Manufactured Capital

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

Our consistent focus on expanding network infrastructure along with strong pool of spectrum holding, is empowering India's digital transformation and helping turn the vision of Digital India into a reality. We leverage on cutting-edge technologies, eco-conscious network infrastructure to provide seamless customer experience. Our investments are directed towards technological advancements and innovative solutions, to enable us stay digitally ahead and future proof our networks.

Highlights for FY 2023-24

43,102
Mobile network towers installed

99,485
Mobile broadband base stations added

55,982 Rkms
Optic fiber cable deployed

5,419 Bn
Minutes on network (gross)

25,461 Bn MBs
Data traffic (Home Services)

65,978 Bn MBs
Data traffic (Mobile Services)

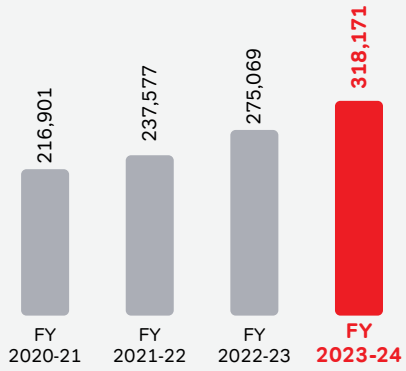
12
Large data centers with **12,647** usable rack count/ tile space

120+
Edge data centers with **27,095** usable rack count/ tile space

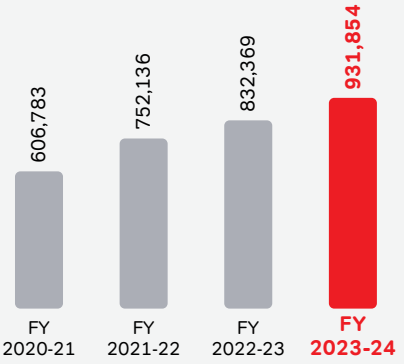
92 MW
Design load in large data center

107 MW
Design load in edge data center

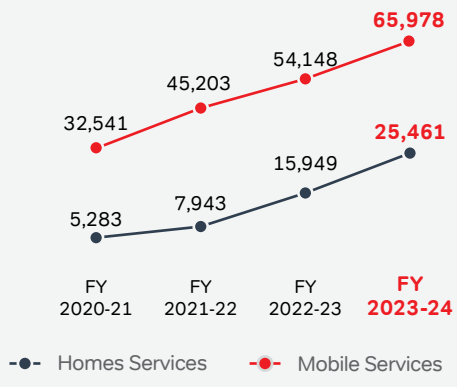
Total mobile network towers (Nos.)



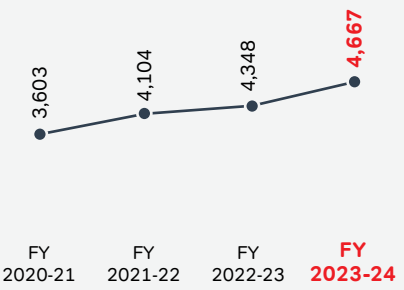
Total mobile broadband base stations (Nos.)



Data traffic (Bn MBs)



Minutes on network (Mobile services) (Bn Mins)

