Where are we with 5G?

May 19th 2019

What did this date signify? It was when EE launched their 5G Network in the UK followed by Vodafone in July and O2 in October.

Three years on, 5G is scaling faster than any previous mobile generation and expect 5G subscriptions to reach 1 billion worldwide by the end of the year.

5G in 2022 primarily consists of Non-Standalone (NSA) networks, meaning they're using the existing 4G LTE core to manage the network while boosting speeds with 5G core signalling. With deployments now well established, networks are now beginning look to Standalone (SA) 5G network types to deliver on many of 5G's promises.

So far, EE is planning to enable Standalone services by 2023. On a global scale, Vodafone Germany will have 5G SA in Bonn and plans to move over entirely by 2025. The kingdom of Bahrain also has its SA network online through operator STC Bahrain.

In the US, T-Mobile has already begun transitioning its network over. Verizon is looking to progress towards a 5G core later in 2022, while AT&T has no commitments at present. What does this shift to 5G Standalone mean for users? From the smartphone user's perspective, not a lot. Many of today's smartphones already support 5G SA. Moving from NSA to SA won't automatically balloon your 5G speeds, at least not without introducing additional bandwidth at the same time.

With 5G SA being deployed, removing the old LTE core opens the door to ultra-low latency devices, big data applications like mass IoT communication and advanced network slicing for service providers. This will gather more and more use cases to be fully immersed in the "Digital Transformation" journey.

Although regular mobile users may benefit from lower latency and a slight boost in bandwidth, we're more likely to see the benefits of 5G Standalone in terms of new services for the IoT space that appear alongside the traditional smartphone experience. 5G doesn't seem all that exciting now, but it does offer huge potential in the future.

To see how this opens up low power industrial IoT opportunities and to compare technology options, why not download our thought leadership article below.