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**Analysis**

# **UNPACKING THE TELECOMMUNICATIONS ACT, 2023**

## **Insights and Implications**

ANALYSIS

# Unpacking the Telecommunications Act, 2023: Insights and Implications

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# INTRODUCTION

The Telecommunications Act of 2023 (2023 Act) represents a significant overhaul of India's legislative framework in the telecommunications sector. It supersedes the Indian Telegraph Act, 1885,<sup>1</sup> the Indian Wireless Telegraphy Act, 1933,<sup>2</sup> and the Telegraph Wires (Unlawful Possession) Act, 1950,<sup>3</sup> marking a transformative milestone in the nation's legislative evolution. This comprehensive Act is poised to catalyse innovation and operational efficiency within the telecommunications sector.

The analysis critically examines the Act's exclusion of Over-The-Top (OTT) platforms from the definition of 'telecom services'. This exclusion, affirmed by Hon'ble Minister Ashwini Vaishnaw, signifies a clear direction for sector-specific regulations.<sup>4</sup> However, the Act's broad definitions of 'telecommunication' and 'message,' if interpreted to include OTT platforms, bring forth potential risks, clashing with its intended scope.<sup>5</sup> The analysis delves into the potential implications of such inadvertent inclusion on the digital ecosystem.

Additionally, the Act's expansion of jurisdiction beyond Indian territory represents a notable shift from its predecessor, addressing legal gaps in the extraterritorial application of telecommunications law.

Moving into the regulatory sphere, the analysis reviews the Act's progressive step of introducing a regulatory sandbox, facilitating innovation and efficient operations in the telecom sector.<sup>6</sup> The establishment of the Digital Bharat Nidhi,<sup>7</sup> replacing the Universal Service Obligation Fund (USOF), signifies a move towards enhancing telecommunications access in underserved areas. The 2023 Act transitions from the existing licensing regime to an authorisation regime,<sup>8</sup> while retaining the government's extensive control over telecommunication services and networks,<sup>9</sup> and simultaneously escalating penalties for non-compliance<sup>10</sup>.

The latter part of the analysis turns to the user's perspective, discussing the regulation of specified messages,<sup>11</sup> biometric identification mandates,<sup>12</sup> and the necessity for accurate

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<sup>1</sup> Department of Telecommunications. *The Indian Telegraph Act, 1885*. IndiaCode. Retrieved December 26, 2023, from [https://www.indiacode.nic.in/bitstream/123456789/13115/1/indiantelegraphact\\_1885.pdf](https://www.indiacode.nic.in/bitstream/123456789/13115/1/indiantelegraphact_1885.pdf)

<sup>2</sup> Department of Telecommunications. *The Indian Wireless Telegraphy Act, 1933*. IndiaCode. Retrieved December 26, 2023, from [https://www.indiacode.nic.in/bitstream/123456789/15410/1/the\\_indian\\_wireless\\_telegraphy\\_act%2C\\_1933.pdf](https://www.indiacode.nic.in/bitstream/123456789/15410/1/the_indian_wireless_telegraphy_act%2C_1933.pdf)

<sup>3</sup> Department of Telecommunications. *The Telegraph Wires (Unlawful Possession) Act, 1950*. IndiaCode. Retrieved December 26, 2023, from <https://www.indiacode.nic.in/bitstream/123456789/1907/1/a1950-74.pdf>

<sup>4</sup> Aaryan, A., & Guha, R. (2023, December 23). *OTT not under ambit of telecom bill: Ashwini Vaishnaw*. ETTelecom. Retrieved December 26, 2023, from <https://telecom.economictimes.indiatimes.com/news/policy/ott-not-under-ambit-of-telecom-bill-ashwini-vaishnaw/106224380>

<sup>5</sup> Sherif, A. H. (2023, December 19). *Telecom Bill 2023 bats for tighter govt control with broad-stroke definitions*. Outlook Business. Retrieved December 26, 2023, from <https://business.outlookindia.com/technology/telecom-bill-2023-bats-for-tighter-govt-control-with-broad-stroke-definitions>

<sup>6</sup> Ministry of Law and Justice, Legislative Department. (2023, December 24). *The Telecommunications Act, 2023*, (Chapter 6, Section 27). Retrieved December 26, 2023, from [https://egazette.gov.in/\(S\(gxjkq2ovaog23crgmlaig1q\)\)/RecentUploads.aspx?Category=6](https://egazette.gov.in/(S(gxjkq2ovaog23crgmlaig1q))/RecentUploads.aspx?Category=6)

<sup>7</sup> *The Telecommunications Act, 2023*, (Chapter 5, Section 24).

<sup>8</sup> Barik, S. (2023, December 21). *Telecommunications bill, 2023: The changes it seeks in the telecom sector, why some have raised concerns*. The Indian Express. Retrieved December 26, 2023, from <https://indianexpress.com/article/explained/explained-sci-tech/telecommunications-bill-2023-significance-9074099/>

<sup>9</sup> *The Telecommunications Act, 2023*, (Chapter 2, Section 3(2)).

<sup>10</sup> *The Telecommunications Act, 2023*, (Chapter 3, Section 11).

<sup>11</sup> *The Telecommunications Act, 2023*, (Chapter 7, Section 28).

<sup>12</sup> *The Telecommunications Act, 2023*, (Chapter 2, Section 3(7)).

information provision<sup>13</sup>. In light of India's evolving cyber landscape, marked by prevalent financial frauds, these aspects of the Act gain particular significance.

The analysis also scrutinises the Act's approach to public safety and national security, encryption standards, and message interception, underscoring the need for clear legal definitions and checks to safeguard individual rights and privacy.<sup>14</sup>

Furthermore, the analysis highlights the Act's innovative digital dispute resolution framework,<sup>15</sup> demonstrating a commitment to modernising grievance redressal in the telecom sector, and concludes with an evaluation of the revised offenses and penalties, particularly in relation to SIM card Rules<sup>16</sup> and anti-fraud measures.

Overall, this analysis offers a comprehensive review of the Telecommunications Act, 2023, spotlighting its advances, the challenges it introduces, and potential pathways for effective implementation, thereby contributing to a nuanced understanding of this landmark legislation in India's telecommunications history.

The Act stands as a pivotal piece of legislation, set to modernise the telecommunications sector, albeit with new challenges and ambiguities that necessitate careful consideration and further clarification.

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<sup>13</sup> *The Telecommunications Act, 2023, (Chapter 7, Section 29).*

<sup>14</sup> *The Telecommunications Act, 2023, (Chapter 5).*

<sup>15</sup> *The Telecommunications Act, 2023, (Chapter 7, Section 30).*

<sup>16</sup> The Times of India. (2023, December 1). *New SIM card rules: What mobile users need to know about changes in KYC and more.* Retrieved December 27, 2023, from <https://timesofindia.indiatimes.com/gadgets-news/new-sim-card-rules-from-today-what-mobile-users-need-to-know-about-changes-in-kyc-and-more/articleshow/105649056.cms>

# 1. SCOPE

This Telecommunications Act, 2023 represents the culmination of extensive consultations, encompassing a wide array of stakeholders. Key among these were public consultations on the Draft Indian Telecommunication Bill of 2022 (2022 Bill),<sup>17</sup> the Assignment of Spectrum for Space-based Communication Services,<sup>18</sup> Regulatory Mechanism for OTT Communication Services, and Selective Banning of OTT Services,<sup>19</sup> and the Regulating Converged Digital Technologies and Services<sup>20</sup>. It is a pivotal step towards catalysing reform in the telecommunication sector, underpinned by a vision of coherent and progressive policymaking.

The 2023 Act in a significant legal development, explicitly removes OTT platforms from the ambit of 'telecom services'. The move is seen as an effort to delineate the legal boundaries within which the 2023 Act operates, thereby providing clarity to the stakeholders within the telecommunications landscape. However, despite this clear demarcation, there remains a slight degree of uncertainty due to the Act's broad definitions of 'telecommunication'<sup>21</sup> and 'message'<sup>22</sup>. This lack of specificity in language presents a potential loophole where the Act might inadvertently encompass OTT platforms, stretching over a broad spectrum of IT and digital services. Such a broad interpretation, if it comes to pass, could lead to regulatory overreach, contradicting the Act's explicit exclusion of OTT platforms from the definition of 'telecom services'. This situation highlights a critical need for further elucidation to ensure that the Act's scope remains aligned with its original objectives.

