

Global Mobile Data Traffic Forecast, 2012 – 2017: The Rise Continues

Market Study
First Quarter 2013





Global Mobile Data Traffic Forecast, 2012 – 2017: *The Rise Continues*

A Market Study

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Abstract

This report forecasts global mobile data traffic for the 2012 to 2017 period. *iGR* estimates that in 2012, approximately 889,000 terabytes of mobile data traffic flowed over the world's cellular data network networks per month. By 2017, *iGR* forecasts mobile data traffic to rise to 10.3 million terabytes per month.

iGR's mobile data traffic model estimates the amount of bandwidth (in MBs) consumed by a given activity – e.g., checking email, listening to streaming music or watching streaming video, checking social sites, etc. – on a per application/use basis and then expands that estimate up to a regional view (North America, etc.) This methodology necessarily means a reliance on average values for how much bandwidth these various activities consume along with an average for how many times in a given time period an end user engages in the given activity, how many connections there are in each market, etc. Inputs for the traffic model are based on *iGR*'s survey data.

To create the mobile data forecast, *iGR* built usage profiles based on data gathered in its primary and secondary consumer and enterprise research over the past several years. *iGR* divided connections into four different categories: light, medium, heavy and extreme. A connection corresponds to a device; the number of connections exceeds the number of subscribers. For example, a mobile worker in North America might have three devices – a smartphone, laptop and a tablet. A consumer might have two (a smartphone and a tablet) or a mix of non-smartphone, smartphone, tablet, laptop and/or mobile hotspot. If these devices connect to a mobile broadband network (MBB), then they are counted as a connection.

Generally speaking, the larger the device, the more bandwidth is consumed on it. That is, a laptop connection will likely generate far more traffic than a smartphone. This is for obvious reasons – the laptop is far more conducive to heavy usage than a smartphone and is typically used in a place where the user is stationary and disposed toward consuming/generating a great deal of data traffic. The processing power and screen resolution of a typical laptop also facilitates the consumption of higher resolution and thus higher megabyte value content.

That said, the advent of streaming video and audio applications (Pandora, Netflix, HBO Go, Amazon Cloud Player, etc.), not to mention YouTube, makes consuming hundreds of megabytes on a smartphone quite easy. The key difference, of course, is that the laptop user could be multitasking among several different high-traffic applications whereas the smartphone user is typically only engaged in one, maybe two different activities. It should also be noted that many smartphones have excellent screens capable of displaying HD content. One of the drivers behind the “phablet” craze (smartphones with 5-

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inch or larger screens) is improved media consumption whether it is video, web or something else.

It should also be noted that seemingly minor changes in per day, week or month mobile data consumption can greatly impact average bandwidth consumption. For example, starting to watch a single streamed episode of a TV show per week on a smartphone could easily equate to an additional 350-500 MB of cellular data usage per month.

Key questions addressed:

- What consists of mobile data traffic?
- What is mobile data usage like today?
- How does mobile data usage change over the forecast period?
- How does mobile data usage change by user profile?
- What are the drivers of mobile data traffic growth?
- What are some differences in mobile data use by geographic region?

Who should read this report?

- Mobile operators
- Device OEMs
- Content providers and distributors
- Financial analysts and investors.