



**Recommendations on Telecom Regulatory Authority of India Consultation Paper on  
Regulating Converged Digital Technologies and Services – Enabling Convergence of  
Carriage of Broadcasting and Telecommunication services**

**Reference on TRAI's Consultation paper dated on 30/01/2023.**

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**Chapter 1**

**Objective of ITU-APT Foundation of India (IAFI)**

We, the ITU-APT Foundation of India (IAFI), are a registered non-profit and non-political industry association registered under the Cooperative Societies Act of India. IAFI has been recognized by the International Telecommunication Union (ITU), the UN Organisation for ICT issues, as an international/ regional Telecommunications organisation and has been granted the sector Membership of the ITU Radio Communications Bureau (ITU-R), ITU Development Bureau (ITU-D) and ITU Telecommunication Standardisation Bureau (ITU-T). IAFI is also an affiliate member of the APT. IAFI has been working for the last 20 years to encourage the involvement of professionals, corporate, public/private sector industries, R&D organisations, academic institutions, and other agencies in the activities of the ITU. For more details regarding IAFI, please visit <https://www.itu-apt.org/>.

## Chapter 2

**Question 1 - Whether the present laws are adequate to deal with convergence of carriage of broadcasting services and telecommunication services? If yes, please explain how?**

**Or**

**Whether the existing laws need to be amended to bring in synergies amongst different acts to deal with convergence of carriage of broadcasting services and telecommunication services? If yes, please explain with reasons and what amendments are required?**

**Or**

**Whether there is a need for having a comprehensive/converged legal framework (separate Comprehensive Code) to deal with convergence of carriage of broadcasting services and telecommunication services? If yes, provide details of the suggested comprehensive code.**

**Answer-** Convergence commonly refers to the integration of the previously distinct industries i.e., Broadcasting, Telecommunications and IT, due to the digitization of information. Convergence has now emerged as a global phenomenon as a result of digitisation.

No, we do not believe that the present laws are adequate to deal with convergence of carriage of broadcasting of services and telecommunication services.

### **Need for a Converged Statutory Framework**

As per the allocation of business rules issued by the Government of India, the boundaries between Department of Telecommunication (DoT) and Ministry of Electronics and Information Technology (MeitY) and Ministry of Information of Broadcasting (MIB) have been completely blurred today.

Department of Telecom (DoT) has been entrusted with the function regarding licensing work of Internet to the various Internet Service Providers (ISP), but the other work like promotion of internet, Information Technology (IT) and IT enabled services have been entrusted to MeitY.

- a) As per the allocation of business rules issued by the Government of India, DoT has been entrusted the function regarding licensing work of Internet to the various Internet service providers, but the other work like promotion of internet, IT and IT enabled services have been entrusted to MeitY
- b) Policy, Licensing and co-ordination matters relating to data services and other like forms of communication have been allocated to Department of Telecom (DoT).
- c) The policy related to Data Centres, policy on Open Government Data (OGD) Platform etc. have been framed by MeitY.
- d) Information Technology (IT) content regulation function is under MeitY.
- e) Over The Top (OTT) broadcasting content regulation has been given to MIB
- f) Blocking of websites is under the purview of MeitY, but the blocking is done by DoT, through its administrative order to all Internet Service Providers (ISP).

Further, there is a multiplicity of statutes being administered by DoT, MIB and MeitY, in discharge of the above functions.

- a) The Indian Telegraph Act, 1885
- b) The Indian Wireless Act, 1993
- c) The Telegraph Wires (Unlawful possession) Act, 1950
- d) The Telecom Regulatory Authority of India Act, 1997
- e) Prasar Bharti (Broadcasting Corporation of India) 1990
- f) The Cable Television Networks (Regulation) Act, 1995
- g) The Information Technology Act, 2000

Now, due to many new age-services including social media, Over The Top (OTT) communication, broadcasting services, online video streaming etc., are operating at the intersection of these compartmentalised statutes, thus posing challenges for regulated DPOs/ Telcos. The Authority has itself noted that these laws are inadequate to address regulatory concerns in a converged era.

