organizing a press conference to convey their distress and also issued a press release stating the industry position on the matter. Further, COAI wrote to the NOIDA Authority, stating that the DoT's TERM Cells are the nodal authority on the issue of EMF emissions from mobile towers and any action from the NOIDA Authority in this regard would need to be done with the TERM Cell's involvement. COAI was in constant coordination with the NOIDA Authority office on the issue, and also suggested alternate solutions to resolve the crisis as requested by the department. As a result of COAI's efforts, constant coordination with the NOIDA Authority and support to the RTA, the NOIDA Authority's notices have been kept in abeyance, and no coercive action will be taken against the mobile towers.

GOVERNMENT ENGAGEMENT IN RAJASTHAN: A delegation of six industry representatives met Chief Secretary of the state. Chief Secretary was deeply ingrained with the past and current issues being faced by the Industry in Rajasthan. CS explicitly expressed that with huge public outrage, negative media coverage, adverse judgment from high court; it is very difficult for any Government official to get into to this matter but he was broadly in line of the industry position. A letter is sent to CS requesting a meeting with him to discuss about his support required for providing quality cellular services in the state and enabling development of a Digital Rajasthan. A meeting was also held with IPS Manoj Bhatt, Rajasthan's new Director General of Police, to engage him for EMF Advocacy campaign in Rajasthan.

GOVERNMENT ENGAGEMENT IN MAHARASHTRA: A meeting was held with the Chief Minister to discuss the ROW issues, develop Uniform Tower Policy, availability of government land for telecom tower installation, organizing EMF Advocacy campaign in association with the state Govt., inclusion of slums in Digital India campaign and electricity to be provided to the operators on industrial tariff rates.

JOINT INDUSTRY CEOS' PRESS CONFERENCE ON CELL SITES: A joint industry press conference in association with AUSPI and TAIPA, with participating CEOs from the member companies, was organised in New Delhi on 17th August 2015. The industry jointly opined on the need for uniform guidelines for Cell Sites and Right of Way (RoW) across the telecom circles in India, in order to have more efficient networks and facilitate seamless connectivity to the citizens. The platform displayed the industry's commitment to realize the Government's vision of Digital India, and also requested support towards addressing the challenges of the

industry to set up a mobile infrastructure. A Q&A session held with key figures from the industry. The press conference saw participation from 94 journalists and was widely covered by the media. Advertisement value equivalent of the total coverage received is over INR 1.8 crore.

JOINT INDUSTRY PRESS CONFERENCE ON NETWORK QUALITY IN BIHAR: On DoT's behest, a joint industry press conference was arranged in Patna on 1st October 2015, to address the issue of Network Quality and Call Drops in the state. The industry was represented by COAI and AUSPI heads, along with Circle CEOs/CTOs of the State. The industry position on the issue, the efforts being made by the industry as well as the improvements observed, specifically in the State of Bihar, were shared with the media. The Conference was well accepted as prominent media from Bihar participated at the conference. Media coverage worth over INR 10 lakhs was achieved



ENGAGEMENT OF TRAI FOR EMF PUBLIC AWARENESS PROGRAMME: COAI successfully engaged TRAI for a public awareness programme to

be conducted by the regulator. A number of activities to be initiated by TRAI on various public platforms are coordinated and the collaterals/content for the same is being developed by COAI with guidance from TRAI on the same. The video interview of TRAI Chairman, Dr. RS Sharma, was conducted and is being edited for placement on various Digital, public engagement and conventional media platforms. COAI also commissioned Oxygen Communications for developing a print media campaign, presentations for RWAs and schools, as well as posters for local placements. The creatives are expected to be finalized with approval from TRAI by end of October 2015.

GOVT. OFFICIAL ENGAGEMENT IN JAIPUR: An EMF Advocacy workshop on "Clearing Misconceptions about Mobile/Telecom Tower radiation" was organized at Swasthya Bhawan in Jaipur, Rajasthan on 11th September, 2015. Approx. 40 participants including key Govt. officials, Media, Industry representatives, media, etc., attended the session. The event was successful in empaneling 2 doctors (Dr. T K Joshi and Dr. Arun Chougule) for EMF Advocacy.

MEDICAL FRATERNITY ENGAGEMENT:

- Eminent Cardiologist and surgeon, Dr. Naresh Trehan of Medanta Hospital, New Delhi was briefed by the COAI on the issues concerning EMF. Dr Trehan had shown some skepticism in the past few months on health issues and was believed to be leading some anti tower activism in South Delhi. Post the engagement, he is reading up on the material made available by the industry and is in dialogue with experts to understand the safety measures built into the networks.
- Dr Dhiman Sen, Senior Consultant of Internal Medicine at Apollo Gleneagles Hospitals, Kolkata engaged with the industry and the TRAI to understand citizen concerns and types of queries citizens pose to telecom operators in relation to perceived health issues from networks. Briefed first by the Idea cellular team, he attended the TRAI education session and highlighted some areas of research that he would like to assess. The industry is engaged with him to make available studies and experts for him to understand in depth and

help the industry advocate truth across the large parts of Eastern India.

- Dr Salim Parvez, Radiologist Fortis Hospital Kolkata and Apollo Hospital Kolkata attended the TRAI led advocacy event. He agreed with the global research findings that the non-ionizing radio wave emissions are not harmful to human health and has agreed to help the industry allay undue concerns among the citizens.

INTERNATIONAL EXPERTS ENGAGEMENT: Arranged interaction of Dr. Vijaylaxmi with government officials from DoT, TRAI and industry representative during 15th -16th February 2016 to share knowledge regarding global trends as regards to research and standards on EMF emissions from Mobile Tower and Cell phones. Dr. Vijaylakshmi briefed the industry on the ongoing research and the WHO/IARC/ ICNIRP progress on EMF related studies. She also made the industry aware of the aberrations found in the methodologies being followed by researchers in some academic institutions in Amritsar and Gujarat. She is independently involved in methodology mapping and peer reviews. The industry took cognizance of the risk posed by such studies that do not follow nationally and internationally accepted norms and research methodologies.

ENGAGEMENT OF TRAI AND DOT FOR EMF PUBLIC AWARENESS PROGRAMME: COAI successfully engaged TRAI for a public awareness programme. A number of activities initiated by TRAI and supported by the industry on various public platforms are coordinated and the collaterals/content for the same is being developed by COAI with guidance from TRAI on the same. Five advertisements were developed on Calamities, Growth, Touch, Happiness & Emergencies. COAI also supported TRAI for developing a print media campaign, presentations for RWAs and schools, as well as posters for local placements. Industry also provided media support to TRAI for their interactive sessions on "Impact of Electromagnetic Field Radiation from Mobile Towers" organised in Bangalore, Gurgaon, Pune and Kolkata during the period of Oct, 2015 till February, 2016.

TRAI interactive sessions on EMF were well attended by members of the public, including Resident Welfare Associations, representatives of all Telecom Service Providers, registered Consumer Advocacy Groups. Industry were able to generate positive media coverage in approx. 65 publications across 4 locations.

The video interview of Mr. Rakesh Garg, Secretary, Telecom – DoT and Mr. R.S Sharma, Chairman – TRAI and Dr. P K Julka, Former Dean & Professor of Oncology AIIMS, New Delhi, was conducted and is being edited for placement on various digital, public engagement and conventional media platforms. 27 advertisements released from Oct 2015-Feb 2016 in Hindi/English/Marathi/ Bengali/Khasi/Assamese across 9 cities in 27 newspapers with a reach of 1,24,27,488 readers.



MEDIA ENGAGEMENT VIA NGO: Arranged media briefing sessions and one-on-one interactions with the media across Chandigarh, Pune and Goa to address EMF concerns. Mr. Rajan S. Mathews, DG, COAI briefed media. Engaged approx. 80 media across 5 locations to garner positive media coverage.

MULTI-STAKEHOLDER ENGAGEMENT: A team of experts led by COAI and officials of the Goa State Pollution Control Board (GSPCB) conducted drive tests across six telecom tower sites in Goa to test the electromagnetic frequency (EMF) levels to measure electromagnetic emission levels across Goa. Results were revealed to the people and the media that mobile towers in Goa emitted radiation that were well within permissible limits and, in fact, in some cases much lower than the prescribed limits in India. Positive message that all towers are safe was proven by the low levels of radiation that showed up in the tests. Engaged 29 media, received positive media coverage in 23 media and achieved*Ad Value equivalent to Rs. 12,34,900.

GOVERNMENT AND LOCAL BODY ENGAGEMENT: EMF Advocacy session and discussion on mobile connectivity were organized to engage government officials of Kalyan and Thane Municipal Corporation in Maharashtra and Mumbai respectively. The workshops were well attended by municipality officials along with commissioner. Industry experts spoke to create awareness and clear misconceptions regarding the impact of EMF. The commissioner seemed satisfied with the workshop content and expressed their view that Mobile Towers are no threat to the city and post this session he alongwith his officials are now well informed to upfront handle such complaints/grievances received at his office. The session helped in clearing the doubts and concerns regarding the health hazards posed by mobile tower radiation. The Commissioners found the session very educative and interesting and assured their support going forward. COAI noticed similar impact amongst all the municipal officers present during the session.



SOCIAL MEDIA & DIGITAL PR: FB and Twitter campaign around call drop and mobile tower radiation issue: Reached out to approx. 84,615 netizens with 1,06,938 impressions on Facebook & Engaged approx. 1,15,516 via Twitter.

