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To,
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Subject: Response to Consultation Paper on ‘Regulating Converged Digital Technologies and Services – Enabling Convergence of Carriage of Broadcasting and Telecommunication Services’ dated January 30, 2023

On behalf of the global information technology sector, the Information Technology Industry Council (“ITI”), thank the Telecom Regulatory Authority of India (“TRAI”) for the opportunity to provide our comments and inputs on the consultation paper on ‘Regulating Converged Digital Technologies and Services – Enabling Convergence of Carriage of Broadcasting and Telecommunication Services’ dated January 30, 2023 (“CP”).

The Information Technology Industry Council (ITI) is the premier global advocate and thought leader for the information and communications technology industry. ITI’s membership comprises leading technology and innovation companies from all corners of the tech sector, including software, digital services, and internet companies. They are headquartered across Asia, the United States, and Europe, and many are significant investors and employers in India.

We appreciate the efforts taken by TRAI to examine the issue of the convergence of carriage of broadcasting and telecommunication and the regulatory frameworks concerning such convergence. We would like to convey our support for modern and future ready telecommunications laws. We note that ITI recently provided feedback on the proposed draft Telecommunication Bill, 2022 announced by the Department of Telecommunications, Ministry of Communications (“DoT”) and to the DoT’s CP on the “Need for a new legal framework governing Telecommunication in India” related to spectrum management, standards, and the need for a simplified regulatory framework.

We are optimistic that the Honourable Prime Minister’s vision of making India a \$1 trillion digital economy will materialize soon if the Indian Government continues to focus on risk-based regulations and policies that balance regulatory burden for industry with benefit to the citizens. To further this goal, please find below ITI’s inputs and comments to the specific observations and questions set out by the TRAI in the CP for your kind consideration.

ITI's Comments and Inputs to TRAI's Questions

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? 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? 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.

ITI Response:

In our considered view, there is neither a need to amend existing laws to bring in synergies amongst different statutes nor a need to have a converged legal framework (in the form of a comprehensive code) to deal with the convergence of carriage of broadcasting and telecommunication services. This is because we believe that broadly: (i) the present laws are adequate to deal with the convergence of carriage of broadcasting and telecommunication services and any challenges arising thereof; and (ii) there are sector specific reforms that are already underway at highly advanced stages of deliberations and consultations between relevant stakeholders for addressing existing regulatory gaps. In this regard, we have elaborated upon the above-mentioned reasons, as well as provided additional reasons on why convergence through a unified, comprehensive code or initiating a new process to amend existing laws is not needed.

Present Laws are Working

ITI foresees convergence, at this stage of India's digital transformation journey, to be a complex exercise with potentially adverse unintended consequences. Currently, the wide definition of 'telegraph' under the Indian Telegraph Act of 1885 brings ICT equipment and various consumer electronic products within the ambit of telecom and telecom equipment-related regulations. Rather than refining the scope and application of telecom equipment regulations to specifically regulate only core telecom products and distinguish between telecom companies/internet service providers and technology facilitators at the application layer, the CP encompasses even more services, which rather than leading to less confusion creates more complexity and barriers to international competitiveness.

While India's technology regulatory landscape is complex and fragmented in some senses, the laws and regulatory frameworks have been firmly established and serve as the foundation for institutional compliance among industry players. The regulation of converged ICT services is governed by several statutes, including the Indian Telegraph Act 1885, the Indian Wireless Telegraphy Act 1933 (IWT Act), Information Technology Act (IT Act

2000), the Cable Television Networks (Regulation) Act 1995 (CTNR Act), the Prasar Bharati (Broadcasting Corporation of India) Act 1990, and the Telecom Regulatory Authority of India Act 1997 (as amended) (TRAI Act). There are other rules that govern content. Although its powers may differ from those of regulators in other countries, TRAI serves as a unified regulator for both telecom and broadcasting services as noted in the CP.

TRAI serves as the regulator for both broadcasting and telecommunications sectors, with disputes settled by the Telecom Disputes Settlement and Appellate Tribunal (TDSAT), as established by the TRAI Act. Additionally, the same government body, the Wireless Planning & Coordination wing ("WPC") of the Department of Telecommunications (DoT), grants SACFA clearance, wireless operating licenses, and spectrum allotments to both telecom and broadcasting operators.

Furthermore, there is already a convergence of some statutes and institutional frameworks governing the carriage of broadcasting and telecom services. This includes a common regulator, adjudicator, and spectrum administrator. The carriage of broadcasting and telecommunication services is also subject to the Information Technology Act and the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 ("Intermediary Guidelines 2021").