Further, it is submitted that convergence of carriage of broadcasting services and telecommunications presents complex legal and regulatory issues that may require extensive amendments to existing laws or the creation of a comprehensive/converged legal framework (separate comprehensive code) as existing laws may not be sufficient to deal with the challenges and opportunities that arise from the convergence of Telecommunications and Broadcasting sectors. It is also recommended that global practices may also be studied in detail to understand how Regulators are handling issues arising from converged Telecommunications and Broadcasting services especially in the context of IT and technological advancements.

Today, linear programming, live broadcasting and global and local content are being consumed across screens be it smartphone, PC, Smart TVs. Due to availability of high-speed broadband services and smart devices, previous dependency on specific devices for watching broadcast content has been nullified, essentially eliminating any difference between of distribution platform on wireless and wireline broadband and a registered distribution platform operator.

While Ministry of Broadcasting (MIB) and Telecom Regulatory Authority of India (TRAI) regulate the existing Distribution Platforms (DPOs), e.g., DTH, IPTV, MSOs and HITS, no such regulatory framework exists for such distribution platform on wireless and wireline broadband, which carry the same broadcast content. This has created an anti-competitive environment and a non-level playing field for the DPOs.

This convergence of carriage medium with differential treatment of regulation, is anomalous and leads to the risk of unequal access of same broadcasting content i.e., content broadcast under DPOs get covered under regulations of must carry-must provide principle and NTO; but no such regulation exists if content broadcast was to happen over broadband networks.

Several different technologies today are delivering treatment of regulation is anomalous and leads to risk of unequal access of same broadcasting content i.e., content broadcast under DPO's get covered under regulations of must carry-must provide principle and NTO; but no such regulations exists if content broadcast was to happen over broadband networks.

Several different technologies today are delivering the same customer experience be it terrestrial broadcasting or analogue cable or DTH services and now online platforms using high speed broadband networks. To that effect, the carriage platform of broadcasting content has come a long way.

Therefore, we believe that the existing laws should be amended to bring in synergies amongst different acts to deal with convergence of carriage of broadcasting services and telecommunication services and/or (b) a comprehensive/converged legal framework should be introduced in the form of a new legislation termed as Communication and Broadcasting Convergence Act – so as to enable DoT to fully harness the benefits of the converged technologies and the emerging converging technologies of the future to meet the growing social and commercial needs.

### **Need for a Converged Regulatory Framework**

#### **Technological disruption and convergence have blurred the difference in market:**

- a) Several different technologies deliver the same customer experience: The carriage platforms of broadcasting content have taken several technological leaps from terrestrial broadcasting and analogue cable to DTH services and online platforms.

4G and 5G networks of telecom operators are today delivering content at such high speeds which were available only with fixed broadband or cable networks or DTH until recently. These high-speed networks have enabled the OTT platforms to offer a variety of content, including linear channels which were otherwise offered only through Cable or DTH.

Hence, the wireless technologies today are in the same league as traditional broadcasting platforms, e.g., DTH and Cable, and fixed broadband, in terms of delivery of content. This collision of carriage platforms offering similar content/linear channels and experiences is only supposed to increase in the future.

- b) The same network layer is providing access across the board: Due to digitization, cable TV services are now offered by LCO's and MSOs through fibre networks. Similarly, fixed-line broadband services have shifted to FTTH technology from the traditional copper, enabling higher speeds and better support for carriage of linear and on-demand content. Fibre connectivity has made cost of providing broadcasting content comparable between the various carrier services.
- c) New set of broadcasting distribution players: With the proliferation of high-speed telecommunications and broadband networks in India, a new set of players have come into play in the broadcasting distribution services. These players (including broadcasters) have created their own digital platforms to provide content using high speed broadband networks (wireline, wireless, cable, etc.). These services have proliferated at a very rapid pace and become an integral part of the lives of large sections of Indians. Through these services, subscribers can avail of live broadcast channels as well as content available on the internet on their mobile handsets/computers or other digital display devices through an application (app).

Most content can now be cast on larger screens and through internet-enabled TV sets, essentially eliminating all differences between distribution platforms on wireless and wireline broadband and a registered distribution platform operator.

