## Global 5G: Connections and Bandwidth Model 2021 - 2026

Market Study Second Quarter, 2016





# Global 5G: Connections and Bandwidth Model 2021 - 2026

## A Market Study

Published Second Quarter, 2016 Version 1.0 Report Number: 2Q2016-03

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#### **Abstract**

In this market study, *iG*R presents a model for the global development of 5G markets from 2021 to 2026, including the number of 5G connections and the amount of data used on 5G networks.

For the purposes of this report, '5G' is defined as networks using IMT-2020. The first networks are not expected to be deployed before 2020, with the first commercial services launched in 2021.

Put simply, the first 5G services are likely to include some or all of the following:

- High bandwidth services for mobile devices, including support for HD video.
- Support for fixed wireless video and Internet services, including HD video.
- Some type of "evolved" IoT use case that goes beyond today's examples of metering, connected cars and homes, and B2B applications that connect stoves and vending machines to their owners' back-end systems – and many other examples.
- Wide-support for advertising-driven business models to support new mobile business cases.
- Support for network 'slicing' enabling mobile operators to provide private network services to third party organizations.

*iGR*'s 5G model is based on the anticipated population of each region of the world and the associated number of mobile device connections. From this, a model is prepared showing the anticipated growth of 5G in each region (North America, Latin America, Europe, Middle East & Africa, Asia Pacific and Japan) and the associated bandwidth used by those 5G connections.

Key questions addressed in this market study include:

- What is 5G? How is it defined and/or viewed right now?
- What is in 5G? When will 5G happen?
- What is the anticipated timing of 5G services based on the IMT-2020 standard?
- What are the characteristics of the core 5G services?
- How many total mobile connections can be expected in each region of the world from 2021 to 2026?

- How many of these mobile connections does the model expect to be using 5G (IMT-2020) from 2021 to 2026 in each region of the world?
- What are the main assumptions for the 5G model in each region of the world?
- What is the expected demand for bandwidth from each 5G connection in each region of the world?
- What is the total expected demand for 5G bandwidth in each region of the world?
- How are the number of 5G connections and demand for 5G bandwidth expected to increase in each region from 2021 to 2026?

Who should read this report?

- Mobile operators
- Mobile device OEMs
- Mobile service and application developers
- IoT vendors and solutions providers
- Infrastructure OEMs
- Small cell product and solution vendors
- Backhaul service providers and equipment OEMs
- Financial analysts and investors.