

Macro Base Stations with Fiber Backhaul to Approach 1.8 Million in 2014

In-Stat

The new generation of consumer electronic devices has made mobile connectivity a boiling-hot topic. Phones themselves are something of a gateway, enabling consumers to select the most interesting mobile content. Between mobile applications, data, voice, and video, global wireless bandwidth usage has increased ten-fold since 2008, and there are no signs of it slowing. The process by which these consumer electronic devices communicate with the content source is called [backhaul](#). [New NPD In-Stat \(www.in-stat.com\)](#) research forecasts that the number of fiber-enabled backhaul macro base stations will approach 1.8 million in 2014.

[For mobile operators the challenge is to match the best backhaul solutions with the needs of their networks. In tailoring the proper backhaul solution, operators have to balance considerations like cost and time of deployment,](#) says Chris Kissel, Senior Analyst. [At the same time, operators must leverage their existing investments, while being able to scale their networks. If the target bandwidth for a current backhaul solution is 100Mbps, five years from now the same operator may need 1Gbps at that site. Therefore, operators seek cost-effective backhaul solutions that can be scaled in the future at a reasonable cost. There is a mosaic of solutions that help mobile operators to meet these goals.](#)

Recent In-Stat research found the following:

- China Mobile estimates that 96% of its base stations have fiber-optic access.
- Cable operators can generate revenue by using all of their bandwidth in their hybrid fiber-coaxial (HFC) cable. Revenue would be derived from cable TV/data and mobile backhaul.
- In the US, a point-to-point microwave license costs US\$1,800 and expires in ten years. Licensees are entitled to 50MHz in the frequency band for which they apply.
- As it is with macrocells, fiber is the preferred backhaul medium for small cells.

[Last Mile Backhaul: The Essential Element for Successful Mobile Networking \[1\]](#) (#IN1104899GW), identifies mobile backhaul expenditures and capacities. Backhaul opportunities include infrastructure equipment, as well as service opportunities for cable MSOs, satellite vendors, and wholesalers.

The research includes the following:

Macro Base Stations with Fiber Backhaul to Approach 1.8 Million in 2014

Published on Electronic Component News (<http://www.ecnmag.com>)

- Five-year forecasts for last mile backhaul capacity by medium (microwave, millimeter microwave, T1/E1/DS3/E3 copper Lines, cable, fiber, copper over Ethernet). Capacity forecast by air interface—GSM, CDMA, HSPA, WiMAX, and LTE
- Five-year forecasts for TDM and Ethernet in the last mile
- All forecasts broken out into six regions—North America, CALA, APAC, Western Europe, Eastern Europe, and MEA
- Companies mentioned in the report: ADTRAN, Alcatel-Lucent, American Movil, AT&T, Telekom Austria Group, Avea, Bharti Airtel, BridgeWave, British Telecom, Cambridge Broadband Networks, Ceragon Networks, China Mobile, Ciena, Cisco , Clearwire, Cox Communications, Deutsche Telekom, DragonWave, E-Band Communications, Entel, Ericsson, Exalt Communications, FairPoint, GigaBeam, Huawei, Indosat, KT Corp, LG Uplus, LightPointe, Metroweb, MTS (Russia), NEC, NTT DoCoMo, Samsung, Siklu, SK Telecom, Sprint, Taqua, Telefonica, Tellabs, Togo Cellulaire, Tower Cloud, VectaStar, Verizon, Virgin Media, Vodafone, Yota, Zain, and Zayo Group.

This research is part of In-Stat's LTE & Cellular Infrastructure service, which provides analysis and forecasts of the market for wireless broadband and communication infrastructure equipment and components, including backhaul—macro, micro, pico, and femtocell basestations—and associated semiconductors.

Source URL (retrieved on 04/20/2014 - 1:58pm):

<http://www.ecnmag.com/news/2012/02/macro-base-stations-fiber-backhaul-approach-18-million-2014>

Links:

[1] <http://www.instat.com/catalog/Wcatalogue.asp?id=29#IN1104899GW>