Sector Specific Reforms are Already Underway

We note that the Central Government has been acting expeditiously to bring into the public domain principle-based frameworks to improve upon existing regulatory mechanisms to regulate certain technologies and/or effectively regulate previously unregulated technologies. Such an endeavor by the Central Government is taking the form of either consolidation of statutes or overhauling of existing sectoral legislations.

The Ministry of Information and Broadcasting (MIB), in response to the Department of Telecommunications' (DoT) reference, acknowledged TRAI's role as the common regulator for carriage of both telecom and broadcasting services. The MIB highlighted that convergence of technology had already happened to a great extent over the last decade, and TRAI, along with MIB, had successfully managed all the legal, policy, and regulatory requirements arising from such changes. Additionally, the MIB stated that broadcasting is a strategic sector that requires regulation due to its sensitivity and impact. Thus, several agencies, including the Ministry of Home Affairs and the Department for Promotion of Industry and Internal Trade, are involved in regulation. The MIB further mentioned that moving licensing functions to another department would be counterproductive and disrupt established practices. MIB also highlighted in a letter to the TRAI on the reference made by DoT that it is proposing reforms for bringing together all broadcasting carriage platforms and their institutional, legal and regulatory aspects under a unified legislative framework. Furthermore, the regulatory convergence in the broadcasting sector is being achieved by creating a single platform in the form of the "Broadcast Seva Portal," where all stakeholders, ministries, and departments are integrated as a single window for all licensing, permissions, reporting requirements, etc.

The draft of the Indian Telecommunications Bill, 2022 ("**Telecom Bill**"), which was placed in the public domain for stakeholder inputs, is designed to replace older legislations governing the telecommunications sector (such as the Indian Telegraph Act, 1885). Further, based on publicly available information, the Central Government proposes to introduce light-touch regulatory approach for over-the-top (OTT) communication services/applications. In this respect, please note that the TRAI in the CP has proposed that a converged code could include provisions to potentially regulate new age technologies like OTT communication services.

It is worth noting that application layer platforms are already subject to extensive regulation under various provisions. These services are governed by multiple provisions of the Information Technology Act, 2000 and will

also be subject to upcoming regulations, such as the Digital Personal Data Protection Bill, 2022, and Digital India Act (DIA), which would replace the Information Technology Act, 2000 and which from publicly available information is likely to include within its regulatory purview different actors operating within the Information Technology (“IT”) and Information Technology enabled Services sector (“ITeS”) [such as, cloud service providers (“CSPs”)], as well as new and emerging technologies (such as metaverse, artificial intelligence, augmented reality/virtual reality, etc.) through the principles of openness, user safety, consumer trust and accountability for the online ecosystem.

We note that above cited sector-specific reforms being undertaken by the Central Government, such as the Telecom Bill and the DIA, are at several stages of consultations (including at the highest ministerial/departmental levels) to take into account both industry concerns and the interest of individual users in equal measure. Therefore, in the interest of facilitating the ease of doing business in India, we believe that there is no requirement to initiate another similar process of reform (either in the form of amendments or introducing of a comprehensive code) to disrupt the present process already underway and progressing rapidly (at a highly advanced stage).

It is our considered view that the above-mentioned sector-specific reforms will adequately address what appears to be the primary concern expressed by the TRAI in the CP – of certain technologies and technology innovations (including converged technologies in the broadcasting and telecommunications sector) not being subject to regulatory oversight. Furthermore, these sectoral reforms (as opposed to a converged regulatory framework) are likely to be important steps for promoting innovation at scale and enabling technology-driven businesses (both domestic and global) to navigate the Indian regulatory ecosystem with ease and efficiency.

Regulatory Convergence at the Application Layer is Counterproductive

While we appreciate efforts to update India’s telecom rules, we would like to urge TRAI to maintain a narrow definition of “Telecommunication Services.” We understand that the broad definition may result from the goal of convergence and the definition proposed in the DoT’s Draft Telecommunications Bill. Every type of service that is made available to users via telecommunication technology is covered under DoT’s proposed definition, which includes email, video and data communication services, internet-based communication services, interpersonal communication services and OTT communication services.

We believe the services enumerated above are distinct from traditional telecommunication services as these listed services operate on the **application layer, as opposed to the network layer**. The technical, functional, and market-based distinctions between Telecom Service Providers (TSPs) and OTT service providers must be recognized. Traditional telecommunication services provide crucial telecommunication infrastructure while application layer service providers offer applications over telecommunications infrastructure. This distinction has long been acknowledged TRAI in its recommendations regarding OTT communication services and should be maintained.

