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The telecom sector has been one of the primary drivers of India’s economic growth – contributing 6.5% to the national GDP. The industry has invested INR 9.2 Lakh Crores while attracting the highest FDI of INR 1.1 Lakh Crores in the last two decades. It has also created 22 Lakh direct and 18 lac indirect jobs. All of this has been achieved while providing telecom services at the lowest tariffs in the world.

Despite the above achievements, the industry is currently going through one of its most challenging phases arising out of a price war.

2016 - THE YEAR THAT WAS:

In 2016, the Government made progressive policy decisions to provide a stimulus to the industry. Some of these decisions were - harmonization of Spectrum, Aadhar based e-KYC, streamlining of Right of Way (RoW) rules, reduction in Spectrum Usage Charges (SUC) to 3% for all future auctions across all bands, and Simplified Assessment Procedure for low-power BTS. Further, the policy on Spectrum Trading & Sharing as well as Active Infrastructure Sharing has led to an overall reduction in cost.

Further in August 2016, the largest ever quantum of spectrum was made available for auction. Out of the 2,355 MHz total spectrum (across seven bands) put up for auction, 40% was successfully sold. As a positive first step towards increased ease of doing business, DoT dispensed with the requirement of Wireless Operating Licence (WOL) for access services.

In the past year, TRAI has also issued around 20 Consultation Papers on key issues such as Internet Telephony, Proliferation of Broadband through Public Wi-Fi Networks, Interconnect Usage Charges (IUC), Free Data, Net Neutrality, and Ease of doing Business, seeking suggestions from the stakeholders.

OPPORTUNITIES

Over the last three years, the Government has put the spotlight firmly on technology, Smart Cities, connected super highways, and enhanced e-governance services delivery for the citizens. All of these are highly dependent on the telecom sector. A close-knit working relationship between the Government and the telecom industry is therefore paramount for the success of these initiatives. Further, the Hon’ble Prime Minister’s Digital India initiative, can be brought to fruition only if the telecom sector remains healthy and vibrant.

We believe that the government should prioritize the objective of ensuring affordable mobile broadband services for large rural and yet unconnected segment of our population. The roll-out of Broadband and Internet services requires investments of INR 2 lac crores over the next 3-5 years for spectrum, technology, equipment and fibre backbone. Hence, it is vital to ensure that the telecom industry remains financially strong.
The telecom sector in India is one of the most heavily taxed sectors as compared to global benchmarks, especially in South Asia and ASEAN countries. The estimated total levy on Indian telecom operators is 29% to 32%, as compared to China which has a total levy of only 11%.

In light of the above, we believe that the simplification and rationalization of the tax regime will lend much-needed financial stability to the Indian telecom industry. We suggest that the government bring down the Spectrum Usage Charges (SUC) to 1% across all bands, while reducing License Fee (LF) to 3%. Further, the 18% slab rate pertaining to GST for telecom services, should to be reconsidered and brought down to at least 12% if not 5%. Further, payments towards LF and SUC should be allowed to be set off against the GST payment.

Further, in order to increase the ease of doing business, the Government is requested to take further progressive steps such as - Licence Fees Deducted at Source (LfDS), online reporting and payments of License Fee and SUC, lesser audits, and simplification of SACFA procedure.

We hope that in 2017-18, Government and TRAI will work with the Industry to address these issues and include them in its strategic growth plan for the next 2-5 years.

I would like to thank Rajan S. Mathews, DG, COAI and his team for their support to the industry in its endeavour for sustained growth and in fulfilling the Government's vision of a fully connected and empowered Digital India.

Mr. Gopal Vittal
Chairman, COAI
The last year was a **mixed bag** for the telecom industry.

There were a lot of **positives on the policy front** – with the Government announcing several initiatives and taking several steps to further its Ease of doing Business objective – the introduction of **E-KYC based subscriber verification** and the much needed **Right of Way rules**, the timely implementation of which, is necessary for rapidly scaling up Digital Infrastructure, for achieving the aims of Prime Minister Narendra Modi’s Digital India plan. Other welcome steps included the huge exercise of **harmonization of 1800MHz**, **simplification of processes** by removal of the need for wireless operating licenses, automation of SACFA processes, etc.

The **emergence of Digital Payment solutions** has been another important enabler. The government's **bold demonetization move** while impacting the economy briefly, has on the whole, significantly encouraged the digital and electronic payments sector. The use of Digital Payment solutions took off in an unprecedented way, with prepaid payment instruments like m-wallets registering a growth of 50 percent between November’ 2016 to December’ 2016.

On the other hand, the market witnessed **severely heightened competitive intensity** where despite consistent subscriber and traffic growth, Industry revenues and profitability have declined sharply, GSM ARPU’s fell 14% in Q3 to INR 104, from INR 121 in the previous quarter and more is expected in the 4th Qtr. On the spectrum front, the last year saw airwaves worth INR 65,000 crores bought by the Industry, a fourth of the quantity available. The high reserve prices, however, left the 700MHz spectrum band untouched, despite SUC being brought down to 3%.

The **growing financial stress** of the industry - the deteriorating financials, escalating debt of over 4.5 lakh crores, etc has been **noted with concern** by the Economic Survey, the RBI and now even the Finance Minister and an **inter-ministerial group has been set up** to look into this aspect. The Industry is also now witnessing a spate of consolidations as operators are gearing up to compete in the emerging market reality.

**GOING FORWARD...’DIGITAL’ IS THE FUTURE**

The Government’s Digital India opportunity is one that has the sector most excited.

The word *'Digital' is becoming synonymous with almost every aspect of our daily lives*. Be it enabling platforms or services such as e-governance, Digital Payments, Machine-to-Machine (M2M) and Internet of Things (IoT), m-Health, Connected Cars, Smart Cities, e-commerce and so on. And it's the telecom sector that is at the center of it, expected to be the backbone of delivery of all these services. And for this purpose – a ubiquitous, high quality, reliable network is crucial.

While currently, cellular networks are almost ubiquitous in coverage, with over 14 lakhs BTSs of various technologies, the **next round of connectivity will need a boost from the government** to ensure quality and reliability.
**M2M** and IoT which was a buzz word until now, has started picking up in a more formal way around the globe; in the markets in U.S., operators have already deployed LTE-M (LTE for Machine Type communication) while many European markets have embraced another variant of 3GPP technology, NB-IoT (Narrow Band IoT). With diverse technological options available to serve diverse requirements like from smart metering requiring data rates of few bytes per second to the smart multimedia devices requiring high data rates of megabytes per second, cellular networks running on 3GPP technologies are going to play an important role; it is projected that in India, the number of mobile-connected M2M modules will grow 6.2-fold between 2016 and 2021, reaching 91 million in number.

**Digital Payments are expected to grow exponentially** in the next few years. This is expected to be a key investment area for telcos that are starting payment banks now. However, Interoperability of m-wallets is important which would make these digital transactions more ubiquitous.

The growing importance of digitization is evident in various Government initiatives related to Governance. E-governance will play an important role in bringing people closer to the Government for the effective delivery of various Government initiatives. Healthcare sector is another vertical which would be benefitted by initiatives such as tele-health which would bring a lot of efficiency in the system and increase the reach of health services to even remote areas.

**India Mobile Congress (IMC)** With so much happening in digital world, the need was felt to bring various stakeholders in the ecosystem together on a single platform. India Mobile Congress (IMC) which is going to happen this year in New Delhi would bring various stakeholders to a global platform and would enable a constructive discussion with stakeholders across the world about how to progress further in the Indian context.

**For Delivering 'Digital Future': Financial viability of Telecom Sector is must**

While the future is exciting on the digital front, that would benefit citizens but there some important challenges that need to be addressed. Telecom Sector is a key pillar of India’s future which has to be built on the bedrock of Digital.

These digital trends or technologies would require telecom operators to invest more not only in networks but also in various platforms which would enable these services. All of this would happen during the time when we are still aiming to connect the next billion to the world of Internet, as delivery of these services requires the citizens to be connected online.

The financial stability of the Industry is a prerequisite to fuel these trends as further investments are required to be made. The huge burden of debt, the rising regulatory levies, the cost of doing business are all dragging down the growth of a sector that is the foundation to our digital future. There is an urgent and imperative need to restore financial stability; the inter-ministerial group that has been set up by the government is a welcome step in this regard.
A stable regulatory and policy environment along with 'ease of doing business' is necessary to attract investments in the sector. The industry hopes that Government would look into this by reducing burden of levies on the sector, suitable provisions in upcoming GST and facilitating ease of doing business.

In conclusion, I would like to thank members for their continued involvement in key Industry issues and Mr. Gopal Vittal for his able Chairmanship. Last but not the least, Mr. Rajan Mathews for his continued and able guidance of the dynamic COAI secretariat.

Thank You

Mr. Sunil Sood
Vice-Chairman, COAI
Technology is the biggest driver of the economy, creating new jobs, connecting the unconnected, delivering government services to every corner of the country including rural markets, becoming a tool for ambitious and timely government programs like Digital India, Skill India, Smart Cities, Make in India and many others. The country is also benefitting from e-education, e-health, telemedicine and e-governance bringing about a never before openness in data, accountability and transparency.

Telecom is the sector contributing substantially high revenues to the government, which is then used for higher benefit. It is also the unsung hero and therefore requires urgent reforms. Predictability backed by a stable regulatory regimen can create conducive environment for continued investments, which are prerequisites for a fully-connected, digitally-empowered India. The latter assumes significance given the government's push to promote initiatives like Skill India, Make in India and a less-cash economy.

The year 2016, has been unsettling for the industry. The country experienced transformation from voice to a data centric market.

The current year will be a landmark year in the Indian telecom industry. On one side, the much-awaited sector consolidation took place as the Government introduced some relevant policies including spectrum sharing and trading while on the other hand, there was a new entrant offering free voice calls and low-cost data. The industry welcomed the entry of a new operator and saw unprecedented customer acquisition of over 100 million subscribers in such a short span of time. While freebies and rock bottom prices worked in the short run in favour of consumers, they also accelerated the already worsening financial situation of the telecom sector. The industry is in financial distress and continues to see pressure on the profitability of the operators. Steep decline in data tariffs, domestic voice revenue and increasing Government levies and taxes are adversely impacting their profitability and sustainability.

Going forward, the industry will have to continue to labour to recuperate from this financial distress to make significant progress towards the ambitious targets of Digital India set by the Government. The need of the hour, therefore, is to have policy and regulatory stability along with financial relief from high Government taxes and levies, so as to enable the industry to invest in growth of data services and provide connectivity to all.

Amidst these challenging times, I present the Annual Report for the year 2016-2017.
STATUS ON POLICY AND REGULATORY ISSUES

Last year, after focused and concerted advocacy, the industry witnessed some favourable policy outcomes from the Government, for achieving the objectives of Digital India. This included issuance of RoW Rules by way of a Gazette Notification to create an enforceable framework for a sectoral policy to grant ‘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. To ease the long pending demand of the industry for easing out the process of submission of SACFA applications, the Government allowed only online submission. The earlier SACFA application process, which was cumbersome and time consuming, as TSPs had to submit the application “Online” besides the hard copies to SACFA Secretariat and members has now been replaced with only online submission. The Government allowed online submission of Self-Certificates for EMF compliances. The Government also issued guidelines on Aadhaar based e-KYC for issuing mobile connections to subscribers as a complete paperless process.

We also witnessed a positive breakthrough judgement from the highest judicial authority in the country, the Hon’ble Supreme Court, timely putting the call drops issue to rest, stating that the telecom companies will not have to compensate customers for call drops. The Court identified the lack of spectrum, shutting down of a large number of towers over health concerns and issues of permissions as the primary stumbling blocks for the operators to be able to provide quality services to the consumers. However, to improve the consumer experience, the operators did make 100 days plan with the Government to improve coverage in the country. The Parliamentary Standing Committee report on 'Issues Related to Quality of Services and Reported Call Drops' was welcomed by the industry which took COAI's submissions into account.

In August 2016, spectrum auction took place with the largest quantum of spectrum being made available by the Government of India. However, the auction witnessed a muted response, primarily on account of high reserve prices. Of the 2,355 megahertz (MHz) total spectrum across seven bands put up for auction, only 40% of the spectrum was sold with no activity in 700 MHz band. Telecom operators were already reeling under the financial burden, bid selectively to plug coverage gaps and enhance their spectrum portfolio, especially for 4G services.

It was expected that, GST would relieve the tax burden on the sector, however, operators will have to face significant compliance costs with the present 18% proposed rate in the new GST regime which will be related to multiple state registrations and will be a significant burden on the operators. This is also likely to slow down the planned rollout of infrastructure across the country and will have an impact on flagship Government initiatives like Digital India, Cashless India and others. Further, the country is divided into 22 telecom circles, while GST sees the country as 29 States and seven Union Territory divisions, resulting in a dichotomy between area covered by telecom circles and State boundaries. This would also create significant IT and accounting challenges for operators.

For the industry to sustain itself in the future, it requires consistent, clear, rational and transparent policies and regulations that ensure both affordability of tariffs to consumers and a fair return on investment to operators, thereby safeguarding the interests of all the stakeholders in the telecom fraternity. The industry is looking forward to more policies which enable ease of doing business.
Moreover, to ensure stability in the sector, there is a need to make the regulatory environment predictable and consistent which works towards the growth of the entire sector so that the operators can focus on meeting consumers’ needs. The imperative going forward would be to combine the latest technology, a progressive regulatory environment with an understanding of the economic and social changes taking place and so as to provide more choice and value to the consumer.

The world is experiencing a data deluge with millions of devices and things talking to each other. While the 4G transformed the consumer space for communication devices, 5G could revolutionize both the consumer and the industrial markets. The transition is pertinent to development of the Internet of Things (IOT), Machine to Machine (M2M) and cloud computing, which will comprise millions of connected devices for the benefit of billions of people. In India the transition to a digital economy, will see data demand growing in leaps and bounds. Digital wallets witnessed exponential growth in the back of the recent demonetization drive by the Government of India. Mobile banking transactions are on the rise due to increased smartphone adoption. COAI along with its members will be working with the Government in the coming years to spread the benefits of a connected, knowledge based economy to all the corners of India.

INDUSTRY INITIATIVES AND ACHIEVEMENTS
During the year, COAI dealt with various issues of importance to the industry.

1. **Spectrum Issues:** COAI, on behalf of its member companies had engaged with the DoT to take the responsibility of undertaking the harmonization of frequency spots between the spectrum holders in the 1800 MHz band to offer contiguous spectrum. This re-arrangement not only helped in creating maximum 5 MHz contiguous spectrum blocks but also helped in long term objectives such as enhancing the efficiency of spectrum usage and improving proceeds to the Government. The complex process of spectrum harmonization included agreements between operators in about 19 licensed areas and the actual implementation was completed in a record time frame of 45 days.

COAI, has been addressing the issue with the DoT of so called “White Spaces” which do not exist in India, as most of the spectrum in the UHF band (470-698 MHz) is actually vacant and has been reserved for IMT. COAI also made the point that as per the policy of the Government, any spectrum that is to be used for commercial licensed services should be auctioned. We thus believe that the TVWS should not be made available to any service provider other than through auctions. It is important to maintain a level playing field amongst service providers providing similar services. In response to various COAI submissions, DoT issued a clarification on the Spectrum Policy for Sub-1 Ghz spectrum bands dated June 07, 2016, stating that the band would not be delicensed and parts of this would be used for IMT. The same was also essayed by the Minister of Communications in response to a Parliament question.

COAI submitted to the DoT that E&V Band frequencies be opened for allocation immediately and strictly to the TSPs who have an increasingly growing customer base as these are needed for providing “middle mile” connectivity for rolling out 3G & 4G services in urban cities and to rural India. The allocation methodology should ensure both efficient and an interference free environment. The charging methodology as suggested by TRAI in its recommendations may be accepted by DoT.
2. **Subscriber Verification**: DoT issued ‘Guidelines on Aadhaar based e-KYC for issuing mobile connections to subscribers’. This was a long pending ask of the industry and we were happy that DoT finally issued this as a complete paperless process. DoT allowed acceptance of e-Aadhaar as valid proof of identity and address. The earlier subscriber verification guidelines mandated tele-verification of subscribers by the licensees as part of subscriber verification guidelines. This was modified by DoT to allow IVR based tele-verification for three documents i.e., Passport, Aadhaar/e-Aadhaar and Voter ID card as documents of identity and address. DoT has recently also issued guidelines post an Order from the Supreme Court, for re-verification of all the existing subscribers through Aadhaar based e-KYC in one years’ time. The industry will make best efforts to start the re-verification of the subscribers; however, the challenges in completing this exercise in the defined time period have also been highlighted to the Government.

3. **EMF Awareness and Tower Related Issues**: The DoT organized many public outreach and awareness programmes on EMF and telecom tower issues across the country. This was primarily to educate the media and the consumers about the facts of EMF exposure. These awareness programs reached out to approximately 12.5 lakh citizens, 700 Government officials and 2200 medical & technical experts. Such events facilitated installation of thousands of BTSs across the country to improve connectivity. This year we also saw increased interaction with various State Governments and Municipal Corporations on Towers and Right of Way issues. Post the interim Supreme Court order deactivation of a tower COAI also cleared the air on EMF related to mobile towers not being hazardous for human health through wide media coverage. Timely and concerted action by COAI helped mitigate panic and nipped the crisis in the bud. The efforts resulted in reaching to a mass of nearly 1.40 lakhs creating a wide spread awareness on the issue.

4. **In-Building Access**: In response to a TRAI Consultation Paper, COAI submitted that new buildings should be constructed in such a way that they are ‘Telecom Infrastructure deployment ready’ by inclusion of one time infrastructure such as ducts, common area for telecom facilities, network access points etc. It proposed mandatory grant of permission to TSPs to install in-building telecom infrastructure. The commercial terms and conditions for haring such infrastructure by both existing and new buildings was to be left to mutual agreement as any mandate on this is believed to increase inefficiency in the system.

5. **Net Neutrality**: COAI is of the view that to develop a coherent policy on the subject of Net Neutrality, there is a need for adopting a holistic approach rather than a piece meal approach. At this stage of development, there is a need for proliferation of internet connectivity, adoption and increased data usage and whatever facilitates the same should be supported. The definition of Net Neutrality in the Indian context may be as enunciated by the DoT Committee. Further, there should be a self-regulators approach towards adopting the principles of Net Neutrality. The economic, privacy and security aspects of OTT Communication service providers need to be included in the discussion on Net Neutrality. Any Policy/ Regulation should lay down a principle based approach rather than adopt a prescriptive approach—either in terms of what is permitted or what is prohibited.
6. **M2M (Machine To Machine):** COAI, believes that there is no need for a separate M2M service provider. These services should continue to be provided under UASL/Unified Licence (Access Service Authorization). There is no need for any change in any of the existing License conditions for provision of M2M Communication. There is no need for any separate allocation of Licensed spectrum for M2M services; the operators should be free to use the Licensed spectrum acquired by them for M2M and P2P communication. Moreover, there is no need to de-license any additional bands for promoting M2M Services or otherwise. Unified License conditions are sufficient as far as security requirements are concerned; therefore, there is no need for any special security measures for M2M communication over the Public Networks. There is no requirement to prescribe QoS requirements for telecom bearer services for M2M services; these should be left to mutual commercial agreements between transacting parties. M2M services are at too early stage of development and adoption and a light touch regulatory approach that does not stifle growth is recommended.

