TDSAT Seminar on ART (Adjudication, Regulation, Telecommunication) of Convergence

Event report
6–7 February 2016
The Telecom Disputes Settlement and Appellate Tribunal (TDSAT), in association with knowledge partner EY, is proud to present the report on the seminar – ART (Adjudication, Regulation, Telecommunication) of Convergence. The report aims to help the policy makers to take care of legal impediments to usher the next phase of growth for the telecom and broadcasting sectors as well as the overall digital economy.

India is one of the fastest-growing and the second-largest telecom market in the world with more than 1 billion subscribers. It is also the third-largest television market globally. Currently, the rising digital quotient in India has transformed the way we live and communicate, and further progress in the sector is expected to drive the next phase of economic growth in the country. The role of telecom and allied services in the country has expanded significantly from being a provider of vanilla connectivity to becoming an instrument of socio-economic transformation. The resultant benefits transcend sectors. India has taken several measures to upgrade its communication infrastructure, improve connectivity, drive internet adoption, and boost the telecommunications and broadcasting ecosystem.

However, given the pace of growth, it is imperative that the policy makers, regulators, service providers and adjudicatory bodies are on the same wavelength to be in a position to cope with and create a congenial environment for such growth. This report highlights some of the key impediments faced by the industry and elaborates on the evolution of policies required to address these issues. It aims to capture input from a wide range of stakeholders encompassing telecom service providers, content broadcasters, lawyers, – as well as industry associations and practitioners.

We hope the discussions from this seminar will help catalyze Government action toward formulation of policies, which are in sync with the changing sector dynamics. We thank the participants for their valuable contributions and are grateful to them for sharing their perspectives. We also thank the team from EY, who have coalesced the discussions from the sessions, and have helped us put this report together.

Justice Aftab Alam
Chairperson
TDSAT
he Telecom Disputes Settlement and Appellate Tribunal (TDSAT) and EY have collaborated to prepare this event report on the seminar — ART (Adjudication, Regulation, Telecommunication) of Convergence. The report focuses on issues discussed and deliberated during the two-day conference, especially around India’s regulatory and adjudicatory mechanism to pave the way for the next generation of reforms in the telecommunications and broadcasting industry.

Today, India has the second-largest telecommunications market and the third-highest number of internet users in the world. Driven by increasing digitization and the rise in internet usage over the last decade, the broadcasting sector is also growing alongside the telecommunications industry. The rapidly evolving digital economy is expected to contribute substantially to the country’s GDP over the next few years.

To aid this development, the Government of India has taken several initiatives, such as the launch of “Digital India” program – an ambitious and robust blueprint for transforming the digital identity of the country. Another significant initiative is the 100 smart cities project, which aims to improve quality of life by leveraging technology. Furthermore, the Government has undertaken key reforms such as the “Make in India” initiative, rolling out high-speed Wi-Fi across 2,500 cities, spectrum sharing and trading guidelines, digitizing the cable sector, and increasing the FDI limits to 100% for cable and satellite platforms, among others.

The advent of 4G services, healthy growth in the number of 3G and 2G subscribers, and continuous efforts by various digital ecosystem players under the Digital India initiative, are contributing to the industry’s growth. However, given the advancement in technology in the broadcasting and telecommunications sectors, India’s regulatory and adjudicatory systems need to evolve in parallel with the industry.

This report puts forward the legal and regulatory issues plaguing the industry and discusses the possible solutions to overcome the existing and the emerging challenges. It also highlights the role that different stakeholders can play in the ecosystem to drive the next wave of growth in telecommunications and broadcasting sectors.

We thank the industry leaders for sharing their valuable contributions in the seminar and for making this event a huge success. We hope that the recommendation of this report will help in formulating our policies in the future and creating a more enabling environment for a longer and more sustainable growth of the industry. We would also like to express our heartfelt gratitude toward the team from EY, our knowledge partner, who have helped us in developing this report.

Dr. Kuldip Singh
Member, TDSAT

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The Telecom Disputes Settlement and Appellate Tribunal (TDSAT) successfully organized the seminar on the ART (Adjudication, Regulation, Telecommunication) of Convergence. It is our privilege to present this insightful event report on the two-day seminar, which was represented by the judiciary, government, industry leaders and the academia. The report aims to highlight key focus areas affecting the regulatory and judicial environment in the Indian telecommunications and broadcasting industry. Furthermore, it puts forward actionable recommendations to solve the industry’s challenges and unleash the next digital revolution in the country.

The Indian telecommunications sector has a base of more than 1 billion mobile phone subscribers and more than 300 million internet subscribers. In the broadcasting sector, 826 private satellite TV channels are registered with the Ministry of Information and Broadcasting and 246 private FM Radio Stations cater to the entertainment and information needs of the people. This is in addition to the omnipresent Doordarshan and the All India Radio. Furthermore, with exciting innovations and spectacular progress in technology and service delivery, the communications sector is always experiencing remarkable changes.

The digital ecosystem has radically changed the way people communicate by giving the consumer an active role, along with a multitude of choices. Nevertheless, the emergence of innovative technologies and new business models has repeatedly posed more complex challenges to the regulator. Therefore, in this fast-changing, constantly evolving and dynamic sector, new policies and regulatory paradigms have to continually emerge to facilitate growth. The theme of this seminar, therefore, is not only contemporaneous but also assumes considerable importance in this context.

It is imperative that we identify and understand the challenges facing the industry to enable policy makers, regulators and adjudicatory bodies overcome the same. This report presents the key recommendations that can aid the industry in preparing the future road map of the industry apropos the policy, regulation and adjudication in a converged ecosystem.

We wish to express our gratitude to the industry leaders who participated in the seminar and helped us to present the industry’s perspective. We also thank EY, our knowledge partner, for developing this detailed report capturing the key highlights of the seminar.

B. B. Srivastava
Member, TDSAT
EY is proud to be associated with the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) to put forth this report on the key findings and recommendations from the seminar on “ART (Adjudication, Regulation, Telecommunication) of Convergence”. Aimed to act as a platform to bring together different stakeholders of the emergent digital ecosystem, the seminar is expected to bring forth actionable recommendations on its regulation via inclusive discussions and deliberations.

The convergence between technology, entertainment, and information, is transforming the telecommunications and broadcasting sector in India. The industry has evolved over the last two decades and has seen a significant shift in consumer preferences, emergence of innovative business models and shifting regulatory structures. With this progression it is imperative that the regulatory frameworks keep pace. Coalesced from the thoughts and ideas of the participants of the seminar, the report aims to highlight the key challenges in the current regulatory and adjudicatory scenario, and provide inputs for their redressal.

The report presents insights based on the views of the panelists, which the Government can incorporate into the new policy framework, to ensure equitable and inclusive growth of the industry. This report includes views from regulators, telecom operators, broadcasters, industry associations, content and value added service (VAS) providers, as well as legal experts. It is essential for policy makers to look at impending regulatory issues to devise a policy that can act as an enabler for overall telecommunications and broadcasting ecosystem in the country.

I take this opportunity to express my gratitude to industry members who debated the issues and helped us formulate recommendations. I would also like to congratulate TDSAT for the success of the seminar, and thank various stakeholders for their enthusiastic participation, which made the event a huge success.

We hope you find this report interesting and informative.

Prashant Singhal
Global Telecommunications Leader
EY
About the seminar

The Telecom Disputes Settlement and Appellate Tribunal (TDSAT) organized a seminar on the ART (Adjudication, Regulation, Telecommunication) of Convergence on 6 and 7 of February 2016 at The Ashok, New Delhi. This seminar provided a platform to bring together the Government, policy makers, adjudicatory body, and service providers to deliberate suggestions to prepare for challenges that arise with a converging digital environment.

The seminar was inaugurated by Shri Arun Jaitley, Honorable Finance Minister, Government of India. Honorable Judge of the Supreme Court of India Justice J. Chelameswar presided over the function and Shri Mukul Rohatgi, the Attorney General of India was the guest of honor. The Honorable Finance Minister, who also holds the charge of Information and Broadcasting Ministry, expressed the need for an adjudicatory mechanism for telecommunications and broadcasting, which has to be agile and responsive to deal with emerging challenges. He spoke about the importance of TDSAT, which, with its institutional experience and ability, has been playing a critical role in devising solutions for the industry.

