
A man with dark hair, wearing a blue sweater and white earbuds, is looking down at a smartphone in his hands. He is in a laboratory or office setting with blurred equipment in the background. The image is framed by a dark, geometric shape with red dots at the corners.

From lab to life

for enhanced customer
end-to-end solutions

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We are spearheading India's 5G roadmap, by leveraging our infrastructure and technical strengths. With its promise of hyperfast speed, ultra-low latency and capacity to carry innumerable connections simultaneously, 5G could help India unlock the digital dividend and build a truly connected society with broadband for all. We intend to create relevant use cases, in order to raise the customer experience on our network.



Building on the 5G momentum

We were the country's first telco to demonstrate 5G readiness over a commercial network last year. This year, we demonstrated multiple use cases for businesses and consumers alike, further cementing our position at the forefront of a big change awaiting India.

We conducted India's first rural 5G trial showcasing the spectrum's massive potential to bridge the digital divide, given that the spectrum enables access to high-speed broadband through enhanced mobile broadband (eMBB) and Fixed Wireless Access (FWA) services.

Our completion of India's first 5G trial in the 700 MHz band in partnership with Nokia in the outskirts of Kolkata achieved the highest broadband coverage of 40 km, marking another milestone in the country's 5G journey. This underscores our potential to take mobile broadband coverage to even the remotest corners of India in a cost-efficient manner, post completion of spectrum allocations.

In partnership with Ericsson, we demonstrated enhanced speeds of more than 1 Gbps on a live 5G network set up at Cyber Hub in Gurgaon using 3500 MHz trial spectrum. Marking yet another industry first on 5G, we conducted India's first cloud gaming session in a 5G environment on our hyperfast and ultra-low latency test network.

Rural Coverage test	Sub 6 3500 MHz	mmWave 26 GHz	Cloud gaming
 Range upto 15 KMs >100 Mbps	1.47 Gbps Peak downlink	Peak downlink Speed	5G test network delivered speeds in excess of 1 Gbps & latency in the range of 10 milliseconds
	120 Mbps Peak uplink	Test #2 1.8 Gbps	
	10-12 ms Latency	Test #2 1.8 Gbps	

Given the strong and focused investments over the last few years, we have developed a truly 5G ready network covering all the aspects of the network including devices, radio, transport, core and digital tools. This, in turn, is enabling a future-ready Airtel to bring 5G to reality.

#5GforBusiness for enterprise customers

We rolled out our #5GforBusiness to demonstrate the wide range of enterprise grade use cases that showcased transformational high speed and low latency network solutions. We partnered with leading technology companies to test solutions for a range of Industry 4.0 use cases for the Indian market. Among them were TCS, Capgemini, Google Cloud, Intel, Ericsson and Avanseus, to name a few.

Extensive research and testing at our advanced 5G lab have helped us come up with various enterprise use cases including anomaly detection and drone-based smart inventory management for warehouses and manufacturing units, AR shopping for retail segment, connected ambulance for healthcare industry, airport security surveillance through video analytics and digital twin in shipyards.

5G solutions such as Smart Factory, Smart Healthcare, 5G powered quality inspection, digital twin, connected frontline workforce and AR/VR based will help revolutionise industries, and lead to more industry-specific customisable solutions in the future.

Partnerships to co-create the 5G ecosystem

To move forward on our 5G roadmap, we have developed best-in-class partnerships with leading global players. These will allow our customers to reap the full possibilities of a hyper connected world.

