

5G NEWSLETTER

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

National Governments' Announcements



China

is leading ahead in deployment of localized and powerful 5G networks inside its factories, coal mines, shipyards and warehouses etc.



Colombia

awarded \$350 million for a 5G highway project planned to improve access to capital Bogotá and provide a better connection to the country's north region



Australia

Australia's federal government opened another round of its grant program worth \$20 million for commercial trials of 5G technology including individual grants of up to \$2 million, expanding the program to a total of \$40 million



India

Indian government plans to distribute 5G spectrum by September 2022 and is preferring to lower the prices of 5G spectrum at the forthcoming auction



Malaysia

Malaysian government is planning to give green signal for deployment of the 5G dual wholesale network (DWN) model conditioning that mobile network operators (MNOs) would be first offered the option to acquire direct stakes of up to 70% equity in 5G network by Digital Nasional Bhd (DNB)

Telcos' Futuristic Initiatives

verizon

Communications Inc. has entered into a partnership with BlackRock Inc. to build a private 5G wireless network at their new Hudson Yards headquarters, that aims to replace office Wi-Fi

AT&T

Has initiated testing and deployment of new 5G small cell radios that can hide on top of street lamp posts, in partnership with Ericsson and Ubiqquia

Singtel

Has launched Paragon, industry's first all-in-one orchestration platform, to support adoption of the 5G network, edge computing and cloud services

**américa
móvil**

América Móvil announced its plans of launching 5G services in 18 cities of Mexico and spending \$1.8 billion to start the largest 5G commercial network in Latin America

Key News



15 MARCH 2022: EDUCATION

Rogers and Sheridan College have partnered on 5G research for the development of autonomous vehicle systems

- Rogers Communications Inc., a Canadian communications and media company, has entered into a 2-year partnership with Sheridan College for the research and development of 5G autonomous vehicle systems
- The research team of the companies, having both students and researchers, will collaboratively conduct research in areas of intelligent transport systems in a multi-user environment and help refine autonomous public transport systems, driverless taxis, autonomous delivery systems and more
- The partnership for which Rogers has allocated \$25 million in funding will also provide an opportunity for Sheridan students to gain research experience



09 MARCH 2022: AVIATION

FreeFlight Systems has launched upgrades in its current radar altimeters models to address the issues of air traffic management and interruption in flights due to the 5G network

- FreeFlight Systems, a company that designs, manufactures, sells and supports avionics systems to improve the safety, efficiency and affordability of flying, has launched an upgraded drop-in 5G interference mitigation solution for two of its radar altimeters
- Company's radalts safely support flight operations on over 5,000 aircraft worldwide, addressing the risks of 5G interference in flights and FAA Airworthiness Directives (ADs)
- The upgrade is available to all FreeFlight Systems customers from business aviation, general aviation, military and defense, uncrewed aviation and rotorcraft platforms



02 MARCH 2022: TELECOMMUNICATIONS, TECHNOLOGY

UK-based Stratospheric Platforms Limited (SPL) completed the first demonstration of the High-Altitude Platform Satellite (HAPS) based 5G base station from the stratosphere

- Stratospheric Platforms Limited (SPL), the developer of a high-altitude platform and communication system, has successfully conducted 5G connectivity trials from high-altitude in Saudi Arabia airspace above the Red Sea Project, which aims to develop a tourism hotspot on the Saudi Arabian Red Sea coast
- The test was able to project a 5G signal to an area of 450 square kilometers, to enable the use of the antennae from high-altitude drones using a German-made, long-endurance Grob aircraft
- It is the world's first trial of 5G High-Altitude Platform System (HAPS) technology, where SPL has completed the test technique using aircraft to position 5G transmitters 14 km above the ground



02 MARCH 2022: INFRASTRUCTURE

Peachtree Corners residents to be introduced to 5G-powered traffic signals and smart infrastructure app from Applied Information and T-Mobile

- Peachtree Corners, one of the US's first smart city environments powered by real-world connected infrastructure and 5G, announced a partnership with T-Mobile, Applied Information and Temple, Inc., where the tech partners will introduce 5G-connected vehicle technology through a smart application
- The T-Mobile's 5G network and TravelSafely smartphone app with two-way communication will enable traffic signals to communicate with any vehicle on the road to warn drivers of light signals running in multiple languages
- It would provide audible warnings about potential red light running and alerts to get ready for green, etc. in languages including English, Spanish, Korean, Hindi, Simplified Chinese, French and German as per users' phone settings



24 FEBRUARY 2022: AUTOMOTIVE

Verizon has agreed with Audi to embed its 5G Ultra-Wideband network technology in Audi vehicles starting in 2024 models

- Verizon, the American wireless network operator, has entered into its first automotive deal with Audi, the German automotive manufacturer of luxury vehicles, to equip the company's vehicles with 5G connectivity
- The deal is estimated to start in the select model year 2024, where the technology will be embedded in Audi vehicles and supported by Verizon's 5G Ultra-Wideband network, which includes C-band and millimeter wave spectrum
- Verizon's 5G Ultra-Wideband is expected to reach 175 million people by the end of 2022, as its C-band 5G now covers 100 million people, with a target of expanding to more than 250 million by 2024 and beyond



22 FEBRUARY 2022: TELECOMMUNICATIONS, TECHNOLOGY

Japanese telecom operator KDDI Corp has signed a deal with Wind River Studio for the development of its O-RAN compliant 5G virtual base station

- KDDI Corporation, a Japanese telecommunications operator, has chosen Wind River, a global software provider for the intelligent edge, for using its O-RAN-compliant 5G stand-alone virtual base station technology
- The Open Radio Access Network (O-RAN) technology provides a cloud-native platform for the development, operations and service of critical intelligent systems
- The partnership enables KDDI to have more flexibility in delivering 5G to its commercial customers that meet usage needs with open and virtualize base stations, without having to deal with the complications of the interoperation of different 5G equipment



21 FEBRUARY 2022: DEFENSE

Lockheed Martin has been awarded a contract by the US DoD for the development of a 5G network testbed for the Marine Corps

- Lockheed Martin Corporation, American aerospace, arms, defense, information security, and technology corporation, has been awarded the responsibility of creating 5G communications network infrastructure testbed for the US Marine Corps
- The US Department of Defense (DOD) chose Lockheed to support the rapid integration of 5G technology across military operations on land, water, air, space and cyber through the testbed known as OSIRIS (Open Systems Interoperable and Reconfigurable Infrastructure Solution)
- The infrastructure will enable rapid experimentation and dual-use application prototyping that would allow connection of various 5G-ready user devices while also addressing cybersecurity requirements



21 FEBRUARY 2022: TELECOMMUNICATIONS

Australia based Field Solutions Holdings (FSG) has partnered with Nokia and Mavenir to expand services to rural and remote areas

- To deliver 4G and 5G services in rural, regional, and remote areas of the country, Australian rural carrier Field Solutions Holdings (FSG) has partnered with Nokia and Mavenir to build the country's fourth mobile network
- Under the deal, both the technology partners will supply 4G and 5G radio access networks and mobile core, to deliver connectivity to regions, while also offering the capability for carriers to join the solution using Active Neutral host RAN
- FSG also plans to deliver 19 new place-based networks across Australia in the fiscal year 2023/24, comprising more than 100 sites that will be 4G and 5G capable