



Contact iGR

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## **New iGR study forecasts a growing number of Mobile Fronthaul and Backhaul Connections for Macrocells and Small Cells to support upcoming 5G**

***Study also discusses both wired and wireless technology options***

**AUSTIN, Texas, March 31st, 2017** – LTE is giving way to LTE-Advanced and LTE-Advanced Pro. 5G looms over the network strategies of mobile operators, as does the ongoing move toward CRAN, SDN and NFV. All of these factors drive the need for reliable, scalable and cost effective fronthaul and backhaul.

While most macrocells have been upgraded to fiber, getting fiber to small cell sites can be expensive and difficult. Because small cell deployments can and will vary so greatly in location, no single backhaul solution is best for them. While fiber has been the preferred solution for small cells to date, wireless backhaul solutions offer many advantages.

The main advantages for wired backhaul, fiber in particular, are: high throughput, low latency and substantial throughput scaling over time. But there are two significant challenges with fiber: it is not always where it is needed and it is relatively expensive to deploy. However, once fiber is in place, the incremental cost of adding new capacity is relatively low. On the other hand, the main advantages for wireless backhaul, as compared to fiber, are: lower cost, faster (and easier) deployment and sufficiently scalable throughput (depending on the use case and technology chosen).

iGR, a market research consultancy focused on the wireless and mobile industry, has recently published a market study that analyzes fronthaul and backhaul requirements and provides a five-year forecast for the U.S. mobile market.

"As macrocell and small cell deployments are each unique in their requirements, fronthaul and backhaul solutions must be individually designed," said Iain Gillott, president and founder of iGR. "While the type of backhaul deployed will vary, we forecast growth in the number of backhaul connections for both macrocells and small cells."

iGR's new market study, [U.S. Front/Backhaul Forecast, 2016-2021: Fiber in a 5G Diet](#), discusses the wireless and wired front/backhaul technologies available and the main market drivers for

each type of backhaul to support macrocells and small cells. It also presents *iGR*'s U.S. forecast for wired and wireless front/backhaul to support the radio access network (RAN) over the next five years. The forecast is provided for both macrocells and outdoor small cells and is further delineated by the type of technology used: fiber, copper and microwave.

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

- What is the anticipated growth of front/backhaul in the U.S. through 2021?
- What is the difference between fronthaul and backhaul?
- How is the type of front/backhaul split between fiber, wireless and copper?
- What is the forecast for front/backhaul to support outdoor small cell deployments?
- What are the major concerns of the mobile operators with regard to each type of backhaul and how can these concerns be addressed?
- What is the role for wired and wireless front/backhaul in small cell architectures?
- How is wired and wireless front/backhaul deployed?
- How do PTP, PMP, NLOS, millimeter wave and traditional microwave solutions differ?
- How do fiber (point to point and passive), VDSL2 and coaxial (hybrid fiber coax) differ?
- How does wireless backhaul compare to fiber backhaul?
- How does wireless fronthaul compare to fiber fronthaul?
- What is CPRI and how may it change?

The information in this market study will be valuable for:

- Mobile operators, particularly those servicing the U.S. market
- Mobile backhaul providers, including telcos and cable MSOs
- Wired and wireless backhaul vendors and solution providers
- Mobile OEMs, particularly those servicing the U.S. market
- Wired and wireless infrastructure vendors, particularly those servicing the U.S. market
- Financial and investment analysts.

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 seventeenth 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).