



KT, Verizon and Samsung Collaborate to Demonstrate and Advance Next Level of 5G Innovation

Chairmen and CEOs from KT and Verizon conduct live video call using Samsung end-to-end 5G network solutions; companies demonstrate Samsung's first prototype 5G tablet

Seoul, Korea and Minneapolis, USA – February 4th, 2018 – KT, Verizon, and Samsung Electronics Co., Ltd. (Samsung) joined to demonstrate Samsung 5G solutions and use cases, including a prototype 5G tablet device, and a successful live video call conducted over 5G between Minneapolis, USA and Seoul, Korea during a sponsored sport event. The 5G international video connection, which featured Samsung's 5G end-to-end (E2E) solutions in each location, served as an example of how use of commercial 5G mobile devices and connectivity is growing closer to reality.

"It brings great pleasure to see where all the contributions we have been making on 5G specifications are leading us," said Hong-beom Jeon, Executive Vice President, Head of Infra laboratory, KT. "The fact that 5G is no longer a dream owes its debt to the collaborations we have carried out with operators like Verizon and vendors like Samsung. Our efforts have enabled some of the most demanding tasks to come to fruition."

"By working closely with industry leaders like KT and Samsung, we are finally making 5G a reality," said Ed Chan, Senior Vice President and Chief Technology Architect, Verizon. "Seeing Samsung's 5G end-to-end solutions in action, including a working prototype 5G tablet, underscores how important our collaborative relationship has been in helping accelerate the availability of commercial 5G mobility for customers. As we say at Verizon, 'we don't wait for the future, we build it.' We are glad to be working with like-minded partners to build the 5G future globally."

"We have been working closely with KT and Verizon to demonstrate mobile 5G use cases at two prestigious global events," said Woojune Kim, Senior Vice President and Head of North American Business, Samsung Electronics. "This demonstration conducted today with KT and Verizon represents a huge milestone for us, showing our contribution to the development of early 5G global specifications and 3GPP NR (New Radio), and spotlighting the next generation Samsung technologies that let operators implement robust new services."

Samsung enabled the demonstration of 5G experiences at the event by supplying network Infrastructure composed of 28GHz 5G access units, 5G home routers(CPEs), virtualized RAN and virtualized core network, as well as the prototype 5G device. Samsung has leveraged in-house technology and assets to develop the first commercial ASIC-based 5G modems and mmWave RFICs, and with these technical advancements, Samsung has been able to bring one of the smallest 5G radio base stations and 5G home routers (CPEs) to market.

Among the Samsung 5G network products demonstrated at the Verizon and KT sponsored sports events is the fully-functioning prototype handheld 5G tablet – capable of running on multi-gigabit per second speeds via 5G networks, as well as the latest 4G LTE network speeds. The proto-type

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tablet is also capable of supporting data session handovers between 4G LTE and 5G and demonstrates advancements in chipset and antenna technology required to support future commercial devices.

The three companies have been working closely on 5G research and development since 2015, including in Verizon's 5G Technical Forum (5GTF) and KT's PyeongChang 5G Special Interest Group (5G SIG), which collectively released early 5G specifications with the aim of building a strong 5G ecosystem. This collaboration generated valuable data that helped inform and accelerate the 3GPP NR 5G global standard.

About Verizon

Verizon Communications Inc. (NYSE, Nasdaq: VZ), headquartered in New York City, generated \$126 billion in 2017 revenues. The company operates America's most reliable wireless network and the nation's premier all-fiber network, and delivers integrated solutions to businesses worldwide. Its Oath subsidiary reaches about one billion people around the world with a dynamic house of media and technology brands.

About Samsung Electronics America, Inc.

Headquartered in Ridgefield Park, N.J., Samsung Electronics America, Inc. (SEA), is a recognized innovative leader in consumer electronics, mobile devices and enterprise solutions. A wholly owned subsidiary of Samsung Electronics Co., Ltd., SEA is pushing beyond the limits of today's technology and providing consumers and organizations with a portfolio of groundbreaking products in appliances, home entertainment, Internet of Things, mobile computing, smartphones, virtual reality, wireless infrastructure and wearables, in addition to offering leading content and services related to mobile payments, 360-degree VR video, customer support and more. Samsung is a pioneering leader in smartphones and HDTVs in the U.S. and one of America's fastest growing home appliance brands. To discover more about Samsung, please visit www.samsung.com. For the latest Samsung news, please visit news.samsung.com/us and follow us @SamsungNewsUS.

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