The 2023 Act also marks a notable deviation from the Draft Indian Telecommunication Bill, 2022. Unlike its predecessor, the 2023 Act asserts jurisdiction not only throughout India

<sup>17</sup> Department of Telecommunications. *Explanatory note to the draft Indian Telecommunication Bill, 2022*. Retrieved December 26, 2023, from <https://dot.gov.in/sites/default/files/Explanatory%20Note%20to%20the%20draft%20Indian%20Telecommunication%20Bill%202022.pdf> ; see also: Tripathi, A., Shekar, K., Birla, B., & Vaidya, E. *Comments on Draft Indian Telecommunication Bill, 2022*. The Dialogue. Retrieved December 26, 2023, from [https://thediologue.co/wp-content/uploads/2022/11/Comments-on-Draft-Indian-Telecommunication-Bill-2022\\_The-Dialogue.pdf](https://thediologue.co/wp-content/uploads/2022/11/Comments-on-Draft-Indian-Telecommunication-Bill-2022_The-Dialogue.pdf)

<sup>18</sup> Telecom Regulatory Authority of India. (2023, April). *Consultation Paper on Assignment of Spectrum for Space-based Communication Services*. Retrieved December 26, 2023, from [https://www.trai.gov.in/sites/default/files/CP\\_06042023.pdf](https://www.trai.gov.in/sites/default/files/CP_06042023.pdf) ; see also: Birla, B., Shekar, K., Tripathi, A., & Shreya, S. (2023, June 2). *Comments on TRAI Consultation Paper On Assignment of Spectrum for Space-based Communication Services*. Telecom Regulatory Authority of India. Retrieved December 26, 2023, from [https://www.trai.gov.in/sites/default/files/The\\_Dialogue\\_02062023.pdf](https://www.trai.gov.in/sites/default/files/The_Dialogue_02062023.pdf)

<sup>19</sup> Telecom Regulatory Authority of India. (2023, July). *Consultation Paper on Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services*. Retrieved December 26, 2023, from [https://www.trai.gov.in/sites/default/files/CP\\_07072023.pdf](https://www.trai.gov.in/sites/default/files/CP_07072023.pdf) ; see also: Tripathi, A., Shreya, S., & Birla, B. (2023). *Comments on TRAI Consultation Paper On Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services*. Retrieved December 27, 2023, from [https://www.trai.gov.in/sites/default/files/The\\_Dialogue\\_04092023.pdf](https://www.trai.gov.in/sites/default/files/The_Dialogue_04092023.pdf)

<sup>20</sup> Telecom Regulatory Authority of India. (2023, January). *Consultation Paper on Regulating Converged Digital Technologies and Services – Enabling Convergence of Carriage of Broadcasting and Telecommunication services*. Retrieved December 26, 2023, from [https://www.trai.gov.in/sites/default/files/CP\\_30012023.pdf](https://www.trai.gov.in/sites/default/files/CP_30012023.pdf) ; see also: Tripathi A, Rizvi, K, Sahiba, J, Birla B .(2023). *Convergence of Internet and Telecom Services: Assessing the Impact on Digital Ecosystem*. The Dialogue. Retrieved December 26, 2023, from [https://thediologue.co/wp-content/uploads/2023/06/RESEARCH-REPORT\\_-\\_Convergence-of-Internet-and-Telecom\\_-\\_The-Dialogue.pdf](https://thediologue.co/wp-content/uploads/2023/06/RESEARCH-REPORT_-_Convergence-of-Internet-and-Telecom_-_The-Dialogue.pdf)

<sup>21</sup> Department of Telecommunications. *The Telecommunications Bill, 2023, (Chapter 1, Clause 2(p))*; see also: Rathee, K. (2023, December 19). *No decision yet on having similar rules for OTTs and telcos: Official*. The Economic Times. Retrieved December 26, 2023, from <https://economictimes.indiatimes.com/industry/telecom/telecom-news/no-decision-yet-on-having-similar-rules-for-otts-and-telcos-official/articleshow/106134104.cms>

<sup>22</sup> *The Telecommunications Act, 2023, (Chapter 1, Section 2(g))*; see also: Sherif, A. H. (2023, December 19). *Telecom Bill 2023 bats for tighter govt control with broad-stroke definitions*. Outlook Business. Retrieved December 26, 2023, from <https://business.outlookindia.com/technology/telecom-bill-2023-bats-for-tighter-govt-control-with-broad-stroke-definitions>



but also addresses offences and contraventions committed outside Indian territory.<sup>23</sup> Previously, the Department of Telecommunication (DoT) lacked express provisions for extraterritorial application; the 2023 Act addresses this lacuna, thereby extending its legal ambit.

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<sup>23</sup> *The Telecommunications Act, 2023, (Chapter 5, Section 52(2)).*

## 2. DEFINITION OF TELECOMMUNICATION

The Telecommunications Act, 2023 represents a significant step forward in regulatory reform, particularly in its shift away from the concept of converged regulation that was a feature of the 2022 Bill.<sup>24</sup> This progress is largely attributed to the Act's more restricted definition of the term 'telecommunication service.'<sup>25</sup> Unlike the 2022 Bill, which under Clause 2(21) broadly encompassed OTT communication platforms as telecom services, potentially leading to excessive compliance burdens and hindering innovation,<sup>26</sup> the 2023 Act provides a much-needed refinement by excluding OTT platforms.

However, despite these improvements, the 2023 Act introduces ambiguity due to the broad definition of 'telecommunication' itself.<sup>27</sup> This ambiguity in defining 'telecommunication' raises concerns about potential regulatory overreach in the future. The broad scope of this term, if interpreted to include OTT platforms, could inadvertently extend regulatory control to areas not initially intended. This scenario underscores the need for further clarification and refinement to ensure that the Act accurately reflects the intended scope of regulation.<sup>28</sup>

The definition of "telecommunication" covers the transmission, emission, or reception of messages across various mediums, such as wire, radio, optical, or other electromagnetic systems. It also extends to messages that undergo any form of alteration during transmission, including rearrangement, computation, or similar processes. If interpreted expansively, platforms like Signal may fall within its scope due to several reasons: Signal messages are transmitted over the internet, employing both wireless signals (like Wi-Fi or cellular data) and wired systems (such as optical fibres) for data transmission. The internet's reliance on electromagnetic systems for transmitting data, combined with the inherent processing of Signal messages - including encryption for security, compression for efficiency, and routing computations - may align with the 2023 Act's broad categorisation of 'telecommunication'.

Such an interpretation could lead to regulatory overlaps, posing substantial challenges for digital platforms. These challenges include severe compliance burdens that might hinder

<sup>24</sup> Chandra, A. (2023, December 21). *Decoding the implications of India's telecom bill*. The News Minute. Retrieved December 26, 2023, from <https://www.thenewsminute.com/news/decoding-the-implications-of-indias-telecom-bill>

<sup>25</sup> *The Telecommunications Act, 2023, (Chapter 1, Section 2(t))*.

<sup>26</sup> Tripathi, A., Shekar, K., Birla, B., & Vaidya, E. *Comments on Draft Indian Telecommunication Bill, 2022*. The Dialogue. Retrieved December 26, 2023, from [https://thedialogue.co/wp-content/uploads/2022/11/Comments-on-Draft-Indian-Telecommunication-Bill-2022\\_The-Dialogue.pdf](https://thedialogue.co/wp-content/uploads/2022/11/Comments-on-Draft-Indian-Telecommunication-Bill-2022_The-Dialogue.pdf)

<sup>27</sup> *The Telecommunications Act, 2023, (Chapter 1, Section 2(p))*.

<sup>28</sup> Tripathi A, Rizvi, K, Sahiba, J, Birla B .(2023). *Convergence of Internet and Telecom Services: Assessing the Impact on Digital Ecosystem*. The Dialogue. Retrieved December 26, 2023, from [https://thedialogue.co/wp-content/uploads/2023/06/RESEARCH-REPORT\\_-\\_Convergence-of-Internet-and-Telecom\\_-\\_The-Dialogue.pdf](https://thedialogue.co/wp-content/uploads/2023/06/RESEARCH-REPORT_-_Convergence-of-Internet-and-Telecom_-_The-Dialogue.pdf)

innovation and competition.<sup>29</sup> Additionally, there are concerns about privacy implications for users<sup>30</sup> including children<sup>31</sup> and members of marginalised communities<sup>32</sup>.

