



## **Samsung Successfully Conducts 5G Prototype Trial with China Mobile Communication Corporation**

*Verify Technical Feasibility on both Below and Above 6GHz for Next Generation Communication*

**Beijing, China – November 09, 2016** – Samsung Electronics announced today it has successfully conducted 5G prototype trial in conjunction with China Mobile Research Institute (CMRI), which was a cooperation milestone between the two companies since Samsung became a member of China Mobile 5G Innovation Center in June 2016.

During the 5G trial test in Beijing, the key technologies like spatial modulation and FBMC (Filter Bank Multicarrier) are validated for the low-frequency (3.5GHz), the performance of throughput, outband emission are tested. With Samsung's ultra-high frequency 5G prototype system and devices powered by advanced beam forming technology, Samsung and China Mobile Research Institute sought to verify mmWave technology's performance and frequency characteristics jointly, including mobility, peak throughput, and multi-user scheduling capacity, as well as mmWave transmission at indoor, penetration loss, etc.

"Over many years of research and development, Samsung has accumulated a wealth of technology and experience related to 5G technology and product development," said Dai Jun Zhang, Vice President and Head of Samsung R&D Institute China - Beijing. "To accelerate the realization of 5G standardization and commercialization in China, we will continue to strengthen our joint efforts with the Chinese government, as well as operators in the future."

Since the late 2000s, Samsung has continuously been investing in R&D of 5G key technologies and, since 2014, has primarily focused on 5G commercialization technologies. Through its efforts, Samsung has achieved great milestones on 5G technology development, including the handover demonstration in a multi-cell mmWave network, Radio Frequency (RF) technology essential in miniaturizing devices and equipment. Samsung has also played a key role in contributing to the formation of 3GPP standards, and strive for a global and unified 5G standard, expected to be finalized in 2018.

### **About Samsung Electronics Co., Ltd.**

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