August 14, 2025

ATTN: Alam Singh Negi
Under Secretary to the Government of India
Ministry of Communications, Department of Telecommunications
Sanchar Bhawan, 20-Ashoka Road,
New Delhi, 110001

RE: Comments of ACT | The App Association Regarding *the Draft National Telecom Policy 2025*

Dear Sir/Madam:

ACT | The App Association (the App Association) writes to provide comments to the DOTDepartment of Telecommunications (DOT) in response to its request for comment on the Consultation Paper on Encouraging R&D in Telecom, Broadcasting, and IT (ICT) Sectors.[1]

The App Association is a global not-for-profit trade association representing the small business technology developer community, including in India. Our members are entrepreneurs, innovators, and independent developers within the global app ecosystem that engage with verticals across every industry. We work with and for our members to promote a policy environment that rewards and inspires innovation while providing resources that help them raise capital, create jobs, and continue to build incredible technology. Largely driven by the ingenuity of startups and small businesses, the app ecosystem has been a catalyst for the rise of smartphones and accelerating the growth of technology markets such as the internet of things (IoT) through robust standards development and a balanced intellectual property system. The dynamic, hyper-competitive app ecosystem continues to produce innovative solutions that drive the global digital economy and augment consumer interactions and experiences. The App Association applauds DOT for undertaking a public consultation on this matter.

The App Association supports DOT's efforts to develop policies and principles that will enable creation of a vibrant and competitive telecom, broadcasting, and IT (ICT) market to strengthen India's long-term competitiveness and serve the needs of its citizens. App Association members' innovations provide the interface for IoT, an all-encompassing concept where everyday products use the internet to communicate data collected through sensors. IoT will continue to enable improved efficiencies in processes, products, and services across every sector. The rise of IoT is demonstrating efficiencies in key segments of the Indian economy, including retail, agriculture, and healthcare, and is projected to be worth more than $9.28 billion in India by the end of this year.[2]

The real power of IoT comes from the actionable information gathered by sensors embedded in connected devices. IoT devices are useful in direct consumer interactions but have huge potential as part of what is now commonly referred to as "big data." For this document, we

[1] https://dot.gov.in/sites/default/files/NTP_2025_0.pdf?download=1. DOT
[2] https://insights.frost.com/pr_ict_sdaivanayagam_pc26_indianiot?campaign_source=PR.

define this term to mean structured or unstructured data sets so large or complex that traditional data processing applications are not sufficient for analysis. As sensors become smaller, cheaper, and more accurate, big data analytics enable more efficiencies across consumer and enterprise use cases.

IoT deployment will be highly use case-dependent yet will depend on standardised solutions to ensure the ability for data to flow between parties. To date, many industries use open application programming interfaces (APIs) and other widely adopted standards (e.g. TCP/IP) to enable interoperability. For example, in healthcare, a miniaturised IoT sensor embedded in a connected medical device must be able to communicate bidirectionally in real time. This capability enables a healthcare practitioner to monitor a patient's biometric data and allows the patient to communicate with a caregiver in the event of a medical emergency. Other uses, such as sensors deployed to alert security of an unauthorised presence, may only require the ability to send data to security professionals with minimal (or even no) capability to receive communications. And ultimately, the rise and sustainability of IoT in India will depend on the ability to leverage standardised solutions.

The App Association's community is the primary driver of a global $6.3 trillion digital economy[3] that employs millions of Indians. App Association members develop and use IoT sensors that can be found in an increasing amount of consumer and enterprise objects and develop the software apps that serve as the main interface for communicating with and managing these devices. India's framework for telecommunications, broadcasting, and ICT sectors (amongst others) should enable Indian companies and individuals to easily access and use these IoT innovations.

Given the intertwined relationship between mobile and IoT devices, software apps, and telecommunications networks, we strongly encourage DOTto ensure that policy guidance encouraging innovation in telecom, broadcasting, and IT (ICT) sectors is clear and predictable to help secure the Indian market's global competitiveness and avoid barriers for Indian innovators to share their products and services (in India and abroad).

