

1.4 Telcos vs OTT Players: Levelling the Playing Field

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Abstract

The rapid proliferation of Over-The-Top (OTT) platforms such as WhatsApp, Netflix, YouTube, and Zoom has fundamentally disrupted the traditional telecommunications ecosystem, creating a structural asymmetry between telecom operators (telcos) and OTT service providers. While telcos bear the financial burden of building and maintaining physical network infrastructure-towers, fiber, and spectrum, OTT players leverage these networks to deliver communication and media services without equivalent regulatory obligations or financial contributions. This paper examines the policy debate around 'levelling the playing field' between telcos and OTT players in the Indian context, situated within a broader global framework. It analyses key policy questions around OTT regulation, licensing, network usage fees, net neutrality, and consumer protection. Drawing on global case studies from European Union (EU) and the United States (US), including the EU 'fair share' debate, the Federal Communications Commission's (FCC) evolving net neutrality jurisprudence, and the Court of Justice of European Union's (CJEU) Skype judgment, this paper evaluates the competing stakeholder positions submitted to Telecom Regulatory Authority of India (TRAI) during its 2023 consultation on OTT communication services. The paper finds that neither full deregulation nor blanket licensing of OTTs is appropriate for India and recommends a balanced, threshold-based, function-specific model that preserves innovation and consumer welfare, ensures network investment viability, and upholds net neutrality within a unified digital regulation framework.

Keywords

OTT services; Telecom Operators (telcos); Net Neutrality; Fair Share; TRAI; Network Sustainability; Lawful Interception; Content Delivery Networks (CDN); Large Traffic Originators (LTO); Federal Communication Commission (FCC)

Introduction

Internet-based platforms that provide services using the existing internet networks, built and operated by telecom and internet operators are called as Over-the-Top (OTT) services providers. These can be categorised broadly into two categories, that is, communication channels like WhatsApp, Telegram, Zoom, Facebook and media platforms like YouTube, Netflix, Amazon Prime, etc. These OTTs have become the main way many people communicate and consume media. The network operators invest in mobile towers, fiber, spectrum, and network maintenance, whereas OTTs use these networks to deliver messaging, voice calls, video, and other services without having the same licences or regulatory duties as network operators.

This difference has created two competing concerns. Network operators say OTTs get the benefits of their networks but do not share the regulatory burdens or pay a fair contribution for the very large amount of traffic they generate (Cellular Operators Association of India, 2023). OTTs and many consumer advocates say that charging or heavy regulation of OTTs would reduce competition, raise prices for users, and slow innovation (App Association, 2023). Governments and regulators must, therefore, find a balanced approach so that networks stay financially healthy while innovation and consumer choice are preserved.

Rationale of Study

This paper aims to explain the problem simply, present key policy questions for India, review important global cases, summarise the Telecom Regulatory Authority of India (TRAI) consultation process, the positions taken by stakeholders, and recommend an appropriate regulatory model for India.

Why this matters for India: telecom networks are the backbone of digital services and India is pushing large public objectives (digital inclusion, online education, e-governance, 5G rollout). The network operators are the backbone of the digital economy and if they find it hard to maintain or expand networks because of falling revenues or rise in costs, the very idea of digital economy and government's vision of easy accessibility to the poor will suffer. At the same time, OTTs have driven cheap, accessible services while connecting and benefitting millions of users. The policy challenge is to level the playing field not by protecting one side at the cost of the other, but by designing rules that are fair, technology-neutral, and growth friendly.

Key Policy Questions for India

For India, the main policy questions are:

- Should OTT communications (messaging, voice, video) be regulated like telecom services? If yes, what obligations would apply (licensing, lawful interception, quality of service, universal service contributions)?
- Should large OTT platforms make any contribution to network costs? Is a 'fair share' or 'network usage' fee justified? Or would that be double-charging the end user?
- How can consumer interests-privacy, affordability and choice be protected? What data retention, content moderation, or privacy rules should apply to OTTs?
- How to preserve net neutrality while addressing investment shortfalls in networks? Are voluntary commercial solutions (peering, CDNs, caching) enough, or are regulatory measures needed?
- What threshold should trigger additional obligations (for example, based on size or traffic)? Should only the largest global players face extra duties while startups are exempted?