- Amplified Opinion of Chairman, TRAI and DoT officials regarding facts related to EMF: Reached out to 116,157 people out of which 12,588 liked our post. Generating Impressions and Engagements: 817,739 netizens were engaged.
- Bloggers Engagement: Plan to engage approx. 30 mn netizens via 15 blog articles to create awareness regarding facts and dispel myth related to EMF. Engaged approx. 2 lakh netizens.
- Amplified EMF Advocacy Expert's Opinions: Executed a campaign on Facebook and twitter. Reached out to 121,746 people out of which 12,378 liked our post. Impressions and Engagements: 687,013 netizens were engaged

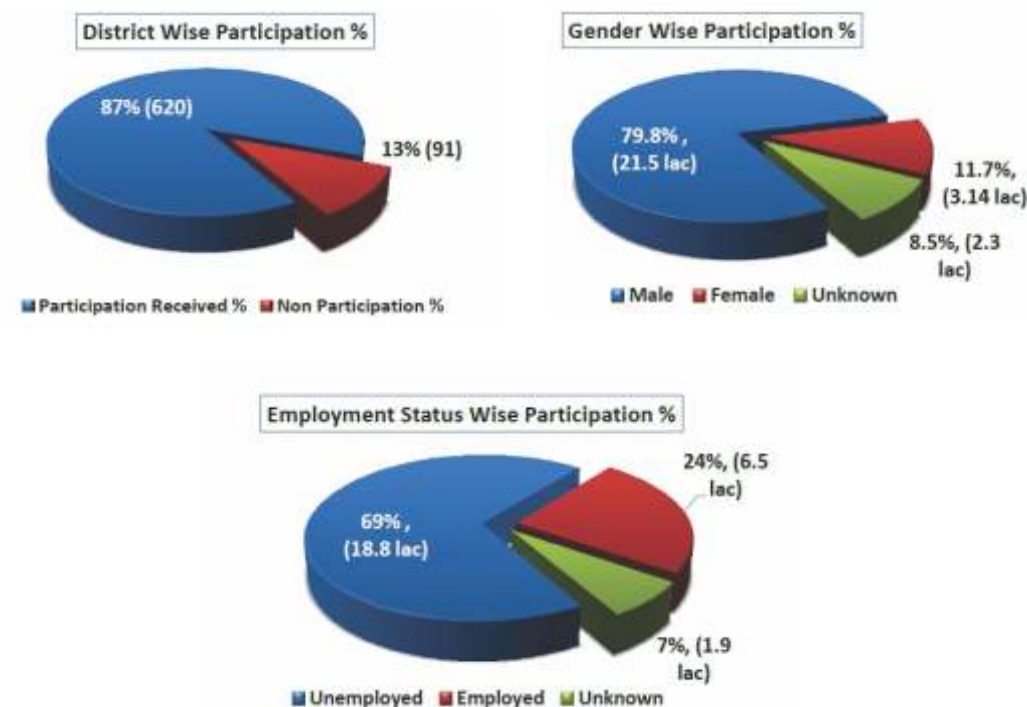
PRADHAN MANTRI KAUSHAL VIKAS YOJANA (PMKVY) – AN OUTREACH CAMPAIGN FOR SKILL INDIA MISSION: The pan-India outreach program undertaken by COAI and its members for the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) was successfully completed. It was a massive mobilization campaign targeted at the unskilled youth of India in the age group of 18-45 years. The campaign ran from July to October 2015.

The mobilization campaign received a remarkable response. The campaign, after a successful pilot phase in the state of Bihar, was started across the country on 15th July 2015, coinciding with the national launch of the Skill India Mission by the Hon'ble Prime Minister on World Skill day. The pilot phase for the state of Bihar was launched jointly by the Hon'ble MoCIT, Shri Ravi Shankar Prasad and the Hon'ble Minister of State for Skill Development and Entrepreneurship, Shri Rajiv Pratap Rudy on 18th June 2015. In just over 2 months, 44 Crore eligible citizens within the age group of 18-45 years were contacted through SMS in their language, and out of them, 75 Lakh responded with missed calls. Of this, about 27.3 Lakh registered with their profiles for counselling. The collected data can be segregated with high granularity. It is possible to identify potential training candidates, Telecom Circle (state) wise, District wise as well as Assembly Constituency wise. It covers a geographical area under 98% Postal Pin codes, and 89% of the districts of the country. These specifications will help the Government through NSDC to identify regions in the country where training interventions may prove to be highly effective.



The pan-India campaign covered the length and breadth of India, with the message content being customized in 11 regional languages. This data was made available to NSDC and TSSC for taking up training programs for the interested candidates.

Approximately 75% of the people who participated in the campaign are unemployed, with 80% being Male. This highlights that the program was successful in reaching out to the correct demographic in India. The activity has



created a vast database of potential talent for the nation. It was a one of a kind mass mobilization campaign using mobile technology, which demonstrates what digital connectivity can accomplish. Rightly, the campaign was awarded the Flames Asia Gold Award by the Rural Marketing Association of India (RMAI) for best use of technology (new and alternate media) and was one of the top 5 contenders for the Times of India Technology Award for Digital Innovation in Employment & Skill Solutions.

FORMATION OF CIRCLE COORDINATION COMMITTEES: Over recent times, there has been an increased Government focus on improving the communications infrastructure for realizing the vision of Digital India and the states are being empowered increasingly. In view of this, the COAI Executive Council felt that this would be an opportune moment for the industry to use the government support to take our EMF Advocacy campaign a step ahead, and extend the discourse towards facilitating mobile connectivity in telecom circles across the country. Hence, the formation of Circle Committees at the circle level was approved. The initial 11 circles chosen were Rajasthan, Delhi, Mumbai, Maharashtra, Madhya Pradesh & Chhatisgarh, AP & Telangana, Punjab & Upper North, North East, Gujarat, Kerala and Karnataka. These Committees are critical for putting our efforts in sync, bridging the gaps at the local levels and extending the reach of our advocacy campaign.

These committees were initially called the Joint Industry Committees (JICs). After 6 months of functioning, their role was expanded to include tower & policy issues as well, and the JICs were rechristened as Circle Coordination Committees (CCCs) with the addition of a central committee at the Association level to project a unified front to the states. The Central Committee does the balancing act as the first escalation point before issues are reflected to Industry CEOs.

Structure & Scope

Each circle committee comprises of the Circle Business and Network heads of the telecom operators and infrastructure providers, along with nominated legal heads. The Committee members choose from amongst themselves a Chair and Vice Chair along with convener(s) for Committee's operations. The objectives of the CCCs are to address the following at the Circle level:

1. Coordination with the respective Corporate Team;
2. Providing inputs on the National EMF Advocacy Plan and executing action for implementation at the Circle Level;
3. Address Circle level Operational, Infrastructure/tower installation related issues faced by the Industry and formulation of an action plan thereof;
4. Identify the availability of Government lands and buildings for provision of telecom infrastructure;
5. Coordination with the respective TERM cell offices
6. Coordinating with local government and authorities on related issues on a day-to-day basis;
7. Implementation and follow-up of the Circle activities as per the plans

Learning so far from the CCCs :The formation of the CCCs has helped us in developing an understanding of Circle level situations. A brief summary of some of the key learnings is as follows:

1. All circle level CEOs and CTOs are eager to be a part of such a platform to solve their own problems

2. All Circle CEOs/CTOs come together to attend CCC meetings irrespective of their association affiliation.
3. There was a low level of interest for only EMF related activities but the CCCs are interested in addressing all common noncompeting issues including EMF concerns.
4. The CCCs have enabled quick reach to retailers, land lords and local authorities for EMF advocacy for the Central EMF Advocacy teams.
5. The Industry feels that they are more effective in presenting their views jointly to the local Govt. on tower and policy issues.
6. By providing an increasing cohesiveness in addressing common issues, the CCC is a platform to improve industry coordination at the Circle level.

CCC Composition Snapshot

The following table gives the details of the 11 CCCs at a glance.

S. No.	Date Formed	Circles	Chairman	Vice Chairman
1	9th June 2015	Rajasthan	Airtel	R Jio
2	2nd July 2015	NESA	R Jio	Airtel, ATC – Conveners
3	17th Jul, 2015	Delhi	Idea	Indus
4	26th Aug 2015	Punjab & Upper North	Airtel	Indus
5	15th Sep 2015	MP & Chhattisgarh	Airtel	Tower Vision
6	16th Sep 2015	Mumbai	Vodafone	Indus
7	24th Sep 2015	Andhra Pradesh	Airtel	Indus
8	20th Oct 2015	Maharashtra	Idea	Indus
9	27th Oct 2015	Kerala	Idea	ATC
10	19th Nov 2015	Gujarat	Vodafone	Indus
11	1st Dec 2015	Karnataka	Airtel	Indus

TECHNOLOGY AND SECURITY RELATED ISSUES

SIM PERSONALIZATION

A TEC Committee was working on the report on the issues related to SIM Personalization. During the meeting of the committee, COAI and its members were able to get certain amendments to the report which included role and impact on TSPs may be deliberated at appropriate stages, for finalization of each action item, TSPs and other stakeholders should be involved in all the discussions. The need for developing indigenous OS needs to be re-considered. Putting in place a certification mechanism for SIM vendors instead of Indigenous OS may also be considered. However, in case, the Government decides to go for indigenous OS, parameters like Standard, cost effectiveness, availability and flexibility, interoperability with current OS available in market, support across all technology both Domestic and Global needs to be considered. It needs to be ensured that development of indigenous OS SIMs should not impact existing /Old SIM or SIMs in transit. A consulting group involving all related stakeholders needs to be formed to look into Standardization, Specifications and Future Roadmap with respect to Device, SIM, Application, etc. in terms of indigenous OS SIMs.

ADOPTION OF K.100 ITU DOCUMENT FOR INDIA

The recent publication of the ITU- T K.100 standard which explains the inherently EMF compliant nature of low transmit power & low EIRP 3G & 4G micro sites as they operate on wider carrier bandwidth & discontinuous transmission modes. In this regard, a proposed usage of K.100 ITU-T document for application in Indian scenario has been submitted to DoT. It was submitted that low power equipment having Transmit power ≤ 10 Watt and antenna installed at height derived from K-100 ITU-T recommendation must be inherently compliant to EMF norm set by DoT and no further assessment and reporting is required if the minimum Hm and Dm is being met and maintained during the installation.