7. **Proliferation of Broadband Wi-Fi:** While COAI supports the proliferation of Wi-Fi, it believes that the notion of 'Public Wi-Fi Networks for providing ubiquitous citywide coverage', as per the TRAI Consultation Paper, is not in consonance with present licensing conditions formulated under the Telegraph Act of 1885; Cellular Networks are the only wireless networks which can provide seamless Broadband services on a commercial scale for a citywide or LSA wide coverage area. As per existing license conditions, Wi-Fi technology, which works on unlicensed bands and low power, can be used only for creating hotspots locally. Wi-Fi can be provided only by licensed TSPs/ISPs who have their own network to extend the last mile access. At present, access spectrum is not a bottleneck for the spread of Wi-Fi services. Hence, there is no immediate need to de-license any additional spectrum for Wi-Fi.

8. **Finance Issues:** To take forward the Digital initiative, COAI took up the issue of online submission of documents with regard to License Fee and SUC payments. The DoT allowed online payment of LF and SUC, however, the physical documents are still required to be submitted at the CCA office before the due date to avoid late payment dues. We have requested DoT that this requirement of submission of documents in physical form must be relaxed and the submission of these documents over email should be accepted by the CCA units. Based on industry requests, downward revision of FBGs (Financial bank Guarantees) has been allowed. This is a relief at a time when revenues of the Industry have dropped significantly and it will save extra margin money to be paid to the Banks.
OTHER ACTIVITIES OF THE ASSOCIATION

COAI remained assiduous in its endeavor to be at the forefront of national and international mobility events held in the year 2016-17. COAI took the lead in coordination with the DoT and the GSMA, in facilitating the visit of the Indian Government delegation to Mobile World Congress 2017, held in the month of February-March at Barcelona, Spain. The delegation successfully represented the Indian Telecom Industry and highlighted the immense opportunities present in the country.

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, TCOE, TSSC, amongst others, as well as activities of many telecom events in India.

To keep pace with the growing ecosystem of a converged communications industry, COAI continued to expand its Associate Membership by inducting new members such as Accenture Services Pvt. Ltd. and Sterlite Technologies Limited.

The COAI Executive Council headed by Chairman, Mr. Gopal Vittal, Vice Chairman, Mr. Sunil Sood and comprising senior representatives from all member operators, met several times over the last year to deliberate on a variety of issues impacting the GSM industry. They were adeptly assisted by expert advice from the various Working Committees that had been set up in COAI.

In conclusion, I would like to convey my deep appreciation and thank all the Committees and Working Groups and their Chairman and Vice Chairmen for the expert leadership and significant contribution towards various industry issues and helping the Association in representing them suitably at various forums.

I would like to personally thank the Chairman, Mr. Gopal Vittal, for his personal involvement and support in all the activities and initiatives of the Association for the last year and we look forward for his continued support and guidance in the coming year as well. I also thank the Vice Chairman, Mr. Sunil Sood, for all the support and guidance that he has provided during his tenure. Both of them have given generously of their time and resources to provide personal support and guidance for the Association.

I would especially like to record my deep appreciation to the unfaltering 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 with competence, efficiency and excellence.

Mr. Rajan S. Mathews
Director General
DELIVERING THE DIGITAL FUTURE

DIGITAL INDIA

Currently India is the second-largest telecommunications market in the world and has registered a strong growth over the past decade. The Indian mobile economy is growing rapidly and will contribute substantially to India’s Gross Domestic Product (GDP), making Digital Economy in the country an important policy focus area.

Access to the Internet is considered one of the most transformative factors for a country or society as can be seen by the direct impact that greater penetration has on GDP growth. Despite having less than 40% penetration, India has the second largest Internet user base in the world after China, putting our country in a unique position where just by increasing penetration of the Internet; we will be able to leapfrog into the future, ahead of the rest of the world.

The Digital India program, which is the flagship programme of the Government, aims to do just that - transform India into a digitally empowered society and a knowledge economy. Its long term vision aims to connect every citizen, and provide access to the government and other key information services on demand thereby enabling digital empowerment of every citizen.

Fundamental to the goals of digital India is the country’s communications industry that has not just connected people, but also created jobs, become a tool for knowledge, contributed to the exchequer and the economic growth and amplified financial inclusion. There are three key visions areas of the Government’s Digital India plan – digital infrastructure as a utility to every citizen, governance & services on demand and digital empowerment of citizens.

DIGITAL INFRASTRUCTURE AS A UTILITY TO EVERY CITIZEN

Infrastructure is defined as the basic physical and organizational structures and facilities needed for the operation of a society or enterprise.

A digitally connected nation, where even the remotest village is connected with high speed internet, thereby enabling the delivery of crucial government services electronically to every citizen along with targeted social benefits, and financial inclusion can be achieved in reality, is a well-served nation. As every citizen gets connected, they become part of the country’s infrastructure, needed, not just for operation, but growth of the nation and society.

Towards this the Government has defined key components with access to high speed internet at its core. Other enabling services include provisions for digital identity, financial inclusion, easy access to common services centres (for government services), mobile phone, space on cloud (digital lockers), among others in a safe and secure Cyber-space environment. The JAM trinity will play a crucial role towards responsive, sensitive, effective, transparent and accountable governance.
GOVERNANCE AND SERVICES ON DEMAND

The second vision is to ensure that access to crucial services, needed by every citizen, is available at all times. This requires State Governments and Central Ministries to work together at multiple levels to simplify processes and improve delivery of public services.

From computerisation of departments, to now availability of many services on the mobile phone, E-governance has been steadily growing in the country. It must now take into account issues of service orientation and transparency.

As more and more services become available digitally, like land records, their delivery or ease-of-access to every citizen becomes very important. The government has identified six elements as crucial for ensuring that governance and services are made available on demand to all citizens and other stakeholders in the country. These are seamless integration services across departments or jurisdictions; digitally transformed services and entitlements, real-time availability of services; portability of entitlements and availability on cloud; financial transactions become electronic and cashless and the leveraging of GIS.

DIGITAL EMPOWERMENT OF CITIZENS

The third vision goes a step ahead and looks at using the increased digitisation to empower citizens – thereby act as the great leveller that technology can be. The Digital India programme aims to transform India into a digitally empowered society by focusing on digital literacy, digital resources, and collaborative digital platforms.

The fact is, the exponential growth of voice services is one of the major reasons India has come this this far – to one of the fastest GDP growth rates in the world. And it will be data that will not only sustain the growth rate, but improve it further. India is on the cusp of a data revolution. National Broadband Plans have been leveraged by multiple countries such as the US, the UK and China to fulfil a number of national objectives. For India, it is expected to not only contribute to the socio-economic development but also enable the Government’s ambitious plans and strengthen our position as a knowledge-based economy. Rise in broadband penetration to 60% in India is expected to translate into a 5-6% increase in the country’s GDP; to the tune of approximately $135 billion.

Achieving the aims of the Digital India programme is dependent on a number of things and there are a number of challenges to overcome. But the government has not left any stone unturned to ensure that the aims are achieved.

Since most of the country is getting access to the Internet for the first time on their phones, the entire program is dependent almost completely on the country’s telecom sector. The sector is expected to contribute as much as 8.6% to the GDP by 2020. The private sector is expected to invest another INR 5000 crore in the next three years to achieve what are essentially the aims of the program.
Every monument is built on the pillars of support. It is this main ethos which is driving the Digital India plan. The Digital India programme has encapsulated multiple governments (State and Central) and agencies and a large number of ideas and thoughts into a single, comprehensive vision so that each pillar can be implemented as part of the larger goal – Delivering The Digital Future. The design is such that each individual pillar would stand on its own, as well as remain key to the larger aims and vision. The programme will provide a boost to nine pillars – Broadband Highways, Universal Access to Mobile Connectivity, Public Internet Access Programme, e-Governance: Reforming Government through Technology, e-Kranti - Electronic Delivery of Services, Information for All, Electronics Manufacturing, IT for Jobs and Early Harvest Programmes.

The first pillar, earlier called the National Broadband Plan, is the most fundamental to the overall vision. At the rural level, it aims to connect 250,000 gram panchayats by 2018, and will integrate all networks and cloud infrastructure in the country to provide high speed connectivity and cloud platform, with government departments. It will include networks such as State Wide Area Network (SWAN), National Knowledge Network (NKN), National Optical Fibre Network (NOFN), Government User Network (GUN) and the MeghRaj Cloud.

The Government of India has allocated INR 10,000 crore for rolling out the optical fibre-based broadband network and another INR 3,000 crore for laying optical fibre cable (OFC) and procuring equipment for the Network For Spectrum (NFS) project in 2017-18.

Then there is the mobile for all initiative, that will see the government spend as much as INR 16,000 crore to connect around 55,619 villages in the country that do not yet have mobile coverage, in different phases. This is essential given that eight of every nine users are connecting to the Internet for the first time using the mobile phone. This is expected to grow exponentially with smartphones already making 24% of the total user base at present. According to the Ericsson Mobility Report India, smartphone subscriptions in India is expected to increase four-fold to 810 million users by 2021, while the total smartphone traffic is expected to grow seventeen-fold to 4.2 Exabytes (EB) per month by 2021. What is unique to the story is the contribution of the Telecom industry which contributes 5% of its revenue to the USFO funds which is the source of the Bharat Net project. The industry has long submitted that it should be incentivised to drive rural penetration instead lowering and subsequently removing entirely its contribution to the USFO.

At present, the only connection to the government that many villages have is through the post office or the CSC. The third pillar expects to put a CSC in every gram panchayat and convert the post office into multi service centres, where citizens can access crucial government and business services. This is key to making e-governance initiatives more effective. Steps have already been taken to make forms simpler, user friendly with only necessary information being collected. Application forms can be accessed online, with constant status updates. Citizens are even being provided use of online lockers for certificates, degrees, documents, land leases, etc. so they don’t have to submit them multiple times and instead access them using the Aadhaar platform. If these pillars have to be successful, then government services themselves need to be transformed. The eKranti plan involves sustained efforts at multiple levels to improve the delivery of public services – the idea being to make the services citizen centric, service orientated and transparent, apart from being affordable and reliable.
Another key pillar is the ability of citizens to communicate to the government and vice versa. The sixth pillar, named Information-For-All, aims to make the government pro-actively engage with citizens through social media and web-based platforms. This not only includes MyGov.in but also SMS and emails, as well as online accessibility of data and key documents.

Another fundamental goal of the current government that has been put under the Digital India umbrella is for net zero imports by 2020. Electronics are the backbone of the communications revolution and most of the parts are currently imported – a huge cost to the country. Demand for electronic goods is increasing with a Compound Annual Growth Rate (CAGR) of 22% and is expected to touch $400 Billion by 2020. This pillar focuses on promoting electronics manufacturing in the country. An ambitious goal that requires coordinated efforts on many fronts to effect positive change ranging from Taxation, skill development and standardisation to incubation and research and development. Many believe that existing structures and programs are adequate and just need fine tuning. The government has taken some steps in this regard and is receiving positive responses from the global investment community.

For the country to succeed in achieving the digital India goals and the consequent social and economic goals, adequate skilling of the youth is necessary. The IT sector is ideal for this given it is one of the largest employers in the country and its impact can be seen in all other sectors. A pillar that focuses on providing training to the youth in the skills required for availing employment opportunities in the IT/ITES sector, would also ensure the bigger Digital India aims are attained. This would also accelerate IT enabled growth in many states as well.

In a bid to ensure that the smaller projects don’t slip into the cracks, due to the sheer size of the Digital India plan, the last pillar, named the early harvest programme, acts as an umbrella programme for all short term projects. This includes proposals for biometric attendance of all government officers and allied organisations’ employees or the Public Wi-Fi program where Cities with population of over 1 million and tourist centres would be provided with public Wi-Fi hotspots. Other programs include the conversion of school texts to e-texts and an SMS based weather information and disaster alert system.

To ensure that these pillars are erected and easily available to every citizen, in all parts of the country and of high quality, a robust infrastructure is indispensable. The provisions of the services have to be uninterrupted and also allow for easy upgrading, as technology is continuously evolving. The government has already done a lot to ensure that at least the direction is set. Many of the goals are well on the way to conclusion.

Already we can see the ministries working together and the government has put in place a multi-tier framework with a monitoring committee overseeing the digital advisory group (headed by IT minister) and the Apex committee (headed by the Cabinet secretary).

This ambitious plan is dependent on the telecom sector, which is currently facing one of its toughest time. The sector has a cumulative debt of as much as INR 4.5 lakh crore and the diminished rate of return on capital of just 1% has made servicing this debt very difficult.
The sector pays as much as 30% of its revenues to the government in taxes and levies—a number that is likely to go higher with the increased 18% GST rate being applied to the sector from next month. It is estimated that the sector has to spend as much as INR 2 lakh crore in the next 3 to 5 years, to deploy mobile towers, optical fibre and other infrastructure for the new technologies and greater coverage in the country.

The digital India plan that expects to cover the entire country needs the telecom sector’s support and the government has to be supportive on this. It is imperative that the country’s telecom sector be treated as an essential service and taxed the minimum as is the case in most major markets.

The health of the financial sector is also the key, the country leapfrogging into the future with the faster deployment of services based on technologies like Internet of Things and Machine to machine communications.

The number of units under Internet of Things (IoT) is expected to grow exponentially to 1.9 billion units in India by 2020 or about $9 billion. A rapidly growing hub for IoT solutions, the country’s IoT market size in this area is expected to increase about 7 times—from $1.3 billion last year to $9 billion by 2020.

IoT refers to the devices, other than computers and smartphones, connected to the Internet. Deloitte estimates the current number of such devices in the country to be around 60 million. The government’s $100 billion initiative towards 100 smart cities project is expected to fuel the M2M market in India. The Country is also exhibiting installation of fourteen smart grids and 130 million smart meters in the coming years, which would spur the M2M market in utility application.

The government has also carried out a number of policy reforms to ensure there are no impediments once the ideal momentum is reached. This includes reforms in spectrum management, where now spectrum is more easily available and a harmonisation process is already in place.

Other major changes include national number portability and connecting the Aadhar number to banking information and other utilities like mobile phones subscription. With increasing connectivity of data, as infrastructure gets built and integrated, costs will come crashing down. This can be seen with the new entrants and the number of data users that have been added in the last 5 months of the year.

It took almost two decades for India to have 1.2 billion voice subscribers, but data is expected to reach that number in a fifth of the time, as access becomes easier, language becomes less of a problem and cost becomes a non-issue. India will emerge as a leading player in the virtual world by having 700 million internet users of the 4.7 billion global users by 2025, as per a Microsoft report. But the capacity that will be in demand and the need for the government and users to move along with the evolution of technology, will continue to need all stakeholders, across the eco system to work closer and closer together, trusting and including the private sector, as much as possible.

It is only then that India can leverage the digital future and all its benefits.
COAI STRUCTURE

WORKING GROUPS AND SPECIAL PROJECTS

- ACT (Apex Advisory Council for Telecom in India)
- EMF Portal Working Group
- Sub-Group on Reduction in Regulatory levies
The COAI team includes dynamic, highly skilled professionals with a must-do attitude and remarkable proficiency in their respective verticals. Lean and yet highly competent, the Secretariat packs a punch in every activity undertaken towards the cause of the industry. Regular coordination with the Government, Regulator, relevant Center and State Government departments, and other stakeholders, have established appreciation and recognition of the Secretariat's efficiency and professional prowess, both within, and outside the industry.

This year, a number of industry professionals joined COAI, Ms. Subi Chaturvedi, Director – Public Affairs & Communication, Mr. Vikas Kumar, Senior Manager–Corporate Communication, Mr. Shivam Vohra, Deputy Manager – Digital Media and Stakeholder Engagement, Ms. Meenu Niranjan, Assistant Manager - Corporate Communication and Mr. Abhijit Panicker, Executive 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

<table>
<thead>
<tr>
<th></th>
<th>Company Name</th>
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<tbody>
<tr>
<td><img src="image" alt="Aircel Logo" /></td>
<td>Aircel Cellular Ltd.</td>
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<tr>
<td><img src="image" alt="Airtel Logo" /></td>
<td>Bharti Airtel Ltd.</td>
</tr>
<tr>
<td><img src="image" alt="Idea Logo" /></td>
<td>Idea Cellular Limited</td>
</tr>
<tr>
<td><img src="image" alt="Jio Logo" /></td>
<td>Reliance Jio Infocomm Ltd.</td>
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<td><img src="image" alt="Telenor Logo" /></td>
<td>Telewings Communications Services Pvt. Ltd.</td>
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<tr>
<td><img src="image" alt="Vodafone Logo" /></td>
<td>Vodafone Mobile Services Limited</td>
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### COAI ASSOCIATE MEMBERS

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<td><img src="image" alt="Ericsson Logo" /></td>
<td>Ericsson India Pvt. Ltd.</td>
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<td><img src="image" alt="Facebook Logo" /></td>
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<td><img src="image" alt="Google Logo" /></td>
<td>Google India Pvt. Ltd.</td>
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<td>IBM India Pvt. Ltd.</td>
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<td><img src="image" alt="Nokia Networks Logo" /></td>
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<td><img src="image" alt="Qualcomm Logo" /></td>
<td>Qualcomm India Pvt. Ltd.</td>
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<tr>
<td><img src="image" alt="SterliteTech Logo" /></td>
<td>Sterlite Technologies</td>
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</table>
I. Wireless Industry in India

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriber Base (Millions)</td>
<td>1170</td>
</tr>
<tr>
<td>Urban Subscribers (Millions)</td>
<td>672</td>
</tr>
<tr>
<td>Rural Subscribers (Millions)</td>
<td>498</td>
</tr>
<tr>
<td>Minutes of Usage Dec-2016*</td>
<td>360</td>
</tr>
<tr>
<td>ARPU (Rs. per month) Dec-2016*</td>
<td>104</td>
</tr>
</tbody>
</table>

* Only for GSM Subscribers (Year ending - December, Mar 2017)
Source: TRAI Subscription Report & PMR

II. Industry Subscribers Figures

A. All India Total Cellular and GSM Cellular Subscriber

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Cellular Subscribers</th>
<th>GSM Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>752</td>
<td>543</td>
</tr>
<tr>
<td>2011</td>
<td>894</td>
<td>671</td>
</tr>
<tr>
<td>2012</td>
<td>865</td>
<td>657</td>
</tr>
<tr>
<td>2013</td>
<td>886</td>
<td>695</td>
</tr>
<tr>
<td>2014</td>
<td>944</td>
<td>679</td>
</tr>
<tr>
<td>2015</td>
<td>1037</td>
<td>756</td>
</tr>
<tr>
<td>2016</td>
<td>1152</td>
<td>809</td>
</tr>
<tr>
<td>Mar-17</td>
<td>1195</td>
<td>914</td>
</tr>
</tbody>
</table>

Source: TRAI Subscription Data, COAI (Year ending - December, March 2017)
B. All India GSM Cellular Subscriber Figures-Circle-Wise

Source: COAI (Year ending - December, Mar 2017)

C. All India GSM Cellular Subscribers - Annual Net Additions – Circle-Wise

Source: COAI
D. All India GSM Subscribers - Metros

Source: COAI (Year ending - December, Mar 2017)

E. Wireless Rural Subs. As % to Total Wireless Subs.

Source: TRAI Subscription report (Year Ending – December, Mar 17)
F. Market Share of Wireless Operators in terms of Subscribers

Source: TRAI Subscription report - Mar 2017

G. Internet Subscribers & Wireless Internet Subscribers

Source: TRAI PMR (Year ending - December)
H. Mobile Internet Subscribers

Source: TRAI PMR (Year ending - December)

I. Composition of Internet Subscribers - Dec 2016

Source: TRAI PMR
J. Mobile Broadband Subscribers

Source: TRAI Subscription report (Year ending - December, Mar 2017)

