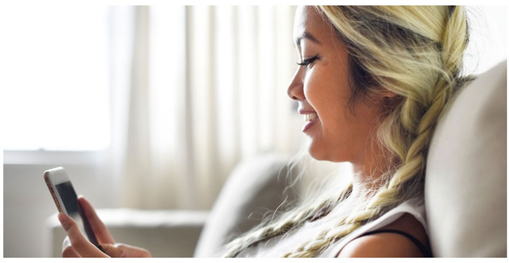
CUSTOMER EXPERIENCE / MOBILE NETWORK OPERATORS

5G Deployment Will Change Lives and Boost Economy, TRAI White Paper Predicts

POSTED FEBRUARY 26, 2019 MIKE KALIL



The deployment of 5G technology, which is happening much quicker than expected, will "touch and change our lives like never before" while bringing new performance expectations to the telecommunications industry, according to a new white paper by the Telecom Regulatory Authority of India (TRAI). Though the upfront investment is significant, 5G will create new revenue streams across industries that justify the costs.

Contents [hide]

- **Download White Paper**

Enabling 5G in India

The white paper, Enabling 5G in India, was commissioned to identify probable roadblocks in deploying 5G across India and encourage stakeholders to craft solutions. The full-scale roll out of 5G is expected to start in late 2019 or early 2020; experts predict it will be deployed by 2020 in India.

"The telecom sector has grown rapidly in the past two decades and has brought with it many innovations in other allied sectors and the economy as a whole," TRAI Chairman R.S. Sharma said in the white paper's preface. "5G is the latest technological development in the telecom sector which will provide enhanced connectivity not only to the individual but will also help in digitizing various industrial verticals."

Related: Service Providers Must Cater to Growing Customer Expectations in the Race to 5G

Sharma said he's sure the white paper "will open the flood gates for the industry and technocrats to kindle their thought process and bring about transformation by removing barriers for the smooth launch of 5G technology in India."

Improved efficiencies

After it's deployed, 5G will promote energy efficiency, spectrum efficiency, and network efficiency, the white paper reports. 5G will act as an "information duct" connecting billions of Internet of Things (IoT) devices. Not only will 5G improve things like streaming video quality, it'll also ensure delivery of critical services such as telesurgery and self-driving vehicles.

India's government is aiming to pave the way for 5G's deployment as quickly as possible. In September 2017, the 5G High Level Forum (5G HLF) was formed to make recommendations. The 5G HLF issued its report in August 2018 titled Making India 5G Ready. Ericsson installed the first public access 5G test bed in Delhi in July 2018.

5G use cases

The white paper breaks 5G use cases into three categories: Mobile Broadband (eMBB), massive Machine-Type Communication (mMTC), and Ultra-Reliable Low-Latency Communications (UR-LLC). Their requirements vary wildly. eMBB addresses human-centric data such as video streaming, virtual reality, and cloud computing. UR-LLC has stricter requirements because it involves critical communications for purposes such as remote medical surgery and industrial manufacturing. mMTC covers IoT applications, which transmit "a relatively low volume of non-delay-sensitive data."

"To support different services with varying requirements, a paradigm shift is taking place in the technologies that drive the networks," the white paper states. "Innovative techniques are being developed to power the next generation mobile networks. Mobile network functions are being split up, distributed and virtualized to provide the best combination of latency, throughput and cost effectiveness for various potential applications."

- **Download the full white paper here**

5G Takes Center Stage at MWC19 Barcelona
February 27, 2019

QoE Management in the Digital Transformation Era
January 13, 2019

Why RAN is Screaming Hot in 2015
March 3, 2015

5G TECHNOLOGY ERICSSON INTERNET OF THINGS (IOT) NETWORK FUNCTION VIRTUALIZATION (NFV)

← When IVR Technology Fails…
The Reality of Conducting Business in the Digital World →