The App Association emphasises that mandates to localise manufacturing processes, requiring use of indigenous hardware or software in manufacturing design processes, preferring domestic products and services with domestically-owned intellectual property rights (IPR) in the procurement by government agencies (especially for the procurement of security-related products), among other discriminatory measures, make it difficult, if not impossible, for innovators to access and leverage global hardware and software development chains, putting Indian manufacturers and Indian consumers at a significant disadvantage. Such mandates ultimately lead to a lack of market choice and reduce the number of ways our members' innovations can provide new efficiencies and solutions to end users, also increasing prices for consumers; we therefore strongly urge DOTto ensure that its guidance avoids any such requirements. Moving forward, the App Association commits to work with DOT to help shape policies that promote IoT growth across all sectors of the Indian economy.

Building on the above, the App Association offers the following specific recommendations for DOT's consideration:

- Promoting the development and success of domestic startups: The App Association supports DOT's innovation goals that promote the development of new startups in India

[3] https://actonline.org/global-appcon22-competition-and-privacy/.

and support their growth and success. Providing funding and mentorship to telecom startups, expanding access to financing, and creating new grant opportunities are all effective ways to bolster the startup community. So long as efforts to affirmatively support domestic startups do not include digital trade barriers to prevent competition from startups abroad, these efforts could lead to successful participation of Indian startups in global markets.

- Outcome-based, technology-neutral, and aligned with international standards: The App Association supports DOT's contemplation of the future of Indian innovation in important markets like 5G. DOT guidance can primarily be future proofed via setting policy goals that are outcome based and technology neutral. Further, the new policy framework should indeed align with global best practices; as one example, this consultation's guidance can advance telecommunications security interests most effectively by fully aligning with the Common Criteria for Information Technology Security Evaluation.[4]
- Streamline guidance: The App Association recommends DOT simplify its guidance, including through consolidating provisions and authorities as well as ensuring duplicative and contradicting language is mitigated. We further recommend minimising policy disruptions by providing for continuation of rules, guidelines, and administrative orders issued under the existing regime until superseded by new rules.
- A balanced approach to spectrum policy: The App Association supports DOT guidance for India that embraces every opportunity for the most efficient use of spectrum bands, which must include a mix of both licenced and unlicenced allowances (and sharing arrangements within the same bands for licenced and unlicenced uses that take responsible measures to avoid harmful interference).
- Consistent and efficient processes for infrastructure deployment: The App Association supports DOT guidance that improves the ability to obtain rights of way in a uniform, non-discriminatory manner for establishment of telecommunication infrastructure. DOT is also encouraged to include a 'dig once' policy, which would require the consideration of including broadband in other infrastructure projects (electric, road, water, etc.).[5]
- Avoiding universal service obligations on OTTs: The App Association has expressed our support for the Department of Telecommunications (DOT) proposals to ensure the delivery of telecommunication service to underserved rural and urban areas. However, we caution against pursuing the expansion of the contribution base of the Universal Service Obligation Fund (USOF) in India. The imposition of USOF fees, levies, or taxes on small business over-the-top (OTT) innovators will negatively impact the ability to provide OTT services globally, takes away from resources dedicated to investment in these services and their delivery, and can represent insurmountable barriers to market entry for small businesses. For OTT application and service providers to grow and create jobs, they must expand to new customers across the global digital economy. Targeted fees and other trade barriers can pose legal liability concerns that jeopardise the ability of startups and small businesses to reach a global scale, resulting in reduced availability and higher prices for the consumer. OTT providers already bear significant costs to ensure content delivery networks can provide their application or service. OTT services stimulate telecommunications network growth, increase demand for data uptake, drive the need for bandwidth, and reduce consumer costs; and requirements for universal service contributions by OTT providers would have the effect of 'locking in'

[4] https://www.commoncriteriaportal.org/.
[5] https://www.ncbroadband.gov/technical-assistance/playbook/policy-broadband/dig-once-policies.

older technology and stagnating innovation, harming the quality and reliability of consumer service.

