

# 5G NEWSLETTER

Monthly update about global developments in 5G technology (16 May-15 Jun 2022)

## National Governments' Announcements



### Brunei

Prepares for 5G network infrastructure launch in the country to provide extensive bandwidth powered with 5G network capacity



### Thailand

Looks forward to receiving its first advanced-5G network to be deployed by Advanced Info Service Plc (AIS) and ZTE Corporation



### US

Introduced 5G Security Evaluation Process Investigation for ensuring the security of 5G networks in the country



### Tanzania

Opens investments in 5G technology to offer data speeds up to 100 times faster than 4G boosting its digital economy ambition



### India

Announced availability of indigenous and country-owned 5G telecom stack from September-October 2022

## Telcos' Futuristic Initiatives

**Viasat**

Awarded contract to research the use of 5G to support communications for Expeditionary Advanced Base Operations (EABO) for US DoD

**HUGHES**

Network Systems tests 5G satellite backhaul with its Jupiter System ground platform intending toward smooth transition from LTE traffic to 5G in future

**BT**

Plans to deploy 5G private network and other smart technologies on Port of Tyne in UK to convert it into a "smart port"

**SAMSUNG**

Electronics plans to launch South Korea's first private 5G network in partnership with NAVAR Cloud for powering NAVAR headquarters with cloud-based autonomous mobile robots

## Key News

### 08 JUN 2022: TELECOM

**The European Space Agency (ESA) and the National Institute of Information and Communications Technology (NICT) Japan have come together to establish intercontinental 5G satellite communications**

- Engineers in Japan and Europe have come together to facilitate Space-enabled 5G transitions and connectivity, which is the first intercontinental connection between Europe and Japan
- The experiment was piloted by sending HD broadcast quality 4K video via space to test the experience of passengers who were on-board an aircraft, seamlessly using satellite
- The test is part of a prevailing agreement between the two regions to work together on 5G satellite communications for the benefit of citizens and industries

### 07 JUN 2022: TELECOM

**Deutsche Telekom aims to cover a maximum rural population of Germany by providing low latency 5G connectivity services even in the out-of-reach areas**

- Deutsche Telekom (DT) plans to cover rural Germany by deploying standalone 5G (SA) on its low-band 700MHz spectrum, deploying more than 3,000 antennas at 1,100 locations
- Deploying a 700MHz band for 5G connectivity, signals are expected to reach a radius of three to six miles, covering areas that were previously out of reach of the network
- The company already provides 5G coverage to more than 90% of Germany's population and has more than 67,000 5G antennas in use across its network

### 06 JUN 2022: AUTOMOTIVE, INFRASTRUCTURE

**Vingroup has signed an MoU with Intel Corporation to develop smart city and smart services initiatives using 5G in Vietnam**

- Intel Corporation, an American multinational technology company, and Vingroup, a Vietnamese conglomerate, have entered into a deal to explore opportunities for 5G-enabled smart city and smart building solutions in Vietnam
- Under the MoU signed by both parties, efforts would be made to create a wide range of advanced computing systems to be applied to Vinhomes' smart city projects, including the deployment of smart factory IoT solutions for VinES batteries and VinFast EV manufacturing
- The collaboration will also focus on developing an optimized multi-cloud strategy to migrate and deploy open-source vehicles and build applications

### 01 JUN 2022: DEFENSE

**US DoD is planning to test the capabilities of 5G trucks at the Pentagon headquarters for military operations**

- The Pentagon, headquarter building of the United States Department of Defense (DoD), is expecting the deployment of 5G Cell on Light Trucks (COLTs) trucks for military operations on its field
- DoD has already experimented with the use of Cell on Light Trucks (COLTs) to test a variety of 5G mobile communications capabilities, and communications for Operation Allies Welcome, the US military operation to airlift certain at-risk Afghan civilians
- The DoD awarded the ~\$32 million contract to purchase COLTs from Oceus Networks and Ericsson, through the Johns Hopkins University Applied Physics Laboratory

### 30 MAY 2022: SEMICONDUCTOR

**Micron Singapore has chosen Singtel to pilot 5G mmWave connectivity on its 3D NAND flash memory fabrication plant**

- SingTel, a Singaporean telecommunications company, has been awarded the contract to deploy a commercial 5G mmWave solution by Micron, an American producer of computer memory, at its largest facility – the 3D NAND flash memory fabrication plant in Singapore
- It would be a first-in-the-country as well as first-in-the-industry deployment for the semiconductors manufacturing sector, to support the development of a variety of digitally enabled applications
- Singtel's 5G mmWave network supports extensive bandwidth of up to 2 Gbps with ultra-low latency, enabling Micron to leverage lighter power lot devices for conducting on-site operations

### 27 MAY 2022: TECHNOLOGY

**Tech Mahindra inaugurated 5G Lab as a service in the USA for customers to create innovative solutions using 5g connectivity**

- Tech Mahindra, an Indian multinational IT services and consulting company, established a 5G Lab as an innovation center in Bellevue, Washington, USA, for clients to co-create 5G powered solutions
- The 5G lab offers, infrastructure, testing and network setup, supporting the communication service providers to work on virtualized and fully interoperable 5G mobile network
- The new 5G lab as a service is the first among few upcoming innovation labs planned for FY-2023 by the company

### 17 MAY 2022: CRAFTS AND SPIRITS

**Nokia and the University of Technology Sydney have set up a Nano-Brewery in Australia that runs on private wireless and 5G network**

- Nokia, in partnership with the University of Technology Sydney (UTS), has opened the world's first private wireless and 5G enabled microbrewery, located in the Tech Lab of a leading Australian educational establishment
- The new wireless microbrewery uses Nokia's 5G backhaul connectivity solution and digital twin technology to optimize the brewing process, and forms part of an international production network
- 5G private wireless networks and cloud-based technologies enable optimization of the brewing process to obtain the ultimate pint of beer

### 16 MAY 2022: MINING

#### Albemarle Corporation has chosen NTT to deploy a private LTE/5G network on its mining site

- NTT Ltd, a global technology services provider, has joined hands with Albemarle Corporation, a specialty chemicals company, to test and deploy a private 5G and Wi-Fi network at Albemarle's lithium mines
- The collaboration enables Albemarle to use integrated technologies with the help of 5G connectivity for remotely operating activities such as surveys, assistance, and maintenance on its mines
- The deployment will be piloted at the Kings Mountain, North Carolina-based mining site, and would eventually be rolled out to additional sites