Monthly update about global developments in 5G technology (16 Oct-15 Nov 2021)

National Governments' Announcements



Lithuania

Government announced the country's first 5G spectrum auction for three 700 MHz radio frequency blocks to be used to deploy next-gen 5G mobile networks



Italy

Government announced an investment of €4 billion to connect 6.2 million people with fiber and 5G, followed by a series of tenders to be launched in January 2022



Belgium

Government approved draft legislation enabling the country's long-delayed 5G mobile spectrum auction to be conducted in early 2022



Japan

Government plans to launch £637 million tech fund for AI and 5G to boost its domestic tech sector



South Korea

Government plans to introduce 5G-equipped buses across the country by 2023

Telco's Futuristic Initiatives



entered into a partnership with United Arab Emirates University (UAEU) at GITEX GLOBAL event to develop and test 5G autonomous driving use cases

airtel

has planned to deploy and test 5G solutions for clients such as Apollo Hospitals, Flipkart and others by teaming up with a number of tech giants including Cisco, AWS, Ericsson, Nokia, TCS and Accenture



announced plans to test
5G-based solutions on
an aerial traffic
management and
motion capture system
in India

Qualcom

partnered with NEC to develop 5G open and virtualized distributed unit (DU) powered by the Qualcomm X100 5G RAN Accelerator Card

Key News

08 NOVEMBER 2021: EDUCATION

TeraGo entered into a partnership with McMaster University to place first institution-based Private 5G Millimeter Wave Network

- McMaster University has been selected by TeraGo Partners as the first campus to deploy an institution-based private 5G millimeter wave network, to develop the top technologies for advanced manufacturing and Industry 4.0 in Canada
- With the introduced capabilities, the users will be able to access the benefits of ML, AR, remote automation, edge computing to improve efficiency of products and processes
- Through the private 5G connectivity, the university's research division and TeraGo plan to jointly develop advanced manufacturing and logistics capabilities, and enable students to leverage world class technology in the classroom

✓ 27 OCTOBER 2021: AUTOMOTIVE OEM/ MANUFACTURING

Ford integrates with AT&T to deliver private 5G network at its EVs factory

- Ford Motor Company, an American multinational automobile manufacturer, has partnered with telecom operator AT&T for the deployment of a private 5G network at its factory for electric vehicles, as part of the company's \$250 million upgrade program
- AT&T will deploy the network and its multi-access edge computing (MEC) infrastructure at Ford factory to also help the company use significant additional advanced manufacturing technologies in the future
- Through the 5G connectivity, the factory's employees will be able to use faster and more reliable communication with increased safety benefits, and will also involve adding 450 jobs

26 OCTOBER 2021: AUTOMOTIVE

Qcraft, a self-driving startup, launched China's first online 5G-based driverless ride sharing bus

- Qcraft, China's autonomous driving solutions developer, released the nation's first robo-bus with online-based ride-hailing functions, supported by 5G connectivity, to transport commuters to work and back home
- The self-developed autonomous minibus comes with a ride-hailing functionality adopted by QCraft that enables the riding passengers to request pick-ups and track their bus's real-time location via a 'WeChat mini-program'
- So far, three bus routes have been set up by the company covering more than 15 km, connecting the city's CBD and industrial districts

🗸 26 OCTOBER 2021: TECHNOLOGY

Verizon intends to use Amazon satellites to expand US and global rural 4G and 5G access

- Verizon, a telecom operator, intends to use Amazon Kuiper satellites, which are yet to launch, to expand rural broadband access across the world
- Verizon plans an early partnership with Amazon, who has promised to invest at least \$10 billion in its Kuiper Satellites Project, to develop technical specifications and define preliminary commercial models for a range of connectivity services
- The companies will integrate to deploy terrestrial antennas for 4G and 5G backhaul at a global level based on Project Kuiper technology

💙 24 OCTOBER 2021: AGRICULTURE

Ericsson and du collaborate to test 5G solutions for smart farms in UAE, with support from Pure Harvest Smart Farms

- Ericsson has entered into an agreement with du, UAE's Integrated Telecommunications Company, to initiate 5G use cases for smart agriculture in the country
- The collaboration is supported by Pure Harvest, a leading Middle East company in sustainable agriculture, which will provide an array of devices such as sensors, drones, and robotics to the telecom operators
- Under the agreement, Ericsson's 5G solutions will protect the UAE's local ecosystem, help in enhancement of crop yields, and increase the quality of farm produce

21 OCTOBER 2021: AUTOMOTIVE OEM/ MANUFACTURING

Volkswagen launched its first local 5G network for the company's smart factories

- Volkswagen, the automotive OEM, announced the launch of a pilot 5G network tested by the company for production in smart factories, as a step in the direction of fully networked factories
- The company has enabled a local 5G standalone network called 'campus network' at its main plant in Wolfsburg
- It is the first time the company is making real-time wireless communication possible in its smart-factory applications

🗸 18 OCTOBER 2021: TECHNOLOGY

Arm unveils 5G Solutions Lab for network infrastructure innovation

- Arm Ltd., a British semiconductor and software design company, has launched a 5G Solutions Lab that focuses on accelerating innovation for network infrastructure, built to help companies test their hardware and software solutions built around 5G
- Arm has focused on investments to provide engineering R&D enablement to 5G/Open RAN providers with secure access to partners and operators to validate solutions and gain confidence in new technologies
- The opening of the lab has been initiated by Arm in partnership with Tech Mahindra including participation from companies such as DISH, Google Cloud, Qualcomm, NVIDIA, Vodafone and others

✓ 18 OCTOBER 2021: INFRASTRUCTURE / CONSTRUCTION

Vodafone Idea partners with Larsen & Toubro for 5G trials of smart city solutions in India

- Vodafone Idea (VIL) entered into a strategic partnership with construction conglomerate Larsen and Toubro (L&T) to test 5G-based smart city solutions under a pilot project, as part of the ongoing 5G trials on government-allocated spectrums across Indian cities
- The pilot project would be set up in Pune, India on government-allocated 5G spectrums, leveraging L&T's Smart City platform 'Fusion'
- The companies plan to test and validate 5G use cases built on IoT, Video AI technologies, and to visualize and analyze smart city applications