During two days, the seminar discussed various legal and regulatory aspects in the telecommunications and broadcasting industry – dealing with a fragmented adjudicatory mechanism, digitizing the governance procedures, giving more power to the tribunal, and addressing the issues associated with the adoption of high speed broadband. Apart from these, the seminar also touched upon the net neutrality debate, given its implications in the growth and spread of internet.

The seminar also emphasized on the importance of eliminating the digital divide to help citizens reap benefits from the Digital India initiative. Public private partnerships, innovative business models, emerging technologies and a standardized regulatory framework are the need of the hour to develop a robust digital infrastructure. The connected digital network that will emerge from such efforts has the potential to become an instrument of socio-economic transformation, and the resultant benefits will transcend sectors.

The seminar carried the support of key government and industry bodies – Department of Telecommunications (DoT), Department of Telecommunications and Information Technology (DeitY), Telecom Regulatory Authority of India (TRAI), Honorable Justices from the Supreme Court and High Court, and esteemed representatives of the industry. EY was the knowledge partner for the seminar.
The Telecom Regulatory Authority of India Act, 1997 was amended by the Telecom Regulatory Authority of India (Amendment) Act, 2000. The amendments were introduced to resolve the issues that emerged from the implementation of the Act. The desired objectives of bringing about functional clarity, strengthening the regulatory framework and the disputes settlement mechanism were attained by bringing about a clear distinction between the recommendatory and regulatory functions of the Telecom Regulatory Authority of India (TRAI) by making it mandatory for the Government to seek recommendations of TRAI in respect of specified matters and by the setting up a separate dispute settlement mechanism etc.

An Appellate Tribunal known as the “Telecom Disputes Settlement & Appellate Tribunal” has been set up under Section 14 of the Telecom Regulatory Authority of India Act, 1997 as amended by TRAI (Amendment) Act, 2000 to adjudicate disputes and dispose of appeals with a view to protect the interests of service providers and consumers of the telecom sector and to promote and ensure orderly growth of the telecom sector. The Appellate Tribunal came into existence on 29 May 2000 and started hearing cases from January 2001.

The functions of the appellate tribunal are to adjudicate any dispute between a licensor and a licensee, between two or more service providers, between a service provider and a group of consumers, and to hear and dispose of appeals against any decision or order of TRAI, DoT and MIB. The appellate tribunal consists of a Chairperson and two Members.

The Government of India brought the broadcasting sector also in the ambit of telecommunications through a notification in 2004. This decision significantly enhanced the scope of work of TDSAT, and was perhaps the first step toward convergence of the two sectors.
The seminar was supported by the following

**Telecom Lawyers Association (TLA):** The Telecom Lawyers Association is a body of legal professionals practicing law and policy matters relating to telecommunications and broadcasting sectors.

**Association of Unified Telecom Service Providers of India (AUSPI):** Constituted in 1997, AUSPI is a registered society that works as a non-profit organization with the aim of delivering improved access to, coverage of and tele-density in India. It is the representative industry body of unified access service licensees providing CDMA and GSM mobile, fixed line and value-added services across the country.

**Cellular Operators Association of India (COAI):** Established in 1995, COAI is a registered, non-profit, non-governmental society dedicated to advancement of modern communication through the establishment of a world-class cellular infrastructure. Over the years, COAI has emerged as the official voice of the Indian GSM Industry and interacts directly with ministries, policy-makers, regulators, financial institutions and technical bodies. It provides a forum for discussion and exchange of ideas between these bodies and service providers, who share a common interest in development of cellular mobile telephony.
Communication Multimedia & Infrastructure Association of India (CMAI): CMAI is an integrated professional registered association in India for ICT, education, cyber security, communications, multimedia, manufacturing industries and infrastructure sector with more than 48,500 stakeholders as its members.

National Association of Software and Services Companies (NASSCOM): Established in 1988, NASSCOM is a trade body and the chamber of commerce of the IT-BPM industry in India. NASSCOM is a global trade body with more than 1,800 members, which include both Indian and multinational companies that have a presence in India. NASSCOM’s member and associate member companies are broadly in the business of software development, software services, software products, consulting services, BPM, e-commerce and web services, engineering services and animation and gaming. NASSCOM’s membership base constitutes more than 95% of industry revenues in India and employs around 3.5 million professionals.

Towers and Infrastructure Providers Association (TAIPA): TAIPA is the body of infrastructure providers who service telecom operators. It plays an active role in deliberations with ministries, policy-makers, regulators, financial institutions and technical bodies for promotion and growth of telecom infrastructure and telecom services.

Zee Entertainment Enterprises Limited (ZEEL): is one of India’s leading television, media and entertainment companies. It is among the largest producers and aggregators of Hindi programming in the world, with an extensive library housing more than 210,000 hours of television content. Through its strong presence worldwide, Zee entertains more than 959 million viewers across 169 countries.
## Post-seminar recommendations

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| Adjudicatory mechanism – issues and way forward | ▶ The law needs to be amended to bring more clarity regarding jurisdictional powers of TDSAT mandated in the TRAI Act apropos writ jurisdiction of the High Court.  
▶ A separate mediation center is required for resolving minor cases, both pre-trial as well as post-trial, which do not require the specialized expertise of the judges of the Supreme Court.  
▶ The original character of the TDSAT needs to be restored; in addition whether certain types of disputes should be entrusted to TRAI for resolution in order to improve the efficacy of the overall adjudicatory mechanism.  
▶ There should be a fully integrated electronic tribunal and innovative technologies should be used to deal with cases rapidly and efficiently.  
▶ Training should be provided to all the stakeholders in the sector to eliminate the digital divide.  
▶ Regulations need to be updated in accordance with the changing technology. |
| Regulatory and licensing regime in a converged environment | ▶ Frame a simplified, resilient and comprehensive convergence law and regulation encompassing all activities and sections of the industry, which are currently governed by myriad laws and regulations.  
▶ There needs to be a clear and well-defined separation of regulatory and adjudicatory powers, with the adjudicatory powers vested in an independent authority.  
▶ Have strategic spectrum under the control of the Government, while the commercial spectrum should be under the control of the regulator.  
▶ There needs to be separate mechanisms for content and carriage regulation, with independent bodies for each of them.  
▶ There needs to be converged licensing regime for telecommunications and broadcasting.  
▶ The governance mechanism should be digitized and the processes should be made simpler to use.  
▶ The last mile cable network should be leveraged to provide broadband services.  
▶ The existing laws should be amended keeping in mind their compatibility with other regulations and processes.  
▶ Legislations should be made technology agnostic to provide a level playing field for all the stakeholders. |
| Content distribution in next generation networks | ▶ There should be clear, defined and uniform regulations for broadband, net neutrality, advertising, patents, and competition and pricing matters.  
▶ Net neutrality should be ensured to safeguard the interest of all stakeholders in the internet ecosystem.  
▶ A suitable patents and copyright system should be developed for India keeping in mind the specific concerns of the domestic industry.  
▶ The industry should not be over-regulated, since it may dis-incentivize stakeholders and hamper the interests of both the content creators and the consumers.  
▶ The behavior of the stakeholders in the industry should be regulated instead of the economics of the industry, since regulation of the latter destroys business models while the former adds to both the consumers' and the industry's welfare. |
### i-way of the Future (M2M, IoT, Digital India, Smart Cities)

- The challenge of slow implementation should be overcome through enhanced co-ordination among the stakeholders and the policy makers.
- A broadband highway needs to be built that ensures accessibility of high speed internet for everyone.
- Cyber security and privacy issues that arise due to the cross sector convergence and have standardized legislations for dealing with it needs to be addressed.
- A pro-active approach needs to be followed in policy making to speed up the creation and adoption of the next generation highway infrastructure.
- There should be a conducive business environment through policies that incentivize entrepreneurs and private participation.
- The expertise of the private sector should be leveraged.
- Start-ups needs to be encouraged to develop their capabilities and help build a compact, connected and coordinated network of smart cities.