- d) Linear content is available on a variety of platforms: Broadcasters have created their own apps/websites and are pushing linear programming and content using the broadband networks of TSPs via an application. This is accompanied by the continuous increase in digital consumption in the country, which has now reached 204 billion minutes per month across all devices. This shows that the integration of access technology is going hand in hand with that of end-user devices, and the same content is being accessed through different mediums and is being consumed on all available devices.

In view of the changed market and distribution structure, services of registered distribution platforms (DPOs) are perfectly substitutable not only from amongst the DPOs but also among platforms of Free Dish and unlicensed digital players/platform delivering broadcast content via broadband through an application— those digital platforms that are presently outside the purview of any licensing and regulatory framework. The Authority has also acknowledged that digital content distribution platforms have established themselves as formidable platforms for distribution of video and media content.

- e) Content consumption is similar across all devices: Unlike earlier, today's consumers do not have to depend on a specific device for viewing specific content. This has been possible due to the presence of multiple digital platforms along with high-speed broadband services. The different types of content, i.e., live broadcasting, linear programming and local/global content, can now be watched on the same screen – be it a smartphone or PC or Smart TV etc. For instance, IPL has reached a national viewership of 405 million, with it being accessible through various modes on multiple devices – through cable and DTH on TVs, through various digital platforms/applications (via broadband) on iPads, through fiber and broadband on hotel screens, etc.

Thus, the viewership of live content is migrating from traditional DTH/Cable platforms to those that operate using telecoms' networks. In fact, screen count is likely to almost double to nearly a billion by 2025, of which over 750 million will be smartphone screen and only around 220 million will be television screens<sup>1</sup>. **This indicates that convergence between broadcasting and telecom is already a reality, right here, right now.**

This convergence, driven by platforms/applications delivering broadcast content via broadband and other digital platforms, has dynamically altered the consumer behaviour and content consumption patterns. The unregulated growth of linear TV content delivered through digital platforms has impacted the regulated DTH Industry (revenues, customer base and viewership).

**Hence, today's consumers are demanding the same content experience (digital + Linear) across all screens – smartphone, TV and PC – and looking for bundled services (both data/broadband and cable/DTH services under one offer) to fulfil their needs, and the existing networks and technology are geared up to provide just such an offering.**

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<sup>1</sup> FICCI-EY Report, 2021 ([https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_in/topics/media-and-entertainment/2021/ey-india-media-and-entertainment-sector-reboots.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/media-and-entertainment/2021/ey-india-media-and-entertainment-sector-reboots.pdf))

However, the statutory/regulatory framework has not been able to keep pace with these developments.

**Suggestions on Reform:**

- a. “Must Carry – Must Provide” principle must be extended to platforms/applications delivering broadcast content through broadband: TRAI’s **Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017**<sup>2</sup>, inter alia, provides that the signals of TV channels have to be provided (by broadcasters) and carried (by DPOs) on a non-discriminatory basis, and that there can be no exclusive contracts.

As per the Explanatory Memorandum to these Regulations, TRAI had introduced the principle of **must provide** for ensuring a level playing field and fair competition in the sector and ensuring the interests of consumers and service providers are protected. The relevant extracts from the same are reproduced below:

*“Any kind of exclusive agreements, whereby signals of popular TV channels can be denied to a competitor so as to promote the broadcaster’s integrated distribution network will affect fair competition and choice to the consumers. Similarly, entering into any understanding or arrangement by a DPO with a broadcaster or LCO which prevents other broadcasters or other LCOs to access the network of the DPO for re-transmission or to obtain signals of TV channels may be prejudicial to the competition.*

*The Authority is of the view that any kind of exclusivity in distribution of TV channels is prejudicial for competition and hence should not be permitted and mandatory provisioning of signal is a meaningful step towards achieving the goal of fair competition and the interest of consumer.”*

Such broadcasters who offer same content are reluctant to offer their channels to any other players on the digital side; and if offered, the content is arbitrarily priced. This hampers fair competition as well as customer choice. This amounts to a violation of the ‘**Must Provide**’ rule of TRAI.

