



Contact iGR

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## **New iGR study forecasts the cost to build 5G in the U.S., including RAN upgrades, cell site densification, and data centers/central offices, and Mobile Edge Computing**

***Study defines the requirements of 5G, discusses the likely time frame of its rollout, and forecasts total build costs***

**AUSTIN, Texas, December 10th, 2015** – The demand for high quality mobile data services has increased dramatically with the advent of robust smartphones and tablets being used on 4G LTE networks. As mobile consumers' demand continues to grow, the question some in the industry are asking is, "What is next after 4G LTE?" The answer is 5G. But what exactly is 5G, how much will it cost to build, and when will U.S. mobile operators deliver it?

iGR, a market research consultancy focused on the wireless and mobile industry, has created a forecast for the cost of building and deploying 5G networks in the U.S. Through its model, iGR has forecast that a total of \$56 billion will be spent in the U.S. from 2017 to 2025 on the build of 5G. Note that this figure does not include any operational costs. iGR's \$56 billion forecast is further divided into the costs for three necessary components: RAN upgrades, cell site densification using small cells, and data centers / central offices (CO) / mobile edge computing (MEC).

iGR has recently published a new market study that analyzes 5G – an ecosystem, defined by ITU-R's IMT-2020 5G standard, that has the goal of improving the connectivity experience of the mobile consumer. The first 5G networks are likely to include some or all of the following: a virtualized mobile core over which a preponderance of traffic flows, some type of "evolved" IoT (Internet of Things) use case, and LTE-Advanced deployed along with new spectrum. In order to deliver the required functionality, iGR believes that spending will be required for RAN upgrades, cell site densification, and data centers / (CO) / (MEC).

"Implementing 5G will be an expensive task," said Iain Gillott, president and founder of iGR. "Unlike previous wireless technologies, where the costs were concentrated in the air interface, 5G will require significant investment in data centers/central offices and mobile edge computing (MEC), as well as upgrades to the RAN. The success of 5G will depend on the ability to support a wide range of low latency applications and services, as well as high bandwidth video content delivery."

*iGR's* new market study, [5G in the U.S.: What will it cost to build?](#) provides a forecast for the cost of building and deploying 5G networks in the U.S. beginning in 2017 and continuing through 2025. This forecast is only for build costs; it does not include operating costs. The study also forecasts the build costs split by the three requirements of 5G deployment: RAN upgrades, cell site densification, and MEC/data center/CO. The study provides a detailed discussion of 5G's requirements and deployment time frame, its likely use cases, as well as how U.S. mobile operators are transitioning and preparing their networks.

The following key questions are addressed in the new research study:

- What are the various 3GPP standards leading up to 5G and what are they likely to contain?
- What are some of the goals and use cases for 5G?
- What is 5G? How is it defined and/or viewed right now?
- What is in 5G? When will 5G happen?
- What are mobile operators in the U.S. currently doing with their networks?
- How close are U.S. LTE networks to 5G now?
- How will U.S. mobile operators get from their 4G LTE networks of today to tomorrow's 5G networks?
- How much will it cost to deploy 5G in the U.S.?

The information in this market study will be valuable for:

- Mobile operators
- Infrastructure OEMs
- Small cell product and solution vendors
- Backhaul service providers and equipment OEMs
- Financial analysts and investors.

The new report can be [purchased](#) and downloaded directly from *iGR's* website at [www.igr-inc.com](http://www.igr-inc.com).

## **About *iGR***

*iGR* is a market strategy consultancy focused on the wireless and mobile communications industry. Founded by Iain Gillott, one of the wireless industry's leading analysts, in late 2000 as *iGillottResearch*, *iGR* is now in its fifteenth year of operation. *iGR* continuously researches emerging and existent technologies, technology industries, and consumer markets. We use our detailed research to offer a range of services to help companies improve their position in the marketplace, clearly define their future direction, and ultimately improve their bottom line.

*iGR* researches a range of wireless and mobile products and technologies, including: smartphones; tablets; mobile wearable devices; connected cars; mobile applications; bandwidth demand and use; small cell and het-net architectures; mobile EPC and RAN virtualization; DAS; LTE; VoLTE; IMS; NFC; GSM/GPRS/UMTS/HSPA; CDMA 1x/EV-DO; iDEN; SIP; macro-, pico- and femtocells; mobile backhaul; WiFi and WiFi offload; and SIM and UICC.

A more complete profile of the company can be found at [www.igr-inc.com](http://www.igr-inc.com).