To mitigate the challenges posed by the broad definition of 'telecommunication' in the Telecommunications Act, 2023, it is recommended that a proviso be added to Section 2(p) to explicitly exclude its application to internet-based communication services. A draft amendment adding a proviso to Section 2(p) is provided below:

*Provided that the definition of "telecommunication" under Section 2(p) shall not extend to or encompass any transmission, emission, or reception of messages, data, or information that occurs exclusively over the Internet. This exclusion specifically applies to any system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to facilitate communication.*

*Explanation: For the purposes of this Act, in the context of transmissions occurring over the Internet, the responsibility for compliance with all relevant provisions shall rest with the entity or individual initiating the transmission of such messages, data, or information, and not with the network operators or Internet service providers. Furthermore, this exclusion shall apply regardless of whether the messages, data, or information transmitted over the Internet have undergone rearrangement, computation, or other processing by any means during their transmission, emission, or reception.*

This addition would help in maintaining the Act's focus and avoid potential regulatory overreach. Furthermore, the government could aid clarity and provide guidance to stakeholders in the digital communication sector by issuing Frequently Asked Questions (FAQs). These FAQs would elucidate the scope and application of Section 2(p), offering much-needed certainty and assisting stakeholders in effectively navigating the regulatory landscape. Such steps are essential to ensure the Act fosters a conducive environment for digital innovation and privacy.

<sup>29</sup> Sarkar, G. (2022, July 6). IT Rules: Impossible to introduce traceability without breaking encryption technology, says report. Inc42 Media. Retrieved December 26, 2023, from <https://inc42.com/buzz/it-rules-impossible-to-introduce-traceability-without-breaking-encryption-technology-says-report/> ; see also: Shreya S. & Tiwari P. (2022, July 4). *IT Rules, 2021: A Regulatory Impact Assessment Study (Vol. 1)*. The Dialogue and Internet And Mobile Association of India. Retrieved December 26, 2023, from <https://thedialogue.co/wp-content/uploads/2022/07/IT-RULES-2021-interactive.pdf>

<sup>30</sup> Tiwari, P. (2022, March 24). *Tracing traceability: Why weakening encryption threatens privacy and free speech*. THE BASTION. Retrieved December 26, 2023, from <https://thebastion.co.in/politics-and/tech/tracing-traceability-why-weakening-encryption-threatens-privacy-and-free-speech/>

<sup>31</sup> Tiwari, P., & Vaidya, E. (2021, June 8). *Child safety and encryption: Analysing the IT rules of 2021*. SCC Blog. Retrieved December 26, 2023, from <https://www.sconline.com/blog/post/2021/06/08/child-safety-and-encryption/>

<sup>32</sup> Global Encryption Coalition. (2022, December 12). *Encryption kept me safe*. Retrieved December 26, 2023, from <https://www.globalencryption.org/events/ged/encryption-kept-me-safe/>

### 3. POWER OF AUTHORISATION AND ASSIGNMENT

The Indian telecommunication sector's erstwhile licensing regime, requiring multiple licenses for various services, created administrative burdens and deterred new entrants due to high operational costs. Spectrum licensing, involving competitive auctions, placed a significant financial burden on all operators, particularly affecting smaller or new entrants. The sector's extensive regulatory compliance requirements added to these challenges. These cumbersome processes thwarted competition, innovation, and investment, highlighting the urgent need for streamlining and simplification to foster a more dynamic and competitive telecommunications industry in India.

The Telecommunications Act, 2023 alters the regulatory framework for telecommunication service providers by introducing a government authorisation requirement for service delivery. This development echoes the licensing approach proposed in the draft 2022 Bill. Hon'ble Minister Ashwini Vaishnaw, while presenting the Telecommunications Bill, 2023 in Parliament, highlighted the reform in licensing, reducing it to a singular license from the previous complex structure of over 100 licenses, alongside reforms in spectrum management.<sup>33</sup> These changes aim to diminish the compliance burden. However, the true impact on reducing bureaucratic complexities will only be discernible post-implementation with a lot dependent on the delegated legislations.

The 2023 Act implicitly excludes OTT platforms from its scope. However, the Act's broad definition of 'telecommunication',<sup>34</sup> risks the inadvertent inclusion of internet-based communication platforms. Application of obligations developed for the telecom sector on ever-evolving internet-based services could have far-reaching, detrimental effects.<sup>35</sup>

The intrinsic nature of internet services, characterised by rapid evolution and reliance on technological advancements, sits uncomfortably within a strict licensing framework.<sup>36</sup> Such a regime could significantly hinder the growth of internet-based services, which are inherently dependent on the integration of new technologies for business sustainability.<sup>37</sup> Imposing a licensing regime on services newly classified as 'telecommunication' could create formidable entry barriers for new entrants and curtail the growth trajectory of this dynamic sector. The additional compliance burdens and associated costs would place a heavy strain on startups, potentially stifling innovation.

Moreover, if internet-based services are subjected to a licensing regime, they would be required to bear the financial burdens of entry fees, periodic license renewal charges, and other related costs. These services are already required to comply with the Information Technology Act, 2000 and other

<sup>33</sup> Tiwari, D. (2023, December 21). *LS approves telecom bill, Vaishnaw defends spectrum allocation provision*. The Indian Express. Retrieved December 27, 2023, from <https://indianexpress.com/article/india/ls-approves-telecom-bill-vaishnaw-defends-spectrum-allocation-provision-9076694/lite/>

<sup>34</sup> *The Telecommunications Act, 2023, (Chapter 1, Section 2(p))*.

<sup>35</sup> Uppal, M. (2022, December 12). *Draft telecom bill: Challenges of ignoring global experience*. ETTelecom. Retrieved December 27, 2023, from <https://telecom.economictimes.indiatimes.com/blog/draft-telecom-bill-perils-of-ignoring-global-experience/96163855> ; see also: Tripathi A, Rizvi, K, Sahiba, J, Birla B .(2023). *Convergence of Internet and Telecom Services: Assessing the Impact on Digital Ecosystem*. The Dialogue. Retrieved December 26, 2023, from [https://thedialogue.co/wp-content/uploads/2023/06/RESEARCH-REPORT\\_-Convergence-of-Internet-and-Telecom--The-Dialogue.pdf](https://thedialogue.co/wp-content/uploads/2023/06/RESEARCH-REPORT_-Convergence-of-Internet-and-Telecom--The-Dialogue.pdf)

<sup>36</sup> Tripathi, A., Shekar, K., Birla, B., & Vaidya, E. *Comments on Draft Indian Telecommunication Bill, 2022*. The Dialogue. Retrieved December 26, 2023, from [https://thedialogue.co/wp-content/uploads/2022/11/Comments-on-Draft-Indian-Telecommunication-Bill-2022\\_The-Dialogue.pdf](https://thedialogue.co/wp-content/uploads/2022/11/Comments-on-Draft-Indian-Telecommunication-Bill-2022_The-Dialogue.pdf)

<sup>37</sup> Tripathi A, Rizvi, K, Sahiba, J, Birla B .(2023). *Convergence of Internet and Telecom Services: Assessing the Impact on Digital Ecosystem*. The Dialogue. Retrieved December 26, 2023, from [https://thedialogue.co/wp-content/uploads/2023/06/RESEARCH-REPORT\\_-Convergence-of-Internet-and-Telecom--The-Dialogue.pdf](https://thedialogue.co/wp-content/uploads/2023/06/RESEARCH-REPORT_-Convergence-of-Internet-and-Telecom--The-Dialogue.pdf)

relevant sectoral laws.<sup>38</sup> Adding another layer of licensing or registration would only elevate entry barriers and adversely affect the ease of doing business in an already competitive and fast-paced industry.<sup>39</sup> This approach necessitates a careful reconsideration to balance regulatory objectives with the need to foster an environment conducive to technological innovation and business growth.

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<sup>38</sup> Karthik, A. (2022, December 1). *Draft telecom Bill 2022: How the reforms may hinder innovation & growth of Indian tech startups*. Inc42 Media. Retrieved December 26, 2023, from <https://inc42.com/resources/draft-telecom-bill-2022-how-the-reforms-may-hinder-innovation-growth-of-indian-tech-startups/>

<sup>39</sup> Tripathi A, Rizvi, K, Sahiba, J, Birla B. (2023). *Convergence of Internet and Telecom Services: Assessing the Impact on Digital Ecosystem*. The Dialogue. Retrieved December 26, 2023, from [https://thedialogue.co/wp-content/uploads/2023/06/RESEARCH-REPORT\\_-Convergence-of-Internet-and-Telecom\\_-The-Dialogue.pdf](https://thedialogue.co/wp-content/uploads/2023/06/RESEARCH-REPORT_-Convergence-of-Internet-and-Telecom_-The-Dialogue.pdf)

## 4. ADMINISTRATIVE ALLOCATION OF SATELLITE SPECTRUM

The Telecommunications Act, 2023, marks a transformative shift in India's approach to satellite spectrum management, signifying a strategic departure from the traditional auction-based methods to an administrative allocation process. This change, emerging from extensive consultations by the Telecom Regulatory Authority of India (TRAI),<sup>40</sup> represents a move towards a more strategic and needs-based allocation of spectrum, specifically tailored for satellite operations.<sup>41</sup> Unlike terrestrial telecommunications, satellite operations require specific operational requirements and technical compatibilities, making the administrative method a more appropriate and effective approach for spectrum allocation.