### Regulatory issues in broadcasting and distribution sector

- There should be a separate Broadcasting Policy analogous to the National Telecom Policy.
- The Government needs to ensure that the amendments in existing regulations do not lead to confusion and ambiguity with regard to the original objectives of the legislations.
- A more effective consultation process should be designed so that the stakeholders do not need to resort to the adjudicatory system.
- There should be a more pro-active approach on the implementation of recommendations of the policy makers.
- Existing laws and regulations should be enforced more stringently before drafting new ones.
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Valedictory session

Glossary
Inaugural session
The inaugural session of the ART of Convergence seminar was an endeavor to bring policy makers, adjudicatory bodies, and service providers together and deliberate upon the issues plaguing the telecommunications and broadcasting industry. Six panelists, including Shri Arun Jaitley, Honorable Minister of Information & Broadcasting and Finance; Justice J. Chelameswar, Judge, Supreme Court of India; Justice Aftab Alam, Chairperson, TDSAT; Shri Mukul Rohatgi, Attorney General of India; Shri B.B. Srivastava, Member TDSAT and Shri Manjul Bajpai, President, Telecom Lawyers Association, spoke at the inaugural session. The two-day seminar stressed the need for an effective adjudicatory mechanism to address the concerns and challenges that emerge in a converged environment.

The panelists covered an exhaustive range of topics relating to the convergence of the telecommunications and broadcasting sectors – overcoming the existing segregation between licensing, registration and regulatory mechanisms, Foreign Direct Investment (FDI) in the industry, the role of the sectors in the Digital India and Smart Cities initiatives and the solutions and the way forward to develop a smooth roadmap for the rapid growth of the sector. The speakers agreed that such conferences are critical to bring about the much-needed regulatory reforms in the industry and strengthen the legislative and adjudicatory mechanism to make the entire system more predictable and transparent for investors. They welcomed the discussions and sought extended engagement of multi-stakeholder participants.

Dignitaries

Mr. Arun Jaitley  
Honorable Union Minister of Finance, Corporate Affairs and Information & Broadcasting

Honorable Mr. Justice J. Chelameswar  
Judge, Supreme Court of India

Honorable Mr. Justice Aftab Alam  
Chairperson, TDSAT

Mr. Mukul Rohatgi  
Attorney General of India

Mr. B.B. Srivastava  
Member, TDSAT

Mr. Manjul Bajpai  
President, Telecom Lawyers Association

"Welcome address by Mr. B. B. Srivastava, Member, TDSAT"

TDSAT, who plays an important role as adjudicator in ensuring fair play and justice among various stakeholders, has taken this initiative to discuss recommendations, issues and thought processes of the policy makers and regulators. With exciting innovations and the spectacular advancements in technology and the service industry, the telecommunications sector has experienced a remarkable change. Communication is no longer in silos confined to voice or limited to data, broadcast and video. Digital communication has radically changed the way people communicate by giving the consumer an active role along with a multitude of choice. The emergence of new smart and connected devices has provided consumers ubiquitous connectivity. In the times to come, the access to online services is likely to become vital for our socio-economic existence.

Hence, in this fast-changing and dynamic environment, new policy making and regulatory paradigms have to emerge to facilitate growth. It is imperative that all the stakeholders are on the same wavelength to be in the position to create a congenial environment for growth. I am sure this seminar will bring forth some ideas for the future of the roadmap concerning policy, regulation and adjudication in a converged ecosystem of communications.

The theme of the seminar – ART of Convergence – is not only contemporaneous but also assumes considerable importance in this context. I would like to quote Dr. Liza Pujji, Consultant Network Strategies “with evolving technology and new services, policies and regulations will also need to evolve in order to prevent problems upstream instead of providing the ambulance at the bottom of the cliff.” Perhaps it is close to the age old adage in Hindi Agra Sochi Sada Sukhi.”
Honorable Mr. Justice Aftab Alam, Chairperson, TDSAT

The computer and the mobile phone are the two inventions that have transformed the way humans live. However, the mobile phone, added with technological convergence has brought about far more pervasive and deep-rooted changes than the computer. Apart from being a handy device for instant worldwide communication, it provides access to information like never before in the history of mankind. The growth of the telecommunications industry has been one of the most successful stories in India in the 21st century. The exponential growth in the number of mobile phones and one of the lowest service rates in the world have been the significant aspects of this development.

This seminar is meant to take stock of the progress made by the telecom services in India, to share views with regards to current challenges and to chart out a path forward. The development of technology in the telecommunications sector is so fast that it needs, perhaps more than any other sector, a swift resolution of disputes. However, several important issues in the sector have remained unresolved for many years – the case of defining the adjusted gross revenue (AGR), permitting code division multiple access (CDMA) operators to use global system for mobile communications (GSM) technology, the dispute regarding port charges for interconnections, or the 3G intra-circle controversy.

Among these, the issue of AGR best highlights the perils of delay in settling fundamental contentious matter in the industry. The dispute had come to the tribunal around 13 years ago and instead of getting judicially settled, the case still lies in different High Courts. Furthermore, during the last 13 years, it has given rise to several ancillary issues that are now coming to the TDSAT. This has implications worth billions of rupees for both the government and service providers.

TDSAT’s jurisdiction has been fragmented further with Supreme Court’s ruling in cases stipulating that any challenge to the regulations framed by the Telecom Regulatory Authority of India (TRAI) is beyond the jurisdiction of TDSAT. Moreover, there are other cases in which the TDSAT is bypassed altogether, as issues pertaining to the sector are no longer debated before the TDSAT, but directly go to the various High Courts. This gives the operators the choice to move between TDSAT and any of the High Courts all over the country. This may work to the advantage of the players in the short term, but it is not conducive for the orderly growth of the telecommunications sector and is detrimental to the interests of the Government.

Another decision that has seriously affected the TDSAT is the inclusion of broadcasting services as part of TRAI. The regulations and orders concerning broadcasting services need to be relooked urgently. In 2015, a total of 707 cases were filed, of which 593 cases were from broadcasting services. Around 80%-85% of cases in the broadcasting services are based on fact-based issues and hardly involve any legal concern. Legal issues of low importance are likely to be best dealt with at the local level, and it is worth contemplating if they call for a tribunal comprising retired judges of the Supreme Court and experts in telecommunications. Moreover, for a litigant, it does not make sense to come to a centralized tribunal to engage in a litigation for claim less than INR1 million.

TDSAT set up a mediation center in July 2013, and till now 330 cases have been referred to it, of which 134 cases have been settled. Four out of five pre-litigation cases that came to the center have also been settled. As such, mediation may be useful for resolution of disputes in the broadcasting services, at least in the lower rung of the broadcasting structure. There is a need to take a re-look at the system, and to take steps to make it relevant and useful for the development of the sector.
Mr. Arun Jaitley, Honorable Information and Broadcasting, and Finance Minister

I am very grateful to be associated with the inauguration of this seminar. I agree with Justice Alam’s analysis of our adjudicatory mechanism and I think that the nature of the economy, as it is going to be, and the impact of technology on that economy itself will be the two-most important factors impacting the adjudication system.

During the onset of the telecom industry in India, the regulatory system in the country was not quite conducive to the growth of the sector. When India opened up the industry to private players, there was a fear of the unknown. There was a conflict of interest that the government itself had. The government itself ran telecom companies, and it was also virtually the regulator. Obviously, the private sector investors had their own doubts. We were also quite content with a sub-par service because the tele-density during that time was only around 0.8%. However, in the past two decades, we have become the fastest-growing telecom economy with more than a 1,000 million phone connections. That is one of the reasons we went for creating a separate regulatory mechanism. However, this mechanism ran into another trouble.

The trouble is that every time the regulator took a decision, that decision was challenged somewhere in a High Court. Due to this indefinite jurisdiction, the rationale behind the regulatory mechanism got defeated, since the decisions of the regulator could never be implemented. They were stayed by some High Court or the other. Therefore, the whole concept of an appellate authority, whose decisions could be directly appealed to the Supreme Court, was born. This appellate authority will have a jurisdiction over the TRAI and will also be the dispute settlement mechanism between the Government and different operators as well as between and among operators. By and large, this experiment worked satisfactorily.

The broadcasting jurisdiction was given to the TRAI because the technology in the broadcasting sector was moving very fast and it was realized that we were moving toward an age of convergence. The use of the same carriage mechanism, satellite mechanism and the same instruments are likely to ensure that telecom and broadcasting sectors will converge into one and a clear demarcation will not be possible. Currently, there is a new challenge to this entire thought process, that even when the acts are framed with the best of intentions; the ingenuity of lawyers and the unlimited jurisdiction of the judges create a situation of a divided authority. Parts of the same issue are pending before some authorities and others before courts.