OTT providers cannot be considered as substitutes for TSPs as they are subject to different regulatory considerations and lack the same infrastructure rights and benefits. For example, compared to telecommunications, the OTT sector has vastly different competition and consumer protection concerns. The CP operates on the assumption that all digital services are largely similar, and indistinct from telecom services (and therefore should be regulated similarly with telecom services). In actuality, the vast majority of online services, sometimes referred to as ‘OTTs’, are in addition to, and not in derogation or substitution of, traditional telecommunications (or broadcasting) services. While adoption of online communications by users is already considerable (even in a market like India), that does not imply product market substitution, and certainly not

complete substitution for traditional telephony, or for mobile networks. Users of these products also typically subscribe to traditional fixed and mobile services, and use each of them as the circumstances and call types vary, depending on the use case (e.g. at home, on the road, personal use, professional use, intended call duration, combination with text, video and file transfer, unified communications, conference calls, business solutions, etc.). Usage is therefore more complementary and accretive than substitutive.

Therefore, the principle of 'same service, same rules' is misleading as these services may appear similar, but their infrastructure and delivery methods are fundamentally different. Many start-ups and innovators in India operate in the application layer and could be burdened with unnecessary regulations if convergence is approached from a 'same service, same rules' perspective. This is also buttressed by the fact that The Competition Commission of India (CCI) in its *Market Study on the Telecom Sector in India* examined the telecom sector and also the establishment of the OTT service providers in India. Tellingly, it stated: "On balance experts feel a separate regulatory framework is not necessary for OTTs and excessive regulation may stifle technological innovation, and therefore be counterproductive.

Further, the International Telecommunications Union's ("ITU") still does not prescribe any regulatory mechanism for OTT communication services, which can be gleaned from its recommendation ITU-T D.262 outlined below:

- *Consideration of the economic impact of OTTs should be based upon recognition of the fundamental differences between traditional telecommunication operators and OTTs, including inter alia, control of broadband Internet access, level of regulatory exposure, barriers to entry, competitive environment, level of substitutability between OTTs and traditional telecom services and interconnection to public networks. ...*
- *8.2 In the spirit of service availability and affordability, Member States should foster enabling legal and regulatory environments, and develop policies that are fair, transparent, stable, predictable and non-discriminatory; and that promote competition, foster technological and service innovation and encourage private sector investment incentives, in order to ensure the continuing growth and adoption of OTTs.*

To safeguard the future of data innovation, telecoms and applications must remain unbundled from a regulatory lens. Telecom law should regulate the hard infrastructure or 'carriage' layer, and not the software layers above. We would stress that this applies to all of the application layer services mentioned in the CP: OTT communication and video services, cloud computing, machine-to-machine communication, and AR/VR communication and applications.

The regulatory approaches to converged technologies should not evolve based on the service or use-case being offered by the service provider. It is crucial to take into account technological distinctions while framing regulations for converged technologies and bring in regulatory approaches that depend on the technology being employed/implemented. This is important in order to avoid a situation wherein entities offering such technologies are subject to excessive, broad-brush regulations. And, as a consequence result in hampering innovation-led commercial growth and the ability of consumers to access such services across diverse platforms.

In fact, it should be recognized that there exists a 'symbiotic relationship' between TSP and technology companies. As use and reach of online OTT services grows, more and more consumers are purchasing more and more of TSP's products to access the internet thereby creating a virtuous cycle where consumers would buy high speed internet access from TSPs (as Internet Service Providers - ISPs) in order to reach content and applications. Similarly, content providers are themselves reliant on a connected population for their business to work.

This has delivered huge advantage to consumers and users who benefit from unfettered access to a rich ecosystem of online content, applications, and services, bringing socio-economic benefits and access to

entertainment and information that enriches consumers' lives as well as economic opportunities. The government should continue to encourage this kind of symbiotic relationship for the benefit of all actors in the ecosystem, beginning with end-users.

In fact, OTT companies contribute significantly to investment in networks and to supporting TSPs and the telecom value chain. Their services and infrastructure are a major benefit for TSPs, other online companies, and consumers. Many OTTs have invested extensively in network infrastructure: both their own, and their TSP partners'. By OTTs building their own networks - often in partnership with TSP providers - interconnecting with their networks, and also providing caching servers to ISPs they carry and off load much of the traffic on it's way to users. This reduces costs for TSPs to whom they deliver traffic and improves the service performance they offer.

Related investments made by OTTs include large data centres for storing content, investment in subsea cables that connect global internet traffic and provide networks with high-speed content delivery, resilience, and capacity, in turn benefiting the consumers. They invest in subsea cables that connect global internet traffic and provide networks with high-speed content delivery, resilience, and capacity. They often directly partner with local carriers, who benefit from the investment into these subsea cables with better global network connectivity and resilient backhaul networks. That in turn benefits their customers. OTTs also design their services and invest in products that support operators' effective network management and reduce their costs.