This allocation process is integral for areas such as emergency communications, national security, and rural connectivity, as it allows for a more nuanced understanding of the satellite services' demands.<sup>42</sup> By prioritising these specific requirements over purely monetary considerations, administrative allocation accelerates the deployment of vital services and lowers the barriers to entry, fostering a diverse and innovative telecommunications sector.<sup>43</sup> It also aligns with global norms, as satellite spectrum is traditionally not auctioned but authorised for 'right-to-use' through administrative processes worldwide.<sup>44</sup>

The approach taken by the Telecommunications Act, 2023, is not just a technological advancement; it is a catalyst for broader socio-economic development. By enabling equitable distribution of satellite spectrum and encouraging private sector participation, particularly from startups, the Act fosters a dynamic space tech ecosystem. This approach is crucial in ensuring long-term certainty and stability, vital for attracting investments and nurturing growth in the space sector.

The Act's administrative allocation of satellite spectrum presents a comprehensive solution that extends beyond providing connectivity. It enhances education, healthcare, and other sectors by enabling access to information and services, particularly in areas where the digital divide is most pronounced.<sup>45</sup> This method promises to illuminate the remote corners of the nation with the power of connectivity, making it a beacon of progress in India's journey towards a truly inclusive and digitally empowered society.

<sup>40</sup> Telecom Regulatory Authority of India. (2023, April). *Consultation Paper on Assignment of Spectrum for Space-based Communication Services*. Retrieved December 26, 2023, from [https://www.trai.gov.in/sites/default/files/CP\\_06042023.pdf](https://www.trai.gov.in/sites/default/files/CP_06042023.pdf) ; see also: Birla, B., Shreya S., Shekar, K., & Tripathi, A. (2023, June 2). *Comments on TRAI Consultation Paper On Assignment of Spectrum for Space-based Communication Services*. Telecom Regulatory Authority of India. Retrieved December 26, 2023, from [https://www.trai.gov.in/sites/default/files/The\\_Dialogue\\_02062023.pdf](https://www.trai.gov.in/sites/default/files/The_Dialogue_02062023.pdf)

<sup>41</sup> Barik, S. (2023, December 19). *Telecom bill paves way for allocation of satellite spectrum*. The Indian Express. Retrieved December 26, 2023, from <https://indianexpress.com/article/india/telecom-bill-paves-way-for-allocation-of-satellite-spectrum-9073632/>

<sup>42</sup> ETTelecom. (2023, December 18). *Telecom bill: Administrative allocation of satellite spectrum to spur growth, says ISpA*. ETTelecom.com. Retrieved December 26, 2023, from <https://telecom.economicstimes.indiatimes.com/news/policy/telecom-bill-administrative-allocation-of-satellite-spectrum-to-spur-growth-says-isp/106099484>

<sup>43</sup> Birla, B., Shekar, K., Tripathi, A., & Shreya, S. (2023, June 2). *Comments on TRAI Consultation Paper On Assignment of Spectrum for Space-based Communication Services*. Telecom Regulatory Authority of India. Retrieved December 26, 2023, from [https://www.trai.gov.in/sites/default/files/The\\_Dialogue\\_02062023.pdf](https://www.trai.gov.in/sites/default/files/The_Dialogue_02062023.pdf)

<sup>44</sup> SatCom Industry Association. *Satellite Spectrum Allocation International Best Practices and Learnings*. Retrieved December 27, 2023, from <https://www.sia-india.com/wp-content/uploads/2022/03/SIA-India-White-Paper-on-Satellite-Spectrum-Allocation-Intl-Best-Practice-Learnings.pdf>

<sup>45</sup> Internet Society. (2022, November). *Perspectives on LEO Satellites Using Low Earth Orbit Satellites for Internet Access*. Retrieved December 27, 2023, from <https://www.internetsociety.org/wp-content/uploads/2022/11/Perspectives-on-LEO-Satellites.pdf>

Incorporating these principles, the Telecommunications Act 2023, under Section 4(1), establishes the Central Government as the steward of spectrum, responsible for its assignment in alignment with the Act and for notifying a National Frequency Allocation Plan. Section 4(4) of the Act highlights the dual approach to spectrum allocation: while primarily favouring auctions, it specifies that for services listed in the First Schedule,<sup>46</sup> the assignment will be done administratively. This dual approach underscores a balance between maximising revenue and addressing broader strategic and public interests.

For ongoing spectrum allocations, Sections 4(8) and 4(9) of the Act provide clarity and continuity. Spectrum assigned administratively prior to the Act will remain valid for five years from the appointed day or until the expiry of the assignment, whichever comes first.<sup>47</sup> Likewise, spectrum assigned through auctions will continue under the terms and conditions of its initial assignment.

As we exploit the satellite spectrum, it's imperative to balance our ambitions with environmental responsibilities. The increasing number of Low Earth Orbit (LEO) satellites intensifies the risk of space debris, posing serious threats to orbital safety and the future of space research.<sup>48</sup> It's essential for India to take a leading role in global efforts to regulate space traffic, to prevent the outer space environment from becoming cluttered and hazardous. This proactive approach will ensure sustainable space exploration and research for future generations.

As the regulatory landscape for space tech evolves, it is imperative that the development of rules ensures a judicious balance. This involves steering clear of over-regulation that could potentially be entangled in bureaucratic complexities. It is essential that regulatory measures are crafted in a manner that upholds the principles of efficient governance while avoiding the pitfalls of excessive administrative burdens.

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<sup>46</sup> *The Telecommunications Act, 2023, (Chapter 2, Section 4(4)).*

<sup>47</sup> *The Telecommunications Act, 2023, (Chapter 2, Section 4(8)).*

<sup>48</sup> Torrieri, M. (2022, March). *Space crowding in LEO is a challenge, but improvements in design and traffic management offer hope.* Retrieved December 27, 2023, from <https://interactive.satellitoday.com/via/satellite-2022-show-daily-day-4/space-crowding-in-leo-is-a-challenge-but-improvements-in-design-and-traffic-management-offer-hope/> ; see also: Internet Society. (2022, November). *Perspectives on LEO Satellites Using Low Earth Orbit Satellites for Internet Access.* Retrieved December 27, 2023, from <https://www.internetsociety.org/wp-content/uploads/2022/11/Perspectives-on-LEO-Satellites.pdf>

## 5. RIGHT OF WAY

The Telecommunications Act, 2023, introduces a progressive Right of Way (RoW) framework, a commendable move towards establishing an enabling regime for telecommunication networks.<sup>49</sup> This framework facilitates the non-discriminatory granting of RoW, ensuring that telecom networks installed under this provision are not deemed part of the property, thereby exempting them from property taxes, cess levies, and similar charges. This would help alleviate some of the monetary stress and will help the telecom operators establish new infrastructure in remote areas without having concerns relating to payment of additional levies and fees.

Addressing the establishment of common ducts or conduits in publicly financed infrastructure projects, the Act marks a significant step to bolster the foundational infrastructure essential for last-mile internet and telecom connectivity.<sup>50</sup> This provision not only empowers the Central Government to develop such infrastructure, but also mandates that the telecom facilities thus established be made available to facility providers on an open-access basis. This would help the facility provider leverage the infrastructure to provide their services in a more efficient manner and not be concerned about building infrastructure.

However, for a comprehensive understanding and effective implementation, a detailed elaboration of Section 15 is necessary. This section is pivotal in fostering decentralised networks that balance public interest with profit motives. It opens avenues for more affordable services and enhances the quality of last-mile service delivery. Effective internet access, especially in under-connected areas, is crucial for realising broader objectives like financial inclusion and digital development. Persistent issues like call drops or inadequate network coverage can significantly hinder these goals.<sup>51</sup> A robust infrastructure that delivers quality services would help in achieving the goal of digital India and ensuring continuous use of these services.