- Supporting Indian public safety across IoT markets and deployments: The App Association also supports India's prioritisation for standards, public safety, and national security in a new Indian telecommunications framework. We strongly encourage alignment with international standards and best practices for telecommunications security and supply chain integrity, and for the avoidance of measures or requirements that mandate localising manufacturing processes, require the use of indigenous software in manufacturing design processes, prefer domestic products and services with domestically owned intellectual property rights (IPR) in the procurement by government agencies, especially for the procurement of security-related products, and other discriminatory measures that suppress competition and innovation.

- A world-leading and pro-innovation approach to standard-essential patent licensing: Where DOT approaches OTT innovation and technical standards in this consultation paper, we encourage framed scoping to ensure that standards use and access is possible for all innovators. India's economy is growing at a fast pace due to its technology industry employing over 5.4 million workers with estimated revenues rising by $245 billion in recent years.[6] This growth is met with an evolving legal landscape for standardised technology that is susceptible to intellectual property (IP) abuse and requires transparent, balanced, and predictable guidance. The IP-based incentives in the standardisation process differ from non-essential IP incentives. In general, a patent holder has the right to exclude others, for a limited period of time, from commercially making, using, distributing, importing, or selling their protected invention, unless their consent is otherwise given. Patent protection only extends as far as the territories the patent was issued in. The goal of establishing technical standards is to provide an efficient and interoperable base for technology developers to create new inventions across multiple market sectors. When a patent holder contributes their technology to a technical standard, they understand and agree that they are using their patent to enable reasonable access to the standard and provide standard-development organisations (SDOs) with a commitment that they will license their standard-essential patents (SEPs) on fair, reasonable, and non-discriminatory (FRAND) terms in order to gain access to a wider pool of licensees. Therefore, by contributing to the standardisation process, a SEP holder understands and agrees to not unduly exclude competitors from a standard past requiring a FRAND license.

  The international community has consistently held that the success of the voluntary, consensus-based, open-participation technology standards system is vital for competitiveness and national security. The success of the standards development process is that industry participants are providing competing patent contributions and approaches. This system enables the market to determine a company's success and incents standardised technology development. This system ensures that internationally adopted standards are high quality and benefit all standards users, including Indian stakeholders. The consensus-based, open-participation technology standards system

[6] https://nasscom.in/sites/default/files/sr-2023-press-release.pdf.

must be preserved in order to protect competitive standards that include Indian leadership and involvement.

Today, SEP holders in key standards across industries routinely abuse their dominant gatekeeper position to those seeking reasonable SEP licences needed simply to build standardised technologies into their products. To avoid this abuse and enable IoT growth and innovation in India, the App Association strongly supports the development of an Indian policy framework to clarify the obligations of SEP holders who commit to license on FRAND terms. FRAND commitments increase competition by reducing IP abuse as well as unnecessary and burdensome litigation. We strongly urge the Office of the Controller General of Patents, Designs, & Trade Marks (CGPDTM) to issue guidance to ensure that overbroad, invalid, and non-essential SEPs are not able to plague the Indian patent landscape. In addition to this guidance, we encourage the Office to consider SEP-specific guidance to reflect basic principles that underlie the FRAND commitment, promote procompetitive technical standard-setting processes, and ensure terms of SEP licences are reasonable. Such a policy should reflect, and enable SDOs to clarify in their own patent policies, all the following principles, which prevent SEP holder anti-competitive abuses:

