Opportunities in Broadband Leasing

Thintri, Inc. announces the release of **Opportunities in Broadband Leasing**, a new market study that surveys growing opportunities in bandwidth leasing. The report discusses the imminent shortage of available wireless bandwidth and explores the sources of that shortage in terms of the explosive growth in wireless data traffic, and analyzes individual markets contributing to that growth in demand. Discussion of the growth and development of today's wireless networks includes new technologies such as 4G and LTE, and the offloading of data traffic off of cellular networks and onto WiFi and other types of networks. Established fixed wired broadband (optical fiber, DSL, cable) markets are analyzed, along with the leasing opportunities already established in dark fiber and wavelength services.

Finally, wireless technologies, particularly millimeter waves and TV white space, are presented with a thorough analysis of the markets available to them, in terms of both system sales and leasing opportunities.

The report separates hype from reality and assesses the dramatically changing landscape facing telecommunications providers, and the opportunities for them and others who are prepared to address the dramatic opportunities now emerging. Forecasts are supplied for demand in data traffic and systems sales, under current conditions going out to 2020.

Thintri Inc.

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Background on Opportunities in Broadband Leasing

The global telecommunications industry faces an imminent crisis in growth of mobile data traffic, and its inability to meet growing demand with the industry's present (and planned) infrastructure. Wireless carriers compete on the basis of coverage and performance, and both are at risk in the near future.

The last few years have seen the beginning of a significant shift from fixed (mostly wired) to mobile (wireless) data transmission.

Exponential growth of data traffic over cellular networks has led network operators to look at new, alternative approaches to managing congestion, because the pace of building out new networks is too slow by itself to keep up with bandwidth demand. Already the incidence of dropped cellular calls has increased markedly.

In 2010, mobile traffic was about 240,000 terabytes (TB) per month. By 2015, that is expected to grow to 6.3 million TB per month. At that rate, all the mobile traffic of 2010 will be carried in the first two weeks of 2015.

In response, carriers are adjusting their business models, expanding coverage areas, deploying 4G and LTE networks, taking advantage of picocells and femtocells to enhance available bandwidth. Most importