December 17, 2018

Comments by the Information Technology Industry Council on the Telecom Regulatory Authority of India's OTT Consultation

The Information Technology Industry Council (ITI) is pleased to respond to the Telecom Regulatory Authority of India (TRAI) request for submissions to address the role of OTT services in the communications sector in India.

ITI is the premier voice for the global information and communications technology industry. Our member companies include the world's leading innovation companies, with headquarters worldwide and value chains distributed around the globe. We advocate on behalf of our members for policy and regulatory environments that enable innovation and maximize all the benefits that ICT companies provide, including economic growth, job creation, and the tools to solve the world's most pressing social, economic, and environmental challenges. We work closely with our partners in government, international organizations, the business community, and civil society to achieve these objectives. One of the core elements of our mission, in every economy in the world, is to position our companies to be genuine partners of governments.

The global internet has provided a platform for the development and deployment of a great variety of innovative content, applications, and services. The emergence of online offerings provided over telecommunications networks – often referred to as "over the top" or "OTT" content, applications, and services – is driving growth, creating jobs, and advancing innovation in the global economy.

Because of the dynamic and cross-cutting nature of OTT offerings and the companies that provide them, and the fact that OTT offerings generally are not direct substitutes to telecommunications services, ITI encourages TRAI to broaden its efforts to understand and analyze OTT content and applications to ensure that they are considered by all relevant agencies, so that the study can include a broader lens into the digital ecosystem.

We appreciate TRAI's consideration of the important role that OTT offerings play in the Indian market, and we offer the following insights based on our global experience in the identified areas of question:

SUBSTITUTABILITY
The consultation seeks to address how OTTs and traditional telecom services may be substitutes of each other. Although creating and maintaining a "level playing field" has intuitive appeal, such an approach is based on a false assumption. The assumption is that OTT applications are direct and perfect substitutes for traditional services, and that they can thus be regulated in similar ways. This is not the case. Rather, OTT's are both complementary to, and dependent, on traditional telecom service providers.

Before a consumer can even use OTT applications, they must first purchase Internet access service from a network operator. As such, telecom service providers control access to broadband internet, and therefore access to OTT offerings themselves. Another key distinction is that while OTTs do not have the exclusive right to deploy their applications, traditional telecom services can and often do offer their own OTT applications. Treating these services as perfect substitutes to justify regulation will create new barriers for entry for OTTs, ultimately harming industry, consumers, and innovation overall.

Short Message Services (SMS) vs OTT messaging applications. While OTT messaging applications offer text functionalities, they use different technologies than SMS and MMS, as they are derived from the earliest desktop-based interactive applications. Further, OTT messaging applications offer other functions beyond rich messaging features, such as group chat, notification and awareness, and integration with third-party applications, that are not available through SMS and have a broad economic impact. These OTT offerings are also distinct from SMS as they range from general purpose applications, to ones aimed at specific use cases or locally-relevant scenarios.

Telephony vs. VoIP. Digital technologies allow voice to be provided in many different ways. For example, some VoIP providers use numbering resources while others do not; some providers allow only connections to others using the same system, while others allow connections to the Public Switched Telephone Network (PSTN); some enterprise systems are designed to connect only offices that are spread around the world, etc. Regulating such different types of providers in the same way could force regulatory obligations that make no sense or cannot be implemented (for example, applying emergency calling location requirements to peer-to-peer VoIP that is not associated with a particular location). In such cases, the playing field is not leveled, but rather obstacles are put in place that affect OTT providers—which is far from "level."

Traditional Audiovisual Providers vs. Audiovisual OTTs. For **purposes of comparison, traditional** audiovisual providers need to be divided into two groups (i) free-to-air television (FTA) and (ii) subscription television (i.e., cable, satellite), as regulations are generally different for both categories.

- **FTA broadcasters.** Many of the regulations for broadcasting were based on two main assumptions: 1) the number of broadcasters was limited and local; and 2) broadcasters use scarce public resources (spectrum). If we use these assumptions as the basis for regulation, neither of these limitations apply to OTT service providers. There is no need to regulate them in the public interest because they are unlimited in number, not a quasi-monopoly, and they do not have physical facilities that use spectrum or any other scarce resource.
- **Subscription television:** Cable, fiber and satellite television providers are subject to regulation, but generally less onerous regulation than FTA broadcasters. Subscription TV providers offer consumers packages of different content for a variety of prices. Some of the programming is linear, some of it is non-linear (video on demand). Some of the content offered by these traditional providers is similar to some of the content offered by subscription-based audiovisual OTTs. Many viewers, however, see both types of audiovisual services as complements rather than substitutes and subscribe to both traditional and OTT providers.