Remarkably, other online platforms invest in this sort of infrastructure as well. For instance, an October 2022 report by Analysys Mason¹ on the impact of tech companies' network investment on the economics of broadband ISPs shows they spent US\$883 billion on internet infrastructure from 2011 to 2021, averaging \$125bn annually in recent years and saving ISPs \$5bn to \$6.4bn a year.

TRAI has also previously observed in its recommendations on "Regulatory Framework for Over-The-Top (OTT) Communication Services" that a comprehensive regulatory framework for OTT services is not recommended beyond the existing laws and regulations, and that such regulation could be looked into afresh when more clarity emerges in international jurisdictions. TRAI has previously recommended that no regulatory interventions are required in respect of issues related with privacy and security of OTT services. We do not believe that this is the time nor has additional clarity emerged at the international level. The International Telecommunication Union ("ITU") still does not prescribe any regulatory mechanism for OTT communication services, with the exception of certain standards for consumer and data protection² – which Indian law already provides for by way of the IT Act, and rules thereunder. Furthermore, India has made certain commitments at the World Trade Organization ("WTO") for both national treatment and market access for certain telecommunications services, which such new licensing procedures could nullify.

Therefore, the **time-tested distinction between infrastructure services such as broadband and spectrum controlling entities and application layer companies should be maintained in practice and in law, which is the basis of allowing innovation, international competition and deeper penetration and adoption of the internet in India.** At the outset, we recommend that TRAI revise the definition of telecommunication services in the CP and in further considerations by removing "application layer" components such as OTT services, internet-based communication services, interpersonal communications services, cloud service providers, etc., from its ambit. It is crucial to recognize that the current framework has played a significant role in fostering innovation in the

¹ Analysis Mason, The impact of tech companies' network investment on the economics of broadband ISPs, <<https://www.analysismason.com/internet-content-application-providers-infrastructure-investment-2022>>

technology sector, and that regulatory convergence that treats OTTs and TSPs similarly through regulation would prove counterproductive.

Sectoral regulators will likely have to find effective means and methods (within existing regulatory frameworks or through amendments, wherever necessary) to deal with the challenge of regulating new and emerging technologies. In this respect, we believe that instead of bringing in a completely new structure by way of an overarching converged legislation, the primary focus should be on ensuring that such regulators have the relevant tools to regulate these new and emerging technologies independently on a case-to-case basis.

Regulation of Content not within the Ambit of the CP

We note that the TRAI in the CP has weighed in on issues related to both the IT sector, as well those subject-matters that are unrelated to carriage, including the co-regulation of carriage and content in broadcasting. For instance, the TRAI appears to suggest that a ‘fully converged Information and Communications Technology (ICT) regulator’ performing ‘data privacy and cyber-security functions’ would be beneficial for a digitalized economy. However, in this context, it is crucial to underline that in the Terms of Reference (‘**ToR**’) for this CP dated August 08, 2022, the DoT had requested the TRAI to *inter alia* examine only issues related to the convergence of broadcasting and telecommunication services – and accompanying measures that may be considered for licensing, spectrum management, etc. If India is to have an independent privacy regulator, it should develop through the DPDP Bill process with appropriate stakeholder input.

Notwithstanding the above, in our view, the suggestion for co-regulation of carriage together with content by a converged regulator neglects to take into account significant peculiarities of content regulation. These peculiarities, as such, are as follows:

The regulation of content (as opposed to that of carriage) requires nuanced, multi-dimensional craft and expertise, which takes into consideration values such as creativity and expression in framing regulatory approaches, which interestingly is also echoed by MIB in its views on the DoT reference.

In our view, the sector specific reforms initiated by the Central Government through a consultative process (including continuous engagement with stakeholders) adequately addresses the challenges posed by the convergence of technologies. Therefore, we would request TRAI to reconsider the formulation of a comprehensive, unified regulatory code or a converged regulator for the carriage of telecommunication and broadcasting services. Further, we request the TRAI to consider limiting the scope of the CP to issues pertaining to carriage and not extend the same to content regulation.

Market Disruptions and Other Unintended Consequences

India has a high adoption of digital technologies when compared to similarly situated countries (e.g., in terms of per capita income, etc.). It is our considered view that a converged regulator is likely to lead to significant regulatory and market disruptions that will undermine the further integration and adoption of digital technologies in India. For example, a converged regulator may not have the flexibility or capacity to respond effectively in an environment of constantly evolving technologies. Further, the imbalance in the regulatory processes in a converged environment (e.g., scoping regulations in a way that captures technologies that may not be relevant) could potentially have a negative impact on India’s ability to contribute to global, large scale technological innovation.