I am personally of the opinion that we should have a dedicated telecommunications court, a phrase that I am using almost as a synonym for the TDSAT. When you create a specialized institution, with an experience of dealing with dozens of matters on the same subject, their understanding and ability to resolve disputes becomes a part of that institutional capacity. And therefore, there is a good case behind Justice Alam’s suggestion that cases getting out of TDSAT into other jurisdictions will lead to extra complications and delays. It is an issue worth consideration, and I will certainly suggest it to Ravi Shankar Prasad, the Honorable Minister of Communications and Information Technology.

For an alternate dispute resolution mechanism of dealing with smaller issues, I think, TDSAT with its experience could make certain suggestions, because these issues too have to be adjudicated quickly and general experience is that if we take these issues to civil courts, the issues can get indefinitely delayed. I am sure the Government will be able to look into it and the time and energy of the TDSAT is reserved for more important commercial and technological issues of the future.

I think the best in the sector is yet to be seen as nobody can really visualize today the technology of the future. In fact, the world is already talking about the fourth industrial revolution. Many of the earlier ones bypassed India and some have only partly touched us. If the fourth have to be technologically driven, we have a few inherent advantages. In the technology sector, we have done well in the last two decades. Moreover, our start-ups, and the Information Technology (IT) and the telecommunications sector have shown that if allowed to go unregulated, it has a capacity to grow significantly.
Mr. Mukul Rohatgi, Attorney General of India

As long as we have Article 226, the issue of fragmented adjudication, and the right to appeal to the Supreme Court, will continue to persist. Furthermore, we can have a tribunal that is above the TDSAT. While TDSAT is headed by a High Court judge; the new tribunal can be headed by a Supreme Court judge. This will lead to a filtration in the cases before they are filed in the Supreme Court, which is fine in theory; however, in practice, it might not be feasible.

Another point worth consideration is that the majority of the disputes that come to TDSAT are between the larger telcos and the Government or the TRAI. It is my earnest request that in all these disputes, which affect millions of consumers, some recognized consumer group should be called suo-motu, and their opinions also considered.

Honorable Mr. Justice J. Chelameswar, Judge, Supreme Court of India

Telecommunications is an area, which has grown at a very rapid pace during the last thirty years. Achieving convergence is very easy in theory; however, in practice, it requires a deep understanding of the technology, framing appropriate regulations and implementing those in the true spirit of the law. An important point to note here is that all the technocrats, the policy makers, the executers of the law and the adjudicators have to be on the same frequency to achieve convergence. For this to happen, it is imperative that all the participants are informed about the numerous possibilities that the technology brings with it and efforts must be made to update the knowledge of all the stakeholders.

Amending the constitution, is perhaps a very good idea from the larger public interest point of view, but will be very difficult to implement in practice. Moreover, a multi-tiered review system consisting of a lower court, an appellate tribunal and then the right to review under Article 226 followed by a second tier of judicial review under Article 136 is a lengthy and cumbersome process and will greatly hamper the efficiency of the adjudication.

An alternative here could be to create specialized benches within the High Courts instead of additional tribunals. The technical and the administrative components of these courts could be handled by different experts, who could be statutorily placed as advisors to the court. They can give their inputs, which could be considered by the judge. This mechanism could eliminate two levels of litigation and speed up the whole process. It is a model worth debating and examining.
Mr. Manjul Bajpai, President, Telecom Lawyers Association

I am honored and privileged for the opportunity to propose the vote of thanks on this historic occasion. I express my profound and most sincere gratitude to all the panelists for their gracious presence today and we have all been greatly benefitted by your inspiring addresses. Mr. J. Chelameswar, expressed the view that convergence can be achieved only when technocrats, bureaucrats and adjudicators are all informed and share the same level of knowledge among them. He also made a very good suggestion that instead of having tribunals we can have specialized benches in the High Courts.

Honorable Minister Arun Jaitley articulated how the government was originally wearing two hats before 1997 and the need for the creation of a tribunal. He also invited us to give suggestions to improve the system. Mr. Mukul Rohatgi made a very interesting suggestion of TDSAT inviting some representatives of the consumers so that their views are heard.

Justice Aftab Alam, while referring to telecommunications as being a success story in India, shared certain misgivings in the adjudicatory mechanism and suggested a re-look to the existing systems. He also pointed out that delay in dispute resolutions leads to uncertainty in the system.
Session 1

Adjudicatory mechanism: issues and way forward
Adjudication is one of the cornerstones for the smooth functioning of the telecommunications and broadcasting sector, and only a competent and efficient adjudicatory body can inspire confidence among stakeholders in the sector. With the growing interconnectivity and convergence of technologies, an adjudicatory body is required to address issues arising in such a diverse and constantly changing environment in an effective and expeditious manner.

The TDSAT, established in 2000 to adjudicate any dispute between stakeholders, has been able to meet these challenges effectively through landmark decisions, keeping in view principles that ensure protection of interests of service providers and consumers as well as orderly growth. However, phenomenal growth in the telecommunications and broadcasting sector, has resulted in continuous entry of new players in the market – telecom service providers, broadcasters, and content distributors such as multiple system operators (MSOs), direct to home (DTH) providers, head-end in the sky (HITS) operators, local cable operators (LCOs)/last mile operators (LMOs), and over the top (OTT) players. Consequently, the number and diversity of legal issues has grown manifold due to the associated commercial interest of various stakeholders.

One of the most noticeable features has been a significant increase in the number of cases in the broadcasting sector. Additionally, the last mile operators are at a relatively disadvantageous position in the current litigation system. The penchant of stakeholders to operate without written agreements or without renewal of such agreements plays a significant role in increasing the number of disputes. Perhaps, revisiting the regulations and rationalizing them, keeping in view extant as well as future scenario, can play a big role in orderly growth of the sector. However, more important is to devise and enforce the regulations to ensure that deviant behavior is an exception and not a rule.

**Key discussion points**

- **Amend Articles 323A and 323B of the Constitution to give more powers to tribunals:** There was a broad consensus that there exists significant division and fragmentation regarding the powers and jurisdiction of different appellate authorities and the court of law. The technical aspects of a case are pleaded before the tribunal, whereas the validity of the concerning conditions and legislations are decided by the courts. This is because the litigants have the right to judicial review under the Article 226 of the constitution. However, bifurcating the functions between the courts and the tribunals renders the whole idea of having a tribunal ineffective. In such a scenario, it is necessary that the list in the Article 323B be expanded to include any additional subjects that are related to the telecommunications and broadcasting industry, and can be entrusted to the tribunal for adjudication.

- **Restore the original character of the TDSAT:** The TDSAT was set up as a specialized and expert appellate tribunal to deal with legal issues in the telecommunications sector. However, due to certain developments over the years in a couple of cases, it has been deprived of the real tools necessary for rendering its decisions effective. Therefore, while the tribunal was meant to adjudicate on the foremost issues plaguing the telecommunications sector, many prominent sectoral issues are no longer debated before the TDSAT, but are presented in mainstream courts. Hence, there is a need to relook at the adjudicatory mechanism and either restore the original character of the TDSAT or make suitable amendments to the TRAI Act.

- **Have a separate mediation center for resolving minor cases:** Bulk of the cases pending in the TDSAT currently deal with minor fact-based issues that may not necessarily require the skills and expertise of the judges of the Supreme Court. Such cases, which are not too demanding in terms of the requirements of legal pronouncements, can be resolved in a time-bound manner by regional courts or a specialized bench in the state High Courts. A mechanism such as this will not only save the resources of the TDSAT and the judiciary, but is also likely to be in the best interest of the litigants, since they have to spend a considerable amount of time and money to fight their cases at the TDSAT located.
in Delhi. Alternatively, a part of the adjudicatory mechanism can also be shared with the TRAI itself, since it has offices in each state capital. The Government can also introduce commercial benches in the High Courts, with technical experts acting as statutory advisors. TDSAT’s own success rate of more than 40% vindicates the concept that such an alternate mechanism could be a viable way to make the adjudication system more efficient.

- **Bring in more technology into the existing adjudication system:** Several cases that come before TDSAT require knowledge of complex technical and legal facets of the telecom industry. Bringing in the expertise of technical consultants could lead to a more efficient resolution of issues along with reduced turnaround times. Furthermore, there is a need for a fully integrated electronic tribunal so that the litigants do not have to worry about the distance, time and costs in coming from different parts of the country.

