



Transformative Impacts of Telecommunications Act 2023

This editorial is based on [“Open Up The Playing Field”](#) which was published in Indian Express on 12/01/2024. The article delves into various facets of the Telecommunication Act, 2023; scrutinises inherent issues within the act and offers constructive suggestions for improvement.

For Prelims: [Indian Telegraph Act, 1885](#), [Telecommunication services](#), [Telecommunications Act, 2023](#), [TRAI](#), [Universal Service Obligation Fund](#), [Digital Bharat Nidhi](#), [Prime Minister Wi-Fi Access Network Interface](#), [Bharatnet project](#), [Production Linked Incentive \(PLI\) Scheme](#), [Digital India Initiative](#).

For Mains: Status of the Telecom Sector in India after the Telecommunications Act, 2023.

According to the [Telecom Regulatory Authority of India \(TRAI\)](#), India ranks as the world's second-largest telecommunications market with a **teledensity of 85.11%** as of July 2022. The country's increasing internet and broadband penetration supports the [Digital India initiative](#), and it has entered the **5G** race.

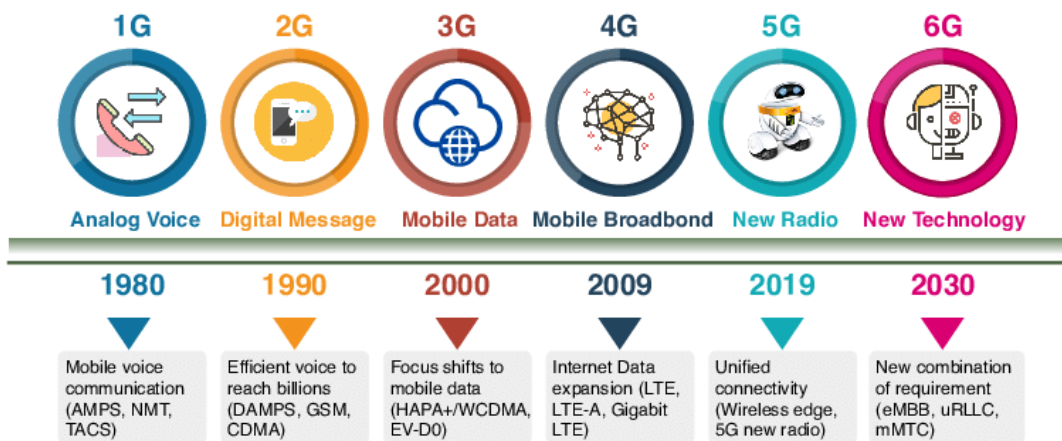
In December 2023, the highly anticipated [Telecommunication Act 2023](#) was implemented, prioritising the development of a strong security framework to protect essential mobile networks from cyber threats and unauthorised access.

What is the History of Telecommunications in India?

- **Historical Framework (1885-2023):**
 - The Indian telecom sector, shaped by three laws—[The Indian Telegraph Act, 1885](#); [The Indian Wireless Telegraphy Act, 1933](#); and [The Telegraph Wires \(Unlawful Possession\) Act, 1950](#)—has undergone a transformative legal evolution.
 - The 1950 Act, addressing unlawful possession of telegraph wires, was recently repealed by the [Repealing and Amending Act, 2023](#), emphasising regulatory adaptability.
- **Regulatory Authorities:**
 - The TRAI Act, 1997, instrumental in tariff regulation, established both the [TRAI](#) and the [Telecom Disputes Settlement and Appellate Tribunal \(TDSAT\)](#).
 - Licensing authority, however, remains vested in the central government.
- **1885 Act and Technological Evolution:**
 - Originally governing telegram services, the 1885 Telegraph Act, surprisingly resilient, navigated through the telegraph era's cessation in 2013.
 - As technology advanced, encompassing real-time transmission of text, voice, images, and video, **the archaic 1885 Act continued to regulate modern telecom services.**

What are the Key Provisions of Telecommunications Act, 2023?

