

# 5G NEWSLETTER

Monthly update about global developments in 5G technology (16 Jun'22 - 15 Jul'22)

## National Governments' Announcements

### Germany

German government introduces a new strategy to promote gigabit broadband throughout the country, wherever people live, work, and travel, with targets to provide 5G connectivity and fiber-to-the-home by 2030

### Macau

Macau SAR government approves much-anticipated regulations that allow for 5G network operations and licensing in the region

### Spain

Spain opens public consultation with the planned award of up to €250 million in funding for 5G fiber backhaul to cover 75% of the population by 2025, to bring about universal access to ultra-fast broadband and extend the reach of 5G mobile in the nation

### India

Indian government announces the implementation of full-fledged 5G services by March 2023, finishing the 5G spectrum auction by the end of July 2022

### Thailand

Thai government begins to establish the Thailand 5G Alliance in partnership with the country's private-sector organizations to enhance the use of next-gen 5G applications in driving economic growth across multiple sectors

## Telcos' Futuristic Initiatives

### ERICSSON

Ericsson plans to set foot in smartphone-use-case-focused testing and validate 5G non-terrestrial networks (5G NTN), in partnership with Qualcomm and Thales, enabling a future 5G smartphone that could use 5G connectivity anywhere on Earth

### اتصالات etisalat

Etisalat UAE plans to introduce a new '5G Edge-in-a-box solution' that would enable operators to instantly use 5G communications for smart cities, IoT, Industry 4.0, and more

### Viasat

Viasat secures a research award from the US Department of Defense to test 5G support to US Marine Corps operations and other command-and-control applications

### Telia

Telia Norway plans to develop private 5G networks and VPN for Norway to be implemented next year as a part of Telia Norway's national 5G network under a new agreement with the Norwegian Defense Materiel Agency

## Key News

### 14 JULY 2022: AUTOMOTIVE

#### Autotalks launches 3<sup>rd</sup> generation 5G supported chipsets for vehicle-to-everything (V2X) stack execution

- Autotalks, the Israel-based fabless semiconductor company focused on vehicle-to-everything (V2X) communications for manned and autonomous vehicles, introduced the world's first-of-its-kind V2X chipsets - TEKTON3 and SECTON3 - which support 5G-V2X for collision and crash prevention
- The world's only functional safety-certified V2X chipsets enable critical actions such as automatic braking using sensor data shared by other vehicles and consume less power and cost
- The 5G supported chipsets are capable of supporting both dedicated short-range communications (DSRC) and cellular's C-V2X based on 3GPP specifications

### 07 JULY 2022: HEALTHCARE

#### GE Healthcare opens the first 5G Innovation Lab in India to develop solutions for critical healthcare issues globally and enhance the MedTech industry

- GE HealthCare, a subsidiary of American multinational conglomerate General Electric, has set up the world's first 5G Innovation Lab in India with futuristic infrastructure and a private 5G network for R&D
- The lab provides a cooperative ecosystem for academia, healthcare, and start-ups, enhancing the patient care continuum, transforming diagnosis, therapy, remote care, and much more
- The lab is expected to enhance 5G-enabled use cases and enter into the next generation of MedTech by developing solutions for the most crucial healthcare issues for India and the world

### 05 JULY 2022: AGRICULTURE

#### 5G RuralDorset and Qualcomm have joined hands for developing 5G-enabled solutions for smart farming

- 5G RuralDorset – a program led by Dorset Council and the Department for Culture, Media and Sport – and Qualcomm, the American semiconductor MNC, have extended their partnership for a new agriculture project
- The partnership intends to explore and test mmWave 5G technology for new farming solutions, including autonomous vehicles, robots, and big data analytics
- The new farming solutions trials will utilize Qualcomm's latest microchips in tandem with a 26GHz spectrum, which would allow for 'per plant' farming, with autonomous robots gathering information on individual plants and taking automatic action to improve crop health and yield

### 04 JULY 2022: HEALTHCARE

#### Virgin Media O2 and South London and Maudsley NHS Foundation Trust have come together to establish UK's first 5G-enabled hospital

- Virgin Media O2, a mass media, and telecom company based in London plans to establish the first 5G hospital in the UK with South London and Maudsley NHS Foundation Trust
- The hospital infrastructure would be connected with a 5G network, IoT and AI all across and will provide connectivity for crucial digital health use cases for clinicians and patients in the trust
- Virgin Media O2 intends to expand the rollout of wireless and smart hospital connectivity across the NHS estate over the next 3-5 years

### 30 JUNE 2022: METALS AND MINING

#### Zijin Mining Group partners with MTN and Huawei to establish its first smart metal mine enabled by 5G technology

- Subsidiaries of Zijin Mining Group, a China-based mining MNC, South Africa Zijin Platinum and Nkwe Platinum, have joined forces with telecom company MTN and tech group Huawei to build a 5G wireless technology-enabled platinum mine
- The Zijin Garatau platinum mine would be Zijin Mining Group's first high-tech overseas smart mine, which will transform the old mining processes using MTN's 5G connectivity and technology
- The new mine would be Southern Africa's first 5G-enabled smart metal mine

### 23 JUNE 2022: LOGISTICS

#### China's Qingdao Port becomes the first hydrogen-powered, 5G enabled port in the world and the first fully automated container terminal in Asia

- Qingdao Port in China becomes the world's first smart ecological terminal powered by 'hydrogen + 5G', which claims to reduce carbon emissions by 3.5 kg and sulfur dioxide emissions by 0.11 kg/TEU
- The port is equipped with innovative futuristic technologies, extensive automation and high loading and offloading efficiency
- The port is also the first fully automated container terminal in Asia with a productivity of 36.2 containers per ship per hour on average, with hydrogen-powered crane technology

### 22 JUNE 2022: IT

#### Aetina and Fibocom come together to build an AIoT world by bringing 5G capacities to multiple tech-based application areas

- Fibocom, provider of IoT wireless solutions and wireless communication modules, and Aetina, provider of high-performance GPGPU and Jetson AI edge computing, have joined hands to bring 5G connectivity and edge AI capacity for robotics, drone, industrial inspection, etc.
- The collaboration focuses on high-speed, ultra-reliable, and low-latency 5G capacities, supported by Fibocom's 5G R16-compliant module FM160-EAU and Aetna's AN810-XNX AI edge computing platform, to assist developers to expand their systems communication ability, I/O connectivity flexibly and quickly
- The partnership intends to meet the growing demand for developing reliable AI platforms with real-time connectivity at the edge

### 17 JUNE 2022: AUTOMOTIVE, MANUFACTURING

#### Hyundai aligns with SingTel to establish a 5G enabled Hyundai Motor Group Innovation Centre in Singapore (HMGICS) for EVs, AVs, and other mobility products

- Hyundai Motor Group, the South Korean multinational automotive manufacturer, has entered into an agreement with SingTel, the Singapore-based telecom conglomerate, to deploy 5G infrastructure network solutions at its Hyundai Motor Group Innovation Centre (HMGICS) in Singapore
- The telco will supply a 5G campus network replete with mobile edge core solutions to Hyundai for the development of a metaverse for the manufacturing industry
- The facility is claimed to be the first of its kind in the world, worth \$40 million, that will also produce electric cars, and is expected to be operational by end of 2022