- **Eliminate the digital divide among all the stakeholders:** One of the challenges of incorporating more technology into the adjudicatory system is the class divide in terms of digital literacy among various stakeholders. However, this can be overcome by introducing adequate training and support for lawyers, judges, members and the litigants. Another step to be taken here is that all the resources of the TDSAT should be available on the mobile platforms so that the whole process can be truly digitized.

- **Need for regulations to change in accordance with changing times:** The regulations in the telecommunications and broadcasting industry are not changing at the same pace as technology. This has the potential to dilute the whole concept of the adoption of new technology, since it leads to ambiguity in the entire process. In addition, there is a need to deliberate whether an abundance of rules inhibits the implementation of new technologies, and “if instead, we can just have an idea of a cogent redressal mechanism for regulating the industry.”

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**Ranjit Kumar, Solicitor General of India**

“I feel that the regulations are not changing with the advent of new technology, and the concepts that are evolving. This can pull down the very concept of the introduction of new technology... There are a plethora of laws and regulations under the TRAI act, most of them are very technical and requires a great understanding. Do we really need so many rules, or should we do away with the rules and just have a concept of what the redressal mechanism should be.”

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**K. K. Venugopal, Senior Advocate, Supreme Court of India**

“The scope of the tribunal, after certain decisions of the Supreme Court, got curtailed instead of getting enlarged so that the significant positive aspects of the adjudication can seamlessly flow towards an even better forum. With these decisions, the hands of the tribunals were tied. This renders the tribunal ineffective, and this is a rather sad state of affairs... Therefore, the issue is that you cannot bifurcate the functions between the court and the tribunal. And in these circumstances, you have to amend the constitution because of the powers which are given to the tribunals and the 323A and 323B, but none of the modern mechanism has been brought in to the existence. You have to add in 323B, you have to add any other subject which in the opinion of the parliament needs to be entrusted to the tribunal under the provisions in this article.”
Session 2
Regulatory and licensing regime in a converged environment
With the introduction of the National Telecoms Policy - 2012 (NTP 2012), there has been a paradigm shift in the licensing regime, i.e., from single service licenses to unified licenses. The unified licensing regime increased the flexibility for service providers by delinking licenses from service provision and spectrum allocation. Furthermore, the progress in digital technologies and phenomenal adoption of internet has led to decoupling of networks. This has provided a foundation for convergence in the telecoms and broadcasting sector. The services, such as voice, data and video, are now increasingly being rendered through same networks.

As service convergence gathers pace, the regulatory and licensing framework needs to evolve to harness synergies of both the sectors. Although the regulatory aspect of telecommunications and broadcasting sectors is in the domain of TRAI, their licensing remains disparate. While, the broadcasting license falls under the ambit of the Ministry of Information and Broadcasting, the license for telecoms service providers is issued by the Ministry of Communication and Information Technology.

NTP 2012 envisages moving toward convergence between platforms, services and technologies, and overcoming the existing segregation of licensing, registration and regulatory mechanisms. Therefore, there is a need to initiate a plan to evolve a mechanism to incorporate these two services into a single licensing regime in India. With this backdrop, the topic of “Regulatory and licensing regime in a converged environment” is of great significance.

Key discussion points

- **Need for a comprehensive convergence law**: The proposed Communications Convergence Bill 2001 of the Government discussed stipulating a single regulatory framework for both telecommunications and broadcasting sectors, and constituting a Communications Commission as well as a Communications Appellate Tribunal. However, it was felt that certain issues in the proposed framework require consideration by the Government.

- **Adjudicatory and regulatory powers should remain separate**: The proposed Convergence Bill intends to divest original adjudicatory and regulatory powers from TRAI, TDSAT and other civil courts and hand it over to the Communications Commission. Although, the current adjudicatory system in telecommunications and broadcasting as a separate expert body has been quite successful, it was felt that adjudication power should continue to vest with an independent institution such as TDSAT, since the separation of adjudicatory and regulatory powers will instill confidence in the system.

- **TDSAT should continue to adjudicate disputes between licensor and licensee**: The Convergence Bill proposes that the newly established Communications Commission will grant licenses, enforce terms of license and adjudicate on breach of license terms. However, this is not advisable, since the license granting authority should be different from authority adjudicating disputes relating to licenses.

- **Jurisdiction over competition issues should remain with TDSAT**: In the proposed framework, both Competition Commission and Communication Commission have jurisdiction over competition issues, depending upon where the proceedings are filed. However, it was opined that the Competition Commission should only regulate and not adjudicate, while the telecom tribunal should be empowered to deal with competition...
issues in telecommunications, since it has requisite expertise in this area.

- **Continue with the current spectrum management arrangement:** Currently, the Government retains its rights over spectrum assignment to strategic users. Furthermore, the balance spectrum is assigned by the Telecom Commission to non-strategic users for commercial purposes. There is a merit in retaining the current arrangement in the proposed Convergence Bill, since the regulator can examine and decide on requirement of all stakeholders and ensure that a level playing field is maintained.

- **Separate regulation of content and carriage:** In 2006, the TRAI recommended for separate regulation of content and carriage, whereas, the Broadcasting Bill proposed for converged regulation of content and carriage. While regulation of carriage is concerned with the technical and economic aspects, the content regulation takes into account its impact on sensibilities, morals and value system of the society. Therefore, provisions of the proposed Convergence Bill should be in sync with TRAI’s recommendations.

- **Convergence of licensing in broadcasting and telecoms:** The Government should look forward toward issuing service neutral licensing regime for both telecoms and broadcasting services. A single licensing regime will ensure better harnessing of synergies for both these sectors. Cues can also be taken from countries such as the US, South Africa, Brazil, Australia, the UK, and Japan, which established single licensing entity for both telecoms and broadcasting services.

- **Regulations to be technology agnostic:** With increasing convergence, same services are being provided using different technologies. In this context, there is an urgent need for regulations, which harmonizes these technologies and provide a level playing field to all stakeholders, and thereby, promote growth and innovation in the sector.

- **Leverage cable connectivity to provide broadband:** The wide reach and network of cable service providers should be leveraged to provide high speed broadband connectivity in homes. This not only improves last mile connectivity but also provides additional advantage in terms of improvement of quality of services and freeing up spectrum. However, certain issues such as taxation, billing on revenues from broadband services, and single licensing regime needs to be addressed by the Government.

- **Regular audit of spectrum:** Ensuring effective utilization of spectrum was another area of discussion. Spectrum is a scarce resource, and its efficient allocation
and usage is critical for successful delivery of telecom services in the country. Therefore, regular audit of spectrum use is imperative to recognize the revenue loss due to idle spectrum.

- **Continuity in convergence policy:** With technology progress, telecom operators, which put large capex investments to build the infrastructure, have become mere pipelines on which applications ride. This has resulted in a regulatory imbalance, since telecom operators are subject to strict licensing regulations, while, application providers are not limited by such restrictions. Looking forward, the convergence policy should provide continuity in regulations and ensure similar rules for all stakeholders in the value chain.

- **Cross-sector convergence:** The telecom operators are rapidly adopting technology and are capitalizing on opportunity to provide new services such as mobile money, m-health, and m-education. The regulatory regime should cater to such cross-sector convergence, and simplify their governance mechanisms.

- **Simplified and resilient regulations:** With data standing at the cusp of revolution, the network providers are competing with each other and with application service providers to seize new revenue opportunities. The increased complexity has given rise to dilemma on their regulation. In addition, other issues such as identity theft, copyright, and content regulation have begun to surface. The onus lies on the Government to make the regulations less complicated and more resilient to provide fair competition and promote growth.