Given the potential disruption to institutional compliance and operational continuity, which could cause significant delays to India's technological development and innovation, and the fact that current legal and regulatory frameworks sufficiently cover the field to ensure that all stakeholders are adequately regulated, we do not believe that modifying the legal, regulatory, or licensing framework is necessary.

The emergence of open-source software and collaborative communities has played a key role in driving the growth of new technologies and applications. By leveraging the collective expertise and creativity of developers and innovators around the world, open-source projects have enabled the creation of novel software and hardware solutions that would have been unfeasible within a regulatory environment that relies on prescriptive approaches.

While the regulatory structure, shape or form of a converged regulator has not been elaborated by the TRAI in the CP - in our view, such converged regulator is likely to have specialized departments/units for different areas/aspects of regulation (such as, for dealing with anti-competitive behavior). In this respect, it is unclear whether the converged regulator and its specialized departments/units will be able to carry out their respective functions in a harmonious manner, or whether this may result in intra-departmental/unit conflicts between the specialized departments/units operating within the umbrella converged regulator.

In our view, bringing in a converged regulator may not merely lead to the emergence of further jurisdictional conflict between regulators but may also result in business/industry-wide uncertainty as such conflicts would likely have to be settled through litigation in constitutional courts. Therefore, to prevent any negative impact to the global perception of the ease of doing business in India and to ensure the healthy growth of the industry (including for facilitating new entrants from overseas markets), convergence in the form of a unified code/regulatory should be avoided. As an alternative, we believe that having separate (though complementary) legislative frameworks would likely allow regulators to holistically address different aspects and effectively deploy their respective expertise.

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.

ITI Response:

We believe that an alternative licensing and administrative framework / architecture / establishment is not necessary. In this regard, we would like to underline that, in our view, the present regime of separate licenses and distinct administrative establishment under different ministries for processing and taking decisions on licensing issues adequately handles convergence of broadcasting and telecommunication services. Insofar as there is a

requirement to streamline business processes for licensing etc., we also believe that such streamlining can be implemented without necessarily overhauling and restructuring the regime.

Licensing is not Appropriate at the Application Layer

Creating a licensing regime for application layer services that is converged with or mirrors licensing regimes for telecommunication service providers would cause considerable disruption to India's ICT industry. As explained earlier, many application layer services have been incorrectly classified as telecommunication services. Some of these application layer services are regulated in India by the Information Technology Act, 2000 (IT Act) and the rules thereunder – such as the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules) and the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data of Information) Rules, 2011. Under the IT Rules, intermediaries – which are likely to include most application layer service providers are subject to dedicated compliance and reporting requirements.

Furthermore, each administrative establishment, under each Ministry, has a unique mandate and purpose. For context, other than the acts and regulations explained above, we have Cinematograph Act of 1952 and the Press and Registration of Books Act 1867, among others which cover the field. DoT deals with issues relating to communications which include voice, video, and data communication, while MIB deals with information and broadcasting technologies; the Ministry of Electronics and Information Technology (MeiTY) considers issues related to electronics and information technology. Together, they form a comprehensive regulatory ecosystem for the carriage of telecom and broadcasting services in India. Furthermore, MeiTY is in the process of developing a legal framework for the digital ecosystem that is likely to be applicable to many application layer services, including OTT service providers.

The introduction of a significantly broader licensing regime may qualify as an act of over-regulation on application layer services and also substantially increase compliance costs. This could hamper innovation and consumer choice. Furthermore, the Ministry of Electronics and Information Technology (MeiTY) is in the process of developing a legal framework for the digital ecosystem that is likely to be applicable to many application layer services, including OTT service providers.

Further, we would emphasize key differences between TSPs and application layer services. TSPs receive exclusive rights and privileges from the Government, such as right to acquire spectrum, right of way, etc. and they own and control what is considered critical infrastructure in India. Thus, a licensing regime on traditional telecommunication service providers is justified to ensure their accountability. On the other hand, application layer services are facilitated by such infrastructure and have no actual control over the same. The imposition of heavy financial obligations on application layer service providers such as license fees, is likely to take away their ability to invest in improving the quality of their services and it may also compel them to shift the burden of their increased operating costs onto the users (by making their services more expensive).

This would run contrary to TRAI's own observations in its recommendations on "Regulatory Framework for Over-The-Top (OTT) Communication Services". TRAI observed that a comprehensive regulatory framework for OTT services is not recommended beyond the existing laws and regulations. It was of the opinion that such regulation could be looked into afresh when more clarity emerges in international jurisdictions, particularly the study undertaken by the ITU. Between 2020 and 2023, there has been no change in this situation, international practices; and no change in ITU's approach. In fact, ITU has not specified any regulatory mechanism for OTT based services and has only encouraged voluntary commercial agreements between TSPs and OTT service providers. Additionally, TRAI also recommended that no regulatory interventions are required in respect of issues related with privacy and security of OTT services.