INSTALLATION OF TOWERS ON GOVT. LAND AND BUILDINGS

COAI has made submissions to the urban development ministry as well as DoT to ensure that expeditious rollout of telecom infrastructure can take place, DoT must support and facilitate the installation of Mobile towers on Government buildings and PSUs. Government buildings are well spread out in all important locations and hence can be crucial to enable better connectivity for mobile phone users. It is imperative to have a continuous mesh of cell sites in the mobile network architecture. Mobile towers are the most important and essential element of any mobile network and the absence of these, is bound to result in gaps in the mobile signal coverage, leading to degradation of services. Such connectivity and coverage gaps are also bound to impact the Government's efforts to provide the benefits of information and telecom facilities to all citizens and its vision of "Digital India" which envisages the building of Smart Cities and delivery of Government to Citizen services.

IDENTIFICATION OF ADDITIONAL BANDS FOR IMT AT WRC

IMT/Mobile Broadband access has become a key driver of global economic growth, employment generation and competitiveness. In developing countries, where mobile wireless is mostly the only way to broadband access for most consumers, it has become an economic imperative. In this regard, the national telecom policy (NTP-2012) of India has clearly identified one of its key objectives as making available additional 300 MHz spectrum for IMT services by the year 2017 and another 200 MHz by 2020 to provide 600 million broadband connections by 2020. To meet these targets of the Government, and to meet the increasing data demands of

the Indian consumers, it is important to allocate additional bands for IMT. We have submitted the following additional bands for IMT to DoT for identification 470 - 698 MHz, 1427 - 1518 MHz, 2700 - 2900 MHz, 3400 - 3800 MHz. These bands are largely unused or under-utilized in India, and identifying them (or parts of them) for IMT would give India an excellent opportunity to deliver high quality mobile broadband especially to rural areas. The government should insist at WRC for recognition of globally harmonized mobile bands to ensure a good choice of low cost devices for their citizens through major economies of scale in manufacturing.

AADHAAR BASED E-KYC

ACT has taken up the issue of getting telephone connection without any paper work after Aadhaar based biometric verification with the PMO. We have requested their intervention and support in allowing the paperless telephone connections based on biometric/ iris verification of the customers using Aadhaar based e-KYC. This will give a big boost to the Digital India mission of the Government of India apart from providing huge convenience to the customers, saving lakhs of trees and addressing the extremely important issue of national security. The details of the PoC (Proof of Concept) conducted by operators was shared with the PMO. The key benefits of this process including security compliance, customer convenience, efficiency and environment benefits were also highlighted.

REQUIREMENT OF 4 PHOTOS ALONG WITH CAF IN J&K, ASSAM & NORTH EAST

As per the existing guidelines in J&K, NE & Assam, each subscriber is required to submit four copies of his/her photograph at the time of verification, which are to be attached with copies of CAFs to be sent to the LEAs, State Police and TERM Cells. At present the entire CAF is being scanned and uploaded, hence with this online availability of the CAF, there is no requirement of making four copies of the CAFs as most of the agencies are accessing the CAFs through soft copies. Thus the requirement of taking four photographs from the customers becomes redundant. Vide this submission we have requested the DoT to allow customers to apply for fresh connection with one photograph instead of current four copies for each connection.

DRAFT RIGHT OF WAY RULES

DoT had posted Draft RoW rules for comments from stakeholders on their website. Joint industry response from COAI, AUSPI & TAIPA was submitted that that framing of Rules under the Telegraph Act to create an enforceable framework for a sectoral policy for grant of Right of Way for laying cable network and installation of towers, etc. and facilitating smooth coordination between the service providers and the State Governments/ local bodies is a very welcome initiative by the DoT and is imperative for achieving the objective of a Digital India. Such Rules/National RoW policy would address the concerns that have arisen on account of the differences between DoT guidelines and State Governments' demands as these would be binding on all including the State Governments. They would also have an overriding effect on all Rules / Guidelines / Policy Circulars hitherto issued by the State Governments and would also meet the purpose of amendment of the original Act.

INSTALLATION OF TOWERS ON DEFENCE LAND AND BUILDINGS

COAI has made submissions to the DoT on the availability of Defence land / buildings for installation of towers. It was emphasised that to ensure expeditious rollout of telecom infrastructure, DoT must support and facilitate the installation of Mobile towers on Defence land and buildings to enable better connectivity for mobile phone

users in Defence areas. It is imperative to have a continuous mesh of cell sites in the mobile network architecture. Mobile towers are the most important and essential element of any mobile network and the absence of these, is bound to result in gaps in the mobile signal coverage, leading to degradation of services. Such connectivity and coverage gaps are also bound to impact the Government's efforts to provide the benefits of information and telecom facilities to all citizens and its vision of "Digital India" which envisages the building of Smart Cities and delivery of Government to Citizen services.

FREQUENCY SELECTIVE MEASUREMENT

The TEC issued a document on measurement of Electromagnetic Fields emission from channelized mobile wireless systems. It was submitted to the TEC that there will be a need to procure software (license keys) and hardware for all Service Areas by the industry in order to meet the requirements mentioned in the Addendum to TEC Test Procedure on Frequency Selective Measurement of Electromagnetic Fields. Therefore, we request time of 6 months to procure these additional instruments and software to be able to do the measurements as per the TEC Test Procedure Addendum. We further request that the Amendment instructions should be issued by TEC mentioning the specifications of the instruments to be used for FSM measurement.

TV WHITE SPACES

It was brought to our notice that DoT along with Microsoft and IIT, Mumbai has been carrying Pilots on this. COAI has been making various submissions to the DoT stating that any discussions related to access spectrum would be of extreme importance to our member operators and hence it would be pertinent to involve all the concerned stakeholders in any such discussions pertaining to TV White Spaces. The sub 1GHz spectrum is very valuable on account of its propagation characteristics and the role that it can play in delivering mobile broadband especially in the rural areas. It is therefore most important that it is used in the most optimal and efficient manner as per globally harmonized band plans which ensure economies of scale and hence will be best placed to deliver on National broadband objectives of broadband for every citizen at affordable tariffs. It must be appreciated that to ensure meaningful outcome of the Pilot, it is important to transparently involve all the stakeholders in the process and all the issues need to be deliberated in detail with all concerned stakeholders before any decision is taken on the same by the Government.

AVAILABILITY OF ADDITIONAL SPECTRUM IN VARIOUS BANDS-NEXT ROUND OF AUCTIONS

COAI has been taking up the issue of availability of additional spectrum bands. This time again we have taken up the issue of additional spectrum in various bands including 1800, 2100, 2300 and 2500 MHz in the next round of auctions. TSPs in India have an average allocation of 2x13MHz (26MHz) compared to 2x55MHz (110MHz) for operators in other nations. There is thus an urgent need to make more spectrum available in various bands to meet the exploding data requirements and quality of service expectations of subscribers, and the Government's vision of a Digital India. It is therefore requested that spectrum available with the Government in various bands be put to auction at the earliest to meet the above objectives. The next round of expiry of licenses is coming up in September/October 2017, where spectrum in 900MHz, 1800MHz and 800MHz will expire and revert to the Government and will need to be allocated through auctions. We request that this spectrum may also be put up for auction in the next round of auctions.

OPENING UP OF E&V BANDS

Both E band and V band are understood to be unallocated in India, resulting in a key enabling infrastructural resource that can be used to achieve the vision of Digital India lying unutilized. In interest of maximum benefit to masses and millions of consumers in every nook & corner of India, and efficient usage of spectrum, COAI submitted to the DoT that these frequencies be opened up for allocation immediately, as India is expanding coverage and capacities for 3G & 4G in urban cities and taking broadband to rural India. The allocation should be strictly to TSPs having sizable customer base so that it can effectively be used to deliver mobile broadband services to masses. The allocation methodology should ensure both efficient and interference free environment. Hop by hop allocation is proposed by TRAI, supported by online platform for faster and non-interfering allocation in line with global practice. It is further proposed that block allocation methodology be chosen within hop by hop arrangement to significantly reduce interference possibility and allow easier inter-TSP coordination within blocks. The charging methodology as suggested by TRAI in its recommendations may be accepted by DoT.

STATE POLICIES FOR INSTALLATION OF MOBILE TOWERS

The Governments of Orissa and Rajasthan issued draft policies for installation of mobile towers in the states. The Orissa policy was quite industry friendly and post discussion with members, minor changes were made to the policy and the same was submitted to the Orissa Government. The Rajasthan policy had many issues in the draft version. Detailed submissions have been made to the Rajasthan Government pointing out all the anomalies in the draft guidelines and also suggestions have been made to make the policy easy and friendly. In the state of J&K, there were issues arising in the installation of towers in the absence of any policy from the State Government. A draft policy, in line with the DoT guidelines, has been prepared and submitted to the J&K Government for issuance of state guidelines.

PROCESS SIMPLIFICATION FOR EMF SELF-CERTIFICATE SUBMISSION

Existing procedure requires every TSP to file his submission for each and every operational site, for each and every BTS, for every upgrades carried out by self by another TSP within the same site. In addition there are other monthly submissions to be made in each Circle TERM cells by each TSP. The above requirement has enormously increased the workload not only to all the TSPs but also to the TERM cells. Logistics required by the TERM cell to receive and process all the certification has also increased manifold. With the availability of the Tarang Sanchar, the process has some what kept the workload situation under control for the present. Tarang Sanchar always carries updated information and ensures track of EMF compliance at all times. The Portal thus offers a simple means to the TERM Cell as well as TSPs for access to any kind of database/information about site compliance. It was thus submitted that in case of upgrades, there should not be any requirement for each TSP to submit self-certificates as the latest one is always available on the Portal.

TRAI CONSULTATION PAPER ON IMPLEMENTATION MODEL FOR BHARATNET

TRAI had issued this consultation paper on November 17, 2015. COAI in its response submitted that cost and timeline for implementation of the BharatNet project become two crucial factors to address. Government alone cannot fill this gap. Private sector participation would allow Government to leverage the existing resources and investment, so that government funds can be targeted efficiently and effectively. This would translate to taking a

holistic approach and also leveraging the opportunities provided by technology. A mix of technologies (for backbone transmission, and local access) to build BharatNet network and engaging the operators from the middle mile level could help faster and cost effective network. Right combination of fibre supported by microwave technology can help bridge the coverage gap in a much faster time frame and substantially lower cost for reaching broadband connectivity to Gram Panchayats. TRAI issued its recommendations on this paper on February 1, 2016. TRAI recommended Build-Own-Operate-Transfer/Build-Operate-Transfer models as a PPP model. TRAI has also recommended that concessionaires should be selected by way of a reverse bidding process to determine minimum Viability Gap Funding.