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**R. S. Sharma, Chairman, TRAI**

“In the emerging scenario with technology changing day by day you cannot have regulation that hard codes some of the issues. Technology should not be stopped. It will continue to march on. Therefore, we need to harmonize that the technology continue to march on and interests of all the stakeholders are preserved...Technology has become central to the change. We need policies that promote growth...Regulation has to be technology agnostic...While convergence is taking place, it is important that interoperability is prerequisite for the convergence to work, once interoperability is there, unbundling is required”

**Peeyush Agarwal, Member (Technology), Telecom Commission, DoT**

“Convergence has already taken place but there is no regulatory framework defined as such. ISPs are taking the bandwidth and content services on broadband are taking place. Requirement of convergence and requirement of regulation is very much essential in the backdrop of Digital India. Things have to move very fast and in a very methodical way. Government will need to define the policies that are industry friendly and ensure a level playing field with all the technologies and services”

**Manjul Bajpai, President, Telecom Lawyers Association**

“Technology is marching and will not wait for a law to be enacted. After all the ultimate beneficiary of convergence is the consumer. Should we make them wait?”
Session 3

Content distribution in next generation networks
Over the years there have been significant changes in the communications market, with the networks transforming from circuit based to packet switched, and now toward next generation networks (NGN). The NGNs have completely re-shaped the current structure of communication systems and access to the internet for the common man. Audio-visual content is increasingly distributed via a broad range of digital technologies that transmit to television sets, computers, as well as to mobile and other portable devices. It will be interesting to see how this shift pans out in India, with the TRAI making efforts and undertaking consultations to chalk out a smooth transition process for service providers.

There are different regulatory regimes for the print media, the broadcast media, and the cinema, all of which are governed by different acts. Therefore, it is time to re-look at the entire set of legislations governing the sector, and take into account the emergence of modern digital platforms and the convergence of technologies. The panelists also discussed the idea of creating a convergence authority that can deal with patents and copyrights, apart from broadcasting regulations.

- **Need for a debate on net neutrality:** The stakeholders agreed that the issue of net neutrality largely remains unaddressed and that there is a need to deliberate upon the regulatory challenges associated with it. Emergence of new technologies lowers barriers, creates market entry opportunities, and stimulates innovative services. However, net neutrality needs to be ensured so that even small companies can have easy access to content and a level playing field to deal with the competition. However, there remain several ways through which net neutrality can be circumvented, including operators providing all of their services for free, zero-rating specific services, or alternately using IP cable and on-demand services instead of public internet to deliver their own content. There is also a need to ponder about the impact of carriage placement, discounted subscription fees, etc., on net neutrality.

- **Regulating behavior instead of the economics:** For the success of Digital India, Start-up India, and other such initiatives, the sectorial regulations need to be conducive enough for the investors. Given the exponential growth of the entire content ecosystem, it is imperative that the policy makers regulate the intent and the behavior of the businesses, and not the associated economics. Regulating economics is unhealthy for business models, whereas regulating conduct adds to the overall consumer and the industry welfare. The panelists also opined that the policy makers need to evaluate the use of database impact studies and scenario analyses to determine the probable impact of regulations before they come into play.

- **Call for an India-centric patent and copyright mechanism:** Although, India is one of the largest content creators globally, it still lacks a robust patents and copyright system. Indian copyright laws have largely been adopted from principles followed in more developed countries. This approach inherently ignores concerns that are specific to Indian stakeholders. Given the unique nature of the Indian market, we require a system, which makes the content easily accessible to all consumers, while at the same time address the issues of content creators.

- **Mainstream TV business to continue to play a pivotal role:** The emergence of the next generation networks has given consumers the freedom to choose what to watch, where to watch, and how to watch. With this in mind, the content makers today are trying to create digital assets that will generate value in the longer term rather

### List of panelists

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### Key discussion points

- **Lack of clear regulations in the broadcasting sector:** The panelists agreed that the existing scenario, where the sector is being governed by myriad regulations, is in the need of a clear, self-contained and comprehensive legislation. Several laws that are currently regulating the telecommunications and the broadcasting sectors have their roots in the Indian Telegraph Act of 1885. Furthermore, there is also an overlap of adjudication for broadcasting services, a part of which comes under the jurisdiction of TDSAT and a part of it is governed by Indian copyright laws. Moreover,
than expecting returns in the short term. This, in a way, is expected to complement the television industry, since it will create multiple opportunities for content creators. Nonetheless, the television industry in non-urban towns and villages has continued to thrive. This is substantiated by the fact that India is adding close to 7 million TV viewers every year. Hence, there is no imminent threat to the traditional TV business in the country.

- **Governance mechanism should not dis-incentivize content creation and distribution:** While protecting the interests of the consumers, it is important to incentivize content creation. There have been some instances in the past where the regulatory pressures have dampened the growth story for content providers, resulting in some companies exiting the Indian market. The regulatory environment needs to be enabling enough so that global content providers can readily contribute to India’s growth story.

- **Avoiding over-regulation:** Too many laws and regulations can end up creating impediments on the content being made available to the consumers. This can hamper the interests of the consumers and the industry rather than facilitating orderly growth. The idea of a more self-regulatory or co-regulatory ecosystem, where the content creators are also involved in creating legislations, was also suggested to policy makers. The need of the hour is to strengthen the legal systems, while avoiding the trap of over-regulating the industry.

- **Decentralization of innovation:** The next generation networks represent the coming together of diverse infrastructure and technologies. Consumers themselves will become content creators and, therefore, there will be decentralization of innovation and a democratization of content. This will lead to a remarkable range of new content and services and presents great opportunities for revenue generation. However, this decentralization will also represent a new set of unforeseen challenges, for which the regulators should also be prepared in advance.

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Mr. J. S. Mathur, Special Secretary, Ministry of Information and Broadcasting

“The way technology is changing... We really marvel at as to why and how, what is the roadmap, what really lies in future in these particular areas, the way the things are transforming themselves. With such technologies coming up, where everything is getting blurred, I think ultimately, the issue is going to be of what regulation is actually needed... I think a lot more thought surely needs to go into what we do not need to enter into and create fresh issues which are best avoidable... The future, of course, cannot be predicted, given the way the technologies are changing, but that is what we have to be prepared for, for the unpredictable.”

Ms. Pratibha M. Singh, Senior Advocate

“The questions remain... Are we doing enough to deal with the telecom industry, given the large size it has grown to? We still live in the age old era of the telegraph act for telecom and broadcasting. Is it not time to re-look at the act? Is it taking care of the technological and the modern digital platforms? Is the legal basis for the TRAI act legitimate today as well? The entire TRAI act and the TDSAT mechanism are governed by myriad regulations. Why can’t there be a proper self-contained, comprehensive legislation to take care of this era of convergence?... How do we resolve the issue between telecom and broadcasting? Is it time to relook at all the tribunals that we have created and merge some of them and divide others? Also, there are some concepts in broadcasting that we have borrowed from the telecom industry which we can do away with. We need to create a regime which is much more independent and which is designed specifically for broadcasting... Further, we don’t have to borrow any systems from the developed world. We need to create a system which makes the content easily accessible to the consumers of the country. Too much regulation has actually created impediments on the content being made available. However, the content owner should not be ignored. Let us have transparent systems. We need to strengthen our legal systems and make them India suitable. We create maximum content in the world.”
Session 4
i-way of the future (M2M, IoT, Digital India, Smart Cities)
At the cusp of initiatives such as Digital India and Smart Cities that aim to transform India into a digitally empowered society and knowledge economy, stands the difficulty that we as a society face to utilize information and communication technologies to address both rural and urban challenges. Machine-to-machine (M2M), for example, has been the very basis of automated information interchange between machines and a control center; hence, it has served as a key pillar to the idea of digitalizing the society.

Several initiatives such as National Scholarship Portal, broadband highways, BharatNet, digitization of public records etc., have been adopted in the country. However, being highly fragmented, and isolated in respective sectors, no substantial gains have been witnessed in respect of these initiatives. Realizing the fast pace at which the global standards of digitalization are growing; only a cohesive and organized endeavor will help India match the rapid growth. As a country, we need to understand the levels of interdependence in these sectors and bring about an effective mechanism dealing with policy formulation, regulation and adjudication process for a wholesome impact on the entire initiative.

Key discussion points

- **Need for a clear regulatory policy**: Some of the issues that the policymakers have to confront today are about net neutrality, IPv6 policy, M2M/IoT policy, cloud computing initiatives and smart city initiatives. Mechanism for registrations of M2M service providers, Know your customer (KYC) norms for M2M, health and safety regulations, environmental guidelines, spectrum requirements and M2M standards development are some of the concerns that the policymakers have to address while framing the M2M roadmap. The challenge requires a paradigm shift in the way regulators, policy makers and adjudicators think today. Additionally, we need to have debates so that the policies that are framed today can also stay relevant in 2025 or 2030.

