Manufactured Capital

We are committed to providing seamless high-speed connectivity and delivering a brilliant network experience to our customers. We continue to invest in cutting-edge, robust and environment friendly infrastructure to connect every corner of India, including the most remote regions. With our strong spectrum portfolio, digitally-driven networks, submarine cable network and data centres, we are powering digital transformation.

SDGs impacted

Material topics included

- Digital inclusion and enhanced access to ICT
- Innovation of products and services
- Green ICT solutions
- Network quality, expansion and transformation

BRSR Principle

Principle 2

FY 2024-25 Highlights

19,858
New mobile network towers installed

60,611
New mobile broadband base stations added

44,390 Rkms
Optic fiber cable deployed

5,717 Bn
Minutes on network (Gross)

30,624 Bn MBs
Data traffic (Homes Services)

81,257 Bn MBs
Data traffic (Mobile Services)

~₹686 Bn
Spent on acquiring spectrum in auctions since FY 2020-21

~7.2 Mn
Home passes rolled out in FY 2024-25

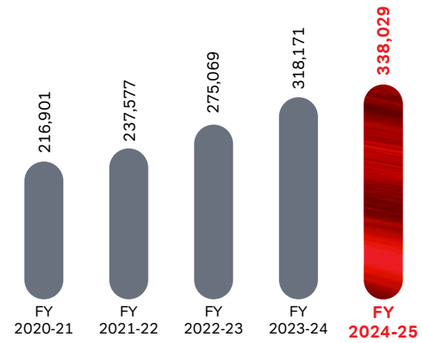
14
Large data centres with ~14,700 usable racks/tile spaces

120+
Edge data centres with ~27,000 usable racks/tile spaces

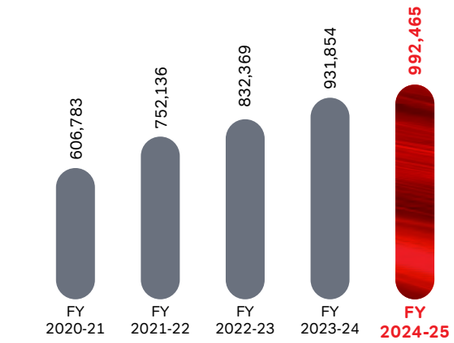
~133 MW
Design load in a large data centre

~108 MW
Design load in an edge data centre

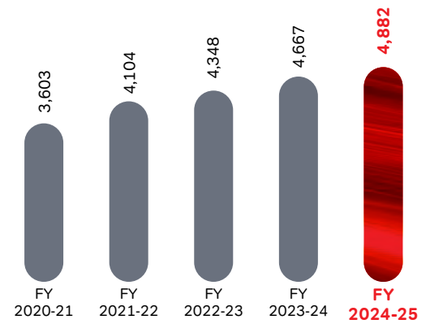
Total mobile network towers (Nos.)



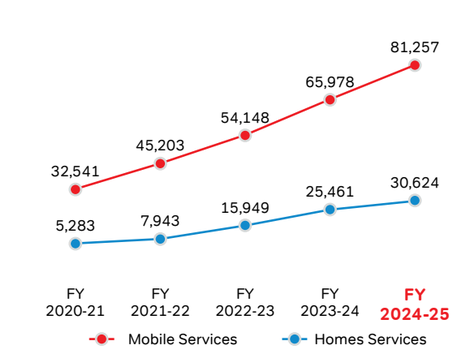
Total mobile broadband base stations (Nos.)



Minutes on network (Mobile Services) (Bn Mins)



Data traffic (Bn MBs)



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Strategic Spectrum Investments Delivering the Best Experience

We have built India's largest mid-band spectrum pool through strategic and cost-effective investments, ensuring seamless 4G and 5G services across urban and rural markets. In FY 2024-25, we invested ₹6,857 crores to acquire 97 MHz of spectrum, renewing spectrum in six circles and further boosting our mid-band spectrum portfolio mix. Refarming of our spectrum holdings in the 1,800, 2,100 and 2,300 MHz mid-bands will help us meet the rising demand for data.