**This anomaly should be addressed by extending the principle of “Must Provide” to all platforms involved in the delivery of broadcast content irrespective of the underlying technology used.**

- b. Restrictions on cross-media ownership, including ‘vertical integration’, should be made applicable to all distribution platforms irrespective of the underlying technology: As a sectoral regulator, TRAI has ensured that a clear distinction is maintained between a broadcaster and distributor, by recommending cross-holding restrictions in the media sector to MIB. TRAI in its CP ‘**Issues relating to Media Ownership**’<sup>3</sup> recognized that:

*“Vertical integration often manifests in the form of ills of monopolies viz. higher cost to the consumers, blocking competition, creating barrier to entry for new players to venture into the sector, deterring innovations, deterioration of the quality of service to the consumers in the long run etc. Vertically integrated entities may negotiate mutually*

<sup>2</sup> [https://www.trai.gov.in/sites/default/files/Interconnection\\_Regulation\\_03\\_mar\\_2917.pdf](https://www.trai.gov.in/sites/default/files/Interconnection_Regulation_03_mar_2917.pdf) , pg. 83

<sup>3</sup> [https://www.trai.gov.in/sites/default/files/CP\\_IRMO\\_12042022.pdf](https://www.trai.gov.in/sites/default/files/CP_IRMO_12042022.pdf)

*beneficial deals amongst the integrated entities & at the same time put up offers for the same deals which would be deterrent to the business interests of entities which are not vertically integrated.”*

Consequently, the Government introduced restrictions on cross-ownership between a broadcasting and/or cable network companies and DTH platforms.<sup>4</sup> The relevant extracts of the DTH license have been reproduced as follows:

*“1.4 The Licensee shall not allow Broadcasting Companies and/or Cable Network Companies to collectively hold or own more than 20% of the total paid up equity in its company at any time during the License period. ...*

*1.5 The Licensee company not to hold or own more than 20% equity share in a broadcasting and/or Cable Network Company. ...”*

However, these restrictions apply only on DTH operators and not on other DPOs such as MSOs or digital platforms, even though all of them are providing the same services.

It is because of absence of any cross-holding restrictions with respect to digital platforms, that broadcasters are able to have their own vertically integrated digital platforms. Due to this, they are providing on these digital platforms, content which is the same as that available on TV channels.

This puts other distribution platforms, that operate under greater restrictions, at a commercial disadvantage, which is highly unfair.

Ultimately, this vertical integration between broadcasters and digital platforms has an adverse effect on the plurality of content for consumers, increases the possibility of arbitrary pricing for the same content and increases entry barriers for the competitors.

**Therefore, restrictions on cross-media ownership, including ‘vertical integration’, should be made applicable to distribution platforms irrespective of the underlying technology employed rather than imposing it on just on one part of the distribution industry. This will ensure that all players, irrespective of technology, operate in a level playing field.**

- c. Digital content delivery platforms should also be brought under TRAI’s tariff order: As per the **Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff (Amendment) Order, 2017**, a broadcaster cannot offer its channels at prices lower than what it has offered to the subscribers of DPOs in terms of the Tariff Order.<sup>5</sup>

However, on digital platforms, pay channels of broadcasters are available at prices which are either much lower in comparison to DTH platforms or are even nil in some cases. This is in contravention of the prescribed regulations.

**This anomaly has led to unequal access in terms of broadcasting content**, i.e., content broadcast from DPOs gets covered under NTO and the licensing regime but no such

<sup>4</sup> Guidelines for obtaining License for providing DTH Broadcasting Services in India, dated 15<sup>th</sup> March, 2001

<sup>5</sup> [https://www.trai.gov.in/sites/default/files/Tariff\\_Amendment\\_Order\\_Eng\\_3032017.pdf](https://www.trai.gov.in/sites/default/files/Tariff_Amendment_Order_Eng_3032017.pdf)

regulation exists if the same content were to be broadcast through applications **over broadband networks.**

In addition, this is also discriminatory against the subscribers of the other DPOs (like DTH operators) who have to pay much higher subscription costs, in comparison to the subscribers of digital platforms who get the same channels at much lower or negligible costs.

