

HKT 5G Standalone network enables smart applications

HKT (SEHK: 6823) – HONG KONG, March 31, 2021 – HKT has built a 5G Standalone (SA) network architecture capable of network slicing which supports industrial grade applications.

HKT's 5G SA network has the technological advantage of dedicating a network slice for ensuring ultra-high speed and ultra-low latency transmission channel necessary for the time-critical communications. Each network slice is created with logically isolated network resource designed with a defined service quality to serve specific vertical applications such as autonomous driving, smart healthcare, VR/AR/360 Ultra High Definition (UHD) video services, cloud gaming, and others.

For example, time-critical applications requiring ultra-low latency include forward collision warning and emergency stop warning in the transport industry, and remote surgery and 4K UHD diagnostic imaging in the healthcare industry. Bandwidth demanding applications requiring ultra-high speed connectivity include VR/AR/hologram content production and transmission in the media and gaming industries.

Capitalizing on HKT's unique strengths and experience in fixed and mobile network expertise, and decades of experience in system integration to help enterprises in digital transformation, HKT is in a unique position to explore and formulate initiatives deploying 5G SA network to facilitate various sectors and the Government in achieving technology advancement and smart city objectives.

HKT is the first mobile operator in Hong Kong using 5G SA network with network slicing for the trial of C-V2X applications on public roads, which is also the first time that 5G SA technology is used for a vertical industry application in Hong Kong. The smart mobility project applies 5G network slicing on C-V2X to enhance road safety in the city with the first trial conducted this week on a designated 14-kilometre route from the Hong Kong Science Park to Shatin town. C-V2X road side units (RSU) are installed on traffic light poles and lamp posts along the designated route for providing real-time traffic intelligence to on-board units (OBU) installed inside the vehicles.

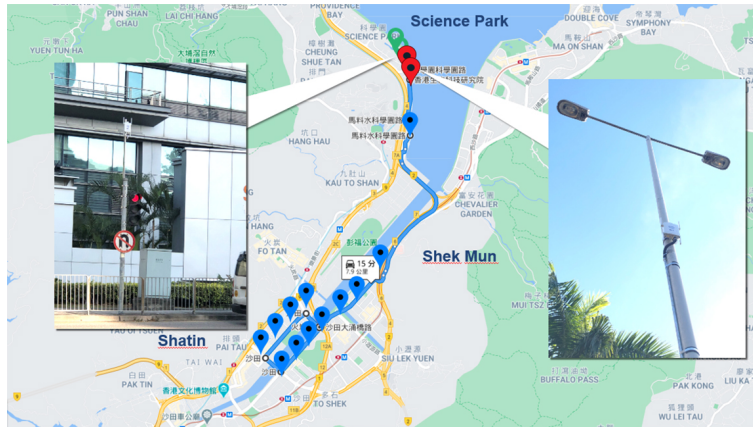
C-V2X is a cellular-based Vehicle-to-Everything communication system connecting with vehicles and road infrastructure. It allows vehicles to communicate with other vehicles (V2V), with pedestrians (V2P), with network (V2N) and with road infrastructure (V2I) such as traffic lights. Through real-time communication between a vehicle and its surroundings, safety alerts can be delivered to the driver for taking immediate actions to avoid traffic accidents.

This successful trial has proven that 5G technology is now ready to support real C-V2X applications, especially for enterprises or organizations which serve consumers within a dedicated area or campus, or along a specific route. HKT's 5G service has been available since April 2020. The market has realized its benefits with successful 5G applications deployed in different sectors including healthcare, construction, property development and management. HKT is ready to further unleash 5G's potential using SA network in automotive and other industries to support and propel Hong Kong into a smart city.

Mr. Peter Lam, Managing Director of Engineering, HKT, said, "Smart mobility is one of the key elements of the Government's Smart City Blueprint and C-V2X is the enabling technology that will transform urban transport. With the emerging 5G technology, autonomous driving will revolutionize the experience of transport and help Hong Kong evolve into a world-class smart city."

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HKT and ASTRI established a Smart City Joint Lab (SCJL) in November 2018, which aims to drive new initiatives on smart city and 5G developments in Hong Kong. The new C-V2X technology and its successful trial helps to realize of autonomous driving in Hong Kong, which is a long-term initiative of the Intelligent Transport System in the latest Hong Kong Smart City Blueprint 2.0.



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(From left to right) Dr. Henry Wong, Head of Strategic Wireless Technology and Core Networks of Engineering, HKT; Mr. Peter Lam, Managing Director of Engineering, HKT; Dr. Martin Szeto, Acting Co-CEO cum Chief Operating Officer, ASTRI; Dr. Lucas Hui, Acting Co-CEO cum Chief Technology Officer, ASTRI; and Dr. Justin Chuang, VP of Communications Technologies, ASTRI, announce the successful trial of C-V2X applications.

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About HKT

HKT (SEHK: 6823) is Hong Kong's premier telecommunications service provider and a leading innovator. Its fixed-line, broadband, mobile communication and media entertainment services offer a unique quadruple-play experience. HKT meets the needs of the Hong Kong public and local and international businesses with a wide range of services including local telephony, local data and broadband, international telecommunications, mobile, media entertainment, enterprise solutions and other telecommunications businesses such as customer premises equipment sales, outsourcing, consulting and contact centers.

HKT is the first local mobile operator to launch a true 5G network with differentiated value-added services. Backed by its substantial holding of 5G spectrum across all bands and a robust and extensive fiber backhaul infrastructure, HKT is committed to providing comprehensive 5G network coverage across the city.

HKT delivers end-to-end integrated solutions employing emerging technologies such as 5G, cloud computing, Internet of Things (IoT) and artificial intelligence (AI) to accelerate the digital transformation of enterprises and contribute to Hong Kong's development into a smart city.

Riding on its massive loyal customer base, HKT has also built a digital ecosystem integrating its loyalty program, e-commerce, travel, insurance, FinTech and HealthTech services. The ecosystem deepens HKT's relationship with its customers thereby enhancing customer retention and engagement.

For more information, please visit www.hkt.com.

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