5G NEWSLETTER

Monthly update about global developments in 5G technology (16 Jan-15 Feb 2022)

National Governments' Announcements

India
Government plans 5G auction for 2022 and announces 5G tech to be in its final stages of development

Taiwan
Government designated $3.8 billion for country's Forward-Looking Infrastructure Development Program in 2022, including continued subsidies for 5G infrastructure and applications

France and Germany
Governments are together funding four 5G projects with the aim of creating a European ecosystem for private networks in 5G telecommunications sector

China
Plans to initiate building a network of a thousand 5G satellites to offer high-speed internet services to remote areas, challenging Elon Musk's Starlink

US
Federal Aviation Administration plans to expand nationwide 5G cellular service while allowing more aircraft to safely land at airports with the support of telecoms Verizon and AT&T

Telcos' Futuristic Initiatives

NTT
Telecom operator NTT partnered with ServiceNow to accelerate enterprise private 5G (P5G) adoption, developing a new combined NTT/ServiceNow solution

tpg TELECOM
TPG Telecom entered into a partnership with Nokia to establish and provide mobile private 4G & 5G network innovations for mining and energy sectors

telenor
Telenor plans to accelerate modernization of its telecoms systems to offer 5G and low-latency data services to customers in collaboration with Amazon Web Services (AWS)

Parallel Wireless
Parallel Wireless is planning to expand its presence with the launch of a new R&D lab and test facility in Canada to advance 5G radio access network efforts

Key News

09 FEBRUARY 2022: TECHNOLOGY
Veea plans to debut its latest 5G and IoT innovations at Mobile World Congress in Barcelona
- Veea, a US-based provider of integrated smart edge connectivity, plans to launch its latest innovations powered by Company's Smart Computing hubs and related platform, products and services at Mobile World Congress (MWC) in Barcelona from February 28 - March 3, 2022
- The Company will introduce its groundbreaking 5G/fixed broadband access solution designed to enable mobile operators and service providers to roll out new business solutions that monetize their investments in 5G infrastructure and edge capabilities
- The Company provides enterprise-grade Wi-Fi 6, IoT and cellular connectivity solutions, including 4G and 5G SD-WAN services, directly from Veea and the Microsoft Azure Certified for IoT marketplace

08 FEBRUARY 2022: EDUCATION
National University of Singapore (NUS), along with StarHub, plans to use IoT applications over a 5G network to improve campus facilities
- National University of Singapore (NUS) plans to better manage its campus using two-year trial of 5G and Internet of Things (IoT) applications including the use of drones and patrol robots with the help of a local telco, StarHub
- Under the 2-year collaborative initiative, the NUS campus has been facilitated with StarHub's 5G standalone services and solar-powered outdoor Wi-Fi system
- Using AR and VR, the prospective use cases would include inspection of building facade, provision of immersive classrooms, housekeeping & landscape operations, waste management, and security management, etc.

04 FEBRUARY 2022: WASTE MANAGEMENT
Swinburne University of Technology plans to support federal government to smarten up Australia's waste trucks with 5G and IoT technologies
- Brimbank City Council in Australia has entered into a 5G collaboration with Swinburne University of Technology, supported by $1.18m of federal government funding, to use its high-resolution cameras and GPS sensors on government waste trucks to rapidly detect roadside assets that require maintenance
- The aim of the collaboration is to demonstrate 5G and the internet of things (IoT) support to establish and accelerate smart cities around Australia, along with saving up to 50% of asset auditing costs
- The technology is expected to reduce the time taken to identify, document and fix issues related to maintenance of road signs, bus shelters or damaged roads, etc., removing the need for costly manual reporting and auditing

03 FEBRUARY 2022: RESEARCH, EDUCATION
Verizon collaborated with Penn State and Caltech to allow students and researchers to use the high-speed 5G connections for advance research across several verticals
- Verizon announced two 5G mmWave partnerships in the education space, each with Penn State, The Pennsylvania State University, and CalTech, California Institute of Technology, to support research & innovation and mobile edge computing
- At Penn State, Company's 5G Ultra Wideband is deployed at Innovation Park, where the network will allow students and faculty to build new products and services for education, training and workforce development
- The telco has also deployed its edge compute platform, AI tech and 5G Ultra Wideband service at Caltech's Center for Autonomous Systems and Technologies (CAST) to offload the heavy computing hardware that AI operations require from a drone and to support drone weather detection and response

01 FEBRUARY 2022: WAREHOUSE AND LOGISTICS
AT&T presented demo of 5G network for US DoD with data speeds higher than 4 GB/sec and latency less than 10 milliseconds
- AT&T demonstrated its capabilities of 5G network solution at the Department of Defense's Naval Base Coronado in San Diego, to facilitate smart warehouse applications, using commodity mobile devices available at a testbed facility in Richardson, Texas
- The successful completion allows AT&T to further advance the program to next level where it will deliver 5G network across the 120,000 square foot Naval Base Coronado warehouse with high-speed, low-latency 5G connectivity
- AT&T 5G is expected to integrate with official Navy systems following efficient deployment of the network enabling inventory tracking, trans-shipment and other elements of Department Of Defense's objectives

26 JANUARY 2022: MINING
Kirkland Lake Gold's Detour Lake Mine has been facilitated with 5G WPN network, making it Canada's first mine to be fully 5G connected
- Detour Lake, the second-largest gold producing mine in Canada, became country's first mining operation to be fully connected over 5G WPN as Kirkland Lake Gold and Rogers Business transformed it into Smart Digital Mine of the future
- The 2 firms have planned to bring 180+ kilometers of connectivity for the local community with 8 new wireless towers along Highway 652, between Cochrane, Ontario and Detour Lake>This first-of-its-king step is expected to expand tele-remote drill operations and research into potential autonomous haul trucks at Kirkland Lake Gold's Detour Lake Mine

25 JANUARY 2022: AGRICULTURE
AgriFood Connect becomes the first agriculture and manufacturing firm to be provided Ericsson Private 5G wireless connectivity platform
- AgriFood Connect, a not-for-profit firm that helps promote adoption of technology across agriculture and manufacturing industries, deployed Ericsson's private 5G on-premise dedicated network for enterprise
- It is the first deployment of dedicated next-gen 5G network at agriculture and manufacturing firm, in partnership with Telstra Enterprises, and utilizes a single-server 5G dual-mode core
- AgriFood Connect is a joint initiative of the FKG Group, the University of Queensland and Telstra, established to ensure science and technology translates seamlessly to industry

20 JANUARY 2022: TECHNOLOGY, AVIATION
Gogo Business Aviation concluded 5G network testbed of first 7 sites for its national 5G A-T-G network in collaboration with Airspan
- As part of an initiative to deploy 5G Air-to-Ground (ATG) network nationwide, Gogo Business Aviation, a provider of in-flight broadband Internet service, announced completion of seven-tower 5G testbed using Airspan's latest 5G infrastructure
- Airspan Networks Inc., provider of software and hardware for 5G network solutions, provides Gogo with its OpenRANGE Air5G Sub-6 GHZ Radio Unit macros, fully virtualized OpenRANGE vCU and vDU software, and large MIMO antennas
- Gogo's seven mMIMO sites are expected to serve as a testbed for its 150-tower nationwide network, that includes sites in both remote and populated locations