**Therefore, the purview of the regulations of Tariff Order should also be extended to the digital content delivery platforms to the extent they are engaged in the provisioning of the same content as that of the DPOs.**

- d. Downlinking guidelines should be strictly implemented: Clause 5.6 of the **Policy Guidelines for Downlinking of Television Channels** dated 5<sup>th</sup> December, 2011 issued by the MIB, provides that broadcasters can provide the signals of satellite television channels only to the registered DPOs, MSOs/DTH operators/HITS operators/IPTV operators. Digital platforms are not covered under this clause.

However, the broadcasters are providing their TV channels or the content of these channels on either their own applications (delivering broadcast content through broadband) or the platforms/applications of other players. This is a clear violation of the Downlinking Guidelines.

Today, digital content platforms are providing the same services as DPOs, but with no corresponding responsibility of complying with the licensing and regulatory conditions which are applicable to such DPOs. This is utterly arbitrary and against the interests of the DPOs as well as the consumers.

**Hence, an urgent intervention is sought from the Authority to establish and formulate a Licensing Framework for the platforms/applications (delivering broadcast content via broadband) with appropriate and applicable conditions by virtue of which only such licensed platforms are allowed to remain operational.**

**In summary, to reiterate, we request the Authority's urgent intervention, to ensure that:**

- **Regulatory framework must include all modes of delivery of broadcast content across all platforms irrespective of underlying technology used.**
- **Same content should be available across all platforms at same price – pricing parity irrespective of technology.**
- **Bring regulatory and licensing parity inter-se regulated DPOs and between DPOs (DTH versus DD Free Dish) and the platforms/ applications delivering broadcast content through broadband, from a carriage perspective, irrespective of the underlying delivery medium (wireless, wireline, Fiber, Satellite or combination of two medium), *inter-alia*:**
  - **Tariff regulation (NTO) applicability for same content**
  - **Regulation of principle of “must carry, must provide” at “same price” equally on all**



- **Guidelines for Downlinking of Television Channels must be enforced on and not be allowed to be violated by platforms/ applications delivering broadcast content through broadband.**

**Question 2- Whether the present regime of separate licenses and distinct administrative establishments under different ministries for processing and taking decisions on licensing issues, are able to adequately handle convergence of carriage of broadcasting services and telecommunication services? If yes, please explain how?**

**If no, what should be the suggested alternative licensing and administrative framework/architecture/establishment that facilitates the orderly growth of telecom and broadcasting sectors while handling challenges being posed by convergence? Please provide details**

**Answer- No.** The present regime of separate licenses and distinct administrative establishments under different ministries for processing and taking decisions on licensing issues is not able to adequately handle the issues arising from the convergence of the carriage of broadcasting services and telecommunication services.

The continuous advancements in technology have resulted in the convergence of networks, services, as well as devices used in the digital markets. **The entire value chain – from underlying technology to service delivery/carriage to end-user – is now converged. However, there is no parallel developments that have been brought in to introduce convergence on the governance side.** The extant licensing and administrative frameworks are still compartmentalized, as already discussed above. This gives rise to the following issues:

- a. **There is a single ministry for content regulation but two ministries for access licensing:** Under the extant regime, MIB is responsible for content regulation. We believe that this should continue as is – content/censorship should be under one ministry i.e., MIB, irrespective of the platform. Recently, online platforms were also brought under the jurisdiction of MIB and we are in complete agreement with the Government’s decision.

In similar vein, access/carriage should also be brought under one department i.e., DoT, as the distribution of similar functions across multiple Ministries/Government Departments can give rise to inconsistencies in policy approach and increased regulatory compliance costs for businesses, the burden for which is ultimately passed on to the consumers.

- b. **Licensing regime for DTH and telecom services is not unified:** Both telecom and DTH licences are granted under Section 4 of the Indian Telegraph Act, 1885. Further, both telecom and DTH operators have to approach the DoT only for all spectrum-related aspects. However, the telecom license is governed by the DoT, whereas the DTH license is governed by the MIB.

The DoT has recently carried out certain amendments in the Unified License in order to exclude non-telecom revenue (including revenue from DTH) from the definition of AGR. However, no parallel change has been brought about in the DTH license regime by the MIB although the DTH license is issued under section 4 of Telegraph Act and the LF is paid there also on the AGR basis.

As a result, a single legal entity cannot operate both in both telecom and DTH as it would end up paying double licence fee on its telecom revenue (both to DoT and MIB) due to divergent Licence fee regime.

