

Blazing a Trail to 5G: SmarTone Successfully Runs Hong Kong's First 5G Technology Demo

SmarTone and Ericsson lead Hong Kong towards a 5G future with agreement to form mobile innovation hub

(Hong Kong, 18 January 2017) – Today, SmarTone announced its partnership with Ericsson to lead Hong Kong's Fifth Generation (5G) mobile journey by successfully conducting the city's first demonstration of 5G technology. The partnership also commits the two mobile leaders to develop a mobile technology innovation hub, Hong Kong's first dedicated open ecosystem to drive innovation in 4.5G/5G use cases and vertical applications.

The five-year partnership will see the two companies push the frontiers of innovation and technology to deliver a truly rewarding next generation mobile experience to customers. While standards are still to be ratified, 5G is widely expected to deliver multi gigabit speeds, anywhere from 5 to 20 times faster than current peak 4G speeds, and sub-millisecond latency. This provides the required high speed, real-time connectivity to deliver AI, VR/AR and the IoT-enabled world of real-time applications and services.

Today's demonstration offers a glimpse of 5G capabilities that will enable users to download a 4K movie in mere seconds or sit behind the wheel of a driverless car. The first-in Hong Kong 5G technology demonstration is run from a 5G base station, next-generation antenna and a test mobile station. These use case demos included "real-time cloud analytics" and "real-time robotic remote control via HD video".

"Today's 5G demonstration, with world-class network leader Ericsson, is a significant milestone in our joint vision to shape the next-generation mobile experience, to build the industry's best network and lead Hong Kong's journey towards 5G," said Mr. Stephen Chau, Chief Technology Officer at SmarTone.

"5G will herald a significant shift towards the hyperconnected and real-time world of IoT. Our innovation hub will see SmarTone and Ericsson forge collaboration with other industry and technology leaders to usher in a new era of mobile possibilities for consumers and businesses."

"Hong Kong is a world-leading mobile market. Working together with SmarTone's clear network leadership and expertise, today's 5G technology demonstration and the commitment to the innovation hub reiterate our dedication of making 5G a reality for the world's mobile users," said Petra Schirren, President of Ericsson Hong Kong and Macau.

Commercial-ready 5G services not expected until 2020, but SmarTone is committed to exploring all possibilities to constantly evolve and improve the mobile experience through network and service innovation.

"SmarTone's continuous network investment and advancement puts us in the lead in paving the way towards 5G. Our customers will be given the best experience at all

times and we will continue to pursue the latest network technologies to ensure the constant evolution of the mobile experience,” said Mr. Chau.

As part of that ongoing improvement, SmarTone also demonstrated an example of pre-standard License Assisted Access (LAA) technology, which leverages existing licensed and unlicensed spectrum to enhance the network to deliver superior 4.5G performance to customers.

Work on delivering a complete 4.5 experience to customers is already underway with SmarTone’s recent extension of 4.5G network coverage to the MTR’s new South Island Line, including Ocean Park, Wong Chuk Hang, Lei Tung and South Horizons stations.

By aggregating existing 900MHz, 1800MHz, 2600MHz spectrum and the additional 2100MHz spectrum on the MTR, SmarTone has provided customers with an even faster, smoother and more stable mobile experience.

Appendix I:

What is 5G?

3G	4G	5G
3rd Generation Wireless network	4th Generation Wireless network	5th Generation Wireless network
Designed for voice with some data consideration (multimedia, text, internet) First mobile broadband	Designed primarily for data True mobile broadband	Designed primarily for massive IoT and enhanced mobile broadband
Availability		
Year 2000	Year 2010	Year 2020
Peak speed		
42 Mbps	1 Gbps	20 Gbps
How long does it take to download an hour of 4K video?		
One hour	3-5 minutes	Less than 10 seconds
Latency		
30ms - 50ms	10ms - 30ms	Down to 1ms or less

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What does it mean to your future life?

- Low Latency/Mission Critical use cases:
 - Smart vehicles, ultra reliable control and emergency services
- Massive IoT:
 - Massive-scale sensor networks, human-machine hyperconnectivity
- Enhanced Mobile Broadband:
 - High definition media, VR/AR, broadband everywhere

Source: Ericsson & SmarTone