K. Broadband access: Share of different Technologies

Source: TRAI subscription report (March 2017)
III. Wireless Tele-density

A. Total Wireless Tele-density (%)

Source: TRAI PMR (Year ending - December, Mar 2017)

Source: TRAI PMR
IV. Revenue & Usage Parameters

A. Monthly GSM ARPU

<table>
<thead>
<tr>
<th>Year</th>
<th>ARPU (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>105</td>
</tr>
<tr>
<td>2011</td>
<td>96</td>
</tr>
<tr>
<td>2012</td>
<td>98</td>
</tr>
<tr>
<td>2013</td>
<td>112</td>
</tr>
<tr>
<td>2014</td>
<td>118</td>
</tr>
<tr>
<td>2015</td>
<td>123</td>
</tr>
<tr>
<td>2016</td>
<td>104</td>
</tr>
</tbody>
</table>

Source: TRAI PMR (Year ending - December)

B. MoU per Subs/Month-GSM

<table>
<thead>
<tr>
<th>Year</th>
<th>MoU</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>360</td>
</tr>
<tr>
<td>2011</td>
<td>332</td>
</tr>
<tr>
<td>2012</td>
<td>359</td>
</tr>
<tr>
<td>2013</td>
<td>379</td>
</tr>
<tr>
<td>2014</td>
<td>376</td>
</tr>
<tr>
<td>2015</td>
<td>376</td>
</tr>
<tr>
<td>2016</td>
<td>360</td>
</tr>
</tbody>
</table>

Source: TRAI PMR (Year ending - December)
C. Total Outgoing MOU for Internet Telephony

Source: TRAI PMR (Year Ending - December)

V. Telecom Financial Data

A. Industry Adjusted Gross Revenue (AGR)

Source: TRAI PMR (Year Ending - March)
B. Industry EBITDA & EBITDA margin

<table>
<thead>
<tr>
<th>Year</th>
<th>EBITDA</th>
<th>EBITDA Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY14</td>
<td>532.6</td>
<td>23%</td>
</tr>
<tr>
<td>FY15</td>
<td>663.2</td>
<td>26%</td>
</tr>
<tr>
<td>FY16</td>
<td>764.8</td>
<td>29%</td>
</tr>
<tr>
<td>FY17 E</td>
<td>645.0</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: COAI Analysis, Mason Analysis (Year ending - March), Estimates

C. Debt of Telecom Industry

<table>
<thead>
<tr>
<th>Year</th>
<th>Debt (in NR Lakh Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>0.83</td>
</tr>
<tr>
<td>2009-10</td>
<td>1.24</td>
</tr>
<tr>
<td>2010-11</td>
<td>1.60</td>
</tr>
<tr>
<td>2011-12</td>
<td>1.86</td>
</tr>
<tr>
<td>2012-13</td>
<td>2.41</td>
</tr>
<tr>
<td>2013-14</td>
<td>2.70</td>
</tr>
<tr>
<td>2014-15</td>
<td>2.83</td>
</tr>
<tr>
<td>2015-16</td>
<td>3.81</td>
</tr>
<tr>
<td>2016-17</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Source: COAI estimates (Year ending March)
D. Revenue to the Exchequer

![Graph showing revenue to the Exchequer over time]

Source: Company, I-Sec research

E. Applicable levies/taxes on mobile services

<table>
<thead>
<tr>
<th>Regulatory Charges</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
<th>China</th>
<th>Malaysia</th>
<th>Bangladesh</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Tax, GST</td>
<td>18.0%–19.5% (Sales Tax)</td>
<td>25.51% Telecom Levy (VAT + MSL + NBT + ECL)</td>
<td>11.0% (VAT)</td>
<td>6.0% (GST)</td>
<td>19.45% (Supplementary duty + VAT + Surcharge)</td>
<td>18% (GST)</td>
</tr>
<tr>
<td>License Fee</td>
<td>0.5% LF + R&amp;D</td>
<td>-</td>
<td>-</td>
<td>0.5%</td>
<td>5.5% Adjusted Gross Revenue + BDT 50 mn (per 2G &amp; 3G license)</td>
<td>8%</td>
</tr>
<tr>
<td>SUC</td>
<td>Cost Recovery</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3% to 6%</td>
</tr>
<tr>
<td>USO Fund</td>
<td>1.5% of Gross Revenue</td>
<td>-</td>
<td>-</td>
<td>6.0% of Weighted Net Revenue</td>
<td>1.0% of Adjusted Gross Revenue</td>
<td>5% included in License Fees</td>
</tr>
<tr>
<td>Other taxes</td>
<td>Sales Tax of PKR 250 on new or replacement SIM</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>SIM Tax of BDT 100 on new or replacement SIM</td>
<td>-</td>
</tr>
<tr>
<td>Total levy</td>
<td>20.5% to 22.0% + Cost Recovery + SIM Tax</td>
<td>27.55% + IDD Levy</td>
<td>11%</td>
<td>12.5%</td>
<td>25.95% + BDT 50 mn per license + SIM Tax</td>
<td>29% to 32%</td>
</tr>
<tr>
<td>Telecom specific levy</td>
<td>2.5% + Cost Recovery + SIM Tax</td>
<td>~12.04%* + IDD Levy</td>
<td>-</td>
<td>6.5%</td>
<td>6.5% + BDT 50 mn per license + SIM Tax</td>
<td>11% to 14%</td>
</tr>
</tbody>
</table>

Source: COAI Analysis
## VI. Spectrum Data

### A. Spectrum Allocation

<table>
<thead>
<tr>
<th>Operator</th>
<th>Spectrum (in MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Mobile, China</td>
<td>100</td>
</tr>
<tr>
<td>Telstra, Australia</td>
<td>78</td>
</tr>
<tr>
<td>Orange, France</td>
<td>69</td>
</tr>
<tr>
<td>SKT, South Korea</td>
<td>69</td>
</tr>
<tr>
<td>Vodafone, UK</td>
<td>68</td>
</tr>
<tr>
<td>O2, Germany</td>
<td>62</td>
</tr>
<tr>
<td>Average of Leading 4 Operators, India</td>
<td>48</td>
</tr>
</tbody>
</table>

*Source: COAI Analysis*

### B. Spectrum Sold in 2016

<table>
<thead>
<tr>
<th>Bands</th>
<th>Spectrum Put-up</th>
<th>Spectrum Sold</th>
<th>Spectrum Sold (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>700 MHz</td>
<td>770</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>800 MHz</td>
<td>74</td>
<td>19</td>
<td>25%</td>
</tr>
<tr>
<td>900 MHz</td>
<td>9</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>1800 MHz</td>
<td>220</td>
<td>133</td>
<td>60%</td>
</tr>
<tr>
<td>2100 MHz</td>
<td>360</td>
<td>70</td>
<td>19%</td>
</tr>
<tr>
<td>2300 MHz</td>
<td>320</td>
<td>50</td>
<td>16%</td>
</tr>
<tr>
<td>2500 MHz</td>
<td>600</td>
<td>200</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2353</strong></td>
<td><strong>471</strong></td>
<td><strong>20%</strong></td>
</tr>
</tbody>
</table>

*Source: COAI Analysis*
VII. Data usage of Mobile Users

A. Data usage/ subscriber per month-GSM

![Bar chart showing data usage per month from 2013 to 2016.]

Source: TRAI PMR (Year ending - December)

B. Average Outgo per MB

![Bar chart showing average outgo per MB from Q1 FY17 to Q3 FY17.]

Source: TRAI PMR (Year ending March)
C. Data Subs and data consumption

Source: Nokia Mbit 2017 (December 2016)

D. Metro data usage

Source: Nokia Mbit 2017 (December 2016)
E. Circle A data usage

Source: Nokia Mbit 2017 (December 2016)

F. Circle B data usage

Source: Nokia Mbit 2017 (December 2016)
G. Circle C data usage

Source: Nokia Mbit 2017 (December 2016)

H. Monthly average data usage per user

Source: Nokia Mbit 2017 (December 2016)
I. Mobile data traffic per month in India

Source: COAI Analysis (Year ending- December)

VIII. Mobile Payment Forecast in India

Source: E & Y, Statistica (Year ending- December)
IX. Smartphone adoption trends in India

Source: E&Y, Statistica (Year ending- December)
I. Net growth In Unique Subs-2016-2020E

Source: GSMA

II. Wireless Penetration 2017E

Source: Merrill Lynch 2017
*Data for Thailand and Bangladesh are of the year 2016.
III. ARPU 2017E

Source: Merrill Lynch 2017  
*Data for Bangladesh is of the year 2016.

IV. YoY ARPU growth 2017E

Source: Merrill Lynch 2017  
*Data for Bangladesh is of the year 2016.
V. EBITDA margin 2017E

Source: Merrill Lynch 2017, Estimates
*Data for Korea and Bangladesh are of the year 2016.

VI. Wireless revenue 2017E

Source: Merrill Lynch 2017
*Data for Bangladesh is of the year 2016.
VII. Mobile spending as % to GDP 2017E

Source: Merrill Lynch 2017
*Data for Bangladesh is of the year 2016.
1. **Harmonization of Spectrum in 1800 MHz Band** - COAI, on behalf of its member companies engaged with the DoT to fulfil the responsibility of undertaking rearrangement of frequency spots between the spectrum holders in the 1800 MHz band to offer contiguous spectrum. This re-arrangement not only helped in creating maximum 5MHz contiguous spectrum it will go a long way in furthering long term objectives such as making even the existing spectrum for the operators contiguous and also consolidating vacant blocks of spectrum for the Defence band of 1765Mhz to 1785MHz (uplink). The agreement for all the five phases was signed amongst the TSPs. DoT issued instructions to individual TSPs to shift carriers between May 23, 2016 – June 15, 2016. COAI organized various meetings between all the service providers, including COAI and AUSPI members and also coordinated with BSNL and MTNL. The implementation of the exercise began on May 23, 2016. The activity was completed in 16 circles by June 15, 2016 and the remaining, i.e., Mumbai, AP, Karnataka, Kerala & Orissa were completed by June 30, 2016.

**Key Takeaway:** The changeover of frequency spots for Harmonization of 1800 MHz band in 21 service areas was completed by June 30, 2016.

2. **Subscriber Verification through Aadhaar based e-KYC** - DoT issued ‘Guidelines on Aadhaar based e-KYC for issuing mobile connections to subscribers. This was a long pending ask of the industry and we are happy that DoT finally issued this instruction, as a complete paperless process. We firmly believe that adoption of this process will make the subscriber verification process extremely robust and effective. This process has several advantages over the traditional paper based process including security compliance, as the database is a Government authenticated database, consumer convenience, as instant activation will now take place, leading to an efficient process. This will be a much quicker exercise and will save cost for the operators, and this will also be environment friendly being a paperless process saving lakhs of trees and avoiding unnecessary wastage of paper, contributing towards a greener telecom industry.

**Key Takeaway:** DoT issued ‘Guidelines on Aadhaar based E-KYC for issuing mobile connections to subscribers.

3. **Spectrum Policy for Sub-1 GHz band** - COAI had been taking up the issue with DoT stating that White Spaces do not exist in India, and most of the spectrum in the UHF band (470-698 MHz) is actually vacant, and COAI needs to be involved in any such trials/pilots. COAI, also submitted that as per the Government policy, any and all spectrum, which is to be used for commercial licensed services based access services should be auctioned. We thus believe that the TVWS should not be made available to a section of service providers in any other manner. It is important to maintain the level playing field amongst service providers providing similar services. The issue was also pursued with the Secretary DoT and various other DoT officials in specific meetings with them. In response to various COAI submissions, DoT issued a clarification on the Spectrum Policy for Sub-1 Ghz spectrum bands dated June 07, 2016 stating the following:
i. Ministry has assigned some part of the spectrum to research and educational institutions for the purpose of experiments, however, this is not for any commercial use.
ii. This band will not be de-licensed and any decision on its allocation and pricing will be taken by the Government.
iii. WRC-2015 has not identified this band for IMT, however, some part of the band may be used for IMT purposes.

**Key Takeaway:** The DoT notification states that the 470-698 MHz band or part thereof will not be delicensed and decision regarding methodology of allocation and pricing of this band shall be taken by Government, taking into account all relevant aspects.

4. **Draft Right of Way Rules** - DoT issued RoW Rules by way of a Gazette Notification in November 2016 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. This 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.

**Key Takeaway:** DoT issued RoW Rules by way of a Gazette Notification in November 2016 to create an enforceable framework for a sectoral policy for granting of Right of Way for laying cable network and installation of towers. This would also ensure a tool in the hands of the industry for better state and centre coordination.

5. **Simplified Assessment Procedure for Low Power BTS** - The Indian telecom network is witnessing introduction of low power Base Station Transmitters (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 a 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.

**Key Takeaway:** TEC has issued guidelines for installation of Small Cells in India giving different slabs between 10W & 100W.
6. **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 and provision of the international certification practice. There are long-standing, credible and reputed, internationally accredited/recognized laboratories conducting tests in this area in accordance with global best practices. While in some cases, it may be desirable for a vendor to test their products 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. Internationally tested components with a valid certificate from a credible lab need to be acceptable, irrespective of their location of testing.

**Key Takeaway:** DoT has provided an extension on this account till April 1, 2018 for compliance.

7. **Amendment of Clause on restriction of installation of towers on residential buildings by Urban Development, department** - The Industry had raised serious concerns regarding Clause 9.2.5 of Urban Development Department (UDD) Gazette Notification dated 22.03.2016 on “Unified Building Bylaws for Delhi 2016” and its potential misuse by various municipal bodies, which restricted installation of mobile towers on residential buildings. Industry had also made several representations on the above mentioned clause of the gazette notification which imposed restrictions on installation of telecommunication towers. In this regard, UDD vide gazette notification dated 17.06.2016 has made amendments in the said clause.

**Key Takeaway:** UDD vide gazette notification dated 17.06.2016 has made amendments in the clause not to restrict installation of towers on residential buildings.

8. **E-Aadhaar allowed as Valid POI & POA** - COAI had taken up the issue of non-acceptance of E-Aadhaar as valid POI and POA by various TERM Cells. It was submitted that E-Aadhaar is equally valid as a hard copy of the Aadhaar card sent through posts. Snapshots from the UIDAI website showing the same was also shared with the DoT. The issue was also raised at the ACT workshop held at Udaipur in February 2016, where it was also submitted that the TERM Cells should carry out the audit based on the above. In response to our letter, DoT has issued instructions on July 11, 2016 for acceptance of E-Aadhaar as a valid POI and POA post verification from the UIDAI website.

**Key Takeaway:** DoT has allowed E-Aadhaar to be accepted as valid POI and POA
9. **Simplification of SACFA Procedure** - To ease the long pending demand of the industry for easing the process of submission of SACFA applications. The earlier SACFA application process was cumbersome and time consuming as TSPs had to submit the application “Online” besides the hard copies to SACFA Secretariat and members. In submitting these applications, every month lakhs of papers and large manpower was required to prepare hard copies of such a large number of applications for all SACFA members. Post advocacy by COAI, WPC has now done away with hard copy submission of SACFA Applications with effect from Sept 14, 2016. The submission of the copy of online SACFA ID and copy of site map to SACFA Secretariat has also been done away with.

**Key Takeaway:** WPC has done away with hard copy submission of SACFA Applications with effect from Sept 14, 2016.

10. **IVR Based Tele-verification for Subscriber Verification** - The earlier subscriber verification guidelines mandated tele-verification of subscribers by the licensees as part of subscriber verification guidelines. This was modified by DoT to allow IVR based tele-verification for three documents i.e., Passport, Aadhaar/e-Aadhaar and Voter ID card as POI/POA. The detailed process for this verification was also defined by DoT stating that the option of selection of languages i.e., English, Hindi and one regional language (as per circle) should be given to the subscriber. The IVR system should prompt the subscriber to select the document, enter the last four digits of the document and then enter their year of birth. After the successful entry of their data, the connection is activated.

**Key Takeaway:** DoT allowed IVR based tele-verification for subscriber verification and activation of mobile connections, easing the process for the industry.

**COAI INTERVENTIONS REGARDING REGULATORY ISSUES:**

A. **Reduction of Regulatory Levies** - The industry made several representations to DoT on the reduction of the levies. COAI has also made representations to the Revenue Secretary on this issue. Following requests were made in the representations to DoT & the Revenue Secretary:

- **USO:** Reduce the USO levy to 3% to start-with, with the ultimate objective of ending this subsidy in the next 2-3 years in line with TRAI Recommendations.

- **SUC:** The 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.

- **Considering the representations made by COAI Government took the decision:**
  - SUC of 3% for future auction
  - Weighted average for existing allocations with floor of 3%
B. **USOF Tender for Provision of Mobile Services in Identified Uncovered Villages and National Highway in the North Eastern Region:**

- COAI made a representation to USOF admin and Secretary DoT regarding various technical and other conditions in the Tender, such as 20W BTS to be used instead of 2W-5W BTS, front loaded subsidy of 50% instead of 40%, No mandating RET deployment, mandatory support for 2G mobile phones should be removed from the bid, relaxation in power backup requirements, time frame to complete deployment, Village coverage wise subsidy instead of BTS wise subsidy.

- USOF admin agreed to almost all the requests of COAI and issued the revised tender document accordingly.

C. **Green Telecom** - DoT issued the directive dated January 23, 2012 on “Implementation of Green Technologies in Telecom sector”. Vide this directive the DoT set the RET deployment and the carbon footprint reduction targets for all the telecom operators. On COAI’s request, an inter-ministerial committee under the aegis of DoT was constituted to examine the renewable energy deployment in Telecom sector.

The COAI team effectively coordinated with other associations and members with regard to the representation made to the inter-ministerial committee (IMC) of DoT. **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 COAI’s request referred its Directive on “Implementation of Green Technologies in Telecom Sector” to TRAI for a fresh Consultation.

TRAI came up with its Consultation paper on the **“Approach towards Sustainable Telecommunications”** wherein the issues pertaining to Green Telecom as referred by IMC were highlighted.

COAI, again represented that there should be only one target i.e. reduction in Carbon Footprint, and enablers to achieve the targets should be left to operators and there should not be any targets for RET deployment.

This is **positive development that the DoT Direction is being reviewed as there was huge financial impact on the Industry with respect to meeting the RET deployment targets and the initial targets set were not feasible.**
D. **TRAI Recommendation on Licensing framework for Audio Conferencing / Audiotex / Voice Mail services** - COAI in its response to TRAI Consultation paper on Licensing framework for Audio Conferencing/Audiotex/Voice Mail services had submitted that Voice Mail/Audiotex Services/UMS should be brought under the UL (Access Authorization), the annual Licence fee should be same i.e. 8% of AGR similar to the UL and other existing UASL/CMTS/Basic Service/NLD/ILD/ISP licensees etc.