Due to this fact, players who want to offer the benefit of convergence (Telecom & DTH) to customers by leveraging synergies existing networks and technology are unable to seamlessly offer bundled services and benefits to the consumers. The consumers should not lose out on the synergistic benefits of bundling that convergence offers, and hence the TRAI should consider recommending this aspect in the new converged framework in the interest of consumer.

In this context, a reading of the TRAI Act, together with the Statement of Objects and Reasons, would show that it was an Act conceived in the public interest, to protect the interests of both service providers, as well as the consumers. The interest of the consumers is therefore one of the paramount considerations when it comes to the authority or jurisdiction of TRAI, and it should form the cornerstone behind its regulatory framework.

It is also relevant to mention here that the importance of convergence of the telecom and broadcasting services has been recognized in NDCP 2018 as well. It calls for establishing a unified policy framework for broadcast and broadband technologies and restructuring the legal, licensing and regulatory frameworks so as to reap the benefits of convergence.

Thus, need is to create a sharper focus and oversight with an orderly separation between content and carriage by:

- a. Assigning DoT to be a single department for all licensing requirements across access platforms – Mobile, Broadband, Cable and DTH.
- b. Retaining the MIB as an umbrella body for all content regulation, management and appropriate censorship across all mediums with these platforms being covered under orderly rules to carry the same content.
- c. Bringing applications delivering broadcast content through broadband under the ambit of DoT and TRAI licensing and regulations for the purpose of ‘Must Carry – Must Provide’ and pricing.

**Question 3- How various institutional establishment dealing with-**

- a) Standardisation, testing and certification**
- b) Training and skilling**
- c) Research & Development**
- d) Promotion of Industries**

**Under different ministries can be synergised effectively to serve in the converged era. Please provide institution wise details along with justification.**

**Answer-** ITU-APT Foundation of India (IAFI) is of the view that, since the end device of target remains a mobile handset, the telecom Single Sign-on (SSO) in India, the Telecommunication Engineering Center (TEC) is better positioned to handle the standards, testing and certification on matters associated with this convergence. We also believe that to ensure that customers are benefited by this convergence, the technology of choice should be general in purpose which is capable of reaching open market mobile handsets. ITU-APT Foundation of India (IAFI) recommends the 3GPP 5G Broadcast for this purpose, which is already adopted into national standards by the Telecommunication Engineering Center (TEC) The 3GPP ecosystem is large enough to make this convergence successful and rich with features that continue to evolve. It would also enable the developers of such solution to export into global markets.

The technology side has already converged. All types of services – broadcasting, telecommunication and information technology enabled services can be provided through a single network. Services are also becoming network-agnostic, with the same media types and formats and signalling protocols being used to establish sessions and deliver payloads. Further several different types of services can be accessed through a single digital device. However, this technological convergence at network, service and device level is not accompanied by convergence at statutory, regulatory, licensing and administrative level.

We also further submit that the Government should work on the convergence on the governance side and take all the ancillary steps deemed necessary in order to fulfill that objective, including synergizing various institutional establishments under different ministries dealing with (a) standardization, testing & certification, (b) training and skilling, (c) research and development, and (d) promotion of industries.

For instance, in cases of standardization, testing and certification of ICT equipment, there are multiple agencies working in parallel – the Telecommunication Engineering Centre (“TEC”) under DoT, the Standardization, Testing and Quality Certification and the Directorate and Controller of Certifying Authorities under MeitY, and finally the Bureau of Indian Standards. In a converged era, where the same equipment is being used to provide services in several sectors, having different set ups for setting standards, testing and certification creates confusion. All of these agencies should be working under a collaborative and unified framework so that a holistic, single framework governs various aspects. Regarding these further suggestions are as follows:

- The same can be done by creating a centralized platform wherein all the institutional establishments can come together to share their resources, knowledge, and expertise. This platform can act as a single interface for all the industry needs, where industries can get access to different services provided by these establishments.
- Collaboration and sharing of resourcing among these establishments can lead to better utilisation of resources, expertise and knowledge.
- The integration of data and technology can also lead to better decision-making and improved efficiency.
- These establishments can work together to develop industry-specific solutions to address the challenges faced by various industries.
- With a centralised platform, Cross-functional teams can bring together experts from different fields to work on complex industry problems.