Thus, they should not be regulated under a similar framework as telecommunication service providers as their accountability cannot be equated and it is likely to negatively impact application layer services as well as the users.

In our view, Licensing is usually required where resources are scarce and operators obtain something of value in turn for a license, such as spectrum (for mobile, television, or radio channels). When it comes to online services, there is a virtually infinite number of services that can be offered which do not require the allocation of such finite resources. As such, we do not believe that a licensing regime is appropriate for online applications and services. For services referred to as ‘Video OTT platforms’, such Internet applications and services have been essential for economic growth and other societal benefits, including choice, innovation and new uses for consumers and businesses. Apart from the fact that it would be impractical and beyond the capacity of any one regulator to license all OTT services, it is important to note that these services which are different from traditional, legacy broadcasting also elicit different user needs and different expectations. For example, for online video services with user generated content, consumers can choose proactively and precisely what they want, from multiple choices and sources, and to protect themselves through tools such as parental controls; this is a marked departure from traditional linear broadcast which gives limited choices to viewers and controls the content shown to consumers.

As such, the permission-based regime should only extend to those services which traditionally qualify as ‘material resources’ and are under the ownership of the government – such as spectrum assignment and bringing internet communication services within the regulatory ambit of DoT or another regulator would not only subject such services to onerous license terms and conditions, but would also include a levy of entry fees, license fees and registration fees. *This will have a chilling effect on innovations and investments in the internet ecosystem.*

Therefore, the introduction of a significantly broader licensing regime may qualify as an act of over-regulation on application layer services and substantially increase compliance costs. This could hamper innovation and consumer choice, create confusion for operators and the internet ecosystem and reduce ease of doing business which is the well-intentioned aim of the government.

Question 3: How various institutional establishment dealing with (a) Standardisation, testing and certification. (b) Training and Skilling. (c) Research & Development; and (d) Promotion of industries under different ministries can be synergized effectively to serve in the converged era. Please provide institution wise details along with justification.

ITI Response:

Standardization, Testing and Certification

The TRAI in the CP states that the existing administrative structure for standardization, testing and certification is complex, with one converged technology having to adhere to different standards, undertake numerous tests and be certified by multiple agencies. For instance, the standardization, testing and certification for telecom and

related IT equipment is *inter alia* conducted by the Bureau of Indian Standards and Telecommunication Engineering Centre and in the area of Electronics and I.T, MeitY's Standardisation Testing and Quality Certification (STQC) Directorate provides quality assurance services such as Testing, Calibration, IT & e-Governance, Training and Certification. To avoid duplicity in such standardization, testing and certification requirements, and harness institutional capacities in the right manner – we recommend that:

- Each agency should be limited to carrying out functions that helps it to utilize and develop their core capabilities.
- Each agency should undertake stakeholder consultation prior to formulating new standards and examine whether specific industry/business practices can be formally adopted and formalized by the agency (given the fact that industry practices are typically developed taking into account the technology itself, the best interest of users and how to ensure effective service delivery).
- Every agency, together, forms part of a cohesive and successful regulatory mechanism. It would be useful for different regulators to collaborate in the form of project teams, working groups, or task forces on areas of common interest, so as to bring together their respective expertise and perspectives to solve particular situations, while not having to merge the entities themselves. Examples of this approach include the UK's Digital Regulation Cooperation Forum, which brings together the data protection authority, the telecom regulator and others, and engages on an ongoing basis with stakeholders across society.
- In a converged environment, we may consider recommending that the same agency specify standards, conduct testing, and issues certifications, otherwise multiple agencies may specify different standards and requirements for the same technology.
- Alternatively, the multiple institutions under different ministries relating to standardization, testing and certification should have some institutional mechanism (as suggested above) to follow a collaborative approach.

We believe that the above recommendations could serve a dual purpose of ensuring that different administrative agencies are not regulating the same technologies in terms of mandating standardization, testing and certification requirements while also allowing for the harmonization of their functions in an orderly manner.

ITI strongly encourages India to rely on internationally recognized standards wherever possible to ensure that India continues to have access to leading edge technology and innovations from around the world. Testing and certification from internationally accredited laboratories should be accepted as evidence of conformance to such standards without the need for duplicative testing and certification in India. This will also enable telecom service providers to deploy global standard products in time and factor for network differentiation which will promote competitiveness, thereby making access to internet affordable.