REGULATORY ISSUES

TRAI ISSUED DRAFT TELECOM CONSUMER PROTECTION (8TH AMENDMENT) REGULATION, 2015 REGARDING DATA SERVICES ON 29TH APRIL 2015

COAI made following key submissions in its response to the draft Regulation :

- a. The proposed Draft Regulation on activation of data services will hamper the Digital India initiative.
- b. Data is a Core service and mandating opt-in will lead to consumer inconvenience.
- c. Easy process for Data Deactivation and Reactivation process already exists through 1925.
- d. In the welcome message on the activation of the service, information regarding this mechanism is to be communicated to the subscriber.
- e. All the operators to create awareness of their mechanism through various channels i.e.
 - i) Through their website
 - ii) At Point of Sale
 - iii) Through Periodic publication i.e. every 6 months
- f. In order to ensure take-up of broadband & data services, the current mechanism of activation and deactivation of data should be continued with.

TRAI CONSULTATION PAPER ON COMPENSATION TO THE CONSUMERS IN THE EVENT OF CALL DROPS WAS ISSUED ON 4TH SEPTEMBER 2015

COAI in its response to TRAI made following submissions:

- a. Industry is of the view that consumer compensation will not resolve problem of the call drops.
- b. Internationally nowhere the compensation to consumers for the Drop Call is mandated, except for one country i.e. Columbia. There are some instances where some operators in certain geographies are following such measures, but not all operators in those geographies are compensating for call drops. These individual operators largely adopt such measures as per their own business model/case.
- c. There are various Technical and Reconciliation issues such as identification of the responsible TSP for the Call Drop; issues pertaining to handset quality, interference due to illegal wideband repeaters etc. resulting in call drops.
- d. We are of the view that following steps/initiative can resolve the issue of the Call Drops substantially:

- Focused efforts to secure government buildings and constructive Government-Industry engagement with local bodies.
- Learning from spectrum change-over issues in metro service areas in order to prevent problems in the future. In order to resolve concern on call drop, genuine multi stakeholder alignment and collaboration is the only way. Compensation to the Consumers for the Call Drop is not the correct approach and will not resolve the problem of call drops.

TOBACCO CESSATION PROJECT BY MINISTRY OF HEALTH

TRAI vide its letter dated November 9, 2015 asked the operators to Co-operate with Department of Health and Family Welfare to strengthen tobacco control project. Department of Health and Family Welfare has proposed that two-way SMS shall be used to interact with registered tobacco users via 7 digit short code (5616115) acquired by NIC. They have requested for making this seven digit number either toll free or charging the customers as per their bill plan.

Representation was made to TRAI on the issue and after detailed discussion following was agreed:

- a. TRAI agreed to our request that Mobile Originating SMS will be charged as per the base tariff of the customer.
- b. NIC agreed that in future use of Level-5 Codes will be avoided for these services.

TRAI has agreed to the Industry request that Mobile Originating SMS will be charged as per the base tariff of the customer.

TRAI CONSULTATION NOTE ON IP BASED INTERCONNECTION ISSUED ON 27TH NOVEMBER 2015

COAI made following submissions on the Consultation Note:

- a. A clear definition is required for the term IP Interconnection for proper clarity. IP interconnection should not be confused with Internet Interconnectivity and IP interconnection strictly would mean PLMN/PSTN to PLMN/PSTN voice / SMS traffic only and will not mean any data /packets through internet.
- b. The interconnection has been as per bilateral agreements among the TSPs, with dispute resolution and this practice should continue even at the advent of change in technology at the point of interconnection.
- c. Voice is sold to customers on minute's basis and is likely to be sold so for many years to come. Therefore, the IUC regime, which is primarily the revenue sharing regime for voice calls, has to be on the same basis and cannot be changed just because of any change of technology at the point of interconnection.
- d. As per the existing License condition the licensees can interconnect their networks on both circuit switched and IP based protocol. The current License condition duly recognizes and provides for interconnection of PSTN/PLMN Services both on TDM and IP networks. Since the existing license conditions authorize the licensee to exercise its discretion to deploy TDM or IP inter connection, the amendment proposed in License vide the captioned consultation note is not required.

TRAI CONSULTATION PAPER DIFFERENTIAL PRICING FOR DATA SERVICES WAS ISSUED ON 9TH DECEMBER 2015

The key points highlighted by COAI in its response are as below:

- a. At our stage of development, our highest need is internet adoption and increased data usage and whatever facilitates that healthily needs to be supported.
- b. Differential pricing plans are important to meet the needs of various segments of consumers. Imposing regulation that thwart such developments threaten to increase costs and discourage investment in ways that ultimately work to the detriment of the consumers that such regulation is ostensibly designed to protect.
- c. Price differentiation should be based on the following principles:
 - FRAND
 - Focus on priority of connecting the unconnected
 - Transparency
 - Non-exclusivity
 - No anti-competitive behaviour and no discrimination
 - Non predatory, non-ambiguous and not misleading
 - Regular reporting
- d. No ex-ante regulation is required since the market is vibrant enough. TRAI can examine tariff plans ex-post, on a case by case basis after granting a hearing to the operators.

TRAI CONSULTATION PAPER ON TARIFF ISSUES RELATED TO TV SERVICES WAS ISSUED ON 29TH JANUARY, 2016

COAI in its response on the paper requested TRAI to make suitable provisions in the regulation, enabling TSPs to get the content on the principles of 'must provide' and 'signals on a non-discriminatory' basis from broadcasters, which would facilitate & enhance the convergence between the telecom operators and the Broadcasters.

REPRESENTATIONS ON TRAI DRIVE TESTS

TRAI released its report on the findings of the Independent drive tests in 7 cities on 04.02.2016. The drive tests were conducted in the month of December 2015 and January 2016 in seven cities.

Just after the drive tests conducted by TRAI, some of the members operators also conducted independent drive tests on the same route as covered by TRAI. It was observed that there was a considerable difference in the results of the TRAI drive tests and drive tests conducted by operators independently.

In order to reconcile the results of the drive tests conducted by TRAI and Operators and to ensure that no negative perception is created due to the publication of the results by TRAI, Industry made representation to TRAI and requested for fair reconciliation process for drive test results.

On the request of the Industry, TRAI initiated the process of reconciliation individually with the members in the TRAI office; however TRAI declined to share the individual operator's logs with them.

On April 5, 2016 TRAI conducted an Industry meeting at its office to discuss the issue. It was informed that TRAI is going to conduct another round of Drive Tests at the end of April 16. Following the Meeting, a Joint Industry Letter was sent to TRAI on April 08, 2016 reiterating the Industry's request for reconciling of the drive test results before the next round of drive tests are conducted.

A follow-up letter was sent to TRAI on April 25, 2016 stating that as a logical progression on the issue, the results of the Drive Tests should be published in the public domain only after the results and logs of the Drive tests are analyzed and discussed with our members.

MOBILE NUMBER PORTABILITY (MNP)

Following two issues with respect to MNP were taken up with TRAI:

- a. Carry forward of the balance talktime for the prepaid subscribers at the time of porting: In this regard, Industry is in the process of sending a representation to TRAI highlighting the operational, licensing and taxation related issues in case carry forward of the balance is mandated by TRAI.
- b. Issue of "Age on Network" (AoN): In order to facilitate the porting of the subscribers of the operators, who are shutting down their mobile services in specific circles, a representation was made to TRAI to ask MNPO to remove screening of AoN.

MOBILE BANKING

- A. On the request of NPCI and Ministry of Finance conducted a joint meeting of NPCI and operators, wherein following was suggested:
 - i. Reduction of the Tariffs for USSD session from the present level of Rs. 1.50 per session to 0.50 per session and charge for only successful transaction.
 - ii. Increase in number of steps from the present level 5 to 8.
 - iii. Enabling push sessions from NPCI for dropped USSD sessions.
 - iv. Making provisions for a unified USSD platform which can support transactions across all payment mechanisms.
- B. After detailed discussion in COAI Regulatory Committee meeting following common position was agreed upon by the industry w.r.t the response to TRAI on these issues:
 - i. Ceiling of Rs. 1.50 should not be reduced.
 - ii. Agree to increase the steps from 5 to 8 provided the ceiling is maintained at Rs. 1.50 and steps to be used for only transactions prescribed by TRAI Regulation.
 - iii. Providing push session to NPCI raises security concerns.

Industry submission that there should not be any reduction in ceiling for the USSD based mobile banking transactions has been well received by TRAI. No decision is taken by TRAI yet on the issue.

SAARC RELATED ISSUES

DoT constituted a joint committee on the issue of Reduction of call rates among SAARC countries and Rationalization of Tariffs. COAI was the member of the DoT Committee. DoT Committee sought Tariff and Traffic related information w.r.t SAARC, from all the operators and also sought Industry inputs from COAI on the issue. All the relevant information was submitted to DoT by all the operators to the Committee. COAI made various submissions to DoT Committee highlighting:

- a. ILD tariffs should be left to bilateral negotiations.
- b. ILD termination rate in India should be increased to at least Re 1/min.

MULTIPLE AUDITS BY DoT

Letters were received by member operators from DoT apprising them that the Special Audit of their books of accounts will be initiated for the financial year 2008-09 & 2010-11.

In this regard, representation were made to DoT and it was requested to them to reconsider the decision of conducting Special Audit for the Financial Years 2008-09 and 2010-11 pursuant to the CAG audit. Industry highlighted to DoT that such an exercise will only result in duplication of efforts, wastage of time, manpower and precious public resources.