- **Overcome the challenge of slow implementation**: Sometimes, even after the guidelines are framed by regulators, the states do not implement them, since they are not mandatory. Hence, different states come up with diverse processes, which translate into an implementation challenge at the ground level. There is also a need to strengthen the capacity to speed up the actual implementation process. Informal lines of communication, along with enhanced co-ordination, are required among different stakeholders to ensure that the policies and plans are implemented timely.

- **Accessibility is of prime importance**: India needs to make high speed broadband accessible to the common man, especially in rural areas, if it intends to truly benefit from the ongoing revolution in the data space. One of the most important ways through which India can benefit from the digital ecosystem is by helping farmers leverage the IoT network in their agriculture needs. There needs to be a roadmap to provide and maintain the infrastructure required for smart cities.

- **Building the broadband backbone**: The Government of India is building a broadband highway under the BharatNet program with an aim to provide an impetus to rural broadband connectivity. BharatNet seeks to bridge the connectivity between rural and urban India connecting 6,600 blocks with 250,000 gram panchayats across the country via fiber network. India can leverage its middle mile infrastructure and develop Wi-Fi connectivity for the last mile through places such as Wi-Fi chaupals. The country also needs several data warehouses, which will require cheap availability of real estate, power and strong resilient network connectivity.

- **Digital literacy as an enabling factor**: Promoting consumer awareness and support through digital literacy is necessary to reap the benefits in health care, education, commerce, agriculture and banking segments. Only around 14% of rural households in the country are digitally literate. This needs to change through
a countrywide digital literacy program that brings in more people into the ecosystem, and develops a trust-based relationship to create robust, secure and accessible digital infrastructure.

- **Opens up new opportunities for every section of the society:** The convergence between hardware, software and communications has opened a plethora of opportunities at different levels for all the stakeholders. The Digital India plan has the potential to boost the GDP by up to US$1 trillion by 2025. Emerging technologies have the potential to create several job opportunities, which needs to be harnessed through local talent. Training people to write mobile and web apps to solve local problems can help them make a decent living. This wave of internet revolution powered by SMAC (social, mobile, analytics and cloud) will eventually help in enabling novel business cases, enhanced work flow, increased efficiency and improved quality of life.

- **Enabling conducive business ecosystem:** The focus for the Government should be to create an enabling environment so that the private sector can unleash its full potential in terms of creating innovation, wealth, opportunities and jobs. The digital infrastructure being laid in India is expected to provide a platform to budding entrepreneurs looking for opportunities in areas such as e-health, e-entertainment, e-commerce and to convert it into business possibilities. The Government, the private industry and the regulator, need to co-ordinate and create an ecosystem that incentivizes private participation.

- **Cyber security and privacy aspects:** For the success of Digital India initiative, cyber security and data privacy are very important facets. A new legislation dealing specifically with the protection of data and information present on the web is required when dealing with the emerging cloud ecosystem. There is also the issue of legal liability regarding who will be responsible in the entire value-chain of M2M processes. Data processing zones based on the lines of SEZ/EPZ needs to be considered, wherein the data security compliances are based on the laws of the countries, regions of the data origination and consumption. This initiative is likely to provide a big boost to the creation of off-shore data centers in the country.

- **Participation of private sector:** While the Government is providing optical fiber connectivity up to the level of gram panchayats, telecom operators will need to set up their own infrastructure at the Panchayat level to provide the last mile connectivity and services to customers. To achieve the objectives of broadband penetration, it is essential for the Government to collaborate with the private sector and leverage their existing capabilities. It should:
  - Have private participation to implement BharatNet in engineering, procurement, and construction (EPC) form
  - Enable adoption of viable business models in order to deploy broadband services in commercially feasible manner; provide viable gap funding to make it sustainable
  - Involve the private sector in management and operations of broadband network programs under turnkey or in public-private partnership (PPP) models

- **Emergence of start-ups:** Powered by the internet revolution, India is witnessing a wave of start-ups, innovation, and entrepreneurship. India today has the fastest and the third-largest start-up ecosystem in the world. Latest technologies, new service models, and innovation, both in technology and in business models, are required to leverage the benefits that come from this innovative ecosystem.
“Mobile telephony has been a game changer. But I believe that, as remarkable as the developments of last 20 years have been, the best is yet to come. And the change is going to be much faster and more transformational. The way electronics manufacturing in India is picking up would give a very strong base to IoT... The biggest bottleneck here is, perhaps, taking the high speed broadband to rural areas... which is a work in progress and I am hopeful that this would expedite and by 2018, we will be able to light up every gram-panchayat... More importantly, it is the issue of digital divide; we have only 14% of rural households which are digitally literate. The i-way of the future will have a huge element of convenience, of connectivity and of being able to influence the behavior of goods and products from a remote location.”

R. Chandrashekhar, President, NASSCOM

“The total global value that would be added by the connected devices by 2020 would be close to US$1.9 trillion. We expect that this would generate more than US$300 billion in revenues, mostly in services, and given the strength that the Indian IT services today has, this would give a huge opportunity in this field... The enormous extent of innovation that has built up through the startup ecosystem is an important element in this whole process. Quite fortuitously, India today is very well placed being the third largest startup ecosystem in the world and the fastest growing... Finally, you have to find a human being somewhere in the whole chain who is responsible. So, how do you really build this whole pipeline of security and privacy? And the good thing is that these issues have been fairly well understood, and the roadmap for M2M applications has also been released.”

S. S. Sirohi, Ex-Member (Technology), Telecommunication Commission, DoT

“In a scenario, of growing convergence of networks, services, devices and ever expanding digital explosion, the challenge is to ensure inclusive and sustainable digital development. We are witnessing a new India of startups, innovation, and entrepreneurship which is leveraging all pervasive digital i-way. The role of policy makers envisioning, strategizing and promoting digital movement and of regulators as responsible facilitators of the rapidly changing technology in the services ecosystem assumes critical importance today. The challenge is to move from reactive response to proactive response to this change. The challenge is how much to regulate, when to regulate in the new expanding scenario of innovations. The challenge is to create state of the art capacity building leveraging youth to empower institutions like regulatory and policy making to effective and balance regulatory responses which promote the growth of services and protect the interests of the consumers.”
Session 5
Regulatory issues in broadcasting and distribution sector
The media and entertainment industry is one of the fastest-growing sectors in India. Being the third-largest television market after the US and China, India has witnessed significant growth in the broadcasting sector over the past two decades. The broadcasting sector is currently governed by multiple agencies, with the TRAI regulating tariffs, interconnection and quality of service, and the Ministry of Information and Broadcasting (MIB) regulating content. Both TRAI and MIB have been able to effectively cope with the challenges faced by the broadcasting sector; however, with the onset of the neo-digital age, a new set of problems is being faced by the broadcasting sector, which may hamper the competition and slow down the growth of the broadcasting sector in India. Some of the issues being faced by the broadcasting sector are:

- Heavy restrictions on content
- Coordination between different agencies
- Barriers to entry of new players
- “Must-provide” regulations in force
- Non-exclusivity of content
- Non-exclusivity of content
- Lack of clarity in existing regulations:
- New developments facilitated by the convergence of technologies demand a paradigm shift in the regulatory framework. This will require an effort to abolish multiple licenses and merge regulations governing various services to establish a common neo-commercial regulator for the broadcasting sector in India. The regulator, in such a scenario, is expected to effectively and judiciously take care of the interests of all the stakeholders and this is further likely to encourage the adoption of convergent technologies.