INVESTMENT IN NETWORKS
OTT offerings have an interdependent relationship with telecommunications network operators and service providers. Cutting-edge applications create increased demand for broadband resources, and also increased consumer demand for broadband services. This highlights the critical importance of the network itself, and the need for continued network investment to support the health of the internet economy. In addition to other benefits from a robust network, none of the benefits from OTT offerings would be possible without continued investment in broadband and wireless infrastructure, which demand for access to OTT offerings helps support.

In addition to this "virtuous circle" of OTT development, consumer demand for broadband to reach OTTs, and resulting investment in local networks that allow end users to access the internet, online application and content providers themselves invest significantly in internet infrastructure – more than $30 billion per year around the world to deploy the networks, facilities, and equipment that make OTT content and applications possible. The majority of this amount, 76%, is direct investment, including investment in hosting facilities, physical cables, and other transport, while the rest is spent by third party providers to ensure that applications, services, and content travel as efficiently as possible. Many OTT providers purchase transport directly from network providers, and some also invest in submarine cables so that they can quickly and reliably move content across the global internet. Network operators benefit directly from this improved performance, as they are able to offer a more valuable product to their internet access customers, including selling higher speed services and data plans to customers who want to reach desirable broadband content.

OTT providers also contribute to economic development and economic growth of countries. A recent study by WIK[1] estimates that for the year 2017, the consumer surplus for India provided by OTT messaging applications was a substantial Rs 6.3 lakh crore. This 2017 report found that each 10% increase in usage of OTTs led to an average increase of US$5.6 trillion in global GDP (0.33% of GDP) from 2000 to 2015. The WIK study also cites a 2017 report by Rafert & Mate that found that a five percent increase in WhatsApp penetration in 2015 is associated with a US$22.9 billion increase in global GDP.

As a result, regulators should encourage the virtuous cycle of investment that currently exists between OTT providers and network operators. In considering goals such as the promotion of innovation and investment, TRAI should take care to consider the achievement of those goals across the entire digital services ecosystem and not just telecom networks and services.

REGULATION
The consultation also contemplates the extension of law enforcement data access or emergency features in OTT offerings. Because of the open architecture of the internet and the increasing affordability and availability of computing power, the entry barriers for internet-based content, applications and services are inherently low. As a result, new opportunities to provide, deliver, or access capabilities online are accessible to small and medium enterprises and individuals.

OTT offerings are fast evolving, and they are often not limited to a single platform, such as a mobile phone. Many OTT services are accessible on multiple platforms (e.g. mobile phone, tablet, laptop, and/or desktop computer), and they do not always have the same technical feasibility of traditional telecom services, as they are limited by type of network connections, user's preferences to limit an application's access to personal data, and other settings.

Requirements for emergency communications, data access, or data collection should be considered in the context of this dynamic market, only being applied where they are technically and economically feasible, and we recommend specific consultations for each requirement. For example, enabling access to localized emergency services requires that the communications provider have access to persistent, granular, and unlimited geolocation information for the user and that the public safety answering point (PSAP) be technologically capable of receiving the incoming emergency call. Standalone, non-

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[1] https://www.wik.org/index.php?id=879&L=1

interconnected OTT communications applications do not on their own have the requisite precise geolocation information – the app's access to that information is subject to the framework of the device operating system and to user permissions around location services. Moreover, PSAPs may not have the required high-cost technology, processes, or interoperable standards to receive emergency communications from non-interconnected communications applications. These functional and technical limitations and other considerations must be carefully and independently explored prior to imposing any obligation on OTT communications providers to facilitate access to emergency services.

Today, OTT providers are making available new suites of products to businesses and consumers on a broader range of devices and to serve a broader range of functions, often at a lower cost and with more availability than traditional services, spurring rapid and inclusive economic growth. TRAI should avoid onerous requirements or mandates that are technically infeasible, or that could restrict small businesses from entering this space, or that would reduce consumer choice or access.