M2M SERVICES

DoT issued the National Telecom M2M Roadmap on May 2015. DoT further conducted a meeting with COAI and other Associations wherein DoT requested the industry to provide the inputs, considering the guidelines highlighted in the Roadmap, so that policy on the key issues relating M2M can be formed. COAI after detailed discussion with its members, submitted its response to DoT on the following key issues:

- a. KYC Requirement/Bulk M2M Connections
- b. M2M service providers
- c. Soft SIM/ embedded SIM
- d. Numbering Series for M2M Services

As per the media reports published on April 23, 2016, DoT has finalized the KYC policies for M2M As per the reports; there will be a provision of SIM transfers for M2M because devices will change hands. Further, there will be provision of no tele-verification and the restricted communication will be allowed on M2M SIM i.e. SMS, data and voice but on a pre-defined number only. The M2M SIMs will be sold in bulk.

It was also stated in reports that system integrators can get the VNO license to enter into the agreement with TSPs to provide the services, however, DoT is in discussion with Ministry of Home Affairs to finalize the guidelines.

COAI has been able to converge members' position on these key issues and the same has been submitted in our response to DoT dated 25.02.2016. DoT is in the final stages for releasing the policy on M2M.

FINANCE & COMMERCIAL RELATED ISSUES**GOODS AND SERVICE TAX (GST)**

Implementation of GST for Telecom Sector: Post independence, GST is the biggest tax reform which will have far fetching impact on the business especially on the service sector. Telecom services, being unique, warrant that sector-specific issues are considered and specific rules addressing the same are formulated under GST regime.

The Centre and the State Governments are in the process of framing the GST law and related rules, including the Place of Supply Rules (PoS Rules) for provision of goods and services. GST impacts almost all functions of a business including but not limited to accounting, Enterprise Resource Planning ('ERP'), other IT systems, customer and vendor relationships and commercial arrangements, pricing, mandate rebuilding databases of a billion customers and vendors, educating and training all stakeholders, transform supply chain etc.

Given the enormity and complexity that is specific to the telecom sector as also recognized by other economies which have already implemented GST, the sector will require minimum 12 to 18 months from the date the GST legislation framework and related Rules are finalised and made available to the public for compliance given the massive transformation mandated by this tax reform. In this regard, COAI met with the Commissioner as well as with Member – GST, in Ministry of Finance, to discuss the GST treatment on output services, valuation, etc. and submitted a detailed representation highlighting issues emanating from GST. COAI is also engaging with the various state governments like Maharashtra, Karnataka, Gujarat etc. and is educating them on industry specific issues.

As mentioned above detailed representations have been submitted with various officials' in Ministry of Finance, State Governments and senior officials in the DoT.

REPRESENTATION TO SELECT COMMITTEE, RAJYA SABHA

Representation was made to the Select Committee on GST, Rajya Sabha and the following key issues relating to Constitution Amendment Bill on GST which are impacting the Telecom Sector were explained.

- (a) Additional tax at 1 percent on origin of goods
- (b) Definition of 'goods' and 'services'
- (c) Exclusions from GST net –
 - Entertainment tax levied by local bodies,
 - petroleum products,
 - electricity duty,
 - real property

The Select committee acknowledged the points brought about by COAI in the report furnished by them.

GST BUSINESS PROCESSES ISSUED BY GOVERNMENT

The Government through Ministry of Finance released the Draft Business Processes of GST on the following processes

- a) Registration
- b) Payment
- c) Refunds
- d) Returns Process.

The said processes were issued to engage with the stakeholders and invite comments from the industry. Release of the Business Process related reports by the Joint Committee was a welcome step by the Government in its journey towards GST implementation. In this connection, we at COAI made comprehensive submissions in connection with business processes and outlined various aspects that the government should consider while finalising the same to ensure a smooth compliance window.

FORMATION OF HIGH LEVEL COMMITTEE CONSTITUTED BY DoT

Based on our representations and follow ups in the ministry, a high level committee was formed under the chairmanship of Smt. Anuradha Mitra, Chairperson to give recommendation on the following.

- (i) To work out a framework for reporting, monitoring and collection of gross revenue of Licensees to completely capture the revenue as per various license agreements.
- (ii) To examine the possibility of adopting standardized audit procedure by the decentralized revenue assessment (LF & SUC) field offices by use of standard operating procedure (SOP's) issued in this regard.
- (iii) To examine the possibility of developing an appellate authority before issue of final demands after considering the grievances / objections of the Licensees without encroaching upon the provisions available in TRAI Act.

Detailed joint representation was made to the committee.

Meeting held with Smt. Anuradha Mitra, Chairperson, High Level Committee on Revenue Verification and with CCA Chennai regarding license fee and gross revenue/deductions assessment process. Joint Industry representation with unanimous consensus of members submitted to the committee.

Key takeaway/s: Committee has taken note of our representation to form process of deduction / verification. In this regard a meeting was also scheduled Meeting with Secretary DoT & Members Finance to discuss on going issues w.r.t decentralization of assessment / verification process at CCA level and the to make a SOP to remove ambiguity.

AGR - SUBMISSION OF DOCUMENTS IN SUPPORT OF DEDUCTIONS CLAIMED THROUGH STATEMENTS OF REVENUE AND LICENSE FEE.

Various CCA's of DoT have their own interpretation on different matters, which is neither uniform nor consistent. Few CCA offices reported to DoT that the operators are not submitting the required documents in time as proof of payment of deduction claimed through quarterly statement of Revenue and License Fees.

In this regard, detailed representations were made to DoT. Few points mentioned in the representation are as follows.

- i. Simplification in submission of multiple documents / digitalization

- ii. Requirement of Bank Statement vs Bank Certificate
- iii. Multiplicity of documentation w.r.t of TDS:
- iv. Timelines for submission of documents on quarterly basis.
- v. Disallowance of IUC/Roaming/Pass through charges paid to foreign operators.
- vi. Dual requirement of Annexure AO & AG and Annexure A: Representation sent to DoT with a request to issue suitable clarification to all CCA offices not to insist operators to submit 'Performa A' for previous period as earlier the same was not required. We informed them that our member operators are fully committed to submit the requisite information as per the prescribed Annexures 'AO' and 'AG' w.e.f. FY 2015-16 onwards.
- vii. Sharing of the Disallowance Report. The format of disallowance should be uniform across all circles and the disallowance report should be shared for each transaction. The reasons for disallowance should be clearly indicated i.e. reasons for disallowance, deficiency in documents, related guidelines, supporting documents required for approving the transaction, etc.

AUTOMATION OF PAYMENT OF LICENSE FEE AND SUC ON LINE SUBMISSION OF DOCUMENTS.

Detailed representations were made / meetings were scheduled with concerned officials of DoT w.r.t. to Automation of process of deduction and verification. Object of the same is to place a system of on line submission of documents, making online payment, filing on line returns and to seek approval from DoT to implement TRAI's recommendations on AGR.

Key takeaway/s: DoT propose to form a committee to make recommendation for the automation.

REPORTING SYSTEM ON ACCOUNTING SEPARATION REGULATIONS 2012

Telecom Regulatory Authority of India (TRAI) had sought comments on "The Reporting System on Accounting Separation Regulations 2012". COAI response on the same was submitted to TRAI in April 2015

UTILIZATION OF CENVAT CREDIT OF EDUCATION CESS AND SECONDARY & HIGHER EDUCATION CESS

We made various representation / follow ups with MoF regarding utilization of Cenvat credit of Education Cess and Secondary & Higher Education Cess. On 29 October 2015, Ministry of Finance issued notification and allowed utilization of Cenvat credit of Education Cess and Secondary & Higher Education Cess. Though Notification has been issued for avilment of credit post 1 June 2015, no clarity has yet been provided on the balance of Cess lying in the books as on 31 May 2015.

LEVY OF SWACHH BHARAT CESS

In the recent Union Budget 2015-16, it was proposed that an enabling provision should be made to empower the Central Government to impose Swachh Bharat Cess (SSC) on certain taxable services including telecom @ 2% on the value of such taxable services, with a view to fund the Swachh Bharat initiative.

COAI opposed the same as the suggested cess at 2% would have increase the effective service tax rate to 16%; which would have been a huge cost for the telecom industry and for the ultimate consumer as the additional burden will be passed on to the consumers eventually.

Key takeaway/s: On 6 November 2015, the Ministry of Finance notified that Swachh Bharat Cess shall be levied @ 0.5% on the value of taxable services with effect from 15 November 2015. Effectively, rate of cess would be 0.5% and new rate of service tax would be 14.5% rather than only on telecom service @ 2%.

POST BUDGET RECOMMENDATIONS

Representation with regard to following key issues mainly for service tax on spectrum and license fees sent to MoF, DoT, CII, FICCI, ASSOCHAM, etc.

S. No.	Issue	Recommendation
SERVICE TAX		
1.	a. Assignment of spectrum by Govt. b. Interpretation of applicability of Service tax on spectrum allotted prior to April 1, 2016	Assignment / allocation of spectrum by Government should be removed from proposed amendment to Section 66E (Declared services) making only subsequent transfers between two business entities liable to Service tax. Without prejudice to the above, it should be clarified by the Central Government that considering that the transaction was not a taxable service at the time of the assignment by the Government prior to April 1, 2016, no Service tax should be payable by the telecom operators under reverse charge.
2.	Service tax on recurring License Fee & Spectrum Usage Charges	Recurring license fee and spectrum usage charges must be excluded from the scope of levy of Service tax.
3.	Deferment of Cenvat Credit	Entire Cenvat credit in respect of Service tax paid on assignment of right to use spectrum should be available as credit in the same financial year in which Service tax payment is paid.
4.	Manner of computing credit available each year	Without prejudice to the above, the credit of Service tax paid should be available over the remaining number of years for which right to use spectrum is assigned (i.e. effective remaining licence period of the rights obtained) as against total number of years for which rights have been assigned (i.e. typically 20 years) as specified under the present budget, considering this will tantamount to spilling of credit beyond the license period issued by the Government.
5.	Cenvat Credit in case of subsequent transfer of right to use spectrum	In the event of a balance of Cenvat credit at the time of transfer cannot be fully offset against the Service tax on sale consideration of spectrum, such unutilized credit should be allowed to be offset against output Service tax of other revenue streams.
INCOME TAX		
6.	Proposed insertion of new Section 35ABA	The phrase in the proposed section " <u>and for which payment has actually been made to obtain a right to use spectrum</u> " be deleted.