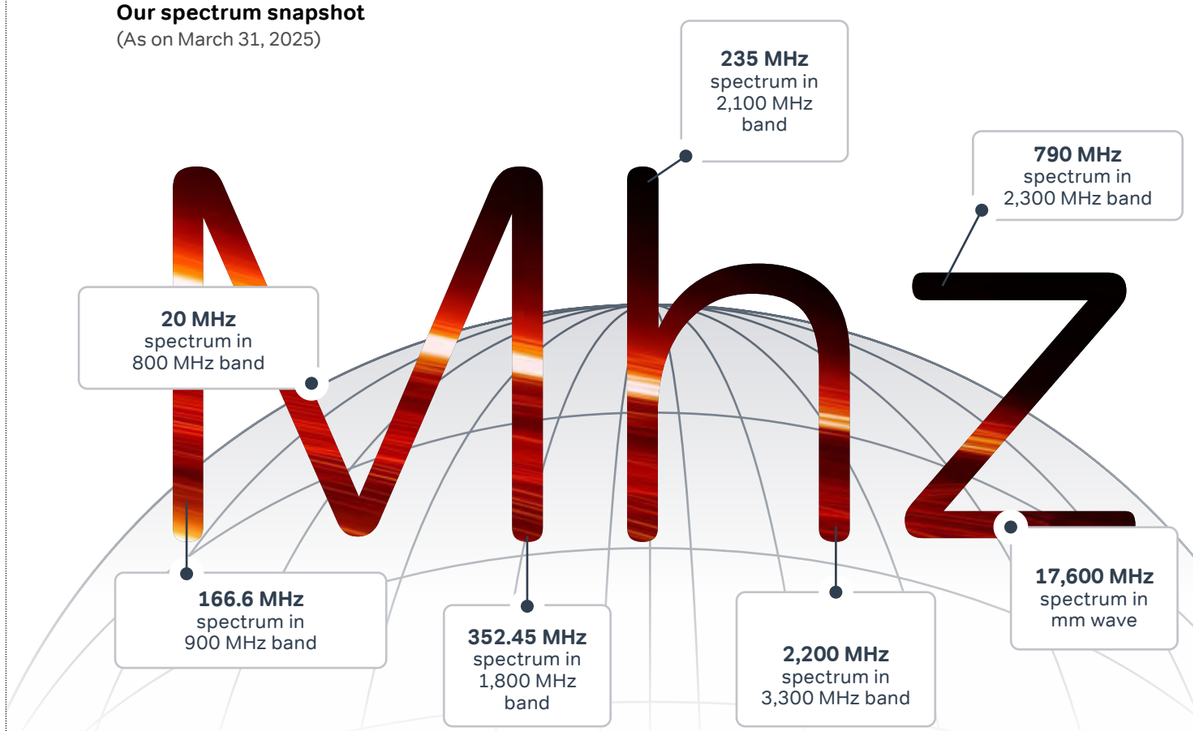
We are fully ready to transition to a standalone 5G network. This will happen when 5G becomes the mainstay wireless technology, while we continue to conduct pilot testing. Until such a transition, we will maintain excellent service to customer needs through the non-standalone 5G architecture.

To further boost our 5G footprint, we entered into definitive agreements with Adani Data Networks to acquire 400 MHz in the 26 GHz band in multiple regions, namely Gujarat (100 MHz), Mumbai (100 MHz) Andhra Pradesh (50 MHz), Rajasthan (50 MHz), Karnataka (50 MHz) and Tamil Nadu (50 MHz). This acquisition strengthens our millimetre wave (mmWave) holdings, supporting high-capacity use cases such as Fixed Wireless Access (FWA) and enterprise solutions, thus helping us densify coverage in major urban markets.

Demonstrating financial prudence, we prepaid ₹25,981 crores of high-cost spectrum liabilities in FY 2024-25, bringing our cumulative prepayments to ₹66,665 crores, clearing all dues before the 2021 auctions, which has further strengthened our balance sheet.

₹68.6 Bn
Spent on acquiring spectrum in FY 2024-25, bolstering mid-band holding and improving indoor coverage

Our spectrum snapshot
(As on March 31, 2025)



Powering the Network for a Digital Future

Driven by the vision to build a smarter, greener and more resilient network, Airtel is integrating next-gen technologies and entering strategic partnerships to power its network digitally. Leveraging advanced AI/ML technologies has enabled the Company to enhance its network intelligence. Automated cell sleep-wake cycles, powered by intelligent traffic profiling, are resulting in significant energy savings while reducing voice of the customer (VOC) concerns. In parallel, RAN Intelligent Management (5G RIM)-based ducting mitigation has improved signal stability over extended ranges (up to 410 km), leading to enhanced network efficiency and user experience.

Through our Green 5G initiative with Nokia, we are advancing sustainability by optimising energy usage across our 4G/5G Radio Access Network. The adoption of revised Electromagnetic Field (EMF) compliance standards and increased Effective Isotropic Radiated Power (EIRP) limits for small cells has enabled us to extend 5G coverage more efficiently – through the use of optimal power without compromising on safety.

Nokia's Converged Packet Core and FWA solutions are helping us streamline our 4G/5G infrastructure. Meanwhile, Ericsson's dual-mode 5G core and advanced monetisation platforms such as network slicing and API exposure are supporting our new enterprise and consumer services.

The introduction of advanced tools i.e., Airtel Cognitive Solutions (ACS), Customer Experience Index (CEI), Mutual NBR Identification and Broadband & Field Operations are improving network efficiency, enabling proactive complaint resolution and optimising cell relations, leading to enhanced performance and customer experience.

These strategic initiatives have enabled us to solidify our position as a frontrunner in 5G innovation, delivering cutting-edge performance, superior customer experience and sustainable network operations across India.

