



*STAR India's Response to
TRAI's Consultation Paper on
Roadmap to Promote
Broadband Connectivity and
Enhanced Broadband Speed*

– 9th November 2020

At the outset, we would like to applaud the Authority's efforts for exploring various options to promote and enhance broadband connectivity in India. Over the years, TRAI has brought out several recommendations¹ to increase broadband connectivity, improve quality of service and support the Digital India Mission under flagship projects such as BharatNet, NagarNet and GramNet to unlock the potential of India's digital economy.

Broadband or internet connectivity is a key driver of economic growth as it enables transparency in public services (such as education and healthcare), delivers real-time communication, develops knowledge economies, reduces costs of financial transactions and bridges the digital divide. A study by the ITU-UNESCO Broadband Commission for Sustainable Development² has confirmed these benefits. It has found that globally, a 10% increase in fixed and mobile broadband penetration yields an increase of 0.8% and 1.5% in GDP respectively.

In India, broadband subscribers grew at a CAGR of 54.22% from 162.06 million in Q1 FY16 to 594.38 million in Q1 FY19³. During the same period, data consumption increased by 65X on account of affordable wireless broadband⁴. The benefits of enhanced connectivity can be witnessed in the delivery of government services, education, retailing, healthcare, and banking. For instance, the Government, through the Direct Bank Transfer (DBT) scheme has reduced leakages and removed the middleman by directly transferring money to the beneficiaries' accounts. In 2019-20 alone, the Government transferred INR 3.8 lakh crores to beneficiaries through DBT⁵. India's online retail market, which is the fastest-growing market worldwide, had approximately 33 crore digital buyers in 2020⁶. Further, digital payments have witnessed a CAGR of 61% and 19% in terms of volume and value in the last five years⁷.

India is entering a new growth paradigm triggered by consumer and business expectations for a better quality of service and experience. This, coupled with the new normal from Covid-19, demonstrates an urgent need for the country to unlock the true potential of its digital economy. This requires building a strong backbone of fibre networks for delivering high-speed broadband

¹[\[Recommendations on "Proliferation of Broadband through Public Wi-Fi Networks"\]](#); [\[Recommendations on Encouraging Data usage in Rural Areas through Provisioning of Free Data\]](#); [\[TRAI Reply to Secretary DoT on redefining the definition of broadband speed/increasing the Broadband Speed\]](#); [\[Recommendations on "Definition of Adjusted Gross Revenue \(AGR\) in Licence Agreements for provision of Internet Services and minimum presumptive AGR"\]](#)

² [ITU Report on "The State of Broadband 2019 Broadband as a Foundation for Sustainable Development"](#)

³ [TRAI Performance Indicator Report April-June 2016](#); [TRAI Performance Indicator Report April-June 2019](#)

⁴ Ibid.

⁵ DBT Bharat

⁶ [Statista](#)

⁷ [RBI Report on "Assessment of the progress of digitisation from cash to electronic" dated 24.02.2020](#)

connectivity which is critical for next-generation networks (5G), adoption of IoT, AI and ML-based technologies, public Wifi, etc.

India has only 1.9 crore fixed broadband subscribers as opposed to 66.7 crore mobile broadband subscribers.⁸ The gap between fixed and wireless broadband subscribers is huge and needs to be bridged. This is because fixed broadband can deliver better speed. **Thus, broadband policies and guidelines must be revised to provide a deeper focus on strategic direction and increased clarity. They must also evolve a robust governance framework that will create synergies among private-sector networks and other cross-sectoral infrastructures such as broadcasting, power, water supply, and roads.**

With a view of enabling robust competition in the sector, aiding higher quality of services and better last-mile connectivity, we present our recommendations as follows:

- 1. The definition of Broadband should be revised, and the minimum download speed should be increased to 2 Mbps:** During the COVID-19 pandemic, work from home became the new norm, which tested the capabilities of India's broadband infrastructure. This is evident from Telecom Service Providers (TSPs) asking Over-The-Top (OTT) players to reduce video quality in order to ease network stress. Given the technological evolution and changes in consumer behaviour, India needs to review its definition of broadband, which was last modified vide Department of Telecommunications (DoT) [Gazetted Notification](#) dated Aug 8, 2013. Under this definition, the minimum download speed is 512 Kbps. This must be increased to bring India on par with global standards. Enhancing the minimum download speed is also necessary to achieve the goals envisioned in the [National Digital Communications Policy \(NDCP\) 2018](#). In a [letter written to the DoT in 2016](#), TRAI had noted the need to enhance minimum broadband speed in the country. It had recommended a minimum download speed of 2 Mbps⁹.

Therefore, in accordance with TRAI's recommendation vide its letter dated May 24, 2016, the definition of broadband must be revised to make 2 Mbps the minimum download speed. Accordingly, we recommend that DoT revise the definition of broadband through a Gazette notification, and TRAI to amend Regulation 2(d) of the "[Quality of Service of Broadband Service Regulations, 2006](#)" for increasing the minimum download speed.