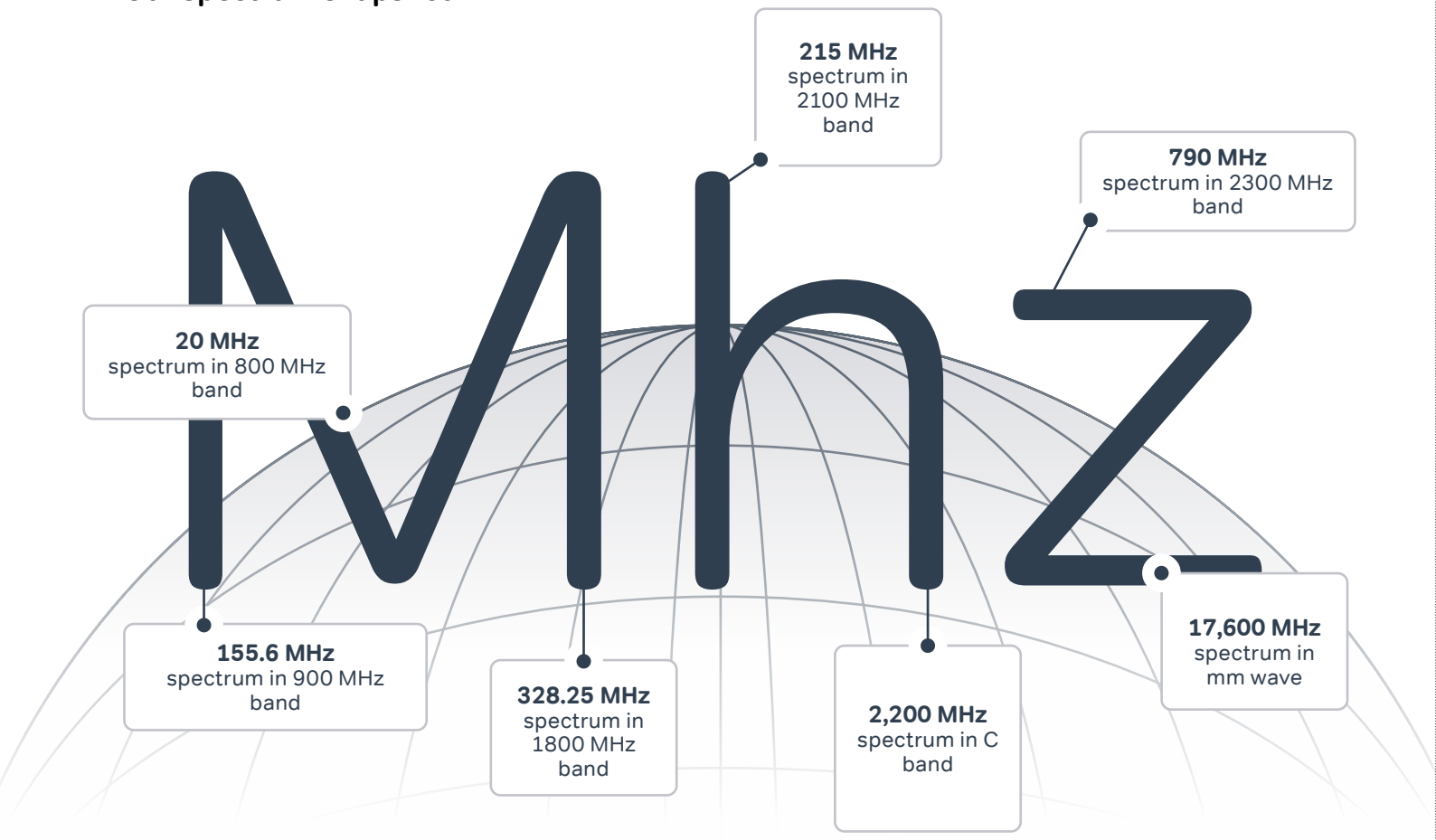


Achieving core objectives with strategic spectrum holding

Over the years, the Company has strategically acquired spectrum to build robust, cost-effective and environment-friendly network. Our strategic spectrum holding includes the largest pool of mid-band spectrum in the country, which we have accumulated in the past spectrum auctions. Our 5G non-standalone architecture has been ranked for superior customer experience, which is delivered on the 3.5 Ghz and mid-band spectrums. We leverage 5G network effectively to maximise technology adoption and offload 4G traffic to make optimal use of capacity expansion.

This well-defined spectrum acquisition strategy empowers us to achieve all our key objectives: delivering an exceptional 5G experience, create large data capacity to address ever-growing customer demands and implementing the most power-efficient solutions, all of which contribute to our ambitious ESG goals.

Our spectrum snapshot



Powering 5G access across Kolkata and Kochi's Water Metro Route

Airtel announced a ground-breaking initiative to provide uninterrupted connectivity to metro commuters by deploying high-capacity nodes 35 metres below the river Hooghly. This makes us the first operator to offer seamless connectivity through the 4.8 km stretch of Kolkata's East-West Metro corridor, connecting Howrah Maidan with Esplanade. We have installed fiber and high-capacity nodes along this stretch to ensure seamless 5G speeds, uninterrupted voice calls, and data transmission, enhancing the daily commute experience. This is in addition to the 5G service made available during the year across Kochi's water metro stations, to offer high-speed 5G connectivity on India's first water metro service. It is delighting that customers can now enjoy the power of Airtel 5G while on the water metro ride and relish the scenic beauty of Kochi.