Manufactured Capital

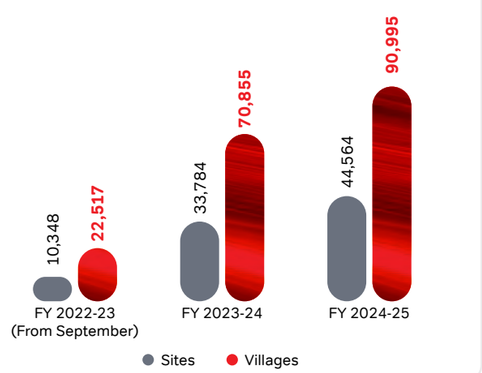
Enabling Access to Underserved Regions

Digital lifeline: Uniting 90,000+ villages

As part of the Rural Acceleration Programme, we made rapid strides in expanding high-quality, affordable connectivity to underserved regions through the deployment of 44,564 sites across 90,995 villages over 3 years.

The sustained site deployment has successfully helped us increase our rural population coverage to over 85 million. This significant expansion underscores our commitment towards bridging the digital divide and bringing reliable connectivity to remotest corners of India.

Total mobile network towers (Nos.)



Expanding Connectivity to India's Remote Frontiers

We expanded our network across the rugged terrains of Leh and Ladakh, just in time for the travel season. Our 5G rollout covers zones including well-known tourist destinations such as Pangong Lake, Magnetic Hill, Khardung La and Diskit; delivering seamless, high-speed connectivity to both residents and travellers.

We partnered with the Indian Army for network deployment in remote border areas to connect villages along the Line of Control (LoC) in North Kashmir, including in Kupwara, Baramulla and Bandipore districts. We also achieved a milestone by extending our network to Phobrang: one of India's remotest villages near the Indo-China border. Situated at 15,000 ft above sea level, Phobrang now has essential mobile services, empowering over 2,000 households in this high-altitude region.

We became the first and only private telecom provider to successfully establish connectivity in the Galwan River region and Daulat Beg Oldie (DBO), India's northernmost military outpost at 16,700 ft above sea level.

From enabling high-speed internet on the iconic Chadar Trek to bridging the digital divide in distant communities, we remain committed to connecting every corner of India.

Empowering Digital Connectivity with 5G

Airtel 5G Plus continues to set new benchmarks in network experience, earning consistent recognition from leading crowdsourced platforms for speed and reliability. Today, our network serves 135 million+ 5G customers and this base is growing rapidly as we capture a fair share of India's expanding 5G device market.

Additionally, we have launched Fixed Wireless Access (FWA) in more than 2,500 cities, further enhancing our broadband footprint. Leveraging Nokia's 5G FWA and Wi-Fi 6 technology (also known as 802.11ax, the latest standard in Wi-Fi technology) powered by Qualcomm chipsets, we deliver high-speed broadband, even in areas without fiber. Our solution offers flexible installation, intelligent mesh networking and seamless in-home coverage. All devices are made in India and packaged sustainably.

The expansion of Home Wi-Fi service enhances the customer experience by providing faster, more reliable connectivity, broader coverage and effortless access to high-quality entertainment tailored to regional preferences. All this together has been done while ensuring quick setup, sustainable delivery and connectivity in fiber-dark areas.

Nxtra by Airtel: Pioneering Intelligent and Sustainable Data Centre Infrastructure in India

Nxtra Data Limited, a leading company in India's data centre industry, operates a vast network of over 120 intelligent and sustainable facilities, including 14 large data centres in key metros and 120+ edge data centres across 65+ cities. With rising demand driven by cloud adoption, AI workloads and 5G rollout, Nxtra is set to double its capacity over the next three years through significant investment.

Leading by example: Nxtra's AI-driven Future in Data Management

During FY 2024-25, Nxtra became the first Indian data centre operator to deploy AI at scale, integrating Ecolibrium's SmartSense platform to enhance operational efficiency. This AI-driven solution, first implemented at its Chennai facility, is now being rolled out across all core centres. The new-age digitised facilities, powered by AI, shall drive smart capabilities like predictive maintenance, enhanced operational and energy efficiency, streamlined automation of operations and optimised capex utilisation.

By leveraging real-time performance analytics and AI-driven fault detection through intelligent, proactive insights across its data centre operations, Nxtra aims to achieve:

10% Increase in asset life

15% Boost in equipment performance

10% Reduction in non-IT power consumption

25% Improvement in overall productivity

nxtQuark- a next-generation tool, is designed to elevate maintenance management across all data centres. This cutting-edge solution represents a paradigm shift, streamlining maintenance activities ranging from routine checks to escalation management, heralding a new era of resource optimisation. For AI/ML-heavy workloads, Nxtra uses advanced simulation tools and offers next-gen cooling solutions like liquid cooling, to ensure optimal performance and reliability. The predictive movement analytics prevent breaches proactively, thus enhancing security.

Nxtra is rapidly scaling its edge network to support latency-sensitive applications, such as OTT streaming, IoT, gaming and AI. With 120+ edge centres already in operation and more in the pipeline, Nxtra is bringing content and compute closer to end users – enabling real-time responsiveness and a superior digital experience.

With a mission to build infrastructure that is 'Intelligent by Design and Sustainable by Choice', Nxtra is leading India's digital transformation through innovation, scale and environmental responsibility.

Read more about our 'strategic partnerships and alliances' and 'infrastructure deployment initiatives' during FY 2024-25 in the 'Management Discussion & Analysis Report' section on page 152.