These questions form the core of India's public debate and must be addressed with evidence and careful balancing.

Global Case Studies

European Union (EU) 'Fair share' Debate and Policy Direction

The European debate is driven by the urgent need to finance expansive broadband infrastructure required to meet the European Digital Decade goals. Telefónica, representing the position of large European operators, notes a significant weakening of the telecom sector's financial situation, with revenues declining even as internet traffic grows exponentially. Internet traffic is expanding rapidly, by 35 percent per year and more than 50 percent for mobile data. This growth is heavily concentrated, with just six large global digital platforms generating over half of the total internet traffic. Now, this translates to increasing investment by EU's network operators which cannot be recovered, as revenues remain unchanged (Telefónica, 2023a).

Further, there exists bargaining power asymmetry in the digital ecosystem, as the telecom companies only charge their end user-their everyday customers for internet access, they do not charge the companies generating huge amount of data (like video streaming, or social media platforms), as building and maintaining networks gets expansive, their revenues from end users are shrinking, giving them no other way of recovering their cost. On the other hand, digital platforms and content providers get revenue from multiple sources at once. They might charge end-users a subscription fee, but they also charge service providers for advertising and platform access. This leads to tech giants making huge profits, giving them significantly more financial power and market control than traditional telecom operators. The resulting bargaining power asymmetries limit the ability of Telecom Service Providers (TSP), which operate in a one-sided market, to recover rising costs from Large Traffic Originators (LTOs), resulting in returns on investment that frequently fall below the cost of capital (Telefonica, 2023b).

Net Neutrality Issue

The European proposal champions a legislative initiative compelling LTOs to negotiate fair conditions for traffic conveyance, backed by a mandatory, binding dispute resolution mechanism overseen by a competent authority. Critically, proponents assert that the 'Fair Share' mechanism is fully compliant with net neutrality obligations. They emphasize that the payments are designed to address network sustainability without involving any differentiated traffic management or unequal treatment of LTO traffic, thereby avoiding violations of open internet principles. The conceptual models include a universal service contribution model (tax based on traffic) or a regulated peering approach (Telefonica, 2023c).

However, opponents to such a fair share regime cite how this may lead to stifling of innovation and fragmentation of internet itself, as well as, violating the principle of net neutrality. Internet Society (2023s) in its submission shows how this can transform in to pass through cost to customers where ultimately end users will end up paying more, as any negotiation between service providers and telecom operators is likely to be passed on to the end-users. Further, such arrangements can lead to a situation where LTOs will be able to pay for the traffic, whereas the smaller players will not be resulting in the violation of net neutrality principle (Internet Society, 2023b). Also, such an arrangement would require every customer to have a separate contract with the Internet Service Provider (ISP) for every service he/she uses, otherwise they will not be able to use that service. For example, if one uses an email

service to run their business, their email service should have a contract with their ISP, if not they will lose access to their emails or will get slower access. This will lead to fragmentation of internet itself (Internet Society, 2023c).

United States of America (USA): TSPs vs OTTs and Net Neutrality Issue

In the United States of America, the main conflict between telecom companies and OTT players is not about whether OTT platforms should pay money for using telecom networks. Instead, the focus is on how internet access should be regulated, especially around the concept of net neutrality. The principle of net neutrality ensures that telecom companies do not slow down certain apps, block specific online services, or charge extra fees for faster access to particular websites or OTT platforms. The network operators in USA want to charge OTTs for providing smooth access on their networks, meaning they can create faster data traffic gates for those who pay and slow down for those who don't. Such an approach has been argued to benefit the growth of network infrastructure (Institute of Electrical and Electronics Engineers Spectrum, 2017). The network operators in the USA consider OTTs as free riders who consume large bandwidth, make huge profits but pay nothing proportionate to the Telecom Operators.

Over the years, USA courts and the national telecom regulator- the Federal Communications Commission (FCC) have changed their interpretations about net neutrality several times. Different governments supported different approaches: some favoured strong net neutrality rules that protect OTT services, while others supported giving telecom companies more freedom over their networks. These legal and policy shifts are important because they directly influence whether telecom operators can treat OTT traffic differently, prioritise their own services, or ask OTT platforms to pay for special treatment. In simple terms, the USA debate is less about charging OTTs and more about deciding how much control telecom companies should have over the flow of internet traffic.

