

5G NEWSLETTER

Monthly update about global developments in 5G technology (16 July-15 August 2021)

National Governments' Announcements



US

amends \$1 trillion infrastructure bill that includes \$2.5 billion funding for the installation of 5G network at Department of Defense facilities



Canada

completes a \$7.5 billion auction of 3.5 GHz licenses



China

completes network integration testing for the first low-orbit satellite and 5G network



South Korea

invests \$50.3 billion towards the upgrade of its digital infrastructure, including 5G networks



Bangladesh

plans to launch 5G network in Dhaka by the end of 2021

Telcos' Futuristic Initiatives

verizon

and Newlab's 5G studio enable visionaries to develop applications for the transformation of mobility, energy and industrial automation

T-Mobile

Partners with Drone Racing League (DRL) and unveils a 5G-connected drone during professional drone racing

NTT

Announces the launch of the Private 5G (P5G) platform, the first globally available private LTE/5G network-as-a-service platform

airtel

Plans to develop 4G and 5G virtualised radio access network (vRAN) and open radio access network (RAN) technology in collaboration with Intel in India

Key News



08 AUGUST 2021: AGRICULTURE

Nokia 5G teams up with AeroFarms to develop technologies and improve yields at vertical farms

- Nokia Bell Labs formed a multi-year partnership with AeroFarms, to develop an advanced system, through integration of analytics, AI, drones, and 5G coverage, and improve yields at vertical farms
- Nokia would provide 5G wireless network, autonomous drone control and orchestration systems, and AI enabled mobile sensors, while AeroFarms will share its vertical-farming expertise consisting of environmental controls, an agriculture-focused data platform, and a machine vision core foundation
- Together, they plan to utilize this system across existing as well as future vertical farms in California (US), Virginia (US), and Abu Dhabi (UAE)



04 AUGUST 2021: INDUSTRIAL AUTOMATION

KUKA deploying 5G wireless network at its production and development center in Augsburg

- KUKA, an industrial robotics and automation manufacturer, is deploying Nokia's 5G SA private wireless networking to support new product development at Augsburg (Germany)
- In the future, KUKA plans to develop industrial automation solutions that harness 5G's potential
- To build the private 5G wireless network, KUKA collaborated with Nokia, a leading telecommunications company based in Finland. Further, in the long-term relationship, Nokia will support KUKA with deployment of 5G network, offer operations support, training, and upgradation



02 AUGUST 2021: TELECOMMUNICATIONS

MatSing to deliver 4G and 5G mobile capability antenna coverage at AT&T stadium

- ExteNet to install 20 high-capacity lens antenna, from MatSing – an antenna manufacturer, at AT&T stadium, in Arlington, Texas, for the forthcoming NFL season
- The solution, selected by Dallas Cowboys and AT&T, will be installed on the roof structure and boost 4G and 5G coverage at the stadium
- MatSing uses a patented new meta-material to build multibeam lens antenna with high capacity



02 AUGUST 2021: TELECOMMUNICATIONS

Ericsson and Nokia win part of 5G radio contracts in China during July and August 2021

- During August 2021, Ericsson, which expected to lose market share due to a ban of Chinese equipment in Sweden, gained a 3% share in a joint 5G radio contract from China Unicom and China Telecom, while Nokia was left out
- Of the three 5G radio contracts announced in July 2021, Nokia won a 10% share of one, while Ericsson won a 96% share of another contract
- Chinese companies, including Huawei, followed by ZTE and Datang Telecom, took a major share from the contracts during July and August



30 JULY 2021: SATELLITE

Inmarsat to combine GEO SAT, LEO SAT and terrestrial 5G to create new type of global network

- Inmarsat, a UK-based satellite communications company, plans to develop and launch 'ORCHESTRA' its global, dynamic mesh network that will connect geosynchronous satellites (GEO SAT) with low earth orbit satellites (LEO SAT) and terrestrial 5G network
- ORCHESTRA, combining GEO SAT, LEO SAT and 5G to a single network, will offer services to customers in maritime, aviation, government and enterprise
- With an initial five-year investment of ~\$100 million, Inmarsat expects ORCHESTRA to provide a strong network signal at both crowded as well as remote locations



28 JULY 2021: DEFENSE

Verizon signed a \$78.8 million contract with Air National Guard (ANG)

- As a second deal with the US Department of Defense (DoD), Verizon will upgrade network services of ANG, through supply of IP-based voice services and managed network services
- Verizon secured the previous deal to provide the DoD with routers, firewalls, switches, edge computing capabilities and managed services, during June 2021
- Verizon expects more deals as 5G adoption gains pace. The deals came through the General Services Administration's 15-year, \$50 billion Enterprise Infrastructure Solutions (EIS) technology procurement program



27 JULY 2021: SMART CITIES

North Landing to be developed as first 5G smart city in the US

- AT&T, a telecom operator, and a leading developer of high-growth mixed use properties, JGB Smith, announced plans to collaborate and develop the first 5G Smart City in North Landing, Virginia
- The 5G smart city could heighten offerings across the self-driving means of travel and transportation, retail and entertainment space, as well as building automation
- With strong integration of 5G, National Landing could become a prototype for smart cities of the future and enhance customer experience across mixed property types



19 JULY 2021: INDUSTRIAL AUTOMATION

Ericsson launched Ireland's first indoor 5G network to boost manufacturing

- Ericsson, in a partnership with Three Ireland (a telecommunications company) and Glanbia (a nutrition group), launched an indoor 5G campus at Glanbia's dairy processing plant located at Ballyragget, County Kilkenny
- With the indoor 5G campus, the plant has an upgraded 5G coverage, low latency connectivity and enhanced data security. The network has also sped-up and optimized maintenance tasks, and improvised analysis of plant processes
- The newly installed network is run on Three Ireland's 5G spectrum with use of Ericsson's Radio Dot System. Glanbia looks to trail Augmented Reality (AR) and Virtual Reality (VR) applications on the network