- **Authorisation and Licensing Requirements:**
 - In order to provide telecommunication services or operate telecommunications networks, **prior authorization from the central government is mandatory.**
 - Existing licences remain valid **for their granted period or up to five years.**
- **Spectrum Allocation and Usage:**
 - **Spectrum will be assigned through auctions**, except for specific purposes like national security, disaster management, and satellite services.
 - The government has the **authority to re-purpose frequency ranges** and allows spectrum sharing, trading, leasing, and surrender.
- **Satellite Internet Provision:**
 - The legislation **introduced provisions for allocating spectrum to satellite internet providers** such as OneWeb and [SpaceX's Starlink](#), with active authorizations already granted to OneWeb and Jio for satellite-based internet services.
- **Surveillance and Suspension Powers:**
 - The government has the **power to intercept, monitor, or block messages on specified grounds** related to public safety or emergency.
 - Telecom **services may be suspended, and temporary possession of infrastructure can occur** during public emergencies.
- **Regulation and Standards:**
 - The central government can **prescribe standards for telecom equipment and infrastructure.**
 - The Act also amends the TRAI Act, 1997 allowing only experienced individuals to serve as chairpersons and members.
 - It says that the **chairperson must have at least thirty years of professional experience** and must have served as a member of the board of directors or a chief executive of a company.
 - The TRAI chairperson must have professional experience in telecommunication, industry, finance, law, accountancy, management, or consumer affairs.
 - Similarly, it also changes the criteria for the appointment of TRAI members stating that a member **must have at least twenty-five years of professional experience** and has served as a member of the board of directors or chief executive of a company.
 - This tells us that the TRAI chairperson and members may now be appointed from the private sector.
- **Digital Bharat Nidhi and OTT Services:**
 - The [Universal Service Obligation Fund \(USOF\)](#) is retained as **Digital Bharat Nidhi**, allowing its use for research and development.
 - [Over-the-top \(OTT\) services are excluded](#) from the Telecom Act, and their regulation falls under the potential [Digital India Act, 2023.](#)
- **Legal Offences and Penalties:**
 - The Bill **specifies criminal and civil offences**, including unauthorised provisions of telecom services and breach of terms.
 - Penalties range **from fines to imprisonment**, and adjudication is overseen by designated officers and committees.
- **National Security Measures:**
 - Provisions initially established post the **2020 India-China border conflict** are integrated into the law, emphasising measures to **prevent the importation of telecom equipment from potentially adversarial nations.**



What are the Merits and Demerits of the Telecommunications Act, 2023?

▪ Merits:

- **Shifts to New Paradigms:** The Telecommunication Act 2023 marks a significant departure from the previous Acts which are now replaced to accommodate the evolving landscape of **human-human, human-machine, and machine-machine communications**.
- **Navigates Different Communication Technologies:** Act is poised to navigate generations of communication technologies, including innovations like voice calls, messaging, video calls, wearables, and **Industry 4.0**.
 - The inseparable integration of computing and technologies like **AI, IoT, and quantum computing** is anticipated in the future of communication.
- **Forward Steps:** Two crucial and possibly overlooked objectives are emphasised; **promoting competition and mobilising resources** for infrastructure upgrade in a debt-laden industry.
- **Technology Neutrality in Spectrum Use:** The Act rightly advocates technology neutrality in spectrum use, acknowledging that telecom services are no longer defined by technology type.
 - To encourage fair competition, **new market entrants must have non-discriminatory and non-exclusive access** to infrastructure on commercial terms.
- **Regulatory Convergence for Digital Technologies:** With an integrated view, **the Act addresses the convergence of telecommunications and the internet**, stressing the importance of regulatory convergence.
 - The **challenge of fragmented oversight over converged services is acknowledged**, prompting questions on the efficacy of separate licences and administrative departments.