COAI's role as the industry thought leader was enhanced in the preceding year, with the Association emerging as the official voice for the Indian telecom industry that interacted directly with ministries, policymakers, regulators, financial institutes and technical bodies. As a result of its concerted efforts to strengthen the industry's stature, COAI has been able to provide a platform for discussion and exchange of ideas between operators, the government and the consumers.

The Association has built on its image of being an approachable entity that has expertise in all aspects of the telecommunication sector and can offer insights about the industry. COAI is being increasingly seen in the media as the first stop for all queries related to the industry, from 4G and new technologies, to the industry stand on emotive issues such as call drops and EMF. The Association's perspective on all forecasts for the sector as well as on policy issues like spectrum are viewed with interest and considered significant.

The most significant activity for the industry in the FY was the issue of call drops, which got maximum media attention. The issue flared up after the Telecom Authority of India's (TRAI) ruling that set terms to penalize telecom operators for dropped calls. Through a focused media approach, COAI was able to successfully put forth before the media the reasons for call drops and how it was hamstrung by a paucity of mobile towers. The association was able to reach out to consumers and educate them through stories in the media.

Another issue that the association worked very thoroughly was EMF emissions from mobile towers. To address this issue COAI took the leading role in reaching out to various stakeholders in order to address and allay the fears in the minds of people regarding this issue. To achieve this, COAI reached out to the people at the ground level and engage the relevant government departments, media, medical professionals, academia and consumer representative groups to engage and educate them on the facts associated with the issue. These efforts successfully provided platform to engage with the various important stakeholders and convince them on the more than adequate safety regime adopted by government and ensured by the industry.



SIGNIFICANT ACTIVITIES WHEREIN COAI ACHIEVED WIDESPREAD MEDIA ATTENTION

Perception management: From 'Net Neutrality' to 'Net Equality'

a. COAI CEOs Media Briefing session on Net

Neutrality: A media briefing session on Net Neutrality was organised by COAI on 24th April 2015, wherein the CEOs of all COAI member TSPs addressed the media queries on the industry position on Net Neutrality and the industry vision to connect the next 1 billion Indian citizens to the internet through its campaign "Sabka Internet, Sabka Vikas". Coverage appeared in all leading mainlines, financials,



wires, vernaculars, electronic channels and online portals. The event was widely covered by media with an ad value worth of over INR 3.9 crores. The key industry messages were conveyed and carried by the media in its reports.

b. Press release on 'Net Equality' by COAI members: COAI issued a press release on 19th April 2015, whereby it was conveyed that the member operators of COAI support Net neutrality and pitched for Net Equality, in order to connect the next 1 billion Indians to the Internet. The Industry's commitment to the Government vision of "Broadband for All" and Digital India were reaffirmed through the press release. The press release received wide coverage in both mainstream and online media with an ad value worth over INR 4.4 crores.

c. COAI Press release on "Sabka Internet, Sabka Vikas" campaign and consumer feedback: A press release was issued by COAI announcing the results of the public perception survey on Net Neutrality, which was initiated as part of the "Sabka Internet, Sabka Vikas" campaign. It was shared that over 40 lakh citizens had supported the industry campaign, in less than a week. The press release was carried widely by major mainlines, financial and regional publications and an ad value worth of over INR 1.7 crores achieved.

MEDIA BRIEFING BY DR. CHINNABABU IN 3 CITIES OF ANDHRA PRADESH TO ADDRESS EMF CONCERNS

Dr. Chinnababu Sunkavalli, addressed the media on the Myths of Cell Tower Radiation in 3 cities in Andhra Pradesh – Guntur (11th April 2015), Vijayawada (12th April 2015) and Nizamabad (18th April 2015). The media briefing sessions were covered by major dailies, satellite channels and various cable channels in their bulletins. The events were well covered by leading electronic channels of the region like TV 9, ETV, HMTV, TV 5, NTV, 10 TV, etc. TV9, the leading Telegu news channel, did a 1-1 live Doctor Discussion programme on Myths about Cellphones and Cell Tower Radiation on 19th April 2015 between 1530 and 1630 hrs.

NOIDA TELECOM TOWER CRISIS

The NOIDA authority had issued notices to tower landlords in the area to remove mobile towers from residential areas, or else face cancellation of their property lease. This resulted in the tower landlords of Noida,

represented by the Noida Residents' Tower Association (RTA) shutting down the towers in their premises, resulting in severe network outage issues faced by the mobile telephony users in the area. The RTA members had demanded written communication from the NOIDA Authority stating that the Noida Authority will not carry out any further action of lease cancellation due to location of cell towers on their premises. COAI assisted the RTA in organizing a press conference to convey their distress and also issued a press release stating the industry position on the matter. Further, COAI wrote to the NOIDA Authority, stating that the DoT's TERM Cells are the nodal authority on the issue of EMF emissions from mobile towers and any action from the NOIDA Authority in this regard would need to be done with the TERM Cell's involvement. As a result of COAI's efforts, constant coordination with the NOIDA Authority and support to the RTA, the NOIDA Authority's notices have been kept in abeyance, and no coercive action will be taken against the mobile towers.

PERCEPTION MANAGEMENT ON NETWORK QUALITY AND RELATED ISSUES

a. MoC&IT's statement on Call Drops:

Media across India was engaged to promote the positive statement of Hon'ble MoC&IT on "call drops" due to lack of mobile towers. The Minister's video was also populated among media and other social group via mail and WhatsApp. News appeared in 34 print publications with estimated Ad value of over INR



1 crore. News was also flashed by IANS titled: Only new mobile towers can reduce call drops: Ravi Shankar Prasad. This story was further flashed on 33 websites and over 8 lakh netizens were reached.

b. Network 18 series on No Call Drops: The Network 18 group ran a campaign on 'No Call drops' during the period of 5th -12th June, 2015. COAI was the knowledge partner for this series which was featured in the channels like CNN IBN, IBN 7, IBN Lokmat, ETV Urdu, ETV Rajasthan, ETV UP/UK, ETV Bihar/JK, ETV MP/CG, ETV Bangla, ETV Haryana/HP, ETV Gujarati, ETV Kannada and ETV Oriya. Approx. 1,01,68,600 people were reached via electronic and online media through various programmes run under the campaign.

c. Response to proposed TRAI regulation on compensation to consumers on Call Drops: Post the TRAI's proposed regulation on compensation to consumers on the event of Call Drops, COAI engaged the media through numerous interactions and managed to get some balanced perspective in the news articles with the Association's point of view also being covered alongside. The estimated ad value of print and online industry stories wherein COAI views have been incorporated is over INR 2.6 crore.

d. Media interactions of DG, COAI

i. National: Mr. Rajan S. Mathews briefed journalists about facts related to the call drops issue through 1-on-1 interactions with key publications, including The Economic Times, MalyalaManorama, The Telegraph, DainikJagran, The Times of India, Sakal, Digit, etc. The objective of these interactions was to highlight COAI's views on a multitude of issues in the telecom industry, including growth, call drops, mobile tower emissions, 4G rollouts, Net Neutrality, spectrum sharing, etc. All interactions were well managed and

resulted in positive outcome.

- ii. **AP and Telangana:** Select interactions of leading media houses of AP and Telangana were organised with Mr. Rajan S. Mathews on 24th September 2015. Various industry issues, including that of Call Drops, were discussed by the journalists and Mr. Mathews. Interactions were conducted with The Times of India, The Hindu, Eenadu, Andhra Jyothi and Namasthe Telangana and positive coverage received.
- iii. **Goa:** Mr. Rajan S. Mathews, Director General, COAI interacted with approx. 29 local media. Successfully dispelled EMF-related misconceptions and how they are adding to the problem of call drops by making mobile towers scarce. Coverage appeared in 13 print publications and 2 wires and 8 websites. Achieved advertisement Value equivalent to Rs. 12,34,900
- e. **Joint industry press conference on 'network quality in Bihar':** COAI along with AUSPI and TAIPA organized a press conference in Patna to put forth the industry's efforts to resolve the issue of Call Drops in the city of Patna and other parts of Bihar. The objective of this conference was to showcase that the industry was serious towards addressing the call drops issue and what it felt the government's role was in resolving the same. The conference was attended by 35 journalists and it secured 18 media impressions across print and online media and electronic channels. The activity generated a total PR value of over Rs 10.28 lakh.
- f. **Press Release:** COAI's reaction on TRAI's regulation on Call Drops (COAI issued a press release "TRAI regulation on Call Drops – Wrong solution for a real problem" voicing its concerns with the Telecom Regulatory Authority of India's (TRAI) direction to telecom operators to compensate users for call drops at the rate of Re. 1 per call drop, up to a maximum of three dropped calls per day. The activity generated 51 media impressions across print and online media.
- g. **Press Briefing Session on Network Quality in Punjab:** COAI organized a press briefing session on Network Quality in Punjab in Chandigarh on December 14. A total of 30 journalists attended the event and 41 coverage was obtained across print, online and electronic media. Mr. Rajan S Mathews also interacted with five mediapersons along the sides of the session, where he discussed major challenges facing the industry, including reasons for call drops, EMF myths, permission to install towers, etc. The total reach of media coverage was over 17 crore readers. Following media coverage of the session, the Union Territory administration allowed installation of mobile towers in 24 new locations within the city of Chandigarh.
- h. **Press Briefing Session on Network Quality in Pune:** COAI organized a press briefing session on Network Quality in Pune. The briefing took place in a centrally-located hotel in Pune city and was addressed by Mr. Rajan S Mathews. The session was attended by 35 journalists and obtained 17 coverage across print and online media. The total reach of the coverage was over 19 crore readers. The briefing helped deliver the messaging around the need for more towers strongly in the media that helped to build a positive perception among one of the very important stakeholders.



