



Samsung and Deutsche Telekom Successfully Demonstrate 5G Guaranteed Latency at Mobile World Congress 2017

Precise and managed latency through Samsung's GLA is a key enabler for generating new use cases, promising stable, real-time communication

Barcelona, Spain – February 27, 2017– Samsung Electronics and Deutsche Telekom have successfully showcased 5G Guaranteed Latency (GLA) as an end-to-end network slice at Mobile World Congress (MWC) 2017. GLA is one of the key differentiators that clearly distinguishes 5G technology from the previous 4G. It is viewed as highly critical for the 5G era, as it enables latency control, low and stable, for example, according to the requirements of specific use cases.

During the live demonstration at Deutsche Telekom's booth, two robotic arms were connected to Samsung's 5G radio system which incorporates GLA technology. When GLA was applied to both of the robotic arms for the guarantee of low and controlled latency, a box was successfully delivered from point A to B, as they moved in a synchronous harmony within the set amount of time. On the contrary, when GLA was applied to only one of the arms, the different latencies caused the arms to differ in speed, causing the box to drop. GLA will gain importance especially in industrial use cases where accurate synchronization between machines are critical.

"5G signifies more than ultra-fast speed. With low latency, close to what is expected of 'real-time', unprecedented business models and services can be generated," said Youngky Kim, President and Head of the Networks Business at Samsung Electronics. "The 5G GLA showcase, jointly conducted with Deutsche Telekom, has proven that an accurate and stable operation of latency control is a feasible concept. We believe that this is a key element in enabling operators to create new business models, including industrial use cases."

"In the 5G era, the ability to control latency in the entire end-to-end network chain guarantees users an unprecedented level of Quality of Service, which would have otherwise been not possible with past technologies," said Bruno Jacobfeuerborn, Chief Technology Officer, Deutsche Telekom. "Today's event is significant, as this innovation makes the application of 5G for industrial use cases more tangible. Through our ongoing partnership together, we will continue to actively make 5G a reality."

Related to end-to-end latency, each step and element with the 5G end-to-end network chain carries an impact, meaning that Radio Access should not be an exception. With GLA, based on 3GPP's Ultra Reliable Low Latency Communication (URLLC), in particular, each network element must control its latency contribution. Guaranteed latency is an aspect of Quality of Service (QoS) that is guaranteed with Samsung's GLA feature, which is part of its 5G radio system. The feature enables efficient operation of scarce radio resources, in turn guaranteeing efficient time management and investment. This makes it an ideal option for various sectors, including those requiring real-time communication such as industrial services and autonomous cars.

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