Proving 5G FWA Functionality on mmWave

We, along with Ericsson, successfully demonstrated mmWave 5G functionality on our Airtel network, achieving a peak speed of 4.7 Gbps. This spectrum is ideal for densely populated urban areas with large number of mobile devices, homes, and businesses. Using FWA Customer Premises Equipment (CPE) supported with 5G mmWave, we can deliver faster speeds and high-capacity connectivity to urban areas seamlessly, connecting users unreachable so far due to inaccessible fiber connections.

Ensuring seamless connectivity through 5G Plus

Airtel 5G Plus is now available across the country. Our 5G Plus service is now accessed by over 72 million 5G customers, experiencing the ultrafast, reliable, and secure connectivity.

Empower rural India through enhanced connectivity

We launched the 'Rural Enhancement Project' to expand our coverage and provide seamless data connectivity in rural areas. This massive project, aims to provide quality and affordable mobile and digital services to rural and remote regions, ensuring equitable access. Gujarat, Madhya Pradesh, Kerala, West Bengal, Maharashtra, and Jharkhand have been amongst the big focus regions for Airtel. By extending connectivity to these areas, we believe, we are not only creating opportunities but also elevating the standard of living, thus contributing to socio-economic development and aligning with the vision of Digital India. Airtel aims to further augment its network connectivity across rural areas.

Connecting Zanskar Valley with Superfast Airtel 5G Plus

We extended our Airtel 5G Plus service to the Zanskar valley in Kargil district, becoming the sole provider of 5G in the region.

This move is part of our broader initiative to bring high-speed connectivity to remote areas, including those situated at high altitudes. Now, all 25 villages in the Zanskar valley can access Airtel's 5G service, improving both local livelihoods and tourism infrastructure.

Upgrading Network with Advanced Technologies

We are committed to delivering brilliant customer experiences and this commitment aims to minimise customer interactions, make informed decisions using big data, reduce service disruption time through quicker identification and resolution, prevent network degradation, and expedite the resolution of network issues. We suffice our commitment consistently by integrating cutting edge digital tools powered by Artificial Intelligence, Machine Learning, and the latest automation in our network infrastructure.

- VoLTE Steering, Airtel's inaugural in-house SON module, designed to elevate the voice experience, is an intelligent, real-time closed-loop solution that dynamically shifts voice calls from congested to clearer bands, thus markedly reducing call drops and muting and delivering an optimal voice experience.
- Intelligent Load Balancing (ILB) is another closed-loop automation via A-SON that ensures equitable distribution of cell loads by redistributing traffic evenly among cells, diverting from congested cells or transferring users from one cell or carrier to optimise network resources utilisation, which enhances the overall network experience for end customers.

These tech-enabled network transformations ensure that our network teams are able to predict network issues ahead of time, deliver seamless connectivity and superior experience.

Investing in Data Centers to Promote a High-performing Digital Ecosystem

Data center being at the core of digital transformation initiatives have multi-fold impact on the way people and enterprises consume digital services. Nxtra is poised to accelerate the journey of Digital India with the largest platform of 120+ intelligent and sustainable data centers across 65+ cities. Today, Nxtra enables the digital infrastructure for 450+ customers PAN India encompassing Government departments, Enterprises, Hyperscalers, OTT, and CDN. Our future-ready, digitised data center infrastructure enables customers to roll out their services with the best possible performance and help them integrate their products and services to make a global digital supply chain a reality.

Currently, we manage 190 MW of power capacity, and we have an aggressive data center expansion plan to support India's digital growth. In the next 3 to 5 years, we will launch multiple new hyperscale and enterprise segment data centers across key metro cities and will increase the existing capacity by more than 2X to over 400 MW. In addition, we are working on adding capacities and building infrastructure in multiple tier 2 and tier 3 cities in India to be able to cater to next generation of AI/ML workloads, supporting next wave of business growth. This additional data center capacity coupled with Airtel's core telecom services will have a significant contribution to the Digital India Program to fast-track the collective dream of $5 trillion economy.