The concept of open access, crucial for telecommunication law, demands clear definition and guidelines, possibly through a combination of rules, FAQs, and model contracting terms. This clarity will positively impact initiatives like PM Gati Shakti,<sup>52</sup> which rely on such connectivity to improve the movement of goods, services, and people nationwide. As echoed in the National Digital Communications Policy, leveraging existing assets is essential<sup>53</sup> and therefore focus should also be on refurbishing and maintaining the existing infrastructure along with building new ones.

Moving forward, establishing linkages to digital public goods in these clauses could be the next step. Enhanced coordination between Digital India initiatives and those focusing on open governance will facilitate infrastructure sharing. RoW reforms in 2023 Act must clearly enable these linkages, laying the groundwork for an expansive Digital Public Infrastructure (DPI) in India. By streamlining infrastructure deployment and reducing bureaucratic hurdles, these reforms facilitate faster and more

<sup>49</sup> *The Telecommunications Act, 2023, (Chapter 3, Section 10).*

<sup>50</sup> *The Telecommunications Act, 2023, (Chapter 3, Section 15).*

<sup>51</sup> Press Trust of India. (2022, September 5). *56% Indians facing call drop issues, 82% doing this to overcome it: Survey.*

NDTV.com. Retrieved December 26, 2023, from <https://www.ndtv.com/india-news/56-indians-facing-call-drop-issues-82-doing-this-to-overcome-it-survey-3317996#:~:text=Around%2056%20per%20cent%20of,in%20a%20report%20on%20Monday>

<sup>52</sup> National Portal of India. *PM Gati Shakti - National Master Plan for Multi-modal Connectivity.* Retrieved December 26, 2023, from <https://www.india.gov.in/spotlight/pm-gati-shakti-national-master-plan-multi-modal-connectivity>

<sup>53</sup> Department of Telecommunication. (2018). *National Digital Communication Policy, 2018 (Clause 1.1 (b) (iv)).* Retrieved December 26, 2023, from <https://dot.gov.in/sites/default/files/Final%20NDCP-2018.pdf?download=1#:~:text=The%20National%20Digital%20Communications%20Policy%2C%202018%20seeks%20to%20unlock%20the,initiatives%2C%20strategies%20and%20intended%20policy>



cost-effective expansion of telecom networks, especially in rural and underserved areas. This enhanced connectivity is crucial for the effectiveness of DPs like the Unified Payments Interface (UPI) and various e-governance platforms, which depend on reliable internet and telephony services.<sup>54</sup> Consequently, the RoW reforms are pivotal in achieving digital inclusion, ensuring that vital digital services are accessible to a broader population, thereby bridging the digital divide and advancing India's digital empowerment agenda.

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<sup>54</sup> NPCI. *UPI 123PAY*, Retrieved December 26, 2023, from <https://www.npci.org.in/what-we-do/upi-123pay/product-overview>

## 6. PUBLIC SAFETY & NATIONAL SECURITY

Chapter IV of the Telecommunications Act, 2023 vests the Central Government with substantial powers concerning public safety, national security, and the protection of telecommunication networks. The government is authorised to establish standards and conformity assessment measures for telecommunication equipment, services, and networks, including cybersecurity and encryption. Significantly, in the event of public emergencies or for public safety, the government can take temporary possession of telecommunication services or networks and prioritise certain messages. Additionally, it can intercept, detain, or suspend messages and services if deemed necessary for national security or other specified reasons, with the obligation to record reasons in writing.

The government also holds the authority to dictate standards for manufacturing and importing telecommunication equipment, emphasising procurement from trusted sources and potentially suspending or prohibiting equipment and services from certain entities for national security reasons. Furthermore, the government can designate certain networks as Critical Telecommunication Infrastructure, establishing standards and security practices for their protection. Lastly, in the public interest, the government can direct authorised entities to transmit specific messages through their services or networks. These extensive powers, while aimed at safeguarding national interests, underscore the need for clear definitions and checks to prevent potential overreach and ensure the protection of individual rights and privacy.

### i. Encryption Standards

The Telecommunications Act, 2023, with its prescriptions for cybersecurity, encryption, and data processing in telecommunication networks,<sup>55</sup> poses significant compliance challenges, especially for smaller platforms and startups. These entities may struggle with the resource-intensive demands of adhering to these standards, navigating technical complexities and evolving international norms. This scenario suggests a need for a regulatory approach that aligns stringent security measures with achievable compliance targets, fostering an environment conducive to innovation and growth within the telecom sector. Moreover there exists the need for the Ministry of Communications to coordinate with the Indian Computer Emergency Response Team<sup>56</sup> and the Data Protection Board<sup>57</sup> among other sectoral regulators before prescribing standards on cybersecurity to avoid overlap and over-regulation during the rule-making stage.

It is critical that the government's role in setting these standards is directed towards recommending and enforcing the most advanced and industry-best encryption practices, ensuring robust user safety

<sup>55</sup> *The Telecommunications Act, 2023, (Chapter 4, Section 19(f))*; see also: Pandey, K. (2023, December 20). *Unpacking the key highlights of the telecommunication bill, 2023 tabled in lok sabha*. MediaNama. Retrieved December 26, 2023, from <https://www.medianama.com/2023/12/223-highlights-telecom-bill-2023-lok-sabha/>

<sup>56</sup> Ministry of Communication and Information Technology. (2016, April). *Gazette Notification: Establishment of CERT-In*. Retrieved December 27, 2023, from [https://www.cert-in.org.in/PDF/Addition\\_of\\_Mandated\\_Activity.pdf](https://www.cert-in.org.in/PDF/Addition_of_Mandated_Activity.pdf)

<sup>57</sup> Ministry of Electronics and Information Technology. (2023, August). *The Digital Personal Data Protection Act, 2023. (Chapter 5)*. Retrieved December 27, 2023, from <https://www.meity.gov.in/writereaddata/files/Digital%20Personal%20Data%20Protection%20Act%202023.pdf>

and security. Any weakening of these encryption protocols could expose users to increased cyber threats and privacy breaches.

A pressing concern is if these standards, given the Act's broad definition of 'telecommunication',<sup>58</sup> inadvertently apply to internet-based communication platforms. Such an extension could impose a significant compliance burden on smaller platforms and have far-reaching privacy implications for users<sup>59</sup> and national security concerns for the State<sup>60</sup>. Thus, the government must define the basis and criteria for the applicability of these encryption standards, ensuring they align with contemporary technological advancements and global best practices. Clarity is also needed regarding which telecommunication services must comply with these standards, promoting a uniform approach to encryption across different platforms. The government's intervention in encryption standards should enhance, not compromise, the integrity of communication systems, balancing security concerns with the advancement of digital communication technologies.

## ii. Interception of Messages

The Telecommunications Act, 2023 with provisions reminiscent of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT) Act, 2001<sup>61</sup> and the UK's Regulation of Investigatory Powers Act (RIPA) warrants oversight.<sup>62</sup> Those legislations lead to surveillance concerns owing to broad grounds for exercising such powers leading to the collection of vast amounts of telecommunications data and encroachment upon private communications.<sup>63</sup> The similarities in language and grounds between these Acts and India's Telecommunications Act, 2023 kindle the need to instill checks and balances in Chapter IV of the Act.

The Act's scope is implicitly limited to the telecom sector by restricting the definition of 'telecom services'. However, if the broad definition of 'telecommunications' were to be interpreted to include OTT platforms, it would lead to multiple challenges for internet-based communication platforms. This broad scope empowers the Executive to intercept communications transmitted by various service providers, including messaging, voice-over-IP, and video telephony software, many of which employ traditional encryption methods to safeguard individual privacy.<sup>64</sup> Such interception capabilities could significantly impact communication businesses, particularly start-ups focused on developing privacy-enhancing technologies and prioritising consumer protection.

<sup>58</sup> *The Telecommunications Act, 2023, (Chapter 1, Section 2(p))*.