Harmonization between international standards and those developed in India is essential for purposes of interoperability and security. Unique domestic standards unique to India could lead to decreased interoperability and could create market access barriers. Should India pursue a domestic standard, that standard should be raised in international standards development bodies to encourage global harmonization. An approach embracing global best practices is best suited for the rapid development and deployment of new technologies in the telecommunications sector.

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.

ITI Response:

At the outset, we are of the view that there is no requirement to establish a unified policy framework and spectrum management regime for the carriage of broadcasting and telecommunication services. This is because there is a need to maintain a flexible framework/regime for formulating effective regulatory responses, considering the accelerated evolution of the telecom and broadcasting sectors and their diversified demands (especially for spectrum bands). Such issues should be examined on a case-by-case basis and after undertaking a regulatory impact analysis. Accordingly, we believe that the time has come (notwithstanding, any legacy issues related to spectrum assignment/allocation) to consider a light-touch framework (including de-licensing) for certain spectrum bands that may not be of value to telecom service providers. This light-touch approach may enable entities not having access to capital and funding to access spectrum bands, and also contribute to reducing the digital divide and accelerating the innovation of technologies, their penetration, adoption and implementation.

We note that the draft Telecom Bill is an important step in this regard considering that it permits the assignment of spectrum for telecommunication by the Central Government as well exemption to entities (by notification and subject to public interest) from specific usages within specified frequencies and parameters.

Regulatory Neutrality and Flexibility

Wireless and wireline technologies remain deeply intertwined. To achieve the greatest potential of internet-enabled communications, we encourage you to take a balanced approach to both licensed and unlicensed spectrum.

The CP acknowledges that the WPC of the DoT exercises the statutory functions of the central government, and issues licenses to establish, maintain, and operate wireless stations under the provisions of the Indian Telegraph Act, 1885. For the delivery of services for broadcasters, suitable approvals / licenses are issued by the MIB, and telecom service licenses are issued by the DoT. The expanded reference from DoT ^{also} refers *only* to the following:

- Amending the license regime to enable the convergence of carriage of broadcasting services and telecommunications services;
- Establishing a unified policy framework and spectrum management regime for the carriage of broadcasting services and telecommunications services;
- Restructuring of legal, licensing, and regulatory frameworks for reaping the benefits of convergence of carriage of broadcasting services and telecommunications services;
- Revising regulatory regime in respect of DTH and cable TV services holistically addressing all institutional, regulatory and legal aspects.

As delineated in the sections above, we believe that the comprehensive policy framework in place now is the best and most effective way to regulate the ICT ecosystem. This framework ensures that licenses are suitably issued, content is moderated, and the remit of each individual agency is suitably protected. That said, we do believe that regulators should prioritise the co-existence of lightly licensed and unlicensed models, with a sharing framework that is light on bureaucratic overheads and makes significant unlicensed spectrum available for WiFi.

Spectrum

As noted in the CP, spectrum is indeed a scarce natural resource, and, in the interest of the public, should be allocated to its highest and best use to enable wide-spread access to telecommunication services. Auctions for licensed spectrum, without the possibility of government overrides, will foster efficient use of commercially available licensed spectrum. Unlicensed use plays a key role in the development of new technologies that will promote future ready networks. In considering the allocation of spectrum resources, it is key to keep an eye towards international standardization and harmonization to provide India with a continued and enhanced global leadership role, a competitive edge with global networks, and the seamless deployment of future technologies that will further enrich India's economic and social prosperity

Licensed Spectrum: We congratulate India on the completion of its recent 5G auction and expected speedy rollout. It is estimated that there will be about 500 million 5G subscriptions representing around 39% of mobile subscriptions, with up-take encouraged by bundled services by the end of 2027. The projected values of the 5G-enabled digitalization revenues in India by 2030 range from USD 17 billion to USD 42 billion. 5G will enable solutions such as e-health, connected vehicles, more- immersive augmented reality and metaverse experiences, life-saving use cases, and advanced mobile cloud gaming, among others.

Prominent experts in the field of internet law and policy, have emphasized that 5G technology has the potential to significantly improve network performance, with lower latency and higher speeds across most applications. We note that the proliferation of capacity in 5G networks reduces the need for Internet Service Providers (ISPs) to differentiate between traffic types and that the increased flexibility and ease of creating specialized services enabled by 5G technology should not lead to the creation of a less open online world.

Unlicensed Spectrum: According to the Wi-Fi Alliance's report on the Global Economic Value of Wi-Fi, Wi-Fi alone contributes \$131 billion in economic value to India today. That number will rise to \$240 billion by 2025. The combination of modern technology and additional spectrum will help ensure Wi-Fi's value continues to grow in years to come. The advent of Wi-Fi 6E, Wi-Fi 7 and beyond and access to more unlicensed spectrum will enhance a suite of advanced applications.