- Patents provide a clear and powerful incentive for innovation and continue to play an important role in driving competition and economic growth.
- Standards provide the foundation for the entire internet ecosystem and are a critical enabler of innovative startups and small and medium-sized firms.
- Holders of patented technologies that are essential to a standard may voluntarily commit to license such patents on FRAND terms, which allows SEP holders to obtain fair and reasonable royalties from a large body of standard implementers.
- Companies that voluntarily participate in standards bodies and choose to commit their patents to a standard under FRAND terms must uphold their promises.
- A commitment to FRAND patent licensing is a broad commitment that means:
    - **Fair and Reasonable to All** – A holder of a SEP subject to a FRAND commitment must license such SEP on fair, reasonable, and non-discriminatory terms to all willing licensees, who implement or wish to implement the standard regardless of where they sit in the supply chain.
    - **Injunctions Available Only in Exceptionally Limited Circumstances** – Injunctions and other exclusionary remedies should not be sought by SEP holders or allowed except in limited circumstances where monetary remedies are not available. The implementer or licensee is always entitled to assert claims and defences in good faith.
    - **FRAND Promise Extends if Transferred** – If a FRAND-encumbered SEP is transferred, the FRAND commitments follow the SEP in that and all subsequent transfers.
    - **No Overbroad Licensing** – While some licensees may wish to get broader licences, the patent holder should not require implementers to take or grant licences to a declared SEP that is not essential to the standard, unenforceable, or not infringed, or invalid.
    - **FRAND Royalties** – A reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based the value of the actual patented invention apart from its inclusion in the standard and should consider the anticipated overall royalty rate for all SEPs relevant to a particular standard, and the innovative impact of an SEP to the specific standard. A reasonable rate must not be assessed in a vacuum.

The App Association is strongly engaged in efforts to support an equitable SEP licensing landscape in India for our members. As part of this effort, we have developed ***A Call to Action: Guiding a Fair Standard-Essential Patent Licensing Process for a Thriving Indian Economy,***[7] a detailed paper recommending a pro-competitive standards and SEP framework for India. We strongly encourage India's approach to policies and laws at the intersection of standards, patents, and competition to align with these recommendations. We have also developed ***Healthcare and Standard Essential Patents*** industry paper, which provides an analysis of the critical data interoperability standards that support healthcare systems worldwide and the increasing potential for SEP abuse.[8]

In order to encourage discussion amongst Indian stakeholders, academics, and legal experts around the rapid development of India's SEP licensing landscape, the App Association hosted a timely event in May of 2025 titled 'A Fair Standard-Essential Patent Licensing Process for a Thriving Economy', in collaboration with Jindal Initiative on Research in IP and Competition (JIRICO) at O.P. Jindal Global University and knowledge partners, Saikrishna and Associates. The event highlighted the importance of SEPs and invited stakeholders and government representatives to discuss and collaborate a balanced approach to SEP governance. We strongly believe that as India reaches a pivotal moment in technology innovation, the country can apply the experience of the global standards community in leading Southeast Asia to develop a strong and fair approach to SEP licensing disputes.

During the event, we announced the initiation of a coalition with the India Cellular and Electronics Association (ICEA) to promote SEP licensing advocacy in India. The coalition's aim is to advance a commitment to maximize the benefits of standardization, and support all parties interested in a healthy, fair and prosperous standard ecosystem. We invite CGPDTM to work with this coalition and participating Indian manufacturers to advocate for a landscape that serves their ingenuity and economic growth against foreign entrants.

The App Association appreciates the opportunity to share its views with DOT and looks forward to assisting DOT in the development of a new policy guidance that encourages research and development (R&D) in telecom, broadcasting, and ICT sectors.

Sincerely,

[7] Scarpelli, Brian and Nair, Priya, A Call To Action: Guiding a Fair Standard-Essential Patent Licensing Process For a Thriving Indian Economy (August 9, 2023), Available at SSRN: https://ssrn.com/abstract=4536835 or http://dx.doi.org/10.2139/ssrn.4536835.

[8] Scarpelli, Brian and Nair, Priya, Healthcare and Standard Essential Patents, Connected Health Initiative (February 28, 2025). Forthcoming in Rutgers Law Review, Available at :https://connectedhi.com/wp-content/uploads/2025/03/CHI-Issue-Paper-Healthcare-and-Standard-Essential-Patents-Feb-202568.pdf.

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