Contact *iGR*
Iain Gillott
(512) 263-5682
Iain@*iG*R-inc.com

FOR IMMEDIATE RELEASE

New *iG*R study examines the cost savings that mobile operators can expect when moving to a C-RAN architecture

Study examines in detail the evolution of the radio access network

AUSTIN, Texas, July 14th, 2014 – Cellular infrastructure, such as the radio access network, traditionally has used industry-specific hardware owned and operated by mobile operators. Software-defined networking (SDN), network functions virtualization (NFV) and cloud radio access network (C-RAN) are among the initiatives starting to break that tradition. The result is that the RAN and evolved packet core (EPC) are slowly becoming applications that can run on off-the-shelf IT infrastructure hosted by data center operators and other third parties.

The first step in the evolution of the network is the process of moving from today's conventional remote radio head (RRH) deployments, where the baseband units (BBU) are deployed at the base of the cell tower, to an architecture in which the BBUs are deployed in one (or more) centralized data centers. The next step in this evolution is to an architecture in which the baseband units are deployed in data centers and the baseband functionality itself runs in virtualized software on generic computing platforms. This eventual architecture would divorce the 1:1 ratio between baseband and RRH, and thus give mobile operators the ability to support the same number of cell sites and sectors on less hardware. This would therefore be a true cloud RAN (C-RAN) deployment in a commercial data center.

"Once the evolution to C-RAN takes place, mobile operators are likely to realize both CapEx and OpEx savings," said Iain Gillott, president and founder of *iG*R, a market research consultancy focused on the wireless and mobile industry. "They will also realize other less easily quantifiable benefits, such as increased flexibility, faster and easier upgrade cycles and the ability to deploy new services and technology in fewer physical locations."

*iG*R's new market study, *Cost Considerations for Centralized RAN and Cloud RAN,* examines the process of moving from today's conventional remote radio head (RRH) deployment where the baseband units (BBU) are deployed at the base of the cell tower, to an architecture in which the

BBUs are deployed in one (or more) centralized data centers. The market study examines the drivers, barriers and benefits of such a centralized architecture and also estimates the likely cost differences between a conventional RRH deployment, a centralized baseband deployment and a cloud RAN architecture.

The following key questions are answered in the new market study:

- What are the traditional benefits of the hosting model?
- What is the current regulatory environment and what is its impact on the hosted RAN model?
- How will the perceived loss of control of the RAN due to hosting / centralization impact the network evolution?
- What are the issues surrounding the ability of third parties to host a RAN / baseband unit rack?
- How important is the availability of fiber in the viability of centralized RAN?
- How important is the distance from the cell site to the data center?
- What are the key differences between hosted baseband and existing architectures?
- How can data centers and C-RAN support "Small Cells as a Service"?
- How can traditional central offices (CO) support centralized RAN deployments?
- What are the CapEx and OpEx costs associated with moving to a centralized data center deployment compared to a virtualized C-RAN? How do these costs compare to today's RRH deployments?
- Who are the main vendors likely to be offering data center services to the mobile operators?

The information in this report will be valuable for:

- Mobile operators
- Telecom / Datacom Equipment Manufacturers
- Tower companies
- Data center providers
- Financial analysts and investors.

The new report can be purchased and downloaded directly from *iGR*'s website at www.*iG*R-inc.com**.** Alternatively, contact Iain Gillott at (512) 263-5682 or at Iain@*iG*R-inc.com for additional details.

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 *iG*illottResearch, *iGR* is now in its fourteenth 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.