Many regulators and policymakers have already determined that OTT communications applications are not equivalent to traditional network-based services. For example, the European Union's acknowledged in the revised European Electronic Communications Code of the fundamental differences between "number-based interpersonal communications services" ("NB-ICS"), such as those interconnected with the public telephone network, and "number-independent interpersonal communications services" ("NI-ICS"), which includes non-interconnected OTT communications apps that ride over the network. The EU created separate regulatory regimes for NB-ICS and NI-ICS, subjecting NI-ICS to lighter touch regulation. Similarly, the Australian Competition & Consumer Commission (ACCC) determined in its April 2018 Communications Sector Market Study that there "is no basis for requiring equivalent regulatory treatment" of OTT and traditional voice services.

COMPETITION
Finally, the consultation explores how regulatory methods can ensure competition in the sector, new regulations can be added to promote fairness, or legacy regulations removed from traditional players. Legacy telecommunications regulations were designed for 20th century network services that were provided on a country-by-country basis in markets with very high barriers to entry and strict licensing requirements. Such regulations were deemed necessary to ensure that the limited number of telecommunication operators in a market did not leverage their control over network access points to limit consumer access or reduce competition between services. Online and OTT offerings are provided in a fundamentally different environment that exists today. The online marketplace is global, with competitive offerings traversing national boundaries that do not have the same characteristics as telecommunications and broadcast services. OTT providers do not typically own or control the underlying broadband access points. Additionally, communications capabilities accessed over a broadband network are not necessarily routed through a phone number or other public resources (by contrast, a phone number may serve merely as a unique identifier), and many OTT offerings are often only offered as a single feature in a suite of services provided to corporate customers or consumers. ITI encourages regulators to refrain from requiring OTT providers to conform to the same regulations as services that provide direct network access to users, but instead, to take a more holistic approach that looks at adoption and benefits not only for end-users but for the economy as a whole.

Under recent reforms, India's telecom players can now determine the nature, scope, and scale of their investments in the market based on their own commercial considerations. Because the Authority

![ITI logo]

prohibits end user tariffs, TSPs are free to set the price of Internet access for their subscribers. Similarly, due to new norms for entry, exits, and mergers, players continue to invest in one or more parts of the industry, and there have been substantial investments in optical fiber networks in recent years. Recent massive investments in 4G networks are primarily due to revenue opportunities offered to mobile operators of OTT offerings, as OTT music, video, and messaging functionality continue to drive growth of data and the accompanying revenues for TSPs.

The growth of OTT apps expands, not reduces, the avenues for greater revenues for TSPs. With OTTs offering progressively richer services, incentives for investment in networks will increase further. This will attract and make available greater funds to enable deployment of newer technologies and investment in network capacity and quality.

New regulation or the application of legacy regulations on new services should be avoided except where rooted in legitimate and specifically identifiable and articulated public policy objectives. It would be premature to apply new regulations in the absence of an evidence-based assessment that existing regulation is insufficient to achieve a government's public policy goals. For example, OTT providers are subject to all generally applicable regulations that ensure protection of consumers and their data, protection of technical network, and competition regulation. Additionally, it may not be appropriate or useful to group a large set of offerings, including but not limited to messaging apps, email, collaboration software, social media sites, video platforms, search engines, and cloud and enterprise services, all within the same regulatory category. Governments should ensure that any regulation is narrowly tailored to correct an observed market failure and achieves the sought-after policy objectives. In general, regulation should be applied ex-post and on a case-by-case basis where those unique conditions exist.

Rather than seeking to incorporate OTTs into a legacy regulatory framework, governments should explore ways to reduce the number and impact of legacy regulations which may have been relevant in the past but no longer have efficacy in an era of expanding mobile and digital communications. By alleviating at least some of the regulatory pressure on service providers, the cost savings could be significant, providing operators with capital to expand their offerings in ways that enable them to partner or even compete with OTTs.

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ITI appreciates the opportunity to present our views on this matter. We stand ready to support TRAI in clarifying policy considerations with respect to online content, applications, and services that allow India to advance its legitimate public policy goals in a manner consistent with innovation, job creation, and economic growth.

Sincerely,

Ashley E. Friedman
Senior Director, Policy