THE EMERGENCE OF 5G ARCHITECTURES

With the upcoming 5G Wireless Network comes a new wave of Functional, Network, and Data Transfer Architectures that will affect products that the current consumer uses in their everyday lives. With these new architectures come new advantages and applications that will impact the technological landscape for years to come.

Why is new Network Architecture needed for 5G?

The ever-changing telecom industry will soon, probably in 2020, be introducing the 5G wireless network. With the emergence of the 5G Network will be new network architectures that will change the overall landscape of the telecom industry. These new network architectures will need to be able to handle the increased bandwidth demands of cell phones, and other various applications that will run off the internet provided by these 5G architectures. Overall, these new architectures will be able to handle approximately 10,000 times more call and data traffic then the current 3G or 4G networks. Also, with the emergence of more streaming applications and cloud services, higher data download speeds will eventually be heavily desired as well. With the 5G architecture installed, consumers can expect 100 times faster data download speeds compared to the download speed generated from current 3G and 4G networks. Faster internet speed, overall download speed, and dependability of sufficient network connections are all current drivers of implementing 5G architectures into our current telecom world.

Status of 5G and the Overall Progression from 1G to 5G

Before the 5G Network and its various network architectures can be implemented, many steps need to be made to make the transition from 3G/4G to 5G efficient, as well as making sure all products and standards related to 5G architectures are validated. At the moment, the European Telecommunications Standards Institute is creating 5G technology standards, and these are targeted to be done by 2019. Once these standards are finished and validated, the telecom industry is one step closer to making 5G a reality. If these standards are completed by 2019, consumers may be able to see 5G Network capabilities as early as the year 2020! Companies such as Nokia, Ericsson, NTT DoCoMo, Samsung, Huawei and Fujitsu are already starting to