**Question 4- What steps are required to be taken for establishing a unified policy framework and spectrum management regime for the carriage of broadcasting services and telecommunication services? Kindly provide details with justification.**

**Answer-** While the convergence of statutory, regulatory and licensing frameworks is an essential requirement, we are of the view that there is no need to establish any new policy framework for assignment of spectrum for telecommunications and broadcasting services.

Spectrum Management involves regulatory, administrative, supervisory, and specialized technical procedures necessary to ensure the efficient operation of radio communication services. It includes frequency planning, assignments, and monitoring of spectrum assigned to different users. Moreover, spectrum is a scarce and a critical resource, and needs to be handled with appropriate sensitivity.

While it is essential to converge the statutory, regulatory and licensing regimes for the broadcasting and telecommunication services, there is no requirement to establish a unified policy framework for spectrum management regime for different spectrum bands serving totally different needs. Instead, both the government and the regulator should continue to examine such issues on case-to-case basis while ensuring the growth of different services, technologies and not disrupting the existing network rollouts. It is crucial that India continues to follow the best practices for spectrum management and assignment for different user sectors as followed internationally.

For example, Satellite services primarily address different connectivity challenges – in areas where terrestrial networks have proven economic or technical limitations – and rather complement it, hence, should not be considered mutually substitutable. Apropos, the spectrum assignment and pricing approach for both must be treated differently. Globally too, administrative allocation of satellite spectrum is the only approach because a) satellite spectrum is given on a non-exclusive basis, and b) it being a shared resource, requires global coordination. Same is true for Broadcasting as well. Thus, any auction of satellite spectrum modelled on terrestrial method/approach will dissipate the business case for Satellite communication and impact vision of bridging the digital divide. Moreover, there are multiple users of satellite e.g., VSAT/DTH/Broadcaster/Teleport. Hence, a unified policy of spectrum assignment such as auctioning the spectrum only for satellite communications would create a non-level playing field among various satellite spectrum users.

Therefore, it is only the mobile access spectrum that should continue to be auctioned at reasonable price in line with global best practices, and, the other spectrum users like broadcasting, satellite, backhaul, DTH, Teleport should continue to be allocated the spectrum on an administrative basis.

In any case, spectrum management in India is already unified – as it is under the domain of a single authority, i.e., the Wireless Planning and Coordination (WPC) wing under DoT. All users of spectrum, including TSPs, broadcasters and DTH operators, have to approach WPC for assignment of spectrum. WPC is a highly specialised agency and already has vast experience of spectrum management in the country. It has also been balancing the demands of government users and private service providers efficiently since a long time.

We note that the TRAI consultation Paper only addresses the use of the 470-703 MHz by IMT as well as by broadcasting without mentioning the use of the band by Programme Making and Special Events (PMSE), which is an ITU's inclusive term covering radio microphones, in-ear monitors, wireless cameras, talkback systems, etc. Audio is of prime importance in the world of PMSE. Without the "audio" part of an event, CEOs, politicians, and entertainers cannot communicate with impact to their audience. PMSE supports India's very vibrant content creation industry with its film, music, theatre and other sectors. This spectrum range from 470-703 MHz is critical for audio PMSE and the question of its long-term availability for PMSE to support content creation and events in India needs to be considered by TRAI. We therefore respectfully recommend not to extend IMT deployment down to 526 MHz considering the fact that major events can require large amounts of spectrum (> 100 MHz).

**Commented [JT1]:** Sir, this is Prakash Moorut's Comments that can be added, I have just added them, you can reject the changes and it will go away if we don't require to put it in this paper for now, maybe we can use these comments in some other consultation paper.

Further, WPC has crafted the extant policies to best suit the availability and usage of different kinds of spectrum. For instance, it is only mobile access spectrum that is auctioned – the spectrum for other use cases is allocated on administrative basis and charged for differently, such as backhaul spectrum, satellite spectrum, spectrum for broadcasting services.

Thus, presently, there is no need for developing any new framework for the spectrum management. The extant policies should be continued with.