▪ Demerits:

- **Contested Provisions and Privacy Concerns:** The Act falls short of addressing concerns regarding contested provisions empowering the government during safety standards and emergencies, potentially infringing on citizen **privacy** with limited accountability.
 - Balancing safety with **privacy becomes a critical consideration for governing officers**.
- **Challenges in 5G/6G Implementation:** India faces challenges in 5G adoption, including unattractive use cases, poor monetization, and insufficient infrastructure investment.
 - The commitment of Reliance Jio and Bharti Airtel to substantial capex reductions post-2023-24 raises concerns.
 - The Act lacks a specific approach to promote **5G and 6G infrastructures** in a time bound manner.

What Steps can be Taken to Improve the Telecom Sector In India?

▪ Functional Separation as Regulatory Remedy:

- The Act should embody the **concept of functional separation**, as seen in international regulations, to address market concentration.
 - Examples from **Sweden, UK, Australia, Ireland, and Poland** illustrate its use, but caution is warranted to prevent disproportionate remedies leading to lower investments and innovation.
- **Voluntary Transitions and Industry Configurations:**
 - **Voluntary transitions**, incentivized by lower taxation or fiscal benefits, **offer a more effective approach, as witnessed in Italy.**
 - Expectations include a spectrum of industry configurations, from fully integrated telcos to network aggregators and pure-play service providers.
- **Transition to Wireline-Led Architecture:**
 - Wireline-led architecture is far more capable of delivering 5g/6g speeds. India must **transition from wireless to a wireline-led architecture** to support high-quality digital applications.
 - The Act's emphasis on **Right of Way** recognizes this need, calling for an enabling business environment to lower costs, particularly in investing in fibre infrastructure for both urban and rural areas.
- **Government Contribution and Resource Generation:**
 - The government, **through the USOF, should set explicit targets for infrastructure buildout in rural and non-rural areas.**
 - Resource generation and a competitive space for private sector investments are vital for fostering a robust fibre infrastructure.
- **Unified Vision for the Future:**
 - The Act concludes with the importance of a unified vision, emphasising synergies in licensing, standards, skilling, and governance across different departments.
 - This **holistic approach is deemed essential for India's digital revolution**, positioning the telecom industry at the forefront of sustained growth.

Related Government Initiatives

- [Prime Minister Wi-Fi Access Network Interface \(PM-WANI\)](#)
- [Bharatnet project](#)
- [Production Linked Incentive \(PLI\)](#)
- [Bharat 6G Alliance](#)

Conclusion

The ongoing expansion of India's telecom sector is a pivotal element in the country's digital transformation. **The key objectives of the Telecommunications Act, 2023, involve fostering competition in services, encouraging the shift to fibre-based networks, and promoting technological dynamism.** These efforts aim to usher in a new era in telecommunications. The emphasis is on achieving tangible progress rather than falling short of expectations.

Drishti Mains Question:

How has the Telecommunications Act, 2023, impacted the growth and dynamics of the telecom sector in India? Discuss the challenges, and potential outcomes, emphasising its role in advancing digital connectivity and technological innovation.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. In India, which of the following review the Independent regulators in sectors like

telecommunications, insurance, electricity, etc.? (2019)

1. Ad Hoc Committees set up by the Parliament
2. Parliamentary Department Related Standing Committees
3. Finance Commission
4. Financial Sector Legislative Reforms Commission
5. NITI Aayog

Select the correct answer using the code given below:

- (a) 1 and 2
(b) 1, 3 and 4
(c) 3, 4 and 5
(d) 2 and 5

Ans: (a)

Q. In India, the term “Public Key Infrastructure” is used in the context of (2020)

- (a) Digital security infrastructure
(b) Food security infrastructure
(c) Health care and education infrastructure
(d) Telecommunication and transportation infrastructure

Ans: (a)

Q. Which of the following is/are the aims/aims of the “Digital India” Plan of the Government of India? (2018)

1. Formation of India’s own Internet companies like China did.
2. Establish a policy framework to encourage overseas multinational corporations that collect Big Data to build their large data centres within our national geographical boundaries.
3. Connect many of our villages to the Internet and bring Wi-Fi to many of our schools, public places and major tourist centres.

Select the correct answer using the code given below:

- (a) 1 and 2 only
(b) 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)