



5G Portfolio Reference : Samsung's Next-Generation Core Solution

Fully virtualized and cloud friendly – the solution will power the vendor's end-to-end network trials in 2017

Barcelona, Spain (February 26, 2017) – Samsung Electronics announced today the readiness of its Next-Generation Core (NG Core) solution, and a library of 5G Virtualized Network Functions (VNFs) as part of its broader commercial 5G portfolio announcement. Deployments are already underway using a pre-commercial version of the solution which will form the foundation for the company's 5G trials throughout 2017.

"Virtualization is a powerful component behind a lot of the benefits of next-generation networks," said Sohyong Chong, Vice President and Head of Cloud Lab in Next-Generation Communications Business Team, Samsung Electronics. "Pulling together the experience we've gained from our NFV milestone successes over the past two years, we're really excited to have a commercial solution in place to help drive our 5G trial deployments."

Samsung's Next-Generation Core solution is built on the principles of virtualization, hardware independence and open platforms. By shifting to a completely software-driven environment, the NG Core solution gains an incredible amount of flexibility in terms of scalability and deployment configuration, with operators gaining the ability to optimize utilization of server hardware resources, and the ability to pool resources from multiple data centers.

At the same time, individual network functions (in this case, Virtualized Network Functions, or VNFs) are split into individual pieces of software – a process called 'decomposition' – allowing for on-demand assignment of hardware resources based on each VNFs changing workload. More importantly, decomposition allows operators to deploy individual functions only as needed by a given service, so that resources aren't wasted on unneeded functions. Finally, decomposition also enables 'Network Slicing', wherein multiple virtual sub-networks can be established that isolate different types of traffic, and handle each in an optimal manner based on its own requirements.

"We have already begun to deploy our NG Core solution in [operator trials in the US](#), and the results we're seeing in early verification testing are fantastic," said Mark Louison, Senior Vice President of Samsung Electronics America's Networks Division. "One key challenge was interlinking our Fixed Wireless Access deployment with the operator's existing fixed-line telco infrastructure, and our NG Core handled that without issue."

Samsung is playing an industry leadership role in the telco virtualization space, and has surpassed several key milestones in the development and readiness of virtualization technology. Core network virtualization is a key pillar of the company's Next-Generation Network strategy, as the vendor strives to leverage its future NG Core roadmap to harmonize operator radio assets, including 5G New Radio, LTE and WiFi, while simplifying network planning and service delivery capabilities.

Samsung Electronics made headlines in 2015 with the [deployment of its virtualized AdaptiV Core solution for Korean operators](#), representing the largest commercial NFV deployment for a major carrier at the time. Initially intended to carry early IoT device traffic from the operator's network, the deployment has since been scaled upwards several times to accommodate growing IoT and VoLTE traffic.

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, medical equipment, network systems, and semiconductor and LED solutions. For the latest news, please visit Samsung Newsroom at <http://news.samsung.com>.

###