TRAI made positive recommendations on the issue. TRAI recommended that these services should come under UL (Access Authorization). TRAI further, recommended that the annual licence fee for the Audio Conferencing/Audiotex/Voice Mail Service authorization should be made same as that in other licence authorizations in the Unified Licence i.e. 8%. Also, TRAI reiterated its recommendations on the “definition of Revenue Base (AGR) for the Reckoning of Licence Fee and Spectrum Usage Charges” dated 6th January 2015. i.e. Licence fee for all the services should be reduced from current 8% to 6% (that includes reduction of USOF from 5% to 3%)

**EMF ADVOCACY and CCC RELATED ACHIEVEMENTS**

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<td>Spreading Awareness &amp; dispelling myths on EMF related to mobile towers</td>
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<td>DoT and experts joined hands to lead Public EMF Awareness Campaign</td>
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<tr>
<td>Maintained connectivity and Quality of Services (QoS)</td>
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<tr>
<td>• Reached out to approx. 12.5 lakh citizens</td>
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<td>• Approx. 700 Government officials and approx. 2200 medical &amp; technical experts joined</td>
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<td>• Saved many telecom towers and facilitated installation of thousands of BTS across the</td>
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<td>country to improve connectivity</td>
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*Figure: EMF Advocacy done across India from Nov’16 to Feb’17*

TERM led EMF Awareness Sessions in Rajasthan, Maharashtra, Kerala, Meghalaya, Assam, A.P & Telangana, Karnataka, Mizoram, Punjab and Haryana

DoT led EMF Awareness Workshop in Dehradun, Mumbai, Hyderabad, Guwahati, Jaiipur and Chandigarh

Interactive RWA Sessions in Mumbai & Gurgaon
1. **DoT EMF awareness workshop and EMF Testing in Dehradun (June 30 – July 1, 2016):** DoT was made aware of all the issues including the need of front ending the EMF Advocacy by AUSPI, the COAI and the TAIPA during multiple briefings. Support was extended to DoT for facilitating workshop by Department of Telecommunications on June 30, 2016 to spread awareness around the scientific facts about the EMF emissions from Mobile tower Radiation. The DoT team, State Chief Secretary, Mussoorie Dehradun Development Authority (MDDA) and Housing Secretary, State Govt and eminent cancer and public health specialists addressed the gathering. Approx. 200 participants (Citizens, Nigam Parshads, RWA, NGOs, Doctors, representatives from Industry, DoT Officials, Speakers/ Special Invitees and Media). Dr. R. Meenakshi Sundaram (IAS), Secretary Housing and Vice Chairman, MDDA, Uttarakhand admitted that unfounded apprehensions that telecom towers radiations were a health hazard could derail the Dehradun’s Smart City dream. He also requested the Telecom Service Providers to come forward to install more tower in the city but under due permission and procedure.

2. **DoT EMF awareness workshop in Hyderabad (July 13-14, 2016):** A workshop by Department of Telecommunications was organised on 13th July, 2016 at Hotel ITC Kakatiya to spread awareness around the scientific facts about the EMF emissions from Mobile tower Radiation. a) Approx. 333 participants (Citizens, Councillors, RWA, NGOs, Doctors, representatives from Industry, DoT Officials, Speakers/ Special Invitees and Media). Media widely picked-up the statement by Dr. Rajiv Sharma, Chief Secretary, Telangana, who said that telecom towers are absolutely safe and that DoT officials and service providers could help in dispelling all unfounded fears of EMF emissions.

3. **DoT EMF awareness workshop and EMF Testing Mumbai, (August 23-24, 2016):** A workshop by Department of Telecommunications was organised on 23rd August 2016 at YB Chavan Centre, Mumbai to spread awareness around the scientific facts about the EMF emissions from Mobile Tower Radiation. Testing of EMF emissions from Mobile towers was done across 3 locations in Mumbai by DoT and TERM Cell officials. Approx. 200 participants attended the event. Counter response was given to activists, Prakash Munshi who was questioning the entire event, later shared a positive story in his tweet that “Mobile Towers in Mumbai are safe”.
4. **EMF Awareness Campaign - South Goa during October, 2016** - Organised an on-ground awareness campaign regarding Mobile Towers in association with the State Govt. who requested the Industry & the Goa State Pollution Control Board (GSPCB) to facilitate the campaign to improve connectivity during BRICS summit. Target audience for the awareness sessions were the concerned residents of the 18 villages in South Goa who believe that mobile towers are harmful to human health. Enthusiastic response from most villages and significant results were achieved in terms of Panchayat permissions. Industry went from a “no sites allowed” situation to putting up 39 sites out of the requisite 61 sites within a month.

5. **DoT EMF awareness workshop and EMF Testing Chandigarh, October 21-22 2016** - A workshop by Department of Telecommunications was organised on 21st October at The Lalit Hotel, Chandigarh to spread awareness around the scientific facts about the EMF emissions from Mobile Tower Radiation. Testing of EMF emissions from Mobile towers was done across 4 locations in Chandigarh by DoT and TERM Cell officials. Over 300 participants attended the event. Shri Depinder Singh Dhesi, Chief Secretary, Haryana said that citizens have no reason to worry as mobile towers emit low level radiation, which is within the prescribed DoT, GOI norms which makes mobile towers completely safe.

6. **EMF Awareness workshop and EMF Testing in Guwahati, January 24-25, 2017** - A workshop in association with Department of Telecommunications was organised on 24th January 2017 at Taj Vivanta, Guwahati to spread awareness around the scientific facts about the EMF emissions from Mobile Tower Radiation. Testing of EMF emissions from Mobile towers was done across 3 locations in Guwahati by DoT and TERM Cell officials. More than 180 participants attended the event. EMF testing proved to be a big sign of assurance to the residents living in the area, who found the reading to be within the permissible limits.

7. **EMF Awareness workshop and EMF Testing in Jaipur, December 17 - 18, 2016** - A workshop in association with Department of Telecommunications was organised on 17th December, 2017 at ITC Rajputana, Jaipur to spread awareness around the scientific facts about the EMF emissions from Mobile tower Radiation. Shri Manoj Sinha, Hon'ble MoS(IC), Minister of Communications was the Chief Guest at the workshop. Testing of EMF emissions from Mobile towers was done across 4 locations in Jaipur by DoT and TERM Cell officials. He expressed conducive ecosystem for infrastructure rollouts is essential and that we should continue to encourage a scientific temper in the country with no place for myths around towers.
8. **Awareness Camps across Delhi and Mumbai** - Mumbai and Delhi have witnessed protests against mobile towers, carried out by citizen groups and reported by media. The protests were being fuelled by fears and apprehensions—all of which were unfounded—in the minds of the people, which, in turn, had root in such fears being fanned by certain interested parties. This was not only hindering seamless mobile connectivity but also causing panic among a section of the unsuspecting public. Against this backdrop, an interactive awareness session on EMF Emissions and Mobile Towers were organized in Borivali (November 20, 2016), Paloma chsl (December 04, 2016), Ajanta Building, South Mumbai (December 6, 2016) and Laburnum, Gurgaon (December 13, 2016) to arrest all such concerns and assure the consumers that there is no reason to fear radiation from mobile towers. Connectivity and Quality of Services in these locations was maintained by saving towers in these locations.

9. **Rajasthan Tower Policy** - The Department of Urban Development and Housing has recently notified the Rajasthan State Telecom Policy and included Telecom as an essential service and telecom installations as critical infrastructure. An effort of Rajasthan CCC and the DoT led EMF Awareness campaign has resulted into the **release of Telecom Policy** from the Government of Rajasthan. The Policy is effective from the immediate effect and encourages industry to roll out mobile infrastructure in the state.

10. **Small format Awareness Workshops on EMF Emissions and Telecom Towers in 20 locations across India** - An Awareness Workshops on EMF Emissions and Telecom Towers in association with Department of Telecommunications were organised in 20 locations across India during a period of February – April, 2017 to dispel the myths related to EMF. Approx. 1,600 representatives of state Government, local governing authorities, municipal councilors, general public, Police, IT Department, Health Ministry, Engineering Students, Professors, Deans of Colleges, etc. were engaged to put forward the facts around EMF exposure. These workshops have been very effective to facilitate telecom infrastructure approvals.

11. **Formation of State level Committee for quick resolution** - As a result of CCC efforts, Shri V Umashankar, Commissioner, Municipal Corporation, Guwahati issued an order regarding the formation of a committee to provide a coordination forum for interaction amongst various agencies involved in resolution of concerns related to EMF Emissions from the Base Transceiver Stations (BTSs) installed within the limits of the Municipal Corporation, Guwahati. Shri Kannan Gopinathan, IAS, Deputy Commissioner, Aizawl, Mizoram announced regarding **formation of District Committee for speedier disposal of grievances relating to mobile towers in Aizawl** in line with the DoT guidelines issued in this regard.
12. The Advocacy Done On The Supreme Court Order - In April 2017, Supreme Court passed the interim order to shut BSNL’s tower in Gwalior which emerged as a crisis for the entire telecom sector. Post the structured interventions we mitigated the impending crisis. There was a statement on behalf of the sector was issued to the relevant media. Media queries were directed towards DoT along with proactive seeding of content and equipping the government with adequate research and key messages. 

60+ positive stories were garnered from various locations. The media was directed and an opportunity was created with relentless advocacy for the Hon. Minister to make his Statement, which was then adequately amplified across the country. The news has been carried positively by all the prominent publications including Times of India, Economic Times, The Hindu, Deccan Herald, Hindu Business Line, Dainik Jagran, Dainik Bhaskar, DNA etc.

FINANCE & COMMERCIAL RELATED ISSUES

1. GST (General Sales Tax) J&K
   a. J&K state started levying tax on Services provided by telecom/cellular phone agencies (vide notification dated 30th March 2007). This was challenged by TSPs before High Court and stay obtained.
   
   b. Representations were made to CM, FM and senior representatives of the Government to find out an amicable solution.
   
   c. On 13th Nov 2016, J&K State announced Amnesty Scheme to facilitate voluntary payment of tax arrears by providing remission of 100% of penalty and interest.
   
   d. COAI, met with the Finance Minister and the post discussion, suo moto in good faith paid the first installment against the principal tax demand under the said Amnesty Scheme. The state tax authorities agreed to favorably consider payment of the remainder principal demand amount in subsequent 4 equal installments as per the Amnesty scheme. FM also agreed for exclusion of IUC and Roaming revenues from tax and allowing a suo moto adjustment of the taxes paid earlier.

Key Takeaway:
Letter received from the Revenue Secretary that the matter is under consideration. Notification/circular is awaited from the Government.
2. **International Roaming**
   - Representations made to DoT that the deductions claimed by the Industry on account of pass through charges being paid to foreign operators for international roaming should be allowed.

   **Key Takeaway/s:**
   - DoT has agreed with Industry’s stand and has withdrawn its earlier communication dated 9th Mar’15 disallowing the deductions claimed towards International Roaming.

   However, the process for claiming the deduction is still under process. We have submitted recommendations with regard to format for submitting information and the requirement for claiming such deduction.

   Matter is under consideration by DoT and clarification is expected shortly.

3. **Online Payment of License Fee and SUC**
   - After initial hiccups, the online payment of LF & SUC has been successfully implemented. Initially Operators were not able to make the payment through Bharat Kosh Account as the credit for the amount paid was not getting reflected into the account of Government of India and most of the operators had to make payment by demand drafts in the initial quarter.

   **Key Takeaway:**
   - Clarification issued by DoT for acceptance of online payment of LF and SUC into Bharat Kosh account through digital payments methodologies like e-transfer / NEFT / RTGS / Debit Card / Credit Card. Payment for Q4 was made online by the operators. Online payment process has reduced the float time for money from 4-5 days to 1-2 days benefiting both the Licensor and the Licensee.

4. **Downward Revision of BG allowed**
   - Downward revision of BG was not permitted by DoT since December 2010 and the members were forced to submit BG of higher value in some of the circles even where revenues had shrunk.

   **Key Takeaway:**
   - In March 2017, DoT has withdrawn its earlier circular dated 28.12.2010 and permits downward revision of the FBG’s. This is would be a relief at the time of when revenues of the Industry have dropped significantly as would save extra margin money to be paid to the Banks.

5. **Requirement of submission of additional FBGs**
   - DoT has issued clarification regarding not to seek fresh financial bank guarantees under Unified Licence without considering the earlier bank guarantees given under the expired CMTS/UAS Licence.
Key Takeaway:
The operators who have migrated their expired licence to Unified Licence, are no longer required to provide additional FBGs.

6. **Certified copy of Bank Statements or Bank Certificate** -
   In the matter of verification of deduction from Gross Revenue for the purpose of License Fees, certain CCAs were asking for submission of the Certified copy of Bank Statements as well as the Bank Certificate for allowing the deduction for the amount claimed by the operator.

   Key Takeaway:
   DoT clarified in April 2017 that the operators can submit the Certified copy of Bank Statements or Bank Certificate or both, as the case may be. In case, name of the payee is not mentioned in the bank statement, the requirement for submission of banker’s certificate indicating the name of the payee for transactions shall continue.

   This will help in smoothening the process and further reduction of submission of excess papers and will help in ensuring the ease of business.

7. **Return of PBGs submitted under UAS/CMTS** -
   DoT issued a letter advising CCAs to release/refund the Performance Bank Guarantees of ISPs who have migrated/renewed their old ISP Licenses under the Unified License (UL). We requested DoT to return the PBGs to respective companies.

   Key Takeaway:
   DoT has issued instructions enabling operators to take back their PBGs of expired licences from CCAs.

8. **Update the clarifications/circulars in the compendium of instructions issued by the Licensing Finance** -
   DoT issued compendium of instructions issued by the Licensing Finance Branch from 2001 till 2014. Representation made to DoT with the request of updating the compendium till date.

   Key Takeaway:
   DoT is putting various circulars and notifications on DoT website and uploading the clarifications / instructions issued by Licensing Finance Assessment Wing.

   This provides information to all concerned stakeholders to help keep a track on the latest announcements without missing any important instruction / developments.

9. **Regional Workshop of CCA and Members** -
   Each CCA seems to have 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:

   - The format of disallowance should be uniform across all circles.
   - Timely resolution of outstanding issues between CCA and Operators.
   - Reduce cost of compliance
   - Reduce amount of disallowances
   - Strengthening the Process by Standardization
**Key Takeaway:**

Last workshop was arranged on issues Related to Assessment of License Fees & Verification Process, from April 07 – 08, 2016 at GOA. Based on the discussions, interactions amongst and the CCA, clarification were issued on couple of issues which was helpful for the Industry as well for the Government for smoothening the process. However a there are critical issues which although agreed, would require early disposal by DoT HQ. For Example clarification on requirement as to TDS, GL certification by Auditors etc.

Second workshop between CCAs and Industry is expected to be held before August 2017.

**MEDIA ADVOCACY & STAKEHOLDER OUTREACH**

1. **Telecom sector disappointed at the announced GST rate of 18%: COAI**

   A press release was issued across media for COAI’s reaction on the announced GST rate of 18%. The key messages that the telecom industry has always hailed GST as an iconic reform, as it will bring in a new era of ‘one nation-one tax’ for the country. COAI believes that it will enhance ease of doing business and streamline tax collection and compliance for the industry. However, the increased rate of 18% that was announced will further stress the already financially weak sector. After several meetings with the GST Council, the industry representatives brought forward many issues, related to smooth operations and expansion of telecom services such as place of business, centralized settlements, and multiple jurisdiction in one LSA, Place of Supply (PoS), MRP based valuation amongst others and further clarity was sought.

   COAI is hopeful that GST will bring in a mechanism to bring down ancillary and peripheral costs of streamlining other services and the industry remains committed for a fully empowered and connected India.

Media Outreach: The news was covered in major publication and was followed by interactions with Mr. Rajan S Mathews

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*Telecom industry hails GST as an iconic reform but we are disappointed with the announced rate of 18 per cent*

**RAJAN S MATHews**

**DIRECTOR GENERAL, COAI**

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*You have to differentiate between impact of GST on companies and consumers — Rajan Mathews, COAI*

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*Telecom industry disappointed at unchanged GST rate*
COAI has advocated for lowering of GST rate for telecom services to 5% in sync with essential services. The debt-ridden industry has been saying that benefit of input credit is not enough to fully compensate the higher tax incidence in the new regime, and that telecom services are bound to become expensive for consumers once the new rates come into effect. At present, telecom consumers are charged around 15% in form of tax and cess over their phone bills. They pay additional around 15% in the form of levies for spectrum and licences leaving the return on investment at a meagre 1%.

By issuing a statement in the media COAI reiterated its disappointment with GST rate for telecom services remaining unchanged at 18%. The Cellular Operators Association of India – which has Bharti Airtel, Vodafone, Idea Cellular and Reliance Jio as members - has been pushing for lowering of Goods and Services Tax, or GST rate, for telecom services to five per cent in sync with essential services.

The coverage across media carried a quote of Mr. Rajan S Mathews stating, "We are disappointed that there has been no change in the GST rate for telecom, which is an essential service. It will increase the cost to consumers"

2. **Launch of Tarang Sanchar**

The Department of Telecommunications (DoT), Ministry of Telecom, Govt. of India, launched Tarang Sanchar – a web portal for sharing information on mobile towers and EMF emission compliances. The portal was launched by the Telecom Minister Shri Manoj Sinha in presence of Mr. R.S. Sharma, Chairman, TRAI and several other high level dignitaries from the telecom industry and central government.

The objective of the event was to make the EMF emission compliance transparent thereby gaining public trust and clearing the misconceptions of human health issues due to EMF emissions from mobile towers. Telecom Minister Shri Manoj Sharma's message in brief: The Minister said the portal will definitely help in clearing myths and misconception of public on mobile towers and emissions. He also reiterated that mobile towers do not have any adverse impact on human health.
**Traditional Media Outreach** - A wide-reaching media exercise was undertaken to spread the message that information related to mobile towers will now be completely accessible to the general public and Tarang Sanchar will usher in a new era of transparency in the telecom industry. Extensive media outreach helped in getting the event and its message covered in major mainstream, regional, online publications as well as electronic channels. Coverage garnered in popular and top of the line publications like The Economic Times, Hindustan Times, The Financial Express, Hindu Business Line, Rajathan Patrika, Navbharat Times, Dainik Jagran, Amar Ujala, CNBC Awaaz, Aaj Tak, Zee Business etc.

**Digital Media Amplification** - Backed by robust digital media and online amplification, the launch reached a wider tech savvy audience who are influencers and are more accessible through new media. Through the means of engaging bloggers and influencers, we were able to achieve both high reach and engagement with our audience and trended at No-1 on twitter during the event. The #TarangSanchar had more than 57 Lakh impressions. The hashtag #MobileTowersAreSafe received more than 13 lakh impressions. This was the top trending hashtag in the country which highlighted the deep level of engagement with the digital audience spreading this message across the country.

3. **Announcement on industry consolidation**

COAI initiated media interactions during the announcement of Vodafone-Idea merger, which included PTI, The Economic Times, Business Standard, Ananda Bazar Patrika, Loksatta and ANI TV. Around 150 news coverage appeared across 13 cities. All the major newspapers carried the statement and views of COAI. The Economic Times mentioned Mr. Mathews' statements in four stories, including the front page lead story. Two news channels – CNBC-TV18 and ET NOW did LIVE show with Mr. Mathews post the announcement.
Media interactions of DG, COAI: Select interactions of leading media houses were organised with Mr. Rajan S. Mathews. Various industry issues were discussed by the journalists and Mr. Mathews. Interactions were conducted with The Economic Times, Business Standard, Mint, The Hindu Business Line, The Hindu, Business Today, Reuters, News18, Eenadu, Wall Street Journal, Dainik Jagran, Cogencis and positive coverage was received. The objective of these interactions was to highlight COAI’s views on a multitude of issues in the telecom industry.

4. World Telecommunication and Information Society Day

COAI organised a panel discussion on the occasion of World Telecommunication and Information Society Day on 17th May with eminent speakers to address the panel. The theme of the day was Telecom, Internet & Connectivity: Accelerating Human Development in India - Big Data for Big Impact 2017. The panel broadly discussed the role of telecom in accelerating human development, the need for a stable policy, regulatory environment and the achievements of the telecom industry.

