



Ericsson and SmarTone, a communication service provider in Hong Kong, have agreed to a five-year contract for the deployment of 5G in Hong Kong. Ericsson is the sole supplier of SmarTone's 4G network and will continue as their sole 5G vendor – extending the companies' 28 years of partnership.

Stephen Chau, Chief Technology Officer of SmarTone, says: "SmarTone has been preparing for the 5G era with Ericsson in Hong Kong since January 2017, when we conducted the first 5G technology demo in this market. Together, Ericsson and SmarTone have led global technology developments in mobility and delivered multiple 'firsts' through early joint trials, shared research and collaborative product development. We will continue to leverage our long-term partnership to build a world-class and robust 5G network in Hong Kong and deliver best-of-breed 5G network experience to customers. SmarTone is also proud to be playing a key role in Hong Kong's transformation to a smart city."

SmarTone will be the first operator in Hong Kong to deploy Ericsson Spectrum Sharing – a unique spectrum sharing technology that enables dynamic sharing of spectrum between 4G and 5G and more efficient use of its existing spectrum and existing Ericsson Radio System infrastructure for 5G deployment. With this advanced technology, SmarTone customers will also be able to enjoy enhanced overall network experience brought by 5G.

With 5G networks going live and consumers getting their hands on the first 5G devices, user expectations are high. Communications service providers need to make the best use of their spectrum assets and utilize each band's performance characteristics to support their business strategies, while maintaining coexistence between all technologies deployed in the network. Ericsson Spectrum Sharing (ESS) allows operators to run LTE and NR simultaneously on the same carrier frequencies and base station hardware.

With a simple software installation, ESS offers quick introduction of 5G over a wide area, for all 5G-enabled devices leveraging 4G spectrum and existing Ericsson Radio System infrastructure.

Magnus Ewerbring, Chief Technology Officer, Asia Pacific at Ericsson, says: "With Ericsson Spectrum Sharing, SmarTone will be able to more efficiently allocate its spectrum assets according to traffic demands, using its existing infrastructure. This ensures, not only a smoother transition to 5G but also a faster one."

This new agreement also includes Ericsson's Dual-Mode 5G Core, enabling SmarTone to quickly launch advanced services and run efficient operations through a cloud-native solution combining Evolved Packet Core (EPC) and 5G Core architectures. This will allow SmarTone to extract more business value out of its network. Ericsson will also deploy automated provisioning and insight-driven service assurance with Ericsson Orchestration and management systems to simplify operations.

The Orchestration product consists of two modules.

- Cloud Manager module: Performing NFVO, G-VNFM and Service Configuration Management (SCM). Enables orchestration of resources across different VIMs (OpenStack or VMware) and both intra and inter-Data Center. Automates the instantiation of a Network Service described in TOSCA/JSON formats. Performs Fault & Performance management for the infrastructure by collecting and correlating alarms from the hardware and VIM. Interfaces with multi-vendor EMS/VNFM through the Or-vnfm interface. The G-VNFM function provides Life Cycle Management (LCM) of VNFs that do not have a specific VNFM.
- Service Orchestration module: For new use cases around 5G, IoT and Network Slicing. Provides network slice management including LCM and configuration by using TOSCA as the template language. Real time inventory check is done to generate a Service instance design which is then deployed across the resources. Enables cross-domain orchestration across Access, Transport, and Core by interfacing with different domain managers and transport SDN controllers.

And with the latest artificial intelligence (AI) powered radio access capabilities, the SmarTone network will also benefit from machine learning and real-time processing on the baseband. This will allow the network to instantaneously direct the 5G end-user to the best 5G cells, providing better coverage and a superior 5G experience. The network can also predict traffic patterns and autonomously activate smart sleep modes for antennas to reduce energy usage.

Ericsson's Security Reliability Model ensures security and privacy by design in all its network

infrastructure products across radio, core, cloud infrastructure, and operational and business support domains. This approach enables SmarTone to manage a new era of network security, including 5G and IoT.