Access to spectrum for new technological developments and global trends in Internet of Things (IoT), Short Range Devices, Wi-Fi, etc., along with other license exempt technologies, must be considered in the spectrum "mix." Delay in allocating spectrum for non-carrier related spectrum needs can hamper progress in the Indian electronics industry in terms of testing, bringing new products to market and meeting the needs for both exports and domestic production.

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.

ITI Response:

OTTs & TSPs

In the draft Indian Telecommunications Bill, 2022 as well (Telecom Bill), the proposed definition of “telecommunication services” includes OTT communication services, among other, extremely varied services. Further, the bill places exclusive privilege on the central government to issue a license to provide telecommunication services. In this proposed design, all OTT communications would require a license by the DoT!

However, there are fundamental reasons why OTT communications should remain outside of the licensing regime. OTT services are essentially different from traditional telecommunications services: OTT services do not have their own network and spectrum and is merely an application delivered through the internet. Even the TRAI, in its Recommendations on Regulatory Framework for Over-the-Top (OTT) Communication Services, had stated that it was “not an opportune moment to recommend a comprehensive regulatory framework for various aspects of services referred to as OTT services, beyond the extant laws and regulations prescribed presently.” TRAI stated that the matter may be looked into afresh when more clarity emerged in international jurisdictions particularly the study undertaken by ITU. Further, as mentioned above, there is sufficient regulatory coverage OTT services under existing laws, including the IT Act and the rules thereunder (including the Intermediary Guidelines).

Further, there is no price arbitrage: TSPs earn revenue for the OTT services provided on their network in the form of data and internet charges. In the IP based network, the cost of voice calls is negligible. TSPs charge for broadband access, and voice calls are free, and therefore, there is no pricing arbitrage between voice calls via TSPs and internet-based calls.

In addition, there is a direct and detrimental impact on user privacy by placing OTTs in the same regulatory ambit as TSPs. OTTs may be required to weaken encryption to comply with requests, directly impacting user privacy.

Cloud Service Providers

The CP assumes similarities between telecom service providers (TSPs) and cloud service providers (CSPs). This assumption is misplaced as there are fundamental differences between TSPs and CSPs. TSPs provide the infrastructure for connectivity and the connectivity itself. On the other hand, cloud services rely on the networks of TSPs to provide services to its users and therefore, do not control access to the internet or the network layer.

There are also inherent differences between cloud services and telecom services. Unlike a telecommunications service, cloud computing does not involve the supply of connectivity to any person. The services offered by CSPs are not substitutable with telecommunication services offered by the licensed TSPs. It is incorrect to suggest that cloud computing operates in an ‘unregulated domain’ (paragraph 1.27) or needs to be brought within the TRAI’s regulatory jurisdiction. CSPs are already subject to comprehensive regulation under both existing general and sector-specific laws and regulation, including in the areas of security (Information Technology Act, 2000), consumer protection (Indian Contract Act, 1872; Consumer Protection Act, 2019) and proposed privacy legislation (draft Digital Personal Data Protection Bill, 2022) and Digital India legislation by the Ministry of Electronics and Information Technology (MeitY). MeitY also provides guidelines and requirements for cloud services for empanelment. Regulators like the Reserve Bank of India and the Insurance and Regulatory Development

Authority of India, also issue IT outsourcing guidelines to ensure that sector specific requirements and expectations continue to be met by regulated entities when they outsource IT, including when they adopt cloud.

Recently MEITY's Computer Emergency Response Team (CERT-In) also introduced guidelines for CSPs including maintenance of ICT logs, customer records. Existing regulations allow access by law enforcement agencies in a streamlined manner, that may arise from a national security perspective. Hence, cloud service providers are already regulated under existing laws and should not be treated at par with telecom service providers and this approach is aligned with international practices.

Lastly, As stated in our response to Issue 1, we understand that the IT and ITeS sector would potentially fall within the regulatory ambit of the upcoming DIA along with the internet ecosystem as a whole (with the DIA also likely to include provisions to set cybersecurity strategy and policy for India, different types of intermediaries). We further understand that the Central Government, through the DIA, is also likely create a new regulator empowered to enforce penalties. Accordingly, and given the fact that: (a) the IT and ITeS (such as CSPs) sector is likely to be regulated under the DIA; (b) the Central Government will likely hold extensive stakeholder consultations to solicit views from the industry to improve upon the DIA – In our view, there is no need as such, for the TRAI through the CP (or in the recommendations that it issues pursuant to the CP) to deal with issues related to IT and ITeS sector.

Conclusion

Thank you for the opportunity to supply comments on this Consultation Paper.