

5G will become the mainstream ecosystem by 2022

A research report released by Ericsson has provided a perspective on how 5G can be realised in Africa. The *Making 5G a reality for Africa* report, which was conducted in collaboration with the Council for Scientific and Industrial Research (CSIR), reveals that 5G will become the mainstream ecosystem by 2022, and we can expect to see 5G start being deployed by global leading operators during 2019.



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Eva Andren, vice president and head of managed services, Ericsson Market Area Middle East and Africa (MMEA),says 5G can offer skills and opportunities that are not currently available to Africa. She says it will also enable a different way of living and a positive impact on the environment.

In Africa, 5G networks can enable a long-term digital transformation and contribute to the emergence of smart societies. This technology will enable greater access to big data sets and the capacity, speed and reliable connections needed to realiSe the UN's Sustainable Development Goals on a national and regional basis.

"5G is a reality for Africa, however, it will take some time for it to be scaled up and deployed in its full capacity. It is actually a reality in South Africa right now. There is a use case with one of our customers today. We collaborated with one of our customers to offer real 5G deployment in full scale," said Andren.

5G opportunities

5G will boost overall economies. Connecting African economies to 5G-enabled, high-speed networks will have resonating impacts when it comes to innovation, productivity, and efficiency gains beyond those of current mobile broadband.

Andren said, "We went from 2G to 3G then 4G which meant that we can start sending data over the network to 5G. 5G will not only benefit the individual, but it will also benefit the industry. For example in South Africa, if there is 5G fully deployed in the mining industry we have self-driving cars used in the mines which can increase security as well as improve efficiency in the operation."

"Another industry is medicine, we could use remote surgery, which is only possible if you have full 5G implemented. In the future, there is a huge potential to unlock 5G for Africa," she added.

Skills and job creation

The rising youth population in Africa means that more jobs need to be created. 5G provides the opportunity to offer digital skills and a new set of jobs. According to Ericsson and CSIR, over a 10 year period, broadband investment could lead to 400 000 jobs being created.

"Each technology will create new jobs and new skills, so will 5G. 5G will bring a different skill set of engineers in Africa and there will be different business models, but also there will be new businesses created at the age of 5G. For all schools and societies, it is definitely time to start looking into learning skills and how to develop and understand the new technologies. This will be a huge potential," said Adren.

Innovative uses of 5G in healthcare and education will help educate the 60% of African teens who are out of school and will extend the reach of healthcare workers to a continent where only 3% of the world's health workers reside.

"People should embrace new technologies and start understanding how they can use it to help provide new revenue and business. There are a lot of SMME's in South Africa and Ericsson is sponsoring a number of these companies together with our partners," said Adren.

5G in telecommunications

Telecommunications-based innovation is growing in Africa and encouraging mobile broadband development throughout the continent is crucial to connecting Africa's unconnected. Another pressing issue is solving the connectivity challenge which is fundamental to driving economic growth throughout the region.

Adren says Telecoms will be key for 5G to scale up network and connectivity. "I believe that the telecoms industry today has a difficulty to find new revenue streams and 5G will open the industry to new use cases. The service providers and operations of today will be able to use AI, automation as well as the Internet of Things to increase revenue streams," she said.

To ensure investment in Africa, regulators will have to make sure that spectrum is available in a timely manner to enable innovation and competition as well as to ensure 5G services benefit consumers, businesses and industries.