**Question 5- Beyond restructuring of legal, licensing, and regulatory frameworks of carriage of broadcasting services and telecommunication services, whether other issues also need to be addressed for reaping the benefits of convergence holistically? What other issues would need addressing? Please provide full details with suggested changes, if any.**

**Answer-** We would like to suggest that in addition to the responses to Q1, Q2 and Q3, another issue which needs attention is **exclusive content delivery platforms for popular content**.

Due to technological convergence, in addition to telecom services, access to internet and broadcast content can also be provided through telecom networks. In this situation, if a single vertically integrated entity – say a DPO/Carrier and content owner – owns the exclusive content as well as distribution rights of a popular programming, like any prime sports event, it may enter into agreements for preferential access to the digital content for its own customers and hinder competition.

Such vertically integrated entities would have the capability as well as incentive to –

- a. Cause restrictions on the availability of content on other distribution platforms; or
- b. Control the pricing of the content to discriminate against other distribution platforms; or
- c. Charge higher prices from other distributors thereby increasing costs for their consumers.

This will ultimately adversely impact the plurality of content for consumers and increase entry barriers for its competitors. This concern should also be urgently addressed under the principles of choice to consumer, non-discrimination, non-exclusivity, equal access / must provide and level playing field.

TRAI is empowered to use its specialized knowledge to provide more effective remedy to any such competition issues that impacts both telecom & broadcasting alike.

**Therefore, we request urgent intervention of the Authority to ensure:**

- Regulatory framework must include all modes of delivery of broadcast content across all platforms irrespective of underlying technology used.
- No blocking of access of content by any one player in the value chain.
- Same content should be available across all platforms at same price – parity irrespective of technology.

Additionally, there are several other issues that need to be addressed for reaping the benefits of convergence holistically, these include:

- (a) Technical interoperability between Telecommunication networks and Broadcasting to enable devices and networks to work together.
- (b) Spectrum allocation to meet growing demand for spectrum to support convergence of broadcasting and telecommunications services.
- (c) Content regulation to address issues such as content classification, censorship, and consumer protection in a converged environment.
- (d) Privacy and security framework to protect consumer privacy and ensure the security of converged networks and services.
- (e) Consumer protection regulations to protect consumers from unfair practices in the converged service offerings to ensure that they have access to reliable information about the services they are using.
- (f) Promoting startup to innovate and deliver applications, content and services to give rise to innovation culture in India.

### Chapter 3

#### **Comments on the Consultation Paper on Regulating Converged Digital Technologies and Services – Enabling Convergence of Carriage of Broadcasting and Telecommunication services in respect of Satellite Networks**

1. Modern satellite systems are being licensed by Department of Telecommunications (DoT) under the telecommunications laws. These systems can offer light weight, low cost and high-performance terminals that can be used for coverage of live events. Today, a substantial portion of the Digital News Gathering has moved to 4G or 5G networks. Using multiple bonded SIMs, solutions have emerged for backpack Digital News Gathering solutions and the same may perhaps apply to satellite broadband terminals. Traditionally, the Department of Telecommunications (DoT) has viewed any satellite use for the purpose of Digital News Gathering or coverage of live events as falling in the “broadcast” domain and to be licensed separately by Ministry of Information Broadcasting. However, in this case, all that a satellite broadband terminal does is to provide an IP transport very similar to that of a SIM based mobile solution. As such the convergence of transport should enable satellite broadband based terminals to do Digital News Gathering and coverage of live events without taking a separate MIB license/registration.
2. Terrestrial broadband networks currently offer *multiple-play* services as they are able to provide, voice, internet and television with a single connection. On the satellite front, however, DTH, Satellite Broadband (VSAT) are separately licensed. This difference lacks justification and we suggest a technologically neutral principle should be followed in the licensing of these services. This will help in the delivery of television, voice and internet to remote households under a unified licensing arrangement.
3. Unification of infrastructure – Similarly, the use of separate infrastructure could be optimised when there is a single infrastructure provider who sets up the GW and is able to provide services to both telecom and broadcast service providers. For example, gateways being set up under the Satellite Earth Station Gateway (SESG) license should be able to cater to teleport/HITS and DTH service providers as well.

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