CJEU: The Skype (SkypeOut) Judgment

The Court of Justice of the European Union (CJEU) issued guidance on whether certain Voice over Internet Protocol (VoIP) services (like SkypeOut, which lets users call traditional phone numbers) fall within the EU definition of an 'electronic communications service'. The Skype case clarified that some OTT functions may be classified as electronic communications where they transmit signals to the public switched telephone network (PSTN), which can bring certain services under telecom rules (Society for Computers and Law, 2019). This decision shows the legal

complexity: not all OTT services are the same and some may attract telecom-style obligations also, depending on the functionality.

TRAI Consultation Paper and Parties' Responses

TRAI (2023) released a consultation paper titled *Regulatory Mechanism for OTT Communication Services and Selective Banning of OTT Services*. The paper sought views on whether OTT communications should be regulated, possible licensing approaches, selective banning mechanisms during emergencies, and options for addressing network sustainability.

Main responses from parties for and against the regulatory mechanism and selective banning can be seen as under:

For the Regulatory Mechanism for OTT and Selective Banning:

- Proponents argued that OTTs create asymmetric competition by providing telecom-like services without equivalent obligations.
- Telcos vouch for 'Same Service Same Rule'. They argue that communication provided by the OTTs is functionally the same service (voice calling, messaging), hence, uniform regulations should be applied on both (Internet Service Providers Association India, 2023).
- They argue that TSPs invest a lot in network infrastructure while OTTs use their network and earn huge profits without paying a fair share to the TSPs (COAI, 2023). Further, they say that OTTs' services account for large data traffic which consumes large bandwidth. This can lead to compromising the TSPs core network quality where TSPs are mandated to maintain QoS standards under license agreement, while the OTTs have no obligation in terms of QoS.
- They have also argued for selective banning of communication OTTs (ISPAI, 2023). They supported measures that would either require large OTTs to follow certain telecom obligations (like lawful interception and local data retention) or contribute to network costs in some manner. Several telcos argued for a 'level playing field' and raised the fair-share concept.

Against the Regulatory Mechanism and Selective Banning:

- They argued that both OTTs and TSPs operate in different layers, while TSPs operate in network, OTTs operate in application layer. They say that OTTs, unlike TSPs, don't own spectrum which is a scarce resource, and hence, they should not be brought under any regulation like TSPs. The Broadband India Forum (BIF) argues forcefully that TSPs possess exclusive, government-granted privileges such as the right to acquire scarce spectrum, numbering resources, and Right of Way (ROW) which fundamentally justifies their high regulatory and licensing burdens.
- Contrary to the TSPs case that OTTs have eroded their revenue, OTTs have, in fact, increased the Average Revenue Per User (ARPU) of the TSPs, as OTTs have led to rise in data consumption and Telcos get paid for data through rising data packs.
- OTTs are already regulated under various laws like IT Act 2000, Digital Media Intermediary Guidelines 2021, Digital Personal Data Protection Act (DPDP Act) 2023 etc. Hence, over regulation would lead to the creation of entry barriers for new startups and rise in cost for the OTTs players, the cost of which has to be borne ultimately by the consumer.
- They argued that selective banning of a few OTTs would go against the principles of 'Proportionality' and 'Justifiability' as adjudicated by the Hon'ble Supreme Court of India in Anuradha Bhasin case. In this landmark case, Supreme Court of India laid down the principles of proportionality and justifiability in connection with any restriction imposed by the government in terms of digital access. Hence, selective banning would violate these principles as highlighted by the advocates of the OTTs.

These parties warned against licensing OTTs as telecom operators. They emphasized consumer benefits, the risk to innovation and startups, and the potential for higher consumer prices. Many argued that users already pay telcos for data, so extra charges to OTTs would amount to double charging or would be passed on to consumers.

Neutral Analyses and Think-Tanks:

Several legal and policy experts recommended a targeted, proportionate approach—only impose specific obligations on very large OTTs (threshold-based), not broad licensing for all OTTs. They also suggested promoting voluntary commercial measures (caching, peering), infrastructure sharing, and telecom financial relief to protect investment.

