





U.S. Open RAN Build Spend Forecast, 2022 – 2027: *A long road ahead*

A Market Study

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Abstract

5G is now firmly established in the U.S. with all the major mobile operators supporting nationwide networks. LTE is still in use and will continue to carry the majority of U.S. mobile data traffic for the next couple of years, but 5G is growing rapidly. Nearly all of the current traffic is carried on RANs supplied by the traditional RAN vendors: Ericsson, Nokia and Samsung. The Open RAN initiative aims to open up the interfaces in the RAN and encourage a RAN ecosystem based on new vendors and architectures.

Fundamentally, the Open RAN concept is about building networks using equipment that separates the vendor-specific software and vendor-specific hardware associated with the vast majority of radio access network (RAN) equipment that is available today from a handful of cellular equipment vendors. Open RAN, then, uses RAN software on commercial, off-the-shelf hardware (COTS).

This market study provides a forecast for the cost to build LTE and 5G radio access networks in the U.S., together with a split of how much will be spent on traditional RAN architectures compared to Open RAN.

Key questions addressed in this market study include:

- How big is the RAN opportunity in the U.S in the next five years?
- What portion of RAN spending will be for Open RAN?
- What is the status of the major mobile operators' 5G networks?
- What are the new architectures that are being used to evolve the mobile network and support 5G, such as cloud RAN, Open RAN and mobile edge computing?
- What are the major market trends for Open RAN?

Who should read this report?

- Mobile operators
- Infrastructure OEMs
- Financial analysts and investors.