PILOT AND NATIONAL LAUNCH OF OUTREACH PROGRAMME FOR PRADHAN MANTRI KAUSHAL VIKAS YOJANA (PMKVY)

On 18th June 2015, COAI, in association with Centum Learning announced the pilot launch of a massive Outreach Programme to mobilize underprivileged youth for skills training. The initiative would help implement 'Pradhan Mantri Kaushal Vikas Yojana' (PMKVY), a flagship outcome-based skill development scheme under the Ministry of Skill Development and Entrepreneurship, which plans to skill over 2.4 million people across the country. The programme was launched nationally on 15th July 2015 by Shri Narendra Modi - Prime Minister of India. He was accompanied by Shri Arun Jaitley - Finance Minister; Shri Manohar Parrikar – Minister of Defence; Shri Rajiv Pratap Rudy, Minister of State, Skill Development & Entrepreneurship and Parliamentary Affairs; Shri Piyush Goyal, Hon'ble Minister of State (Independent Charge) for Power, Coal and New & Renewable Energy; Shri Suresh Prabhu, Minister for Railways; Shri Sunil Arora, Secretary, Ministry of Skill Development & Entrepreneurship; Commerce & Industries Minister; and other leading government dignitaries from relevant departments. The outreach programme was completed successfully with over 2.7 million potential candidates profiled.



EMF ADVOCACY MULTI-STAKEHOLDER ENGAGEMENT IN SHILLONG

COAI organised a Workshop on "Mobile Telephony: Digital Inclusion and Health Aspects" on 2nd July 2015, in association with the Govt. of Meghalaya, Department of Telecommunications and TAIPA at the State Convention Hall, Shillong. The Workshop was aimed at being a formal engagement with the members of TERM Cell/State Government/Municipalities/Police/NGO's/RWAs and industry for aligning all stake holders with Govt. of India/Industry position on EMF and tower issues. More than 8 speakers and 460 audiences attended the event. 30 media attended the event and coverage worth Ad Value of INR 24,22,190/- appeared in 16 publications, 3 Channels and 8 websites. Govt. officials engaged have become supportive to the cause of telecom tower installation in the state of Meghalaya as a part of the Digital India initiative. This joint initiative of the industry was highly appreciated by the Government.

COUNTERING ACTIVISTS LIKE JUHI CHAWLA'S RELATED TO EMF ISSUE

Patrika newspaper and actress cum activists, Juhi Chawla organised a seminar on 'Effects of radiation from Mobile Towers' in Bhopal on 26th June 2015. Approx. 5000 audience including all marketing and editorial staff of Patrika from Jaipur, Bhopal and other adjacent cities were present at the event. Juhi Chawla and higher management of Patrika newspaper were the key speakers. To counter this COAI engaged media for generic stories on Indian



telecommunication, Myths of cellphone radiation, misguided activism affecting quality of mobile telephony services in India, etc. Media across Jabalpur, Bhopal, Indore and Ujjain were engaged and 29 news articles were published to counter the myths spread by Juhi Chawla. Juhi Chawla's event was covered only by DabangDunia (Bhopal edition), a category-C publication and Patrika (Indore and Bhopal editions). In terms of circulation, visibility, value and content; the counter coverage placed in the media (across Bhopal, Indore, Jabalpur and Ujjain) far exceeds that of any coverage received from the Juhi Chawla's event.

JOINT INDUSTRY CEOs PRESS CONFERENCE ON CELL SITES

A joint industry press conference in association with AUSPI and TAIPA, with participating CEOs from the member companies, was organised in New Delhi on 17th August 2015. The industry jointly opined on the need for uniform guidelines for Cell Sites and Right of Way (RoW) across the telecom circles in India, in order to have more efficient networks and facilitate seamless connectivity to the citizens. The platform displayed the industry's commitment to realize the Government's vision of Digital India, and also requested support towards addressing the challenges of the industry to set up a mobile infrastructure. A Q&A session held with key figures from the industry. The press conference saw participation from 94 journalists and was widely covered by the media. Advertisement value equivalent of the total coverage received is over INR 1.8 crore.



ENGAGEMENT OF TRAI FOR EMF PUBLIC AWARENESS CAMPAIGN

COAI successfully engaged TRAI for a public awareness programme to be conducted by the regulator. TRAI organised Public Awareness Campaign across Bangalore, Pune, Gurgaon and Kolkata. TRAI has published 27 number of ads to create awareness regarding facts related to EMF among general public from Oct 2015-Feb 2016 in Hindi, English, Marathi, Bengali, Khasi and Asamese languages across 9 cities in 27 newspapers with a reach of 1,24,27,488 readers.

INDIA - BROADBAND FOR ALL

COAI, Ericsson India in association with The Embassy of Sweden organized the India-Broadband for All - an essential infrastructure for a prosperous society conference. The event provided a platform for decision-makers to come together to discuss how the industry, government, regulators and policymakers could work together to match the aspirations of a billion Indians as the country embarked on its dream of Digital India. The dignitaries and speakers who attended the event were Shri Ravi Shankar Prasad, Hon'ble Minister of Communications & IT; Mr. Harald Sandberg, Ambassador to India, Embassy of Sweden; Mr. Rakesh Garg, Secretary, DoT and Chairman,



Telecom Commission; Mr. Ram Sewak Sharma, Chairman, TRAI; Mr. Sunil Bharti Mittal, Founder & Chairman, Bharti Enterprises; Mr. Rajan S Mathews, Director General, COAI; Mr. Paolo Colella, MD & Region Head, Ericsson India; Mr. Ulf Pehrsson, Global Head Govt & Industry Relations, Ericsson. Around 33 journalists attended the event, which generated a total PR value of Rs 18.7 lakh.

EMF Advocacy Session in Thane

EMF Advocacy Session and discussion on Mobile Connectivity was organized at Fortune Park LakeCity on the Eastern Express Highway, at Thane for Thane Municipal Corporation and mobile service operators. The objective of this session was to create awareness among members the Thane municipal body about mobile connectivity and clear misconceptions that EMF is harmful to humans. The session was addressed by Mr. Sunil Chavan, Additional Municipal Commissioner, Thane Municipal Corporation; Dr. Suresh AVS, Consultant, Oncologist; and Mr. TV Ramachandaran.



PRESS RELEASE(S)

Himachal Pradesh High Court's ruling on mobile towers: COAI, through a press release, welcomed the decision of the Hon'ble Himachal Pradesh High Court debunking fears around mobile tower radiation, by dismissing multiple petitions filed in the Court against the setting up of mobile towers citing health hazards. The activity generated over 61 media stories across print and online media

Delhi HC's Order on Call Drop Regulation: COAI through a press release informed media about the Delhi High Court's order of no coercive action in the matter with regard to the Telecom Consumers Protections by TRAI, which regulation provides for telecom operators to compensate consumers for call drops at the rate of Re. 1 per call drop, up to a maximum of three calls per day starting January 1, 2016. The activity garnered over 123 coverage across print and online media

BUDGET RECOMMENDATION FOR THE FINANCIAL YEAR 2016-17

COAI through a press release submitted its recommendations for the Union Budget for FY 2016-17 to the Ministry of Finance, Government of India, on behalf of its members, representing the telecom service providers. The key recommendations on both direct and indirect taxes, included suggestions on rate of interest, CENVAT Credit, deductibility of spectrum fees paid and tax withholding on distributors margin on sale of SIM cards and prepaid vouchers, etc. The activity generated 47 media coverage across print and online media

COAI APPEALS TO SUPREME COURT AGAINST DELHI HIGH COURT'S ORDER ON CALL DROP JUDGMENT

A press note on COAI requesting the Honorable Supreme Court to consider its prayer that the TRAI Regulation on Call Drops is ultra vires the TRAI Act in that the Act does not give TRAI adjudicatory powers and hence TRAI

MEDIA VISIBILITY SNAPSHOT

COAI's role as the industry thought leader was enhanced in the preceding year, with the Association emerging as the official voice for the Indian telecom industry that interacted directly with ministries, policymakers, regulators, financial institutes and technical bodies. As a result of its concerted efforts to strengthen the industry's stature, COAI has been able to provide a platform for discussion and exchange of ideas between operators, the government and the consumers.

The Association has built on its image of being an approachable entity that has expertise in all aspects of the telecommunication sector and can offer insights about the industry. COAI is being increasingly seen in the media as the first stop for all queries related to the industry, from 4G and new technologies, to the industry stand on emotive issues such as call drops and EMF. The Association's perspective on all forecasts for the sector as well as on policy issues like spectrum are viewed with interest and considered significant.

The collage consists of several newspaper clippings:

- Top Left:** "Double the towers to cut call drops: Cellular body to UT". A headline from The Hindu dated 11/01/2014, discussing the need for more towers to reduce call drops in Uttar Pradesh.
- Top Middle-Left:** "UT policies drew ire of telcos". A headline from The Hindu dated 11/01/2014, reporting on the dissatisfaction of telecom operators with the government's policies in Uttar Pradesh.
- Top Middle-Right:** "GSM Customers Base Hits 774mn". A headline from The Hindu dated 11/01/2014, announcing that the GSM subscriber base in India has reached 774 million.
- Top Right:** "GSM Cos Want Uniform Fees". A headline from The Hindu dated 11/01/2014, stating that GSM operators are demanding uniform fees for spectrum usage.
- Far Right:** "No Harmful Impact of Tower Radiation on Health: Prasad". A headline from The Hindu dated 11/01/2014, featuring a statement from the Union Health Minister, Dr. Anbumalai Prasad Reddy, regarding mobile tower radiation.
- Middle Left:** "High Spectrum, More Usage Increase Demand For Better Connectivity". A headline from The Hindu dated 11/01/2014, discussing the need for better connectivity as spectrum usage increases.
- Middle Middle-Left:** "Additional tower pill for call drop". A headline from The Hindu dated 11/01/2014, reporting on the government's plan to build more towers to reduce call drops.
- Middle Middle-Right:** "HC Rejects Petitions against Mobile Towers". A headline from The Hindu dated 11/01/2014, stating that the Supreme Court has rejected petitions filed against mobile towers.
- Middle Right:** "Debunking the tower myth". A headline from The Hindu dated 11/01/2014, reporting on a study that debunks the myth that mobile towers cause cancer.
- Bottom Middle-Left:** "50,000 cancer cases reported every year in Rajasthan: Doc". A headline from The Hindu dated 11/01/2014, reporting on a doctor's claim that 50,000 cancer cases are reported annually in Rajasthan.
- Bottom Middle-Right:** "Paying for dropped calls". A headline from The Hindu dated 11/01/2014, discussing the issue of consumers paying for calls that do not connect.
- Bottom Left:** "Mobile radiation doesn't cause cancer, say experts". A headline from The Hindu dated 11/01/2014, reporting on experts' views that mobile radiation does not cause cancer.
- Bottom Middle:** "‘ഭരഞ്ച്’ കിട്ടണം...". A headline from The Hindu dated 11/01/2014, discussing the need for a 'budget' for the telecom sector.
- Bottom Right:** "മാവേളി ടവർ സെ നീക്കലന് വാലേ രീടിയോ". A headline from The Hindu dated 11/01/2014, discussing the removal of towers from the Malappuram district.