The consultation showed a clear split. TRAI has not issued a final, comprehensive regulatory change making all OTTs telecom operators, instead, the debate continues with a preference in many analyses for targeted regulation rather than broad licensing.

The debate itself appears debatable where two key challenges have emerged. The first concern the compliance obligation on those OTTs who provides communication services, that may be called as Communication Service Providers (CSPs) and second is revenue sharing by those OTTs who are actual LTOs and promote data consumption through streaming services.

From the perspective of income tax compliance, creating a level playing field requires ensuring that overseas Large Traffic Originator (LTO) platforms providing streaming services in India are subject to tax compliance obligations comparable to those applicable to domestic entities. The start-up and innovators in India are required to comply with income tax, which puts additional burden on them, creating uneven level playing field. Such scenario makes a case where such overseas OTTs must be brought at equal pedestal.

Appropriate Regulatory Model for India (Recommendations)

Based on international experience and the TRAI consultation responses, a pragmatic model for India would combine these elements:

- **Threshold-Based Obligations (Proportionality):** Impose limited, well-defined obligations such as obligations related to lawful interception when technically feasible, emergency response, and designated grievance redressal only on the large OTTs, whereas small OTTs should be exempted, to preserve innovation. This differentiation may be clearly defined using the criteria like number of users or years of operations.
- **Light-Touch, Function-Based Approach:** Do not attempt to forcibly convert all OTTs into legacy telecom licensees. Instead, apply obligations based on what a service does, for instance, an OTT that terminates calls to the PSTN might face specific rules (this follows the logic of the Skype case).
- **Avoid Network Usage Fees as a Primary Fix:** Europe's recent statements and analysis suggest that charging Big Tech directly for network rollout is unlikely to be a practical or fair primary solution. Such fees risk higher consumer costs and legal complexity. Instead, focus on policies that improve

telcos economics like rationalise levies, incentivise fiber build-out like giving them tax breaks for every mile of fiber laid or providing subsidies to lay fiber in rural and unprofitable areas, and encourage infrastructure sharing like sharing tower sites, underground ducts and fiber cables which can cut down cost for every network operator.

- **Promote Voluntary Technical Solutions:** Encourage peering, Content Delivery Networks (CDNs), caching and edge computing investments by both telcos and OTTs so that traffic is carried more efficiently and operational cost is reduced. Peering allows these companies to link their networks directly to trade data, completely bypassing expensive third-party transit providers. Meanwhile, CDNs and edge computing work hand in hand by copying and storing popular digital content on localized servers placed right at the “edge” of the network, meaning a video or web page is served from a neighbourhood hub rather than being fetched from a distant, centralized global data centre every time.

Shifting to this interconnected, localized architecture eliminates the heavy long-distance transit and backhaul fees telcos usually pay to move traffic through global networks, while simultaneously lowering the cloud hosting and server upkeep expenses for OTT platforms by taking the heavy processing strain off their main database. This combined model balances the need for network investment, user protection and continued innovation.

Conclusion

The debate between telcos and OTTs represents a pivotal regulatory crossroads for India's digital economy. As this paper has demonstrated, telecom companies face a massive investment burden for infrastructure upgrade to handle surging internet traffic, while OTTs act as a primary engine driving internet adoption, innovation, and start-up growth. Resolving this tension requires moving away from rigid 'winner-takes-all' argument. Forcing tech giants to pay direct network usage fees is a short-sighted fix that risks triggering endless legal battles and raising subscription cost for every consumer. Instead, the goal should be to design a system where networks remain financially viable without chocking the digital freedom that allows and services to thrive.

To build this balanced ecosystem, future policy must focus on smart compromises and strategic interventions. First, India may adopt a tiered approach where small startups are left free to innovate, while large global communication and streaming

platforms are subjected to proportionate rules relating to public safety and fair taxation. Further, promoting technical collaborations such as direct network peering and local data storage through Content Delivery Networks (CDNs) can help reduce network delivery costs and improve traffic management for both industries. This balanced approach would support the development of world-class 5G and 6G infrastructure while keeping the internet open, affordable, and accessible for all.

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