<sup>59</sup> Biyani, N., Bhaskar, P., Bopanna, A., Waghre, P., & Jain, A. (2023, December 22). *Draft Indian telecommunication Bill 2022*. Internet Society. Retrieved December 27, 2023, from <https://www.internetsociety.org/resources/2022/internet-impact-brief-draft-indian-telecommunication-bill-2022/>

<sup>60</sup> Azad, Y., Venkatnarayanan, A., Tiwari, P. B., & Chatterjee, S. (2022, January 12). *Analysing the National Security Implications of Weakening Encryption*. The Dialogue. Retrieved December 27, 2023, from <https://www.internetsociety.org/resources/2022/internet-impact-brief-draft-indian-telecommunication-bill-2022/>

<sup>61</sup> Department of Treasury (USA). *USA Patriot Act*. Retrieved December 27, 2023, from <https://www.fincen.gov/resources/statutes-regulations/usa-patriot-act#:~:text=The%20official%20title%20of%20the,USA%20PATRIOT%20Act%20link%20below>

<sup>62</sup> UK Government. *Regulation of Investigatory Powers Act 2000*. Retrieved December 27, 2023, from [https://www.legislation.gov.uk/ukpga/2000/23/pdfs/ukpga\\_20000023\\_en.pdf](https://www.legislation.gov.uk/ukpga/2000/23/pdfs/ukpga_20000023_en.pdf)

<sup>63</sup> Popovich, N. (2013, November 1). *NSA files decoded: Edward Snowden's surveillance revelations explained*. Retrieved December 27, 2023, from <https://www.theguardian.com/world/interactive/2013/nov/01/snowden-nsa-files-surveillance-revelations-decoded#section/3>

<sup>64</sup> *The Telecommunications Act, 2023, (Chapter 4, Section 20 (2)(b))*.

This issue extends further to services relying on end-to-end encryption, which are pivotal in maintaining user confidentiality.<sup>65</sup> The potential intrusion into these encrypted services could have profound implications for the right to privacy, a fundamental right under Article 21 of the Constitution of India, as affirmed by the Puttaswamy judgements.<sup>66</sup>

### iii. Checks and Balances

The Telecommunications Act, 2023, particularly through Sections 20 and 21, grants the government substantial powers, raising concerns about potential overreach and infringement on individual rights.<sup>67</sup> These sections authorise the government to assume control of telecommunication services and networks in public emergencies or for national security, including the interception, detention, or disclosure of messages and the suspension of services. They also permit the government to dictate the procurement and usage standards for telecommunication equipment and services.

This extensive authority, however, is marred by ambiguous terminology and broad discretionary powers. The lack of precise definitions for 'public emergency,' 'public safety,' and 'national security' opens the door to subjective interpretations and arbitrary applications.

To mitigate these risks, the Act should incorporate specific legal definitions for key terms to prevent misuse. Executive actions under the Act must be subjected to parliamentary scrutiny and judicial review, ensuring democratic adherence and public accountability. Transparency and accountability should be fostered by requiring the government to disclose the reasons behind its actions and regularly report to Parliament.

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<sup>65</sup> Shukla, S., & Venkatnarayanan, A., & Tiwari, P. B.(ed.), (2023, January 12). *Analysing the technical workarounds to end-to-end encryption*. IJLT. Retrieved December 27, 2023, from <https://www.ijlt.in/post/analysing-the-technical-workarounds-to-end-to-end-encryption>

<sup>66</sup> Kapoor, P., & Motiani, P. (2023, December 21). *Aadhaar biometric authentication likely to be mandatory to buy new mobile number soon*. The Economic Times. Retrieved December 26, 2023, from <https://economictimes.indiatimes.com/wealth/save/you-wont-be-able-to-buy-new-mobile-number-without-aadhaar-biometric-authentication-soon/articleshow/106182176.cms>

<sup>67</sup> *The Telecommunications Act, 2023, (Chapter 4)*; see also: Das, S. (2023, December 21). *Telecom bill: Experts seek clarity amid privacy worries*. mint. Retrieved December 26, 2023, from <https://www.livemint.com/news/india/telecom-bill-experts-seek-clarity-amid-privacy-worries-11703177618697.html>

## 7. DIGITAL BHARAT NIDHI

The Telecommunications Act, 2023 introduces the 'Digital Bharat Nidhi,' a rebranded version of the USOF, aiming to extend telecommunication services to underserved rural, remote, and urban areas.<sup>68</sup> This initiative parallels the objectives of its predecessor, focusing on enhancing access and delivery of services in these regions. It also seeks to support research and development, pilot projects, and provide consultancy and advisory assistance for the deployment of telecommunication services in underserved areas.<sup>69</sup>

However, a critical challenge for the Digital Bharat Nidhi is addressing the issue of its predecessor's unutilised funds. Currently, about \$6.7 billion (₹50,000 Crore) of the USOF remains unused,<sup>70</sup> even as private investments primarily drive improvements in telephony and internet access across India. With 25,067 inhabited villages still lacking mobile network coverage, this fund's underutilisation represents a significant barrier to India's digital ambitions.<sup>71</sup> Although initiatives like BharatNet, funded by the USOF, have made strides in increasing coverage, the quality of connections often remains subpar, offering unreliable and slow services that are inadequate for long-term benefits, especially in areas where only 2G network speeds are available.

To expedite network coverage and reduce costs, a collaboration between public and private entities is essential. The proposed Telecom Technology Development Fund (TTDF) is a commendable step towards fostering such collaboration, enhancing service access, and improving consumer experiences.<sup>72</sup>

Moreover, the telecom sector faces high government levies, estimated at 30% of their revenues, one of the highest globally.<sup>73</sup> The DoT imposes various fees and charges, including a non-refundable initial entry fee, annual license fees contributing to the universal service obligation (now TDF), and spectrum usage charges. Mobilising idle funds under the TDF could be a strategic move to alleviate the financial burden on the sector, facilitating more efficient and wider telecommunication service provision across the country. This approach would not only optimise the use of existing funds but also pave the way for more sustainable and inclusive growth in India's telecommunication infrastructure.

<sup>68</sup> *The Telecommunications Act, 2023, (Chapter 5, Section 25).*

<sup>69</sup> *The Telecommunications Act, 2023, (Chapter 5, Section 25(b)).*

<sup>70</sup> Department of Telecommunications. (2022, August 31). *Fund Status of the Universal Service Obligation Fund, Ministry of Communications.* Retrieved December 26, 2023, from <https://usof.gov.in/en/fund-status>

<sup>71</sup> Minister of State for Communications. (2021, August, 4). *Lok Sabha Unstarred Question No. 2672, Lok Sabha.* Retrieved December 26, 2023, from <https://sansad.in/getFile/loksabhaquestions/annex/176/AU2672.pdf?source=pqals>

<sup>72</sup> Universal Service Obligation Fund. (2022 October 1). *Universal Service Obligation Fund (USOF) launches Telecom Technology Development Fund scheme.* Department of Telecommunications. Retrieved on December 26, 2023, from [https://pib.gov.in/PressReleasePage.aspx?PRID=1864133#:~:text=Universal%20Service%20Obligation%20Fund%20\(USOF\)%2C%20a%20body%20under%20the,aligned%20with%20Prime%20Minister%2C%20Shri](https://pib.gov.in/PressReleasePage.aspx?PRID=1864133#:~:text=Universal%20Service%20Obligation%20Fund%20(USOF)%2C%20a%20body%20under%20the,aligned%20with%20Prime%20Minister%2C%20Shri)

<sup>73</sup> Rathee, K. (2023, April 18). *Telecom sector dials up centre to slash levies for 5G viability.* The Economic Times. Retrieved December 26, 2023, from <https://economictimes.indiatimes.com/industry/telecom/telecom-news/telecom-sector-dials-up-centre-to-slash-levies-for-5g-viability/articleshow/99570411.cms>

## 8. REGULATORY SANDBOX

The Telecommunications Act, 2023 marks a significant advancement in the telecommunications sector by introducing regulatory sandboxes, a concept designed to spur innovation and technological progress.<sup>74</sup> A regulatory sandbox is a controlled live testing environment, offering businesses a 'safe space' for experimentation.<sup>75</sup> In this setup, regulators may provide certain relaxations for the purpose of testing, allowing both regulators and businesses to assess the advantages and risks of new technologies, and to devise ways to mitigate these risks in the development of safer and more reliable technologies.<sup>76</sup>

Moreover, the sandbox environment plays a crucial role in policy development, providing real-world data that is critical for shaping effective regulations. This initiative not only attracts investments, but also fosters a thriving ecosystem of innovation. It offers a practical platform for testing new developments, ensuring their practicality and user-friendliness. Importantly, it establishes a feedback loop from users, facilitating continuous refinement of technologies to meet market needs and expectations.