**List of panelists**

**Key discussion points**

- **Need for strict enforcement of laws:** There was a broad consensus that a large number of existing regulations are not being implemented efficiently. Therefore, there is a need to first sort out the issues on the implementation of laws before enacting new ones. One of the cases highlighted was that of digital addressable cable TV system (DAS), where it is mandatory for all the broadcasters and operators to put their interconnection agreements in writing. However, sometimes these written agreements do not exist, or these are executed, retrospectively.
- **Lack of clarity in existing regulations:** The panelists also shared the opinion that the laws and regulations governing the sector are not clearly defined. Additionally, frequent amendments in legislation leads to confusion and ambiguity among different stakeholders. Moreover, some of the amendments are in contradiction to the original objectives of the regulations. Therefore, there is also a scope of different stakeholders interpreting the same legislation in different ways, which leads to a consequent rise in litigations.
- **Effective regulation of the sector:** The panelists agreed that the purpose of the regulation is to help in the orderly growth of the sector and not to restrain the stakeholders. Therefore, there was a call for framing technologically neutral and progressive legislations that could be relevant even in the converged era of 2020. Sometimes even the regulations that have just been enacted are technologically outdated. Hence, there is a need to revisit the entire set of regulations and the various tariff orders, and debate as to whether a plethora of regulations are really required or a single comprehensive guideline will be easier to follow.
- **Need for a Broadcasting policy:** The panelists discussed the importance of having a comprehensive National Broadcasting Policy analogous to the National Telecom Policy. In the absence of such a policy, the broadcasters, which are part of the same value chain, are deprived of some incentives such as – tax concessions and priority sector lending. The policy document should also have a well-defined roadmap in terms of developing the sector and the means to achieve growth objectives.
- **Need for a more effective consultation process:** There was a broad consensus that real participation, timely consultation and open house discussions are lacking among different stakeholders and policy makers. A convergence among stakeholders, along with the convergence in the technology, is the need of the hour. A more transparent and consultative approach by all the participants during policy making will likely ensure a reduction in litigations and lessen the need for the stakeholders to resort to the adjudicatory system.

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**List of panelists**

**Chair** Mr. B.B. Srivastava, Member, TDSAT

**Panelists**

- **Dr. Kuldeep Singh**
  Member, TDSAT

- **Shri Jawahar Goel**
  Managing Director, Dish TV

- **Mr. S.K. Gupta**
  Principal Advisor, TRAI

- **Ms. Anuradha Prasad**
  Managing Director, News 24

- **Mr. Ashok Mansukhani**
  Whole Time Director, Hinduja Ventures

- **Mr. A. Mohan**
  President (Legal and Regulatory), Zee Networks
Call for a more proactive approach on the implementation of recommendations: The technologies in the telecommunications and the broadcasting sectors are evolving very rapidly, giving rise to new contentions and challenges. In light of these changes, TRAI frequently makes recommendations for an effective regulation and management of the sector. However, many times, the Government, even after receiving those recommendations, neither rejects nor implements them. Therefore, the panelists suggested that a more proactive stance be taken in the implementation of the recommendations suggested by the regulator.

Eliminate price inconsistencies among different segments in the industry: Taxes and fees are unequally distributed among different segments and favor some sections of the industry while discriminating against others. The regulator has highlighted these discrepancies in certain cases. For example, in the case of license fee, TRAI’s recommendations have not yet been implemented by the Government. Therefore, there is a need to eliminate disparities in the pricing mechanism and ensure a level playing field for all the stakeholders. The interconnection regulations, where the prices are left to be fixed by the broadcasters within certain prescribed ceilings, and the carriage placement agreements were other examples cited.

B.B. Srivastava, Member, TDSAT

“One aspect, which sometimes I find amiss, is the rule of law. We have the laws and regulations, but whether we have the rule of law is the testing point in our adjudication system.”

S.K. Gupta, Principal Advisor, TRAI

“Whenever TRAI comes up with a consultation paper, no issues are quoted at that time in response to the paper and are quoted only when the cases go to the court. So, if the stakeholders are more transparent to us then the need to go to the court may not arise. We are asking for participation, timely consultation, and open house discussions… Only when final recommendations are given, people say that there are shortcomings in that. If there are violations of regulations of TRAI, the only option available with the TRAI is to go to the court … There is a need to enforce the regulations. And if the preventive measures are taken at the right time, there would be less need for the stakeholders to resort to the adjudicatory system.”

Dr. Kuldip Singh, Member, TDSAT

“The purpose of the regulation is not to put constraints or shackles, it is for the orderly growth. It is like regulating traffic, you do not regulate traffic to put roadblocks. You regulate the traffic so that it can flow smoothly, in minimum time and there should be no accidents on the way… Also, there have been a number of amendments in the regulations from time to time. While coming out with the amendments, some of the previous objectives of the regulations were overlooked and some contradictions crept in. So the different stakeholders interpret the same regulation differently and the consequent legislation… The broadcasting sector in India is anything but regulatory, the regulations are followed more in breach and are used as a tool for negotiation rather than to provide the orderly and non-discriminatory regime envisaged by the regulator. The service providers at all the tiers of the hierarchy flout regulations and resort to them only when the disputes arise.”
Valedictory session

The valedictory session was chaired by the former Chairperson of TDSAT, Justice (Retd.) D. P. Wadhwa. He congratulated Justice Aftab Alam and TDSAT on the success of the seminar held over the two days.

Justice Wadhwa expressed his surprise that the TDSAT has still been facing the same issues as were faced by him during his tenure in 2003-05. He agreed with concerns expressed by Justice Alam that there is a bi-furcation of adjudicatory powers between the civil courts and the TDSAT. He also concurred that it is very difficult for TDSAT to deal with minor cases related to the broadcasting sector, which do not require the expertise of a specialized tribunal comprising technical members and a judge of the Supreme Court. Justice Wadhwa suggested ideas for further deliberation and consideration:

- With a large bench with one judge of the Supreme Court as chairman, two members from the telecommunications industry, one member representing the broadcasting sector, and one member from the administrative department

- With rotating benches of the tribunal where the members of the tribunal can hold sessions in different parts of the country to resolve smaller issues.
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>3G</td>
<td>Third generation of mobile telecommunications</td>
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<tr>
<td>AGR</td>
<td>Adjusted gross revenue</td>
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<tr>
<td>ART</td>
<td>Adjudication, Regulation, Telecommunication</td>
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<tr>
<td>ASUPI</td>
<td>Association of Unified Telecom Service Providers of India</td>
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<tr>
<td>BSNL</td>
<td>Bharat Sanchar Nigam Limited</td>
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<tr>
<td>CDMA</td>
<td>Code division multiple access</td>
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<tr>
<td>COAI</td>
<td>Cellular Operators Association of India</td>
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<tr>
<td>DAS</td>
<td>Digital addressable cable TV system</td>
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<tr>
<td>DeitY</td>
<td>Department of Telecommunications and Information Technology</td>
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<tr>
<td>DoT</td>
<td>Department of Telecommunications</td>
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<tr>
<td>DTH</td>
<td>Direct to home</td>
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<tr>
<td>EPC</td>
<td>Engineering, procurement, and construction</td>
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<tr>
<td>EPZ</td>
<td>Export Processing Zone</td>
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<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<tr>
<td>GoI</td>
<td>Government of India</td>
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<tr>
<td>GSM</td>
<td>Global system for mobile communications</td>
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<tr>
<td>HITS</td>
<td>Head-end in the sky</td>
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<td>ICRIER</td>
<td>Indian Council for Research on International Economic Relations</td>
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<tr>
<td>IoT</td>
<td>Internet of things</td>
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<tr>
<td>IP</td>
<td>Internet protocol</td>
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<tr>
<td>IPv6</td>
<td>Internet protocol version 6</td>
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<tr>
<td>ISPs</td>
<td>Internet service providers</td>
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<tr>
<td>IT</td>
<td>Information technology</td>
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<tr>
<td>IT-BPM</td>
<td>Information technology-business process management</td>
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<tr>
<td>KYC</td>
<td>Know your customer</td>
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<tr>
<td>LCOs</td>
<td>Local cable operators</td>
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<td>LMOs</td>
<td>Last mile operators</td>
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<tr>
<td>M2M</td>
<td>Machine-to-machine</td>
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<tr>
<td>MIB</td>
<td>Ministry of Information and Broadcasting</td>
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<td>MSOs</td>
<td>Multiple system operators</td>
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<tr>
<td>NASSCOM</td>
<td>National Association of Software and Services Companies</td>
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<tr>
<td>NTP 2012</td>
<td>National Telecoms Policy - 2012</td>
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<tr>
<td>OTT</td>
<td>Over the top</td>
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<tr>
<td>PPP</td>
<td>Public-private partnership</td>
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<tr>
<td>SEZ</td>
<td>Special Economic Zone</td>
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<tr>
<td>SMAC</td>
<td>Social, mobile, analytics and cloud</td>
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<tr>
<td>TDSAT</td>
<td>Telecom Disputes Settlement and Appellate Tribunal</td>
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<tr>
<td>TLA</td>
<td>Telecom Lawyers Association</td>
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<td>TRAI</td>
<td>Telecom Regulatory Authority of India</td>
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<tr>
<td>VAS</td>
<td>Value added services</td>
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The better the question. The better the answer. The better the world works.
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