- 2. A collaborative approach needs to be taken to create and execute a uniform Right of Way (RoW) policy between all Government departments:** The DoT in November 2016 issued the

⁸ [TRAI Performance Indicator Report July-September 2019](#).

⁹ https://traigov.in/sites/default/files/Letter_to_Secretary_DOT_24_may_2016.pdf

[Indian Telegraph Right of Way \(RoW\) Rules, 2016](#) (“Rules”) to enable the roll-out of networks in a time-bound and non-discriminatory manner across India. The Rules provided for a single-window clearance mechanism, defined time-period for approvals, appointment of nodal officers and nominal administrative fees. They did not impose restrictions on the location of telecom towers.

However, RoW issues still persist because the Rules have not been implemented and harmonized across all states. As per Tower and Infrastructure Providers Association’s (TAIPA) report released in March 2020¹⁰, only 16 out of 36 states/UTs have aligned their RoW policies with the Rules. Other prominent issues regarding RoW are the exorbitantly high prices being charged by state and local authorities and delays in granting permissions. For instance, according to TAIPA’s report, exorbitant charges are being levied under different heads such as One-time charges, Renewal Fee, and Developmental Charges. These charges vary from Rs. 10,000 to Rs. 8,00,000 in states like West Bengal, Bihar, and Sikkim that have not ratified as per DoT’s RoW Rules, 2016.

A robust telecom and cable infrastructure will play a key role in seamless connectivity. To enable the development of such infrastructure, all states, UTs and local administrative bodies must align themselves to the DoT’s RoW Rules. This will help streamline the process, RoW charges and allow for faster and time-bound rollout and adoption. The Government must also institute a centralized single-window clearance mechanism for RoW. This online portal can simplify timely approval for RoW permissions, include integrated maps of all utilities to prevent any damage to other pipelines, and become the single platform of engagement for RoW.

- 3. Leverage the existing cable infrastructure for delivering broadband to both urban and rural India and enhancing last-mile connectivity:** Despite several government initiatives¹¹, India’s cable TV infrastructure which connects to around 8.3¹² crore households (both urban and rural) has not been able to unlock its potential of providing reliable and affordable broadband services along with broadcasting services.¹³ The major deterrent for cable operators has been the Adjusted Gross Revenue (AGR) that also needs to be paid on the revenues from broadcasting in addition to broadband services.

¹⁰ <https://icrier.org/pdf/2-March-2020/TAIPA.pdf>

¹¹ [\[DoT’s 2016 notification to extend RoW to Cable TV operators who have ISP licenses\]](#) ; [\[MIB’s advisory to extend RoW to Cable TV Operators, 2014\]](#); [\[CTN Act\) amended in 2011 to extend Right of Way \(RoW\) to cable TV operators\]](#)

¹² [KPMG Report titled “India’s Digital Future” dated Aug 2019](#)

¹³ [TRAI Annual Report 2018-19](#)

The ~1600 MSOs and ~60,000 LCOs have laid a vast network of copper coaxial and fibre network connecting 8.3 crores¹⁴. Since these are private networks and do not utilize scarce spectrum, the Government of India (GoI) should exempt Cable Operators who have obtained Internet Service Provider (ISP) license them from paying AGR for a minimum period of five years, provided that they operationalize them within 6 months of obtaining ISP license. This will incentivize Cable TV operators to provide broadband services and instantaneously increase wired broadband connectivity from 1.9 crores to around 10 crores.

4. Framework for utilizing Cable TV infrastructure for broadband and enabling infrastructure sharing:

The GoI has laid the legislative foundation for digitalizing Cable TV infrastructure and incentivizing them to provide broadband/internet connectivity.

For instance, the Ministry of Information & Broadcasting (MIB) [amended the CTN Act in 2011](#) to pave way for the digitalisation of TV networks in India. Included in the amendment was the insertion of “Section 4B – Right of way for cable operators and permission by public authority” that grants RoW to all cable operators. To reinforce this enabling provision, the DoT RoW Rules that extended to all Cable Operators who have obtained ISP license

Additionally, the Harmonized [Master List of Infrastructure Sub-sectors](#) notified by the Department of Economic Affairs (DEA), includes “optic fibre/wire/cable networks which provide broadband / Internet”. Hence, Cable Operators that provide broadband/internet are accorded “infrastructure status” that will ensure easier access to institutional credit and help them in reducing their cost of borrowing for up-gradation of their networks.

However, there is still a problem of last-mile monopoly in the cable TV industry arising from exclusive deals between Cable TV operators and Resident Welfare Associations (RWA). Following TRAI recommendation on “In-Building Access by Telecom Service Providers” in January the DoT in November 2019 issued an [advisory](#) to all Telecom Service Licensees to share in-building infrastructure to share infrastructure in airports, railway stations, bus terminals, metro lines and hospitals etc. The MIB, as the licensor of all MSOs, must issue a similar advisory for sharing of Cable TV operators’ in-building infrastructure and infrastructures within a particular RWA.

¹⁴ [KPMG Report titled “India’s Digital Future” dated Aug 2019](#)