The concept of regulatory sandboxes is not new and has been implemented in several sectors. Notably, the Reserve Bank of India introduced a regulatory sandbox for the banking and finance sector in 2019.<sup>77</sup> This precedent highlights the potential for regulatory sandboxes to significantly contribute to the evolution and growth of various industries, including telecommunications. The 2023 Act, by incorporating this innovative approach, stands poised to significantly impact the landscape of telecommunications, driving forward both technological advancement and effective regulatory practices. In the telecom sector, regulatory sandboxes can play a crucial role in developing multiple use cases of 5G and in future 6G too. Given that telecom is already a capital intensive industry, a regulatory sandbox to test the product would help the businesses gauge its commercial viability before rolling it out in the market.

<sup>74</sup> *The Telecommunications Act, 2023, (Chapter 6, Section 27).*

<sup>75</sup> Vanamali, K. V. (2022, November 8). *What is a regulatory sandbox*. Retrieved December 26, 2023, from [https://www.business-standard.com/podcast/economy-policy/what-is-a-regulatory-sandbox-122110800137\\_1.html](https://www.business-standard.com/podcast/economy-policy/what-is-a-regulatory-sandbox-122110800137_1.html)

<sup>76</sup> *The Telecommunications Act, 2023, (Chapter 6, Section 27).*

<sup>77</sup> RBI. (2019, August). *Enabling Framework for Regulatory Sandbox*. Retrieved December 26, 2023, from <https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=938> ; see also: Shashidhar, K. J. (2020, May 27). *Regulatory Sandboxes: Decoding India's attempt to regulate Fintech disruption*. ORF. Retrieved December 26, 2023, from <https://www.orfonline.org/research/regulatory-sandboxes-decoding-indias-attempt-to-regulate-fintech-disruption-66427/>

## 9. USER'S PERSPECTIVE

### i. Protection Against Specified Messages

The Telecommunications Act, 2023 introduces vital provisions to regulate 'specified messages', specifically targeting advertisements and promotional content. Key among these measures is the requirement for obtaining users' prior consent before sending such messages, ensuring respect for personal preferences and privacy.<sup>78</sup> A 2023 national survey revealed that a staggering 66% of Indian mobile users continue to receive three or more pesky calls daily.<sup>79</sup> Most of these calls originate from personal mobile numbers, with 78% related to the sale of financial services and real estate.<sup>80</sup> This is despite 92% of the surveyed mobile users reporting that they had registered their numbers on the Do Not Disturb (DND) list. The 2023 Act mandates the establishment of a DND register, empowering users to opt-out of marketing communications effectively.<sup>81</sup> This register is a significant step towards giving users control over their digital communication channels.

Furthermore, the Act prescribes a mechanism for reporting unauthorised messages and malware, enhancing user security and response against digital intrusions.<sup>82</sup> The telecom service provider is also mandated to establish online mechanisms for resolving user grievances.<sup>83</sup> While the Act sets the baseline expectations, it is the Rules that will enforce the law. These measures collectively represent a proactive approach to protect user rights in the digital space, balancing the dynamics of digital marketing with the imperative of maintaining user privacy and security. Accordingly, this legislative move underscores the commitment to creating a more user-centric and secure digital communication environment.

### ii. Verifiable Biometric Identification

The Telecommunications Act of 2023 introduces mandatory biometric identification for telecom service users.<sup>84</sup> While such measures, including Aadhaar-based verification, are justifiable in financial sectors for preventing money laundering,<sup>85</sup> their broader application in telecommunications could be revisited.<sup>86</sup> This move necessitates a delicate balance between security objectives and the protection of individual privacy and data. Offering alternative modes of authentication, as seen in the

<sup>78</sup> *The Telecommunications Act, 2023, (Chapter 6, Section 28)*.

<sup>79</sup> ETTelecom. (2023, February 14). *Pesky callers are still big menace*. Retrieved December 27, 2023, from <https://telecom.economicstimes.indiatimes.com/news/pesky-callers-are-still-big-menace/97898337>

<sup>80</sup> LocalCircles. (2023, February). *2 in 3 Indians surveyed get 3 or more pesky calls every day*. Retrieved December 27, 2023, from <https://www.localcircles.com/a/press/page/unwanted-phone-calls-survey>

<sup>81</sup> *The Telecommunications Act, 2023, (Chapter 6, Section 28 (2)(b))*.

<sup>82</sup> *The Telecommunications Act, 2023, (Chapter 6, Section 28 (2)(c))*.

<sup>83</sup> *The Telecommunications Act, 2023, (Chapter 6, Section 28 (3))*.

<sup>84</sup> *The Telecommunications Act, 2023, (Chapter 2, Section 3 (7))*.

<sup>85</sup> RBI. (2023, October). *Master Direction - Know Your Customer (KYC) Direction, 2016 (Updated as on October 17, 2023)*. Retrieved December 26, 2023, from <https://www.rbi.org.in/CommonPerson/english/scripts/notification.aspx?id=2607>

<sup>86</sup> The Times of India. (2023, December 22). *Telecom Bill 2023: Will Aadhaar biometric authentication be mandatory for new SIM cards soon?*. Retrieved December 27, 2023, from <https://timesofindia.indiatimes.com/business/india-business/telecom-bill-2023-will-aadhaar-biometric-authentication-be-mandatory-for-new-sim-cards-soon/articleshow/106208332.cms?from=mdr>

Telegraph Act, 1885, would be a prudent approach, respecting both the Supreme Court's rulings and the privacy rights of citizens.<sup>87</sup>

The 2023 Act restricts its scope to the telecom sector. However, if the definition of 'telecommunications' is broadly construed, it might inadvertently extend the biometric verification requirement to internet-based communication platforms, placing undue burdens on these services. This is particularly pressing for smaller entities, already grappling with new data protection laws<sup>88</sup> and lacking the resources to process personal data securely. Overextending the Act's reach could lead to heightened regulatory demands and increased privacy risks for users, considering the sensitive nature of biometric information.

In response, the government must provide clear guidance on the Act's scope and applicability. This is vital to ensure that the implementation of biometric identification aligns with India's legal framework and respects citizens' privacy rights.<sup>89</sup> Careful delineation of the services subject to biometric verification is necessary to avoid overreach and to protect the interests of smaller platforms and startups. The government's clarification will play a crucial role in ensuring legal compliance while safeguarding individual privacy, making the implementation of the Act both effective and respectful of fundamental privacy norms.

### iii. Not to Furnish False Information

The Telecommunications Act, 2023 arrives at a critical juncture in India's cyber landscape, where financial fraud dominates cybercrime statistics. From January 2020 to June 2023, financial offenses, particularly via UPI and internet banking, accounted for 75% of cybercrimes, as highlighted by a study from an IIT Kanpur-incubated startup.<sup>90</sup> This trend underscores the urgency for robust cybersecurity measures, a concern the Act seeks to address. The Act mandates accurate user identification for telecom services,<sup>91</sup> as well as a mandate on the user to not furnish false information,<sup>92</sup> a directive aimed at curbing cybercrime, especially in financial transactions. Law enforcement agencies use various data points for metadata analysis. They look beyond basic call logs to include IP addresses, device identifiers, and even the specific apps and websites accessed. By analysing this data, they can establish patterns like call chains, indicating a network of communication between individuals.<sup>93</sup> Additionally, they can determine a person's location within a 50-meter range and track their online behaviour by mapping IP addresses to applications. This analysis allows for the construction of a comprehensive profile of an individual's activities and connections, aiding in investigations.

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<sup>87</sup> Department of Telecommunications. *The Indian Telegraph Act, 1885, (Chapter 2, Section 4 (3))*.

<sup>88</sup> Ministry of Electronics and Information Technology. (2023, August). *The Digital Personal Data Protection Act, 2023. (Chapter 5)*. Retrieved December 27, 2023, from <https://www.meity.gov.in/writereaddata/files/Digital%20Personal%20Data%20Protection%20Act%202023.pdf>

<sup>89</sup> K.S. Puttaswamy and Anr. Vs. Union of India ((2017) 10 SCC 1)

<sup>90</sup> The Economic Times. (2023, September 18). *Financial frauds accounted for over 75% cyber crimes since 2020: Study*. Retrieved December 26, 2023, from <https://economictimes.indiatimes.com/tech/technology/financial-frauds-accounted-for-over-75-cyber-crimes-since-2020-study/articleshow/103756565.cms>

<sup>91</sup> *The Telecommunications Act, 2023, (Chapter 2, Section 3 (7))*.

<sup>92</sup> *The Telecommunications Act, 2023, (Chapter 7, Section 29 (a))*.