JOINT INDUSTRY PETITION ON TRAI'S REGULATION ON CALL DROP : SUPREME COURT

A Special Leave Petition was filed challenging the TRAI Regulation dated October 16, 2015 making it mandatory for telecom operators to compensate subscribers for the very first three calls dropped per day at the rate of Re.1 per dropped call with effect from January 01, 2016. The Petition also challenged the judgment of the Delhi High Court dated February 29, 2016, which upheld the TRAI Regulation and held that TRAI is at liberty to take appropriate steps in accordance with law for compliance of the same.

On May 11, 2016, the Supreme Court allowed the industry petition and set aside the TRAI Regulation while holding them as ultra vires, manifestly arbitrary, non-transparent and violative of Article 14 and 19 (1) (g) of the Constitution of India.

JOINT INDUSTRY PETITION CHALLENGING PENALTY ON EMF (DELAY IN SUBMISSION OF SELF-CERTIFICATES) : TDSAT

A joint industry petition on EMF penalty for delayed submissions was filed in TDSAT praying that DoT cannot levy any penalty on the basis of Circulars dated 13.08.2010, 27.08.2010, and/or 03.11.2010 or any other circular on ground of delay in submission of the Self Certificates for the BTS sites installed prior to 11.10.2012.

On March 29, 2016, the Tribunal allowed the petition fully and set aside the impugned penalty demands while holding that the circular dated 11.10.2012 is unreasonable, unjust and unfair and no penalty in terms of the scheme can be sustained.

The Tribunal further directed DoT to frame a fresh scheme in light of the recommendations of the committee constituted by it on 26 July 2013 and the observations made in this judgement and to consider the case afresh in light of the new scheme as directed.

JOINT INDUSTRY PETITION CHALLENGING HIKE IN INFRASTRUCTURE CHARGES BY BSNL: TDSAT

A joint industry petition was filed challenging the validity of Circular dated March 30, 2015 by which BSNL has revised the Infrastructure and Space Charges for Active Links of Licensed Telecom Service Providers with effect from April 1, 2015. BSNL has sought to bring back the same charges as were sought to be levied by it in terms of its Circular dated June 12, 2012, which was set-aside by the Hon'ble TDSAT by way of its Judgment dated August 20, 2014.

On February 12, 2016, TDSAT issued notice in the matter and directed BSNL not to take any coercive steps in pursuance to its Circular dated 30.03.2015.

PETITION ON EMF IN THE NATIONAL GREEN TRIBUNAL : NGT

An application was filed in the National Green Tribunal praying for directions to DoT to implement Inter Ministerial Committee Recommendations and to restrain SEBI from allowing the telecom companies to raise money through IPOs while setting up towers.

On December 10, 2015, the judgment was pronounced in this matter and NGT dismissed the application for want of jurisdiction and held that radiation i.e. emission of electromagnetic waves from the towers does not fall within the ambit, scope and jurisdiction vested in this Tribunal under the provisions of the NGT Act.

COAI APPEAL CHALLENGING NGT BHOPAL JUDGMENT : SUPREME COURT

COAI has filed a Civil Appeal before the Hon'ble Supreme Court challenging the final Judgment passed by NGT, Bhopal directing the Local Authorities to carry out a fresh survey to identify whether the mobile towers, which are located within its jurisdiction, are found within the prohibited zone in accordance with Judgment of the Justice I.S. Israni (Retd.) Vs. UOI passed by the High Court of Rajasthan and further directing that the said towers should be made non-operational and de-activated by the Service Providers.

The Civil Appeal also challenged the order dated August 13, 2015 passed by NGT Bhopal dismissing COAI's Review Application.

On October 16, 2015, Hon'ble Supreme Court issued notice in the matter and stayed the operation of impugned judgments and orders dated May 28, 2015 and August 13, 2015.

JOINT INDUSTRY PETITION CHALLENGING BSNL DEMANDS FOR BANK GUARANTEE FOR IUC PAYMENT : 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 September 09, 2015, an application was filed praying for an order restraining BSNL from demanding bank guarantee from the Telecom Service Providers (TSPs) by determining net payable status of the TSPs qua BSNL separately for the Basic and Cellular Mobile Services and from threatening disconnection of Point of Interconnection or non-commission of new Point of Interconnection for non-furnishing the bank guarantee on the above basis.

JOINT INDUSTRY WRIT PETITION CHALLENGING CHANDIGARH TOWER POLICY : PUNJAB & HARYANA HIGH COURT

A Joint Industry writ Petition was filed before the High Court of Punjab and Haryana at Chandigarh challenging the Chandigarh Policy dated March 09, 2015 on installation of towers for Mobile Telephone and Data Services and notices issued thereunder directing the TSPs to remove/relocate their towers from certain areas specified in the notices, including residential areas.

On August 04, 2015, the Counsel appearing for Chandigarh Administration assured that no coercive steps shall be taken by the Chandigarh Administration till the next date of hearing.

JOINT INDUSTRY PETITION ON SHORTFALL IN SUC AND ADJUSTMENT OF EXCESS PAYMENT : TDSAT

A joint industry petition has been filed challenging the validity of DoT Circular dated 11.11.2014 in so far as it provides in Clause 4(vi) that excess payment of Spectrum Usage Charges (SUC) as on 31st March of any financial year will not be carried forward to the next financial year till the final assessment of Spectrum Usage Charges. The Petition also challenges the levy of interest by DoT on the alleged shortfall of payment of Spectrum Usage Charges by the TSPs on the basis of self-assessment.

On August 03, 2015, notice was issued in the matter. The Tribunal indicated that they are not inclined to stay the

impugned Circular but will stay the demand notes received by the TSPs seeking interest on shortfall of SUC arising out of the impugned Circular.

SUBSCRIBER VERIFICATION (CAF) MATTER : PATNA HIGH COURT

On September 11, 2014, telecom service providers in Bihar were directed by Hon'ble Patna High Court to attend a hearing of a habeas corpus petition filed by Balinder Singh whose son has gone missing and 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 May 22, 2015, the Hon'ble High Court directed DoT to supplement existing guidelines on subscriber verification by instructing service providers to confirm the genuineness of PoI, PoA from the Authority which has issued the same, may be through official email of the issuing Authority. Until the identity, address proof is verified from the Authority concerned new SIM should not be activated. Court also said that these guidelines be supplemented within three months from the date of receipt/ production of a copy of this judgment before the Secretary Telecom.

DoT APPEAL AGAINST THE PATNA HIGH COURT JUDGMENT: SUPREME COURT

An appeal was filed by DoT against judgment dated May 22, 2015, wherein Patna High Court directed DoT to supplement existing guidelines on subscriber verification by instructing service providers to confirm the genuineness of PoI, PoA from the Authority which has issued the same, may be through official email of the issuing Authority.

On September 07, 2015 the Hon'ble Supreme Court issued notice in the matter and stayed the direction against DoT.

JOINT INDUSTRY PETITION CHALLENGING PENALTY ON EMF (SHARED SITES) : TDSAT

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 PENALTY ON COLOUR SCAN PHOTOS AND MISSING DATE ON PROOF OF IDENTITY (POI) / PROOF OF ADDRESS (POA) : TDSAT

A joint industry petition was filed on the issue of imposition of penalty on non – submission of scanned coloured photograph in the Subscriber Database and absence of date on documents of PoI/PoA by Rajasthan TERM Cell.

On May 6, 2015, the judgment in this matter was pronounced and TDSAT restrained DoT from realising penalty and stated that such penalty imposed on the TSPs for non-compliant CAFs (for the reason that on the PoIs and PoAs attached therewith the signatures of the customers were undated) is unreasonable, unfair and invalid.

On imposition of penalty on non – submission of scanned coloured photograph of the subscriber in the subscriber database, the judgment records that DoT has amended their circular dated August 9, 2012 to substitute "Scanned photograph (coloured) of the subscriber" with "Scanned photograph (greyscale / black & white) of the subscriber".

JOINT INDUSTRY PETITION CHALLENGING HIKE IN INFRASTRUCTURE CHARGES BY BSNL: TDSAT

A joint industry petition was filed challenging the validity of Circular dated March 30, 2015 by which BSNL has revised the Infrastructure and Space Charges for Active Links of Licensed Telecom Service Providers with effect from April 1, 2015. BSNL has sought to bring back the same charges as were sought to be levied by it in terms of its Circular dated June 12, 2012, which was set-aside by the Hon'ble TDSAT by way of its Judgment dated August 20, 2014.

On February 12, 2016, TDSAT issued notice in the matter and directed BSNL not to take any coercive steps in pursuance to its Circular dated 30.03.2015.

JOINT INDUSTRY PETITION CHALLENGING PENALTY ON EMF (UPGRADATION) : TDSAT

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 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.

COAI