Global RAN Build Spending Forecast, 2018-2028: *LTE and 5G RAN in the U.S., Europe and Asia Pacific*

Market Study
Second Quarter, 2019

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Table of Contents

Abstract

The first 5G networks have now been launched in the U.S., while in the major markets of Asia Pacific and Europe, operators are trialing 5G with plans to launch commercially in the next year. The first part of the evolution to 5G involves the RAN (Radio Access Network) with the deployment of the first part of the 3GPP Release 15 standard, 5G NR (New Radio). The next step will be to deploy the new packet core and subsequent 3GPP releases.

Historically, the majority of build spending on the mobile network has been for the RAN and this is not expected to change as 5G is deployed. Therefore, if the wireless industry wishes to cut the cost of building and operating mobile networks, savings must be made in the RAN if significant benefit is to be realized.

This market study presents a summary of *iG*R's RAN research and includes a ten-year forecast of RAN build spending in the U.S., Europe and Asia Pacific, which is further split by 4G and 5G spending. The study also includes a discussion of global operators' progress towards 5G, 5G network requirements, and new RAN technologies such as massive MIMO and beamforming.

Key questions addressed in this market study include:

- What are the various 3GPP standards leading up to 5G and what are they likely to contain for the RAN?
- What is 5G? How is it defined and/or viewed right now? When will 5G be deployed?
- What are some of the goals and use cases for 5G?
- What are global mobile operators doing to prepare for the transition from their 4G LTE networks of today to tomorrow's 5G networks?
- What are the key RAN technologies that will enable 5G, such as Massive MIMO and beamforming?
- How big is the LTE and 5G RAN infrastructure build opportunity in the U.S., Europe and Asia Pacific in the next ten years?
- How is the RAN infrastructure build spending split between 4G and 5G in the U.S., Europe and Asia Pacific in the next ten years?
- Who are some of the major vendors that will support LTE and 5G RAN over the next ten years?

Who should read this report?

- Mobile operators
- Infrastructure OEMs
- Small cell product and solution vendors
- Financial analysts and investors.