<sup>93</sup> Azad, Y., Venkatnarayanan, A., Tiwari, P. B., & Chatterjee, S. (2022, January 12). *Analysing the National Security Implications of Weakening Encryption*. The Dialogue. Retrieved December 27, 2023, from <https://thedialogue.co/wp-content/uploads/2022/01/Report--National-Security-Encryption--The-Dialogue-DeepStrat--Jan-12-2022.pdf>



However, even an inadvertent extension of this mandate on internet-based communication platforms could compel services like Signal and Twitter to alter their anonymity policies, potentially impacting user privacy and freedom of expression.<sup>94</sup>

Section 29 of the Act, focusing on user responsibility for providing correct information, neglects scenarios involving third-party data entry and the challenges posed by digital illiteracy. The predominantly English terms and conditions exacerbate these issues, risking alienation of non-English speaking users. Moreover, the stringent penalties for non-compliance, ranging up to INR 25,000 for a first offense and INR 50,000 for each subsequent day of contravention, seem disproportionate, considering India's varied digital literacy levels.

The Act's broad definition of 'telecommunication services' also raises concerns about online anonymity. Anonymity serves legitimate purposes and the Act's provisions could significantly restrict this anonymity warranting clarification on the scope of the term 'telecommunication'.

While the Telecommunications Act, 2023 is pivotal in strengthening cybersecurity against financial fraud, it necessitates a balanced approach. This balance should consider user accessibility, privacy rights, and the importance of maintaining online anonymity, ensuring that cybersecurity measures do not inadvertently infringe upon fundamental freedoms.

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<sup>94</sup> Article 19. (2015). *Right to Online Anonymity*. Retrieved December 27, 2023, from [https://www.article19.org/data/files/medialibrary/38006/Anonymity\\_and\\_encryption\\_report\\_A5\\_final-web.pdf](https://www.article19.org/data/files/medialibrary/38006/Anonymity_and_encryption_report_A5_final-web.pdf)

## 10. GRIEVANCE REDRESSAL

The Telecommunications Act, 2023 introduces a digital-by-design, four-tiered dispute resolution framework for effective grievance redressal, reflecting a modern approach to handling disputes in the telecom sector.<sup>95</sup> At the first level, the framework encourages voluntary undertakings, allowing assignees and telecom service/network providers to self-disclose and rectify any inadvertent contraventions.<sup>96</sup> This proactive measure fosters a culture of compliance and responsibility among service providers.

The next tier involves adjudicating officers and a Designated Appeals Committee, both functioning as digital offices.<sup>97</sup> They are tasked with deciding matters related to the contravention of terms and conditions by assignees and telecom service or network providers. This digitised approach not only streamlines the resolution process but also aligns with the contemporary digital landscape of the telecom industry.

In cases where parties seek to contest the decisions made at the second tier, an appeal can be made to the Telecom Disputes Settlement and Appellate Tribunal (TDSAT).<sup>98</sup> This provision ensures that aggrieved parties have access to a higher authority for a fair and impartial review of their cases.

Overall, the dispute resolution framework embedded in the Telecommunications Act, 2023 represents a significant step towards modernising the grievance redressal mechanism in the telecom sector. It balances the need for a swift and efficient resolution process with the principles of fairness and transparency, ensuring that disputes are handled in a manner that is both timely and judicious.

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<sup>95</sup> *The Telecommunications Act, 2023, (Chapter 7, Section 30).*

<sup>96</sup> *The Telecommunications Act, 2023, (Chapter 7, Section 32 (3)(e)).*

<sup>97</sup> *The Telecommunications Act, 2023, (Chapter 7, Section 37).*

<sup>98</sup> *The Telecommunications Act, 2023, (Chapter 7, Section 39).*

# 11. OFFENCES AND PENALTIES

The Telecommunications Act of 2023 marks a significant shift towards stricter regulatory compliance, evident in the escalated severity of penalties compared to the 2022 Draft Bill. The Act imposes harsh consequences for unauthorised telecommunications activities, prescribing imprisonment of up to three years and fines as high as INR 2 Crore.<sup>99</sup> Despite this rigor, the Act's categorisation of offenses, which range from minor to major as per the Second Schedule, lacks clear demarcation into severe or non-severe categories. This ambiguity, coupled with the wide latitude in punishment – from written warnings to fines up to INR 5 Crore – raises implementational concerns.

In addition to this, the Act introduces specific regulations for Subscriber Identity Modules (SIM cards), setting a fine of INR 50,000 for exceeding the permitted limit of SIM cards per individual, escalating to INR 2 Lakh for subsequent offenses.<sup>100</sup> This move aligns with the Government's August 2023 regulations aimed at curbing fraudulent calls and activities.<sup>101</sup> Under these regulations, Telecom Service Providers must undergo stringent police verification for SIM card dealers, with a substantial non-compliance penalty. The rules also redefine business-related SIM card connections, requiring detailed registration and individual employee KYC. For individual users, the Act limits the number of SIM cards to nine per ID and prohibits the reissuance of deactivated SIMs for 90 days. Furthermore, the Department of Telecommunications' launch of the 'Sanchar Saathi' portal enhances mobile connection management and provides mechanisms for fraud reporting and blocking lost or stolen handsets.

The Government's efforts in strengthening the regulatory framework and addressing infringements in the telecom sector are commendable. However, while the Act introduces tougher penalties, the need for clarity in the classification of offenses is evident. Ensuring a balance between stringent enforcement and practical application is essential in the dynamic landscape of telecommunications law, where precision and fairness are as critical as firmness.

<sup>99</sup> ETTelecom. (2023, December 19). *Telecom bill: Illegal phone tapping to invite three years in jail, Rs 2 crore fine or both*. Retrieved December 26, 2023, from <https://telecom.economictimes.indiatimes.com/news/policy/telecom-bill-illegal-phone-tapping-to-invite-three-years-in-jail-rs-2-crore-fine-or-both/106106854>

<sup>100</sup> ETTelecom. (2023, December 19). *Telecom bill: Illegal phone tapping to invite three years in jail, Rs 2 crore fine or both*. Retrieved December 26, 2023, from <https://telecom.economictimes.indiatimes.com/news/policy/telecom-bill-illegal-phone-tapping-to-invite-three-years-in-jail-rs-2-crore-fine-or-both/106106854>

<sup>101</sup> Livemint. (2023, December 1). *New SIM card rules to be applicable from today. A look at what will change*. mint. Retrieved December 26, 2023, from <https://www.livemint.com/industry/telecom/new-sim-card-rules-to-be-applicable-from-december-1-heres-a-look-at-what-will-change-11701320163500.html>

## 12. DELEGATED LEGISLATION

The successful implementation of the Telecommunications Act, 2023, pivotal in establishing a new telecom regime in India, hinges on the efficacy of delegated legislation. This section highlights the necessity for precise and clear rulemaking, which is essential for achieving the intended outcomes of the Act. It underscores the significance of well-defined regulations in key areas, facilitating a more streamlined and effective application of the new telecom framework.

- A. **Power of Authorisation and Assignment:** Simplify authorisation processes to reduce compliance burdens. Establish clear, streamlined procedures to encourage competition and innovation.
- B. **Biometric Verification:** Limit the scope of biometric verification to specific purposes and businesses. Include privacy-respecting alternative modes of authentication to balance security and privacy.
- C. **Administrative Allocation of Satellite Spectrum:** Develop rules that balance efficient governance with minimal bureaucratic complexities. Ensure that satellite spectrum allocation is practical, strategic, and devoid of excessive administrative burdens.
- D. **Right of Way:** Define 'open access' in telecommunication law through a combination of rules, FAQs, and model contracting terms to provide clarity and guidance.
- E. **Power to Notify Standards:** Collaborate with sectoral regulators to avoid regulatory overlap. Formulate standards that advocate for advanced encryption practices. Provide clear criteria for the applicability of encryption standards and ensure they align with global best practices.
- F. **Powers in Chapter IV:** Implement rules mandating parliamentary scrutiny and judicial review of executive actions under the Act. Promote transparency and accountability by requiring detailed reporting of executive actions to Parliament.
- G. **Regulatory Sandbox:** Specify eligibility criteria for products, services, and business models in the sandbox. Outline the relaxations and durations applicable under the Act to encourage innovation and business certainty.
- H. **DND Registers:** Establish comprehensive rules for creating and maintaining DND Registers. Implement nuanced penalties for violations to address the issue of spam calls.
- I. **Offences:** Categorise offences into severe and non-severe categories, providing clarity and facilitating appropriate enforcement measures.

These recommendations aim to ensure that the Telecommunications Act, 2023 is effectively and efficiently implemented, fostering a balanced, secure, and innovative telecommunication environment.

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