

# 5G NEWSLETTER

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

## National Governments' Announcements



### Canada

The Government of Canadian Province, Manitoba, collaborated with Xplornet Communication to enhance 5G network availability for Manitoba residents



### Colombia

Colombia's ICT ministry plans to initiate a public consultation to encourage the development of 5G and updating spectrum caps



### China

The Ministry of Industry and Information Technology (MIIT) announced plans to increase the number of 5G base stations in the country by more than triple over the next 4 years



### Brazil

The Government has authorized 10 companies to build 5G networks as part of the country's auction of its 5G spectrum, kicking off the practical work around the implementation of 5G



### US

The US Department of Homeland Security has collaborated with the US Defense Department and the National Institute of Standards and Technology to develop new security evaluation methodology for 5G wireless technologies

## Telcos' Futuristic Initiatives



Announced a 3 year R&D partnership with King Abdullah University of Science & Technology (KAUST) for advancing 5G and 6G networks in Saudi Arabia



Upgraded its Guadalajara, Mexico based 5G lab to support growing operations and ease out the testing of new 5G products in the region



A US-based satellite TV firm racing to build a 5G network collaborated with Cisco to sell cloud-based 5G services, driving wireless disruption and innovation for businesses



Announced its plans to establish 4G and 5G telecom base stations in Russia in collaboration with YADRO under a joint venture

## Key News



### 09 DECEMBER 2021: TELECOM

**Teletalk, the solo state-owned GSM, 3G, LTE and 5G-based mobile phone operator in Bangladesh, has selected Nokia to launch the first 5G network in the country**

- Nokia collaborated with Teletalk Bangladesh to install Bangladesh's first ever 5G network, supporting the government's digital plan to enhance automation, digitalization, and Industry 4.0 in the nation
- Under the deal, Nokia will initially equip the nation with its latest ReefShark System on its Chip-powered AirScale equipment portfolio
- To coincide with Bangladesh's golden jubilee independence celebrations, Teletalk will inaugurate its 5G network with Nokia, which has been Teletalk's partner since 2004 for joint deployment of the country's 2G, 3G, and 4G networks



### 07 DECEMBER 2021: TECHNOLOGY

**Cambium Networks developed a 28 GHz cnWave system that employs 5G protocol and innovations optimizing performance for fixed wireless applications**

- Cambium Networks, a global provider of wireless networking solutions, set forth the availability of a 28 GHz cnWave 5G NR-based solution
- The new solution is purpose-built to deliver high speed with low latency via fixed wireless access, designed to work in urban, suburban, and rural locations
- The 5G-based fixed wireless system is made for service providers to seamlessly expand into new markets, utilizing the 112 MHz wide channels



### 07 DECEMBER 2021: SEMICONDUCTORS

**Marvell has launched its AtlasOne platform for next-gen 5G RAN fronthaul to meet growing 5G capacity demands**

- Marvell Technology, Inc., an American company which develops semiconductors and related technology, established the AtlasOne chipset, a 50Gbps PAM4 DSP and TIA chipset solution for 5G optical fronthaul
- The new chip set is the industry's first such solution, delivering an end-to-end RAN experience from the company, and positioned to be a substantial tool for advanced 5G networks
- The demand of the new platform is largely driven by corresponding fronthaul bandwidth needs that have to be simultaneously increased to 50G



### 07 DECEMBER 2021: AUTOMOTIVE

**Volkswagen has indicated the deployment of 5G private mobile network in its Germany plant with Nokia's support**

- Volkswagen has selected Nokia to leverage its private 5G technology capacities to drive real-time IoT data uploads to the company's production vehicles
- Nokia will deploy its industrial-grade private 5G interface, wireless, at Volkswagen's biggest and main plant in Wolfsburg, Germany, which is part of a pilot program expected to help the facility achieve real-time connectivity
- The focused 5G bandwidth will enable the OEM to support the intelligent networking of production robots and wireless assembly tools



### 06 DECEMBER 2021: TELECOMMUNICATIONS

**Avanti Communication and the European Space Agency have accelerated the adoption of 5G with the launch of their new 'Instant5G' project**

- Following a validation from the European Space Agency (ESA), UK Space Agency and the Romanian Space Agency, Avanti Communications has launched a new research project - 'Integrated Satellite and Terrestrial Communication (Instant5G)'
- Under the project led by ESA and Avanti, a software-based platform will be developed, that will enable the merging of satellite communications and mobile networks to support 5G satellite connectivity services
- From 2023, trials of the project will begin across Africa and Europe, followed by the launch of Avanti Extend, another new managed satellite service for rural connectivity



### 01 DECEMBER 2021: MINING

**Europe's largest gold mine, located in northern Finland, is going to experience Nokia and Telia's new standalone 5G private network connectivity**

- Nokia, in partnership with Telia, is establishing a 5G SA (standalone) network in Finland for Agnico Eagle AEM, which operates the Kittila mine in northern Finland, to boost the digital transformation of gold mining
- The 5G SA network will reach depths of up to one kilometer to support Industry 4.0 use cases at the Kittila mine, Europe's largest primary gold producer
- The network deployment is expected to be completed by October 2022, and will be based on Nokia's Modular Private Wireless (MPW) solution



### 29 NOVEMBER 2021: AUTOMOTIVE

**Ericsson has been selected by Porsche to optimize its production units' performance by facilitating the first ever 5G SA network deployment in the company**

- Porsche, the leading sports car manufacturer, signed a research partnership with Ericsson for trials of 5G networks at the company's production units, being the first deployment of a private 5G network at any of Porsche's production complexes
- The trial project will operate on Ericsson's secure 5G standalone (SA) network which operates over a private frequency spectrum
- Under the collaboration, the partner telecom operator will provide high-speed wireless connectivity, ultra-low latency and huge data-handling capabilities for Porsche's production units



### 17 NOVEMBER 2021: ENGINEERING AND CONSULTING

**L&T Technology Services has been selected as the engineering partner by NVIDIA and Mavenir for enhancing the use of NVIDIA's converged AI-on-5G platform**

- Nvidia Corporation, an American multinational technology company, and Mavenir, an American telecommunications software company, have selected L&T Technology Services (LTTS) to enhance customization, integration and deployment of 5G-AI applications
- LTTS will support the companies to boost the adoption of the industry's first converged AI-on-5G platform
- The platform focuses on developments at the edge to uplift the digital transformation of enterprises across all industries with 5G support