The panel had a mix of eminent speakers from various genres including Government, Industry, and Academia. Media was invited for the panel discussion and post event interactions were organised for the speakers highlighting the need for the stable long-term, predictable policy environment which facilitates affordability, growth, innovation and investments. The need for intervention by all the relevant stakeholders to improve the financial health of the sector was one of the key messages addressed by the panelists. The panel drew attention to the various ways in which there is a direct impact of telecom and connectivity on human development. Our hashtag also was one of the top trends of the day.
5. **Budget Recommendation for the financial year 2017-18**

COAI stated in a statement and interaction submitted its recommendations for the Union Budget for FY 2017-18 to the Ministry of Finance, Government of India, on behalf of its members, representing the telecom service providers. Top demands included, lower and uniform rates of tax for telecom services and concerns around determination of tax liability under GST. The activity generated media coverage across print and online media.

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**Telcos to Seek Relaxation in Special Audits**

COAI prepares a list of demands to be submitted to PM ahead of Budget preparation.

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**List of Demands**

- Nokia will get back to Basics’ Early Next Year
- Telecos to seek relaxation in special audits
- COAI prepares a list of demands to be submitted to PM ahead of Budget preparation.

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**Rajan S Mathews**

Director General, COAI

“The telecom industry has always been pro-development and has favoured a streamlined taxation policy with no unwarranted tax litigation. In order to ensure a uniform tax practice among taxpayers and eliminate unwarranted litigation, it is important for the government to clarify that section 35ABA of the Income Tax Act, which is applicable from FY17, regulates spectrum allocated after April 1, 2016. The spectrum allocated prior to April 1, 2016, shall continue to be governed by section 32 of the Act.”

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**Most Retweeted Tweets**

- Maharashtra
- #SajGomai
- #COACelebratesTelecomDay
- #WeAreAllFabulous
- #WorldTelecomDay
6. **BSNL Telecom Tower in Gwalior – SC Interim Order**

Supreme Court had ordered shutting down of a BSNL mobile tower in Gwalior on the plea of a 42-year-old cancer patient. The tower was asked to be removed for not having enough permission from the Municipal Corporation. The Times of India, Delhi picked-up the story but mentioned the wrong reason and said that the petitioner blamed the radiation from mobile tower for his cancer. The story appeared on the first page in all editions. Team arranged interactions with TV9 and sourced opportunity of panel discussion at Mirror Now news channel. Next day, Telecom Minister Shri Manoj Sinha quoted that mobile towers don't cause cancer and PTI ran the story after few hours. Awareness through media was done in major cities. An exclusive interaction was planned with The Times of India and shared all the relevant facts with the journalist. Next day, the national daily published the story with positive tone and online media picked the story. Team also connected will all the key journalists and shared the actual facts on mobile tower radiation. Almost all the media carried messages of COAI and the Minister.

7. **EMF awareness programmes**

Multiple awareness programmes were organised by the Department of Telecommunications (DoT), Min. of Communications on Electromagnetic Field (EMF) Emissions and Mobile Towers. This is part of a nationwide public outreach campaign to dispel myths about EMF Emissions and quell unfounded fears of citizens through scientific evidence. Shri J.S. Deepak, Secretary, DoT, delivered the inaugural address and highlighting the importance of mobile connectivity across the states and emphasizing on the need of cultivating a scientific temper and deepening collaboration between the public, Government and industry for growth and progress of the respective states. Senior Government officials' presence at the program, was a testament to the Government’s commitment towards enhancing telecommunications infrastructure importance of mobile connectivity for the progress in the states.

The first day's session was addressed by senior officials. In the Question & Answer session, experts explained to the participants and the audience that EMF emissions from mobile towers are completely in compliance and within the safety limits prescribed by International Commission on Non-ionizing Radiation Protection (ICNIRP) and World Health Organization (WHO). The overarching message: “There is no scientific evidence of EMF from mobile towers causing adverse health effects and #MobileTowersAreSafe.

The prevalent misinformation was addressed in the session and via EMF tests that were conducted on the second day. By bringing together all stakeholders, the DoT initiative ensured correct information was disseminated to all, including the media, and that growth was not hampered.

The second day the exercise concentrated on undertaking EMF testing at various city sites. The TERM Cell officials conducted EMF tests on cell sites. Results were revealed to the audience present at the sites and the media that was invited to cover the testing. The idea was to reiterate and further strengthen the messaging of the previous day, supporting it with empirical evidence.
The results showed emission levels at such locations in the city were less than 10% of the DoT's prescribed limits as well as that prescribed by ICNIRP and recommended by WHO.

The Government's initiatives in this two-day exercise lent credibility to the entire proceedings, providing an assurance to all concerned citizens that there was indeed nothing to fear from mobile tower radiation.

This claim was not only backed by scientific studies and court judgments but also by concerned Government specialists as well as academicians and medical experts – able testimonials from the scientific community.
Jaipur - The Department of Telecommunications (DoT), Ministry of Communications, Govt. of India, organised a public outreach and awareness program on EMF emissions and telecom towers in Jaipur. The two-day exercise was organised with the objective to dispel unfounded concerns around EMF. To this end, the awareness programme was followed by an EMF testing drive on the second day in the presence of telecom experts and media. This provided the opportunity to educate the media and the consumers about the facts around EMF exposure and also to leverage the image of a responsible Government, which actively engages with citizens and the media on emotive issues.

Shri Manoj Sinha, Hon’ble Minister of State for Communication (I/C) during the EMF Awareness Programme in Jaipur

Guwahati - The Department of Telecommunications (DoT), Ministry of Communications, Govt. of India, organised a public outreach and awareness program on EMF emissions and telecom towers in Guwahati. The two-day exercise was organised with the objective to dispel unfounded concerns around EMF. To this end, the awareness programme was followed by an EMF testing drive on the second day in the presence of telecom experts and media. This provided the opportunity to educate the media and the consumers about the facts around EMF exposure and also to leverage the image of a responsible Government, which actively engages with citizens and the media on emotive issues.
Traditional Media Outreach - A wide-reaching media exercise ensured the message that mobile tower radiation is not linked to human health was delivered, in major mainstream, regional and financial publications for both the cities. Coverage was garnered in popular and widely-read relevant publications in both the states which have seen major concerns around the issue of EMF. Moreover, coverage of the event by regional publications, including Assam Tribune, Asomiya Pratidin, Shillong Times, Mawphor, Rajasthan Patrika, Dainik Naviyoti etc ensured the messaging was being delivered to the far-flung corners of the states. There were separate interactions with DoT Secretary to understand the details on EMF Emissions.

Digital Media Amplification - Backed by robust digital media and online amplification, the message was projected further to a wider audience who access news only through new media. The #MobileTowerAreSafe was amongst the country’s top two trend for over two and half hours. Through the means of an influencer program, live updates from the events, YouTube videos, live streaming of the events, Facebook and twitter live, we were able to achieve a high reach and engagement with our audience and trended on twitter during the events. The teams also worked closely with the government to create and share content. The handles of both DoT India and Shri JS Deepak tweeted live updates of the events and that further amplified the key messages organically. A mix of paid, owned, earned and shared media strategy was utilized to achieve desired results for a pan India amplification. All in all, the event was a success in terms of making media and consumers in Guwahati and Jaipur aware of the myths and realities about EMF emissions from mobile towers. A strongly delivered message by the dignitaries was played out by media and amplified on digital and social media channels.
**Trending for around 2.5 hours #MobileTowersAreSafe**

People started re-tweeting and quoting tweets that were put up on the #MobileTowersAreSafe handle resulting in the hashtag trending. Not only did #MobileTowersAreSafe trend but EMF Emissions and Telecom Towers were also listed in the trending topics list all sentiments were being completely positive.

![Trends](image1)

**Chandigarh** - DoT organised an awareness programme on EMF Emissions and Telecom Towers. Team managed the media and digital promotion at the event and disseminated the press release to media. There were 45 media attendees at the event which garnered 64 impressions across print and online media.

**Mumbai** - DoT organized an awareness program on EMF Emissions and Telecom Towers. Team managed the media and facilitated the media interactions and disseminated the press release to the media. The event garnered 42 impressions across print, online and electronic media.
8. **COAI on demonetisation**

Major development pertaining to the Government of India announcing the demonetisation of all INR 500 and INR 1,000 notes. Press release was issued on behalf of COAI thanking the Modi Government for allowing prepaid mobile users to continue top-up payments with old INR 500 notes. Around 273 news coverage appeared across all platforms.

**COAI congratulated Government’s decision to permit the use of old INR 500 notes for prepaid mobile recharges.** This will allow customers to use mobile services without disruption and ease their anxiety, allowing them continuous communication, telephony being an essential service. They said that they were delighted that the Government acceded to their request prioritising consumer interest, so that citizens can continue to top-up and use mobile phones, which are an essential service.

COAI reiterates its support for Hon’ble Prime Minister Narendra Modi’s efforts to move the country towards becoming a 'less cash' society in order to curb corruption and black money, advancing social equity and financial inclusion among all sections of society. Such measures will increase the drive towards 'Digital India', benefitting every stakeholder, including the public. The telecom industry supports such endeavours that drive banking transactions towards mobile phones, reducing the cost per transaction for all stakeholders and benefitting banking eco-systems too.
Cellular Operators Association of India (COAI) in association with High Commission of Canada in India hosted a Trade Mission of Ontario Government to initiate engagements with the Indian Telecom Sector companies. The event - ICT Mission to India - at Hotel Taj Palace provided a perfect platform for the Canadian Mission and the Indian telecom companies to deepen collaboration and enhance networking opportunities between them. To create value for our members the mission also hosted B2B meetings/networking sessions.

COAI Director-General Mr. Rajan S Mathews inaugurated the event with his keynote speech on the Indian telecom sector. He stated: “We welcome the industry leaders from Canada and look forward to a strong collaborations between telecom sectors of two nations. Indian telecom sector is growing at a rapid pace and creating many opportunities for its stakeholders. Our network system is very robust and secure against the cyber-attacks. The Government has a vision of Digital India and they are very proactive in this sector.”

Added to Mr. Rajan, Mr. Akhil Tyagi from High commission of Canada in India said: Both India and Canada have very strong trade ties and we are working together in many sectors. Telecom is one of the largest sectors in India and is drawing attention from all corners of the world. Canadian companies would like to work closely with Indian private sector and look for vast opportunities in both countries. We are looking forward to a strong partnership in this area.”

Representatives from Indian leading companies such as Airtel, Idea Cellular, AT&T, Panasonic, KPMG, TCS, OLA and Intex Technologies attended the session.

10. **COAI – DoT host Mr. Malcolm Johnson, Deputy Secretary General, International Telecommunication Union**
COAI hosted a meeting with Mr. Malcolm Johnson, Deputy Secretary- General, ITU along with other senior delegates from DoT for a brief networking session. The session provided an opportunity for Sector Members, Associate Members and Academia to discuss the issues of collaboration with ITU in relevant areas of ICT and other matters of mutual interest creating value for our members and associate members including Ericsson, Apple, Google, Indus Towers and others who joined us for the meeting and for the interactive session.
Govt panel begins hearing case for a telecom bailout

Firms want major cuts in various statutory payments such as spectrum user charges

BY GIREESH CHANDRA PRASAD

NEW DELHI

A n inter-ministerial panel led by a senior official in the telecom ministry started its hearings on a possible bailout of debt-laden telecom companies even as most telcos increased the pitch of their demand for one.

India’s telcos are loaded with debt—around Rs1.85 trillion at the end of December 2016—and face the burden of payments due to the government for spectrum (close to Rs3 trillion). They also face intense competition, with the average revenue per user (ARPU) of most falling sharply since the launch of Reliance Jio Infocomm Ltd in September 2016.

The telcos want major cuts in various statutory payments such as the spectrum user charge and the interconnect charge and a liberal payment schedule, allowing them to pay for spectrum over 20 years instead of 10, according to a telecom industry executive who asked not to be identified.

State-owned banks, worried that their already stressed balance sheets—stressed assets in the Indian banking system amount to around Rs9.5 trillion—raised the issue in a meeting with finance minister Arun Jaitley on Monday, said a government official who spoke on condition of anonymity.

He added that the finance ministry is “waiting for the telecom ministry to come back with proposals after consultations with the industry.”

Not all telcos want a bailout. On Monday, in its discussions, Reliance Jio is believed to have told the inter-ministerial panel that its rivals should invest more equity. Jio and other telcos have fought a bruising battle since September, offering its service for free for almost six months up to 31 March, and for a small fee thereafter. Jio has acquired over 100 million subscribers. Its launch and pricing strategy has engendered a clutch of legal challenges by rivals, and also provided the trigger for the largest merger in the space—of Idea Cellular Ltd and Vodafone India Ltd to create India’s largest telco.

A Jio spokesperson did not respond to an email seeking comment.

The total revenue of Indian telcos declined for the first time since 2008-09 in the year ended 31 March 2017. Thanks to Jio, according to brokerage CLSA, it fell to Rs1.88 trillion from Rs1.93 trillion in the previous year.

The inter-ministerial panel is expected to meet representatives of banks on Wednesday, other companies later, and telecom minister Manoj Sinha is scheduled to meet the chief executives of telcos on 25 June, added the executive cited in the first instance.

In response to a query from Mint on the incentives sought by the telecom sector, the Cellular Operators Association of India (COAI) said that there was no need to rationalize the regulatory cost which, if not addressed, can hurt the telecom industry, the economy and revenue of the exchequer. COAI’s recommendations include reduction of the spectrum usage charges, licence fee, a five-year moratorium on deferred spectrum payment against two years at present and a 12% goods and services tax rate against the proposed 18%.

The executive cited explained the math of the telcos’ woes. In 2017-18, telcos will have to pay Rs53,000 crores as interest and Rs29,000 crore to the government for spectrum already bought. The industry’s aggregate earnings before interest, tax, depreciation and amortization (EBITDA) will come to only about Rs50,000 crore, this person added.

Telecom companies paid Rs78,000 crore to the telecom department in 2016-17 alone by way of recurring licence fees and other charges, according to the Union budget of 2017-18.
Monthly GSM mobile subscribers report:

COAI shares the GSM subscriber base on a monthly basis with the media and updates the same on the web portal for the customer to access the same easily.

The mobile subscriber base of seven telecom operators, including Bharti Airtel and Vodafone, increased by 5.68 million in March to reach 895.25 million, according to industry data collected by the Cellular Operators Association of India. Bharti Airtel led the subscriber growth, adding 3 million new mobile customers during March and taking the total base to 273.65 million subscribers. It had the highest market share at 33.25 per cent. Vodafone followed in the tally with 209.06 million subscribers and Idea Cellular with 193.37 million subscribers. Reliance Jio had 72.158 million subscribers.

Telenor, whose business was acquired by Airtel, lost 113 million mobile customers.

NEW DELHI The mobile subscriber base of six telecom operators, including Bharti Airtel, Vodafone and Idea, jointly increased by 2.27 million in February to reach 817.42 million, according to industry data. This includes data of all COAI members except Reliance Jio Infocomm. Bharti Airtel led the subscriber growth by adding 1.25 million new mobile customers, followed by Idea Cellular (1.21 million), Vodafone (0.79 million) and Aircel (10,000 new customers).
INDIA NEEDS TO INCULcate A SCIENTIFIC TEMPER

- India has one of the most stringent standards on EMF radiation which are 1/10th of ICNIRP guidelines.
- WHO (World Health Organisation) has reviewed over 25,000 papers and has found no scientific evidence linking them to any hazards on human health.
- DoT, Department of telecommunication, regularly tests and monitors compliance and has extremely strict penalties.

Prof. Farhat Bashir Khan is the senior most faculty member of AIJ Mass Communication Research Centre.

Over the past decade, people have become more health conscious than ever before. Unfortunately, inattention to even good things result in bad associations. This is the case in the case of mobile towers, whose outcome about electromagnetic fields (EMF) radiation have created a national scare and misconception in the minds of the people. Consequently, thousands of mobile towers have been dismantled and new ones prevented from being constructed in many areas. Therewith, some of the negative outcomes include frequent cell drops all over India. The DoT has formed a standing committee on information technology, in its recent report on “Issues related to quality of services and reported cell drops”, confirmed “negligible reports” by resident welfare associations against installation of mobile towers in one or the reasons for cell drops in the country. Is it addition to towers really so harmful? A close look at facts dispels this myth. The World Health Organisation has prepared around 25,000 articles worldwide during the past 30 years, concluding: “current evidence does not confirm the existence of any health consequences from exposure to low-level electromagnetic fields.” In September 2013, WHO stated “Studies to date provide no evidence that environmental exposure to PWR radio frequency fields, such as from base stations, increases the risk of cancer or any other disease.”

Surpassing Global Norms:
In 1999, WHO set up the International EMF Project to study the scientific evidence on the possible side effects of EMF radiation involving more than 50 national and international bodies. The World Health Organisation’s (WHO) Global Guidelines do not have any limit on exposure, whereas ICNIRP guidelines have. ICNIRP’s monitoring is ongoing, whereas the WHO’s exposure norms are up-to-date.

Accordingly, WHO recommends adoption of these international standards. In 2008, the Government of India accepted the ICNIRP norms for limiting levels of EMF radiation from mobile towers. Despite this, based on the recommendations of an Inter-Ministerial Committee, the Government decided to adopt norms ten times more stringent in 2012. With the ICNIRP norms already ten times stricter than those prescribed by ICNIRP and the WHO, there seems to be no possible cause for imposing separate norms in residential areas as is being currently demanded in some quarters. The present limits were reviewed and deemed adequate by a committee instituted by the Allahabad High Court in 2014. Incidentally, the committee comprised members from IITs, Kharagpur, Kanpur, Roorkee, Dhai, Mumbai and other scientific institutions, including Indian Council of Medical Research, Indian Institute of Technology Research Unit and All India Institute of Medical Sciences (AIIMS), New Delhi.

Additionally, the Department of Telecommunications (DoT) has taken steps to enforce the stricter limits in India. Therefore, all BTS (Base Transceiver Station) sites have to be safe limits compliant. When certification to this effect is submitted to the DoT, it will be examined and if safe limits are certified, the DoT will issue a certificate to this effect.

The Department of Telecommunications (DoT) has taken steps to enforce the stricter limits in India. Therefore, all BTS (Base Transceiver Station) sites have to be safe limits compliant, with certification to this effect submitted to the respective TDCM (Telecom Enforcement Resource & Monitoring Cells) of DoT.

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TECHNOLOGY AND SECURITY RELATED ISSUES

1. **Rollout Testing** - COAI made various representations to DoT regarding problems faced on high testing fees, availability of maps and actual count of BHQs. In this regard, COAI has made various submissions requesting for Rationalization of BTS test fees with the increase in number of BTSs/Node-B/eNode-B in the DHQ/town/BHQ/SDCA, not linking the MSC test fee to the number of DHQs/town/BHQs/SDCAs tested in case of all the TSTPs i.e. 2G, 3G and LTE and to charge per MSC only once, refunding the excess amount already paid in various service areas during the course of service testing as per the present instructions. Regarding availability of maps, we submitted that Self-Certified Digital Maps of concerned local body showing important landmarks may be accepted in line with the 3G TSTP - No. 1-4/2013-ASIV Dated: 17 March, 2015 and all subsequent NIAs, TSTPs and other associated documents issued by DoT may state that Self-Certified Digital Maps of concerned local body showing important landmarks may be accepted. On count of BHQs, the submission was that the required information of the count of BHQs be provided by the TERM Cells to the TSPs to maintain uniformity and it should be mentioned in the subsequent NIAs that the list and count of BHQs will be provided by the TERM Cells in order to have enhanced clarity, avoid ambiguities and different interpretations.

2. **Revised Remote Access Regime** - DoT had called a meeting of the telecom service providers to discuss certain proposed changes in the current Remote Access regime. It was submitted that the current process of obtaining prior approval of locations be changed to a process of prior-intimation or post-intimation (within a specific time period). The telecom licensees have and will continue to comply with the requirements stated in RA guidelines dated 31.01.2013. On reporting of logs, it was submitted that the proposal to stop RA Activity in case the link to RA Storage Server or the Server itself fails is unwarranted and may not be technically practical to comply since the failures of the IT Systems (hardware/software/links) cannot be predicted in advance. Regarding the Domestic RA requirements, the problems in doing this at domestic level were stated as submitted was that there should not be any domestic RA requirements and the current process should be continued. It was submitted that no unilateral changes in the RA may be brought into force as these changes have wide ranging implications on the operations and security of the telecom networks. We submit that a Committee be constituted including representatives from industry, DoT and the relevant Security agencies to enable holistic deliberations on the technical and operational issues involved in proposed revisions. This will enable better understanding amongst all the stakeholders and will result in implementable guidelines taking into consideration the security concerns.
3. **Simplification of Self-Certification** - Submission has been made to DoT regarding review of EMF guidelines and process simplification of self-certificate submission. It is submitted that several aspects of the self-certification requirements, which were relevant previously, have now become redundant in view of the developments in the last few years. Some of the aspects which need review are Upgrade Self-Certificate, Biennial Self-certificate submission, Non EMF related site parameters, Site Photograph(s), Measurement Value on ground Self-assessment criteria for Stand-alone GBT/GBM Sites Signage. It was also submitted that audit for 10% of Sites be for the entire LSA and not per TSP and review of testing fees associated with Audit conducted by TERM Cells. Likewise penalty imposed for non-compliance should be on a per site basis rather than being on per site per Operator basis. Furthermore it may be noted that 10% audit should not be repeated again and again on the same site, rather new sites should be audited for every 10% audit each year so that we could have completed 100% sites TERM cell audited in the near future. Online submission of EMF self-certificates was also allowed by the DoT.

4. **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 and strictly to the TSPs having sizable customer base, 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.

5. **Interference in the Spectrum Assigned for Telecom Usage** - High interference was being observed by our member operators across all circles due to illegal transmission by repeaters/boosters and faulty/leaky equipment of cable TV operators. The interference from repeaters/boosters/jammers and faulty/leaky cable TV equipment have become so prominent that it prevents the licensees from providing flawless telecom services and even in launching of services. The operators are facing such interference in many service areas including Delhi, Mumbai, Punjab, Kolkata, Gujarat, Haryana, Rajasthan, Pune, Pondicherry and Karnataka. COAI also sent details of some repeaters freely available in the market. COAI has requested DoT the following:

a. To ban the sale of illegal repeaters and direct TERM/WMO wings to conduct raids to check this.

b. TERM/WMO should be granted Authority for seizure/confiscation of illegal Repeaters, Boosters, and Jammers.

c. Time bound resolution of identified Interference cases, so as to provide flawless services.
6. **State Policies for Installation of Mobile Towers** - Different State Governments like Uttar Pradesh, Manipur, J&K, Agartala, Noida, etc. issued policies for installation of mobile towers in the respective states. The issue was taken up with the respective state Governments suggesting a Model Policy submission regarding Framing of policy/guidelines for erection of Telecom/Cellular infrastructure in the states. The industry submitted the clauses that need to align with the DoT guidelines on installation of towers. As a result of the efforts made by the industry a favourable policy in the state of Rajasthan was issued by the Government.

7. **Operationalization of “Botnet Cleaning and Malware Analysis Centre”** - To comply with the Cyber Swachhta mission of GOI, CERT-In office requested our member operators to take appropriate measures to keep the users informed of the bots or other malware on their systems, based on the information received from CERT-In. COAI submitted that this requirement envisages sending an SMS or Email urging customers to download an exe file from a URL as their system is infected. If this is being sent by the service providers then there are chances that this technique will be emulated by unwarranted characters and may lead to fake SMS’s with identical content, but with a different download URLs being sent to the customers urging them to download and install even more malware disguised as “Botnet Cleaning software”. It is to be noted that this might be like a “Phishing attack”. Hence, it was suggested that Cert-In should take details directly from the subscriber information provided by ISPs and send notifications.

8. **Allocation of Spectrum for Microwave Access & Backbone (MWA/MWB)** - During the year 2012-2015, DoT in its NIA confirmed, that the resources already granted to existing licenses, including those which are due to expire in 2014 and onwards, will be transferred to the renewed Unified License (UL). This was subsequently reiterated by DoT in UL guidelines also. However, in October 2015, DoT issued interim guidelines on allotment of MWA and MWB and prescribed that:

- a. The expiry licenses would get revalidation of MWA and MWB only on a provisional basis.
- b. If DoT decides to auction MWA and MWB or follow any other methodology, then the expired licensees will have to give the MWA and MWB back to DoT.
- c. Expiry licenses would also be required to pay new charges basis the rates prescribed in 2006 and 2008 (which the Industry had challenged in TDSAT and won. Subsequently, DoT challenged the TDSAT order in Supreme Court and has been unsuccessful in getting any stay on TDSAT judgment).

DoT has stopped issuing the subsequent clearance/s required for operating the network. Any decision for auction of MWA/MWB is in violation of the NIA as the backhaul spectrum has been bundled with the access spectrum auction. It was submitted that DoT should take an early decision on TRAI Recommendations on Microwave Access & Backbone and the transfer of the existing MWA and MWB carriers to licensees whose licenses have been migrated to new Unified License, on the same terms, as confirmed in NIAs should be facilitated.
9. **Increase in RF transmit power from BTS** - At present, TSPs have been allowed to transmit only 20 watts of power. This is historically set from the time when GSM operating with a channel bandwidth of 0.2 MHz, was the predominant technology. Unlike GSM where the transmitted power is concentrated in a bandwidth of 0.2 MHz, the power is distributed in a much wider bandwidth, typically 5 MHz, in case of 3G/4G (LTE). Further, all 3G/4G technologies are operating in different frequency bands and the free space losses are different in different frequency bands. TSPs have been requesting to allow transmission power from BTS to be in the range of 60-80 Watt power instead of presently allowed 20 Watts. The lower transmit power reduces the network coverage and results in inefficient use of the spectrum. The power density in case of GSM is 100 Watts/MHz (20W/0.2MHz) whereas it is 4 Watts/MHz (20W/5MHz) in case of 3G/LTE, which is much lower than GSM. Even 60-80 Watts for 3G/LTE would have much lower power density at 12-16W/Mhz. The radiated power from BTSs is already being monitored via the EMF guidelines, which prescribes the maximum power allowed to be received at any place. Further, while assigning BWA spectrum, DoT has permitted different BTS output power ranging from 10 watts to 40 watts to different operators, which creates non level playing field and needs correction. COAI requested the DoT that TSPs should be allowed to configure 60-80 W transmit power while maintaining compliance to the EMF norms.

10. **Review of EMF Test Procedure and Reporting Requirements** - Several aspects of the self-certification requirements, which were relevant previously, have now become redundant in view of the developments in the last few years. A review of the EMF self-certification guidelines issued vide TEC Test Procedure TEC/TP/EMF/001/02.OCT.2012 issue OCT 2012 and Scheme of penalty letter vide No. 800-15/2010-VAS dated 20th November 2013 has now become imperative in order to rationalize the self-certificate submissions so that it remains a purposive and meaningful exercise that serves the objectives of good governance and does not deteriorate into a mere paper exercise unduly burdening the TSPs without providing any commensurate benefit to the public interest involved. Some of the provisions that need changes are that there shall be no need for other tenants to submit an upgrade certification for the same site. The Tarang Sanchar Portal offers a simple means to the TERM Cell as well as TSPs for access to the latest compliance status of a site. Therefore, the need to submit Self-Certificates biennially to be evaluated and reviewed. TSPs shall be permitted to alter the non EMF related site parameters such as lat./long; site address; photographs, north direction marking, site id, name etc. in the NEP database, without being considered as non-compliant for EMF exposure requirements as these do not pertain to any change in the reported EMF exposure levels. We believe that review of the existing EMF Guidelines of Testing and Penalties will further help in enhancing clarity, avoiding ambiguities and conflicting interpretations, thereby facilitating faster implementation of the guidelines and smooth roll out of telecom and tower infrastructure and ease of doing business. COAI requested the DoT that the existing EMF Guidelines of Testing and Penalties should be reviewed at the earliest to help in enhancing clarity, avoiding ambiguities and conflicting interpretations.
REGULATORY ISSUES

1. **TRAI CONSULTATION PAPER ON FREE DATA WAS ISSUED ON 19th MAY 2016 -**
   COAI in its response to TRAI made following submissions:
   - At our stage of development, the need of the hour is increased internet adoption and data usage.
   - TSPs should be permitted to offer Free Data.
   - It should be left to TSPs to decide whether they want to enter into arrangements with the content providers or not, basis their business case and requirement of technical development.
   - No ex-ante regulation is required since the market is vibrant enough. On expost basis, TRAI can examine tariff plans on a case by case basis after giving a reasonable opportunity to the operators of being heard.

2. **TRAI CONSULTATION PAPER ON IN-BUILDING ACCESS BY TELECOM SERVICE PROVIDERS WAS ISSUED ON 6th JUNE 2016 -**
   COAI made following submissions on the Consultation Paper:
   - Building Code: It should be made mandatory in the Building Code that the new buildings should be constructed in such a way that they are 'Telecom Infrastructure deployment' ready by creation of one time infrastructure such as ducts, common area for telecom facilities, network access points etc.
   - It should be made mandatory to grant permission to TSPs to install in-building telecom infrastructure.
   - The permission to install telecom infrastructure should be granted to TSPs only.
   - Private Buildings: There is no regulatory intervention required for the existing Private Buildings as TSPs have invested sufficient CAPEX/OPEX based on their business viability.
   - For sharing the infrastructure, the commercial terms and conditions for both Existing and New buildings should be left to mutual agreement as any mandate on this will increase inefficiency in the system.

3. **TRAI CONSULTATION PAPER ON CLOUD COMPUTING WAS ISSUED ON 10th JUNE 2016 -**
   The key points highlighted by COAI in its response are as below:
   - The cloud services in India are at a nascent stage, hence flexible and light touch regulation for emerging and innovative technologies and business models is crucial to take advantage of the social and economic benefits of the digital economy.
   - It is important that all providers of cloud services have appropriate policies and practices in place that are compliant with applicable laws, are consistent with relevant industry best practices and use meaningful and reasonable efforts to address and deter the use of their services to engage in illegal activity.
   - With respect to the telecom operators, there are some restrictive clauses in the license that do not allow the TSPs to leverage the benefits of cloud services for/on behalf of their customers. The telecom operators are only allowed to use cloud services as an Enterprise.
The license restricts the telecom operators to send any user identifiable information outside India. This is creating reluctance on the part of TSPs to avail the benefits of cloud for their subscribers. However, similar or more information pertaining to identification of the subscribers is being sent outside India through subscribers themselves or through handsets or websites.

The provisions of the IT Act are also applicable to the TSPs and hence any separate provision in the license may not be required.

The framework which TRAI endeavors to formulate after this consultation should address the above concerns of the telecom service providers should promote agility, lower costs and interoperability with sufficient protection to the consumers.

4. TRAI CONSULTATION PAPER ON REVIEW OF VOICE MAIL/AUDIOTEX/UNIFIED MESSAGING SERVICES LICENCE WAS ISSUED ON 14th JUNE 2016 - COAI in its response to TRAI made following submissions:

- There should not be any standalone licenses for Voice mail/Audiotex/UMS services. No need for a separate standalone audio conferencing service License.
- Voice Mail/ Audiotex Services/UMS should be brought under the UL (Access Authorization).
- All current licensing clauses prescribing service specific conditions/prohibitions related to Audiotex Services should be incorporated in the UL (Access Services).
- With respect to the OTT players providing this type of service, regulatory equality principle of “same service same rule” should be adopted.
- Terms and Conditions should be as per the UL (Access Service Authorisation).
- There should be mandatory migration of the current Voice Mail/Audiotex/Unified Messaging Services licensee to the UL (Authorisation).

5. TRAI CONSULTATION PAPER ON INTERNET TELEPHONY WAS ISSUED ON 22nd JUNE 2016 - COAI made following submissions on the Consultation Paper:

- Only Unified Licensee with Access Authorization can be allowed to provide Internet Telephony to their subscribers on their networks.
- No decision so far on status of OTT Communication by the Government or TRAI - hence this consultation cannot be initiated.
- OTT Internet Telephony (VOIP) is Content as per TRAI” - TRAI can only Regulate Interconnection between networks of two Licensees.
- Under UL (Access Authorization)/ UASL/CMTS Internet Telephony calls may be interconnected with PSTN but also requires Access Network (Last Mile) of UL/UASL under Licensing Framework.
- Illegal termination of “Internet Telephony” calls using numbering scheme assigned for mobile/fixed telephony.
- There is need for Level Playing with the OTT services.
6. DOT ISSUED DRAFT M2M SERVICE PROVIDERS (M2MSP) REGISTRATION GUIDELINES ON 14TH JUNE 2016 -

The key submissions made by COAI to DoT on draft guidelines are:

- We do not believe that there is a need for a separate M2M service provider—these services should be offered only under a UASL/UL(AS) UL( VNO) to be issued under Section 4 of Indian Telegraph Act, 1885.
- If at all a new service provider is to be introduced, the same should be done under Unified Licence regime after holding a wider consultation process as envisaged under the TRAI Act.
- Current KYC norms should not be applied for M2M services since the same is in the nature of point to point communication. We request DoT to incorporate this aspect in the final M2MSP guidelines on KYC requirements and mandate the maintenance of only MSISDN and IMSI numbers in M2M services.
- The current QoS regulation for telecom services is sufficient as far as telecom bearer services are concerned.
- We request DoT to provide clarity in the draft guidelines on the interception requirements as TSPs can provide only current level of interception for voice, data and SMS. Any decryption shall be the responsibility of M2M platform who has introduced the encryption.
- We request DoT to suitably modify and allow the movement of M2M information outside Indian boundaries for proliferation of M2M services.

7. TRAI ISSUED DRAFT PAPER ON CONSUMER PROTECTION REGULATION 10TH AMENDMENT 2016 ON 5TH JULY 2016 -

The key points highlighted in its response to the Draft Regulations are as below:

- India’s large offline population and its GDP growth represent a tremendous opportunity to bring new Internet users online.
- Even with the low absolute prices of data plans as compared to the rest of the world, Internet access in India remains unaffordable.
- In order to cater to the offline population in India, the service providers should be given flexibility to offer innovative tariff plans with affordable tariff rates.
- In light of the above, Industry supports the TRAI proposal of having higher validity for the STVs (exclusively for the data).

8. TRAI CONSULTATION PAPER ON PROLIFERATION OF BROADBAND WI-FI WAS ISSUED ON 13TH JULY 2016 -

COAI made following submissions on the Consultation Paper:

- We believe that the notion of ‘Public Wi-Fi Networks for providing ubiquitous citywide coverage’ is incorrect; Cellular Networks are the only wireless networks which can provide seamless Broadband service on a commercial scale for a citywide or LSA wide coverage area.
- Wi-Fi technology, which works on unlicensed bands and low power, can be used only for creating hotspots locally.
- Wi-Fi can be provided only by licensed TSPs/ISPs who have their own network to extend the last mile access.
• “Public Wi-Fi Hotspots” can only be set-up by licensed TSPs/ISPs directly or by adopting models which are consistent with Unified Licensing conditions.
• At present, access spectrum is not a bottleneck for the spread of Wi-Fi service. Hence, there is no immediate need to de-license any additional spectrum for Wi-Fi. This can be reviewed after some time as and when need arises. Regarding the Sub-1 GHz band, DoT has already stated that it will not be delicensed and any decision regarding methodology of allocation and pricing shall be taken by the Government. In light of this, we re-emphasize that Sub-1 GHz band should not be delicensed.
• Any new Authentication mechanism for Wi-Fi should be cleared by the Ministry of Home Affairs; further, TSPs/ISPs should be free to adopt from amongst the options available and there should be no mandate in this regard.
• Interoperability between Wi-Fi networks can emerge as a result of market forces and there is no need for any Regulatory intervention.

9. **TRAIDRAFT CONSUMER COMPLAINT REDRESSAL MECHANISM REGULATION WAS ISSUED BY TRAI ON 28th JULY 2016 -**

The key submissions made to the Consultation Paper are highlighted below:

- The existing system of two-tier consumer complaint redressal, as stipulated by the TRAI Telecom Consumers Complaint Redressal 4 Regulations 2012 dated 05th January 2012, is an adequate mechanism to address the issue of complaints raised by the consumers.
- The number of complaints being received by the operators is miniscule in comparison to the total subscriber base of the Industry.
- The effectiveness of the current mechanism can be determined by following parameters:
  - Complaints resolved at the Complaint Centre as a percentage of total complaints
  - Time taken to resolve the complaints
- Ease of filing complaints at both Complaint Centre and Appellate level.

10. **TRAIRELEASED ITS CONSULTATION PAPER ON THE REVIEW OF REGULATORY FRAMEWORK FOR THE USE OF USSD FOR MOBILE FINANCIAL SERVICES ON 2nd AUGUST 2016.** - COAI in its response to TRAI made following submissions:

- We support the national objective of financial inclusion of the unbanked.
- We submit that adequate efforts have not been made by the Banks to promote this service and believe that underlying factors need to be addressed before concluding that further regulatory intervention is required in respect of the USSD based mobile banking services.
- We submit that the regulated access and pricing of USSD based mobile banking services through NPCI may not be the best approach for developing mobile payment eco-system.
- We are of the view that operators should be able to offer B2B model as well as B2C for m-banking services.
- TRAI should seek to promote an eco-system and facilitate a regulatory environment that fosters mobile banking services.
11. TRAI CONSULTATION PAPER ON REVIEW OF INTERCONNECT USAGE CHARGES WAS ISSUED BY TRAI ON 5th AUGUST 2016 -

The key highlights on the response to TRAI are as below:

- The principle of “Fair, Reasonable, Reciprocal and Non-Discriminatory (FRRAND)” should be adopted.
- Interconnect framework should be based on cost-based charging.
- Fair and equal terms for all.
- Approach of Transparency should be adopted by all operators.
- Interconnection should be only with a licensed entity having its own access network.

12. TRAI CONSULTATION PAPER ON SPECTRUM USAGE CHARGES AND PRESumptive Adjusted Gross Revenue FOR INTERNET SERVICE PROVIDERS AND COMMERCIAL VERY SMALL APERTURE TERMINAL SERVICE PROVIDERS WAS RELEASED BY TRAI ON 19th AUGUST 2016 -

COAI in its response to TRAI made following submissions:

- A detailed plan related to the frequency bands assigned to ISPs as listed in the TRAI paper, should be developed in line with international developments.
- All the frequencies which are identified as an IMT band must be treated as all the other licensed access spectrum.
- The Authority should lay down the roadmap for the auction of all such spectrum which are or may be declared as an IMT band. Further, the Authority should devise a long term migration roadmap for the users of such bands which are or may be declared as an IMT band to alternate frequency bands to ensure the business continuity.
- In the interim, the allocations including existing allocations in these bands allocated to the ISPs may be allowed to continue on a link by link basis. The link by link charging needs to be only an interim arrangement.
- The end use of the spectrum would determine its pricing approach. If the spectrum is used for backhaul, then the rules applied to backhaul spectrum may be extended to this spectrum as well. If the use is for licensed access, then the approach adopted for licensed access spectrum should be followed.
- For assignment of spectrum done administratively on a link by link basis, a formula based approach may be continued purely as an interim arrangement.
- For all access spectrums which are acquired through an auction mechanism, there should ideally be no requirement for further annual SUC payments beyond nominal administrative fees towards covering the cost for spectrum management. Same approach should be followed for all auctioned access spectrum.
- Any decision of TRAI in favour of presumptive AGR or revenue share should not mean a right to spectrum for entire LSA. In this regard, we would like to submit that any change from link wise allocation/charging can only be by way of auctioning of this spectrum.
13. **TRAI CONSULTATION NOTE ON WI-FI ISSUED BY TRAI ON 25th NOVEMBER 2016** -
COAI made following submissions on the Consultation Paper:

- In case any entity wants to set-up a Wi-Fi hotspot to resell capacity and bandwidth it should obtain a relevant License/authorization under UL/UL-VNO to do so.
- Regulatory predictability and Level Playing field is required to ensure further investments in the sector.
- There is no need for any Regulatory intervention in unbundling of Wi-Fi value chain as these are commercial decisions and can be best handled by market forces.

14. **TRAI CONSULTATION PAPER ON M2M WAS ISSUED BY TRAI ON 18th OCTOBER 2016** - The key highlights of the response are as below:

- There is no need for any change in any of the existing License conditions for provision of M2M Communication. These services should continue to be provided under UASL/Unified Licence (Access Service Authorization).
- Any entities such as System Integrators who have created local networks or platforms and require access to Public Networks for enabling the end to end M2M communication should obtain UL-VNO License as the reselling of Telecom Services is allowed only in VNO licensing framework.
- There is no need for any separate allocation of Licensed spectrum for M2M services; the operators should be free to use the Licensed spectrum acquired by them for M2M and P2P communication.
- There is no need to de-license any additional bands for promoting M2M Services or otherwise.
- Unified License conditions are sufficient as far as security requirements are concerned; therefore, there is no need for any special security measures for M2M communication over the Public Networks.
- There is no requirement to prescribe QoS requirements for telecom bearer services for M2M services; these should be left to mutual commercial agreements between transacting parties.
- KYC norms should be simplified keeping in mind the M2M use cases.

15. **TRAI CONSULTATION PAPER ON NET-NEUTRALITY ISSUED ON 4th JANUARY 2017** - COAI made the following submissions on the Consultation Paper:

- To develop a coherent policy on the subject of Net Neutrality, there is a need for adopting a holistic approach rather than a piece meal approach.
- At our stage of development, our highest need is internet adoption and increased data usage and whatever facilitates the same needs to be supported.
- Definition of Net Neutrality in the Indian context may be as enunciated by the DoT Committee. Further, there should be voluntary approach towards adopting the principles of Net Neutrality Principles.
- The economic, privacy and security aspects of OTT Communication service providers need to be included in the discussion on Net Neutrality.
- Previous Recommendations/ Regulations on Discriminatory Pricing and Free data have to be aligned with the holistic approach adopted for Net Neutrality in India.
• Policy/Regulation should lay down a principle based approach rather than adopt a prescriptive approach – either in terms of what is permitted or what is prohibited. Authority should not prescribe standards of reasonableness but only lay down the principle of reasonableness.
• There is need to enable Specialized Services, managed services, IOT, etc. to cater to legitimate demands for prescribed quality of services different from “best effort” QoS typically available on the public internet. Such services should be excluded from the purview of Net Neutrality and should continue to be guided based on mutual agreements.
• No ex-ante regulation is required since the market is vibrant enough. Ex-post approach should be adopted and TRAI can examine tariff plans on a case by case basis after giving a reasonable opportunity to the operators of being heard.

16. TRAI CONSULTATION PAPER ON ISSUES RELATED TO CLOSURE OF ACCESS SERVICES WAS RELEASED ON 30th NOVEMBER 2016 -
The key highlights of the response are as below:
• There is no need to make any changes in the UL, except that Clause 30.3(b) of the Unified Licence should be amended to the extent of deleting the line, “The Licensor reserves the right to reject such request”.
• We also submit that as long as the TSP is offering any of the authorized services under UL, the process of discontinuation of any of the permissible services, should entail intimating DoT/TRAI for the purposes of information only.
• With regards to the issues pertaining to the spectrum trading, we would like to submit; the current process is fine. There is no need to prescribe separate timelines for different steps as this will lead to an excessive micro-regulatory approach.

17. TRAI CONSULTATION PAPER ON APPROACH TOWARDS SUSTAINABLE TELECOMMUNICATIONS WAS 16th JANUARY 2017 -
COAI made the following submissions on the Consultation Paper:
• Telecom Industry accounts for a fraction of the carbon footprint.
• Industry has been meeting the Targets for the Carbon Footprint reduction.
• There is no need for the separate target for deployment of the RETs.
• Necessary modification in the license should be done in order to remove RET deployment Targets.
• Industry should be allowed to voluntary deploy various solutions for the reduction of carbon footprint and hence no targets should be enforced on the Industry.
• In case government wants to impose any targets on the Industry the same should only be the carbon abatement/ reduction in Carbon Intensity in percentage terms.
• Government needs to see that the targets which are laid down are achievable in order to meet required end objectives.
• It should be left to the operators to decide on the enablers/methods for achieving these targets.
18. **TRAI CONSULTATION PAPER ON EASE OF DOING BUSINESS was issued on 14th 2017** - COAI highlighted following key issues in the paper:

- Simplification under the current process of taking prior approval for Remote Access (RA)
- Online Reporting and Payments
- Introduction of a system of LFDS
- Set-off of license fee paid on input services against license fee payable on output services
- Doing away with multiple audits
- SACFA related issues:
  - Reduction in number of applications leading to cost Optimization
  - Reduction in the SACFA Application Fee
  - Single clearance for multiple technology application
- Increase in RF transmit power from BTS
- Introduction of M Bill enabling replacement of hard copy of mobile bill as default option for postpaid subscribers
- Discontinuation of non-significant Directions and Regulations
- Aadhaar based e-KYC for Outstation customers:
- Subscriber re-verification through E-KYC
- E-acquisition of Enterprise Business Customers and acceptance of optical/digital signatures
- E-collection and storage of all subscriber documentation:
- Electronics Manufacturing Ecosystem:
- High Interference due to installation of illegal Repeaters, Boosters, Jammers and faulty/leaky equipment of Cable TV operators

19. **MEITY DRAFT POLICY FOR SECURITY OF PPI ISSUED ON 8th MARCH 2017** - COAI made following submissions on the draft policy:

- The security rules for a payment instrument should be proportionate to risk associated with a payment instrument; PPIs have minimum risk associated with their usage and hence, the same should be considered while framing rules.
- We request that MeITY should adopt principle based approach; the implementation of the principles in form of specific rules should be left to sectoral Regulators.
- Flexibility should be given to e-PPI issuers for the purpose of Authentication of Customers.
20. **TRAI CONSULTATION PAPER ON INTRODUCTION OF UL (VNO) FOR ACCESS SERVICE AUTHORIZATION FOR CATEGORY B LICENSE WITH DISTRICTS OF A STATE AS A SERVICE AREA ISSUED ON 23rd MARCH 2017 -**

COAI made following submissions on the Consultation Paper:

- With due consideration to the issue of continuity of services offered by DID franchisees, we submit that Cat-B VNOs [DID] may be allowed in the sector only for DID franchisees in order to prevent any further complications that may arise. In view of the same, DID franchisees may be mandated to migrate to UL (VNO) Cat-B License.
- The purpose of the VNO Cat-B License should be only to accommodate the DID franchisees; therefore Mobile and Internet Services should not be allowed under VNO Cat-B license and only fix-line DID services should be permitted under this license.
- The VNO Cat-B licensee should be permitted to take resources from only one TSP in an area of operation.

The VNO Cat B Licensee should be mandated to fulfil all the obligations (equivalent to TSPs/VNOs) arising from Tariffs orders/regulations/directions etc. issued by TRAI.

**FINANCE & COMMERCIAL RELATED ISSUES**

1. **Goods and Services tax (GST)**

   GST is the biggest tax reform post-independence. GST will have an enormous impact leading to business transformation for all major sectors and in particular telecom sector. With passage of GST Bills by Lok Sabha and Rajya Sabha, the Government of India seems to be on course of implementing GST with effect from 1 July 2017.

Considering the magnitude of changes envisaged under GST regime and uniqueness of telecom sector, COAI initiated to educate policymakers on issues and concerns of telecom sector by way of various representations.

**Key actions undertaken by COAI have been highlighted below:**

- Identifying telecom sector related issues in draft GST law and prioritising key concerns
- Holding meetings with policymakers and educate them on issues for telecom sector in GST regime
- Engaging with state bureaucracies to create awareness about sector specific issues and its effect on state revenues
- Meetings with State VAT authorities, CBEC to create awareness about telecom sector specific issues
- Meetings with Standing Committee formed by the Rajya Sabha members to ensure concerns of telecom sectors are addressed at the time of drafting and finalisation of final law and rules
- Obtaining support of the officials from the Department of Telecom for addressing key telecom industry related issues
- Publishing news articles for creating public awareness on critical issues for telecom sector
The following key issues and other sector-specific concerns were represented in several meetings with officials from the Ministry of Finance, State Finance Ministries, and DoT.

1. Single PAN India registration for telecom operators and unified rate of GST for telecommunication services
2. Exemption in GST on spectrum assigned prior to April 2016
3. Self-supply of services in case of State-wise registrations
4. Supply received from unregistered persons
5. Concerns around determination of tax liability under GST due to ambiguity in place of supply and location of service provider
6. Clarification on J&K related transactions in GST framework
7. MRP based valuation for pre-paid services
8. Lower rate of Tax
9. Other issues emanating from the law and draft Rules

The above key issues and other sector-specific concerns were represented in several meetings with officials from the Ministry of Finance, State Finance Ministries and DoT etc. Meetings were set up with following key officials

a. Members of the GST Council
b. Revenue Secretary, Department of Revenue, Ministry of Finance, Government of India
c. Director General (GST), Central Board of Excise & Customs
d. Commissioner (GST), Central Board of Excise & Customs
e. Joint Secretary, TRU – II, Central Board of Excise & Customs
f. Secretary, Department of Telecom
g. Revenue Secretary of Karnataka and Principal Secretary (Finance) of Gujarat
h. Commercial Tax Commissioners of Uttar Pradesh, Karnataka, Andhra Pradesh, Gujarat, Haryana and West Bengal

TSPs foresee huge accounting and IT challenges, especially in the 12 telecom circles that have multiple states within their territory as books will need to be maintained at the telecom service area level for DoT purposes and state wise level for GST purposes involving splitting of of revenues and expenses to avail input tax credits for the corresponding state wise output particularly in multi states within a single telecom service area circle and for multi telecom service area involving a single state

Even though examples of EU and Canada were given wherein telecom was kept outside the purview of provincial tax but under territorial tax due to its network architecture, our GST laws will unfortunately be making ease of doing business and compliance extremely cumbersome for telecom.

Post recommendation made by COAI and its members, the Department of Telecom also sent representations to the Revenue Secretary and to States highlighting key concerns of the industry
2. **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 submission of additional FBGs:
iii. Return of PBGs submitted under UAS/CMTS
iv. Requirement of Bank Statement vs Bank Certificate
v. Multiplicity of documentation w.r.t of TDS.

3. **International Roaming** -

Representations made to DoT that the deductions claimed by the Industry on account of pass through charges being paid to foreign operators for international roaming should be allowed.

**Key Takeaway:**
DoT constituted an internal committee under the Chairmanship of DDG- LFP to evaluate the same. DoT withdraw its earlier communication dated 9th Mar’15 disallowing the deductions claimed towards International Roaming. However, the process for allowing the deduction is still under process.

However, the process for claiming the deduction is still under process. We have submitted recommendations with regard to format for submitting information and the requirement for claiming such deduction.

Matter is under consideration by DoT and clarification is expected shortly.

4. **On line submission of documents with regard to deduction and verification** -

Although, DoT has allowed for making online payment of LF and SUC, the physical documents are still required to be submitted at the CCA office on or before the due date.

We have requested DoT that this requirement of submission of documents in physical form must be relaxed and the submission of these documents over email / upload on a portal should be allowed. Subsequently, these documents can also be sent by post to ensure the physical submission.

**Key Takeaway:**
Representation have been made w.r.t. to acceptance on line submission of supporting documents. Clarification is expected.
5. **Disallowance of adjustment of excess License Fees paid from one financial year to another financial year** -
Some TSPs providing telecom services under UAS / CMTS/ UL received notices from CCA offices disallowing the adjustment of excess LF paid from one financial year to another financial year. The same is being disallowed basis a clarification issued to the CCAs by DoT vide its letter dated 10th Jan 2012 (letter no. 1-28/2006/LF).

This does not allow our member operators to adjust the excess LF dues paid in one financial year from the dues of the next financial year. This goes against the principle of equality and level playing field as there cannot be a situation that there is different treatment for the same activity under different licenses.

**Key Takeaway:**
We requested for the clarifications allowing the adjustment of excess license fee paid in one financial year from the license fees dues of the subsequent financial year and to reopen the DVR Report of the circles wherein such LF Adjustment has been disallowed. The adjustments which have been disallowed in the past, should also be reviewed and allowed.

6. **Pre and Post Budget Recommendations** -
Representations made with regard to key issues related to Direct and Indirect Taxes sent to MoF, DoT, CII, FICCI, ASSOCHAM, etc. Certain key points represented are as follows.

**DIRECT TAXES**

A. **Non-applicability of section 206AA of the Income-tax Act, 1961 (‘Act’) where the deductee furnishes AADHAR Number to the deductor** -
Section 206AA of the Act provides for levy of higher withholding tax rate of 20% where the deductee does not furnish his PAN to the deductor and causes significant hardship to the deductees, particularly to individuals in low income group and rural areas, who do not have a PAN.

AADHAR number has been recognised as a valid means of identification and is also being used as an effective means to keep a record of the transactions undertaken by a person.

**Key Takeaway:**
Representations were made before the Government to amend the provisions of section 206AA of the Act to provide for non-applicability section 206AA of the Act where the deductee furnishes his AADHAR number to the deductor.
B. **Applicability of lower withholding tax rate discount extended to pre-paid distributors** -
Distributors of Pre-paid Products (includes SIM Cards and pre-paid vouchers – both physical and electronic form) earn a significantly low margin from distribution of such Products. While the Industry believes that discount extended to the pre-paid distributors is not subject to tax deduction at source, the tax department has been challenging the above position alleging the discount to be in the nature of commission subject to tax deduction [presently @ 5%] under section 194H of the Act, which has resulted in protracted litigation for the telecom operators and the distributors.

**Key Takeaway:**
Given the low margins of the distributors, representations were made before the Government to prescribe a low withholding rate (say 1%), which would be commensurate with the margins earned by the distributors. This would, besides increasing the tax collection of the Government, also bring the litigation faced by the Industry/distributors to an end.

C. **Clarification regarding applicability of section 32 of the Act to spectrum acquired prior to April 1, 2016; capitalisation of all capital expenditure upto the date of putting to use the acquired spectrum under section 35ABA (for spectrum acquired post March 31, 2016; and non-applicability of withholding tax provisions to spectrum sharing/trading charges** -
Significant investments have been made by telecom companies for acquisition of spectrum and the Government has also permitted trading/sharing thereof inter se between the telecom operators, which is a welcome move. While the Government has been forthcoming in addressing the concerns raised by the Industry in the past, some of the issues, which have the potential to culminate into long drawn litigation, are yet to be addressed.

**Key Takeaway:**
Representations were made before the Government to provide that
- Section 35ABA (applicable from FY 2016-17) of the Income Tax Act would apply only to expenditure incurred on acquisition of 'right to use spectrum' acquired on or after April 1, 2016 and expenditure incurred towards 'right to use spectrum', which was acquired on or before 31 March 2016, would continue to be governed by section 32 of the Act.

- Payments made in connection with the trading/sharing of spectrum are not in the nature of royalty and hence, do not attract withholding tax obligations under the provisions of section 194J the Act or any other withholding tax provisions. This would facilitate an effective implementation of spectrum trading in India and reduce/eliminate any potential tax dispute arising out of such transactions.

- Any expenditure (including interest cost on debt incurred till the date of putting to use of awarded spectrum), being in the nature of capital expenditure, incurred for acquiring any right to use spectrum should be covered by section 35ABA of the Act and deduction for the same should be allowed under section 35ABA of the Act.
D. Clarification to provide that royalty provisions under section 9(1)(vi) of the Act are not applicable to service agreements and Explanation 5 and 6 to section 9(1)(vi) of the Act cannot be read into the Double Taxation Avoidance Agreements (‘DTAAs’) Explanations 5 and 6 to section 9(1)(vi), inserted w.r.e.f. 01.06.1976, intend to bring within the purview of royalty, transmission by satellite, cable, optic fibre, or similar technology; and also, use of equipment irrespective of any actual possession or control by the user.

Payment made for anything which is widely available in the open market to all those willing to pay cannot constitute ‘royalty’ and is essentially in the nature of business income. Further, use of its own equipment/ process by service provider to provide service cannot be viewed as use of such equipment/ process by the recipient.

**Key Takeaway:**
Representations were made before the Government to clarify that the retrospective amendment is not applicable on the transactions which were entered into before the amendment which is in line with the policy of the Government.

**INDIRECT TAXES**

1. Clarification requested with regard to service tax on spectrum allotted and paid for earlier (in 2015) but possession received in April 2016

2. Representation filed w.r.t. clarification on Scope of ‘exempted service’ for the purpose of reversal of CENVAT credit.

3. Imposition of service tax on Right of Way/ access charges levied by local authorities. Services provided by Government for Right of Way should be exempted from the levy of service tax with retrospective effect.

**Key Takeaway:**
Met with JS – TRU and followed up on the following issues. Matters are pending with the Department for clarification. Notification/ circular are awaited from the Government.
COAI along with the Ministry of Communications (DOT), with support of Ministry of Electronics and Information Technology (MeitY) and Ministry of Skills Development (MSDE), Government of India, is organizing India Mobile Congress (IMC) 2017, scheduled in New Delhi on September 27-29, 2017. IMC is the definitive, single largest event intended to bring together the converging communications industry on one platform in India, to showcase, present and emerging opportunities and trends, technologies, business opportunities, applications, platforms, government policies, and initiatives. The event already has commitments from several international intergovernmental bodies and organizations to participate and showcase their country offerings and interests. With more than 500 participants (exhibitors) from key stakeholders globally, including industry, technology, academia and governments, IMC will be attracting over 5000 paid delegates and 50,000 visiting footfall from India and abroad.

For more information please visit: www.indiamobilecongress.com
1. **COAI Review Petition - Judgment on TDSAT Jurisdiction : Supreme Court**
   A petition was filed by COAI before the Supreme Court seeking review of the judgment dated December 06, 2013 passed by the Supreme Court which held that TDSAT does not have the jurisdiction to entertain the challenge to the regulations framed by TRAI under Section 36 of the TRAI Act.

   **Key Takeaway:**
   On April 10, 2017, Hon'ble Supreme Court directed the matter to be listed for arguments on the maintainability of Review Petition on August 16, 2017.

2. **Joint Industry Petition challenging hike in Infrastructure Charges by BSNL: TDSAT**
   COAI moved an application challenging BSNL Circular dated January 27, 2017 revising the Infrastructure and Space Charges for Active Links of Licensed Telecom Service Providers with effect from April 1, 2017.

   **Key Takeaway:**
   On March 22, 2017, Hon'ble TDSAT directed that BSNL shall not take any coercive steps in accordance with its Circular dated January 27, 2017 (for FY 2017-18).

3. **MCD Tower Petition: Delhi High Court**
   COAI, AUSPI and MTNL had filed a writ challenging MCD orders and praying inter alia quashing of MCD Office order dated 20.11.2003, Circular dated 07.02.2008 and office order dated 08.04.2010 as these impugned office Orders and the impugned terms and conditions are lacking in competence, ultra vires the DMC Act, unfair, unjust, unreasonable, arbitrary, without power and jurisdiction, unconstitutional and are violative of Petitioners' rights under Article 14, 19(1) (g) and 21 of the Constitution of India.

   **Key Takeaway:**
   On January 30, 2017, a mediation settlement agreement with MCD was signed by Aircel, Airtel, Idea, Vodafone, RJio, Indus, ATC Viom, GTL Infra and Tower Vision.

4. **PIL filed by Ms. Juhi Chawla seeking revision of DoT Guidelines on EMF: Bombay High Court**
   A PIL was filed in the Bombay High Court expressing concern about the increase in number of cell towers / antennas without due caution of the harmful effects of EMF radiation.

   **Key Takeaway:**
   On November 17, 2016, Hon'ble High Court informed the Counsel appearing for the Petitioner that—
I. There has been a progressive change in science as regards the harmful effects of radiation from cell towers;
   ii. There are plenty of concrete studies which evidence that the radiation from cell phone towers is not harmful;
   iii. The only issue that citizens can have against cell towers is their illegal construction, for which the necessary fora are already established.

It was brought to the attention of the High Court that the issue relating to radiation from cell phone towers is pending adjudication before the Hon'ble Supreme Court. In view of the above, the High Court adjourned the matter until this issue is decided by the Hon'ble Supreme Court.

5. **PIL on Telemarketing: Supreme Court**
   A PIL was filed in the year 2005 in the Supreme Court stating that Telemarketing by the Cell Phone companies and other companies is an intrusion of subscriber right to privacy thereby causing cost as well as inconvenience to the subscribers.

   **Key Takeaway:**
   On July 08, 2016, the Supreme Court disposed of the Petition and observed that with the change in circumstances, grievances raised in the Petition have also changed.

6. **Petition on SUC Calculation by CCAs for 5 MHz Radio Spectrum in 2100 MHz Band: TDSAT**
   A petition was filed by COAI challenging the demand letters from CCAs whereby DoT has wrongly rejected the Telecom Service Provider’s (TSP) calculation of Spectrum Usage Charges (SUC) for 5 MHz Radio Spectrum in 2100 MHz band, which is incorrect, unreasonable, and violative of DoT’s own letters, NIA conditions dated 25.02.2010, TSPs' contractual rights and their rights under Articles 14, 19 (1) (g) and 21 of the Constitution.

   **Key Takeaway:**
   On May 30, 2016, TDSAT allowed the TSPs to pay the SUC as per the calculation provided by TSPs in the Petition till DoT apprises TDSAT about the principle of calculation of SUC adopted by DoT.
Pursuant to the EC Mandate on enhancing the thought leadership and brand building, COAI undertook concerted media advocacy and stakeholder outreach to support the facilitation and creation of a stable regulatory policy environment which has a long term view and enables both innovation and investment.

- Builds and creates visibility for the industry
- Shares the telecom success story

COAI’s role as the industry thought leader was enhanced in the preceding year, with the Association emerging as the official voice of the 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. Ask the difficult questions, make timely interventions and build and create third party voices.

The Association has built on its image of being an approachable entity that has expertise in all aspects of telecommunication and internet 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 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.

Demonetisation, announcement on industry consolidation, EMF, GST got maximum media attention. The association was able to reach out to all relevant stakeholders including media, government, and consumers and educate them through stories in the media. The big interventions centered around the need for a level playing field and stable policy environment.

Another issue that the association engaged with through the year 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 of people regarding mobile towers. To achieve this, COAI reached out to the people at the ground level and engaged the relevant government departments, media, medical professionals, and 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 more than adequate safety regime adopted by government and ensured by the industry.
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<th>Key Issues</th>
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<th>ADV Value + Reach (Readership)</th>
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<td>Financial Health of the Industry</td>
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<td>INR 46 lakhs</td>
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<td>Demonetization</td>
<td>273</td>
<td>INR 1.0 crore</td>
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<td>EMF</td>
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<td>Media-Year Ending</td>
<td>15</td>
<td>INR 10 lakhs</td>
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**SIGNIFICANT ACTIVITIES WHEREIN COAI ACHIEVED WIDESPREAD MEDIA ATTENTION**

**EMF awareness program in Jaipur**

The Department of Telecommunications (DoT), Ministry of Communications, Govt. of India, organized a public outreach and awareness program on EMF and telecom towers in Jaipur, Rajasthan. The two-day exercise was organized with the objective to dispel misplaced concerns around EMF. 102 coverage was garnered across print, online and electronic.

The workshop-cum-awareness program was attended by Minister of State for Telecom (Independent Charge), Sh. Manoj Sinha as Chief Guest and Secretary, Department of Telecom, Sh. J. S. Deepak and other top level ministers from Government of Rajasthan.

This provided the opportunity to educate the media and the consumers about the facts around EMF exposure and also to leverage the image of a responsible government, which actively engages with citizens and the media on such emotive issues.

A wide-reaching media exercise successfully drove home the message that mobile tower emissions do not cause any harm. With positive and analytical coverage in popular and widely-read publications like Rajasthan Patrika, Dainik Bhaskar, The Times of India, Hindustan Times, DNA, Dainik Navjyoti, Punjab Kesari. Rajasthan Patrika did three stories on the awareness session and the coverage in this leading daily is important as it has had maintained a consistent negative stand over the subject in the past.
• Twitter Trending for more than 4.5 hours - #MobileTowersAreSafe
• People started re-tweeting and quoting tweets put up on Mobile Towers Are Safe handle resulting into the hashtag trending
• Along with #MobileTowersAreSafe, EMF Emissions and Telecom Towers was also listed in the trending topics list.
An Awareness Programme on EMF Emission in Guwahati

The Department of Telecommunications (DoT), Ministry of Communications, Government of India, organized a public outreach and awareness program on EMF emissions and telecom towers in Guwahati. The two-day exercise was organized with the objective of dispelling unfounded concerns around EMF. To this end, the awareness programme was followed by an EMF test drive on the second day in the presence of telecom experts and media. The programme provided an opportunity to educate the media and the consumers about the facts around EMF exposure and also to leverage the image of a responsible Government, which actively engages with citizens and the media on emotive issues.

The media outreach exercise ensured that the message, 'mobile tower EMF emissions (radiation) are not linked to any harmful impact on human health' was delivered in all major mainstream media including regional and financial publications. Positive and prominent coverage in popular and widely-read relevant publications like The Assam Tribune, Asomiya Pratidin, The Shillong Times, Mowphor, The North-East Times, Newslink, etc. reached the public in Meghalaya, Assam and other regions, which have seen major concerns around the issue of EMF. Moreover, coverage of the event by regional publications, including Assam Tribune, Asomiya Pratidin, Shillong Times, Mowphor etc ensured that the messaging was delivered to the far-flung corners of the state. For larger impact, there were journalists from Mawphor and Nongsain Hima, two major publications from Shillong who also attended the event. They also had separate interactions with DoT Secretary to understand the details on EMF Emissions.

Impact Generated -

- No.2 India Trend #MobileTowersAreSafe
- Total reach: More than 29,16,241 readers
- Tweets - 1,274
- Original tweets: 386
- Re-tweets: 299
- Replies – 219
- links & pics - 397
- Reach: 2,156,935 (4 million)
- Impressions: 9,655,877 (15 million)
Demonetisation -
Major development pertaining to the Government of India announcing the demonetisation of all Rs 500 and Rs 1,000 notes. Press Release was issued on behalf of COAI thanking the Modi Government for allowing prepaid mobile users to continue top-up payments with old Rs 500 notes. Around 273 coverage appeared across all platforms.

Announcement on industry consolidation -
COAI initiated media interactions during the announcement of Vodafone-Idea merger, which include PTI, The Economic Times, Business Standard, Ananda Bazar Patrika, Loksatta and ANI TV. Around 150 coverage appeared across 13 cities. All the major newspapers carried the statement and views of COAI. The Economic Times mentioned Mr. Mathews’ statements in four stories, including the front page lead story. Two news channels – CNBC-TV18 and ET NOW did LIVE show with Mr. Mathews post the announcement.

Media interactions of DG, COAI: Select interactions of leading media houses were organised with Mr. Rajan S. Mathews. Various industry issues were discussed by the journalists and Mr. Mathews. Interactions were conducted with The Economic Times, Business Standard, Mint, The Hindu Business Line, The Hindu, Business Today, Reuters News 18, Eenadu, Wall Street Journal, Dainik Jagran, cogencis and positive coverage received. The objective of these interactions was to highlight COAI’s views on a multitude of issues in the telecom industry.

An Awareness Programme on EMF Emission in other cities -
A wide-reaching public and media exercise ensured the message that mobile tower radiation is not linked to human health was delivered, in other cities (Hyderabad, Kochi, Mumbai, Bengaluru, Chandigarh). Coverage in popular and widely-read relevant publications like The Times of India, Hindustan Times Deccan Chronicle, The New Indian Express, The Shillong Times, The Hans India and Daily Post, which has seen major concerns around the issue of EMF. Overall around 100 coverage were garnered.

Gwalior Telecom Tower Crisis – SC Interim Order -
Supreme Court has ordered shutting down of a BSNL mobile tower in Gwalior on the plea of a 42-year-old cancer patient. The tower was actually asked to remove for not having enough permission from the Municipal Corporation. The Times of India, Delhi picked-up the story but mentioned the reason wrong and it said that the petitioner blamed the radiation from mobile tower for his cancer. The story appeared on the first page in all editions. Team arranged interactions with TV9 and sourced opportunity of panel discussion at Mirror Now news channel. Next day, Telecom Minister Shri Manoj Sinha quoted that mobile towers don’t cause cancer and PTI ran the story after few hours. Awareness through media was done in major cities. An exclusive interaction was planned with The Times of India and shared all the relevant facts with the journalist. Next day, the national daily published the story with positive tone and online media picked the story. Team also connected with all the key journalists and shared the actual facts on mobile tower radiation. Almost all the media carried messages of COAI and the Minister.
Budget Recommendation for the financial year 2017-18 -
COAI through a statement and interaction submitted its recommendations for the Union Budget for FY 2017-18 to the Ministry of Finance, Government of India, on behalf of its members, representing the telecom service providers. Top demands included, lower and uniform rates of tax for telecom services and concerns around determination of tax liability under GST. The activity generated media coverage across print and online media.

Media visibility on Year-ending Stories -
Team explored Year-ending story around the sector, PTI did a story, which was carried by key print and online media. Year-ending articles also got published in Business world (online), Express Computer and Tele.net.

Launch of Tarang Sanchar
The Department of Telecommunications (DoT), Ministry of Communication, Govt. of India, launched Tarang Sanchar, a web portal for sharing information on mobile towers and EMF emission compliances. The portal was launched by the Hon'ble Minister of State for Communications (Independent Charge) and Railways, Shri Manoj Sinha, in the presence of DoT Secretary, Shri P.K. Pujari, Shri R S Sharma, Chairman, TRAI, Shri G.K. Upadhyay, Member-T, DoT and several other dignitaries from the Government and the industry. The objective of the event was to make the EMF emission compliance transparent thereby gaining public trust and clearing the misconceptions around EMF emissions from mobile towers. A wide spread media campaign was undertaken to spread the message that information related to mobile towers will now be completely accessible to the general public and Tarang Sanchar will usher in a new era of transparency in the telecom industry. Extensive media outreach helped in getting the event and its messages covered in major publications including all leading mainlines, regional, online as well as electronic channels. Coverage in top of the line publications like The Economic Times, The Financial Express, Hindu Business Line, Rajasthan Patrika, Nav Bharat Times, Dainik Jagran, Amar Ujala, Deccan Herald, New Indian Express, CNBC Awaaz, Aaj Tak, Zee Business etc has appeared reaching out to the audience across the country.
World Telecom Day

Cellular Operators Association of India (COAI) organised panel discussion on the occasion World Telecommunication and Information Society Day on 17th May with eminent speakers on the panel. The theme of the day was Telecom, Internet & Connectivity: Accelerating Human Development in India - Big Data for Big Impact 2017. The discussion broadly discussed the role of Telecom in accelerating human development, the need for a stable policy and the achievements of the telecom industry.

The panel had a mix of eminent speakers from various genres including Government, Telecom, IT and Academia. The media was invited for the panel discussion and post event interactions were organised for the speakers highlighting the need for stable long – term, predictable policy environment which facilitates affordability, growth, innovation and investments.

On twitter the Hashtag #COAICelebratesTelecomDay was one of the most trended topic for the day
COAI celebrates the World Telecom Day with a billion salutes to billion connections

The number of subscribers in India has increased from 280 million to 1.15 billion.

Over 580,000 towers have been installed to build a world-class telecom infrastructure.

India has overtaken the US as the world’s second-largest consumer of mobile data, consuming 80 billion gigabytes across the country.

The telecom sector has generated 10.2 million jobs, including 8.5 million jobs in the telecom sector.

More than a billion people use the telecom sector, with over 1.1 billion connected devices globally.

Telecommunication Milestones

Mobile towers emit very low frequencies. Over 25,000 papers & several studies by WHO prove that there is no evidence of any harmful impact on babies, elderly, as well as expecting mothers.

Mobile towers are completely safe and can therefore be installed near schools, parks, residential areas, and also in the proximity of hospitals.

Government of India, DoT regularly monitors and tests the radiation levels and emission. They have very strict norms hence citizens have nothing to worry.

Use of pesticides, loss of habitat, loss of nesting places, and unavailability of food has led to a decline in the visibility of sparrows and other birds. There is no scientific evidence linking mobile towers to their disappearance.

COAI extends warm greetings to all the consumers on behalf of its members, on the occasion of World Telecom Day, 2017.

COAI Website: http://coai.org | COAI Facebook Page: https://www.facebook.com/COAIIndia | COAI Twitter Handle: https://twitter.com/COAIIndia

Quote Unquote

I see a great future of the telecom sector in this country with the Digital India program and the JAM Tryst.

The telecom industry has ushered in the digital revolution in the country and remains committed for a fully connected and digitally empowered India.

The Government of India has allowed the verification through fingerprint e-KYC for new connections.

Ronan S Mathews, Director General, COAI
“It’s Becoming a High-Volume, Low-Margin Game”

Rajan S Mathews, director general of the Cellular Operators Association of India (COAI), has had an action-packed stint as head of the telecom industry body since 2010. The honeymoon was over a long time ago, he says in a lighter vein when asked about how the intense fight between Jio and the Airtel-Vodafone-Idea combine has shattered the peace within the COAI family.

In an interview with Rajive Singh in his nondescript office on Bhai Veer Singh Marg in central Delhi, Mathews says he is used to handling flaring tempers. But it’s COAI itself that is now facing the heat. Jio has accused the telecom body of siding with Airtel, Vodafone and Idea. There’s tension on other fronts as well: telecom handset makers have rubbished the theory of sub-standard handsets leading to call drops, and the Reserve Bank of India has warned banks against their exposure to the telecom sector, which is sitting on a debt pile of over Rs 6.6 lakh crore, editor’s excerpt:

How do the first four years differ from the last 12 months of your tenure?

Mathews: It was never a substantial issue in spite of the fact that there was always dissatisfaction. Moreover, the first four years were more about being reactive: 2G scam, auction, Supreme Court order of spectrum cancellation, rising ambition, competitive pressure... The last 12 months have been more about finding a middle ground among the members and maintaining a balancing act. Now we are more proactive.

But you have been accused of being biased by one of your own members...

Mathews: If you want to find a common element and focus on that, 5G% of things that we do are with common consent. Unfortunately, it’s the first that we clarified. We have been relatively successful in doing two things: keeping the members together and focusing on key issues. If we stay together and work together, we can achieve much.

Don’t you think that COAI is facing an existential challenge? CO has never seen that...

Mathews: The COAI is a unique entity. We have been through several existential crises. This isn’t the first one. The first major crisis happened when 10% of foreign investors decided to leave. Then we went through litigation, and then the COAI crisis happened. Several members moved on. Another couple of crises happened. We think a terrible crisis. But we worked through it. In 2018, SC canceled licenses of five of our members. That was another crisis. We survived that.

The telecom sector is under huge financial stress and is sitting on a debt pile of over Rs 6.6 lakh crore. We have been talking about this but the situation has worsened over the last several months. But it started way back in 2012-2013 when spectrum auctions started. Revenue story didn’t match with upfront payment. Then there was the issue of re-farming of spectrum, when the government took back spectrum and invited bids again. It was a double whammy. By the end of the day, the disinvestment was not attractive. And then the demand came in, for the nine months or so, we saw 20% growth. 20% of our revenue goes to the government and so even now government is concerned. Banks, equipment manufacturers, vendors are equally concerned.

Do you see more consolidation on the segment in the telecom segment post-Vodafone-Idea merger?

Mathews: I see one or two dozen players currently. COAI has six core members. There won’t be room for smaller ones. It would be very tough for them. If even Vodafone and Idea are finding it difficult, you can imagine what a new entrant or a smaller player would find. So Airtel, Jio, Vodafone-Idea, BSNL-MTNL, and maybe another possible candidate could be the big players in the segment. It’s becoming a high-volume, low-margin game. Even in Europe and US, it’s almost the same scenario of consolidation. So telecom operators have to think of various ways to monetize data and look at other issues.

What about call drops? Is it about the re- certification of towers?

Mathews: Yes, it’s a crucial issue. But it’s not that we are not doing anything to solve it. A part of the problem is that the availability of the spectrum is not granted to install more towers. We are getting delayed as they try to extract more from us. Then there is the issue of people having misgivings about radiation from towers. We have spent over Rs 4000 crores on people about this issue. But we believe in mitigating it.

You have decided to roll out your own version of Mobile Congress in India. What was the trigger?

Mathews: The World Mobile Congress is a great place to be but it was very Western focused. It was big gifting of how to spend money. On the other hand, we have another one in Mumbai, which was more focused on the Indian scenario. Neither of those was relevant to the people here. Even when the world was talking about net neutrality, we thought that was going to connect the next billion here in India. That’s a different set of dynamics and challenges. So we wanted to have a forum which could address our own concerns. We are trying to take the best of Barcelona and the annual sense of the World Mobile Congress and trying to take it to the needs of this part of the world. Why can’t the second largest mobile market in the world have its own marquee event?
On this World Telecom Day, COAI Celebrates. India has 1 bn plus subscribers, this is awesome.

Today, we have billion people connected with each other. Thanks to telecom resolution, COAI Celebrates Telecom Day.

one of the most important components of human development is #telecommunication.

Need to say a big thank you to telecommunications for improving people’s life.

With more than 1 billion subscribers, India’s telecom sector is 2nd largest in the world. COAI Celebrates. India now has 1 bn plus subscribers.

A great World Telecom Day, amazement is here. COAI Celebrates TelCom Day.

Truly the masterful World Telecom Day to emulate as COAI salutes the journey of Telecom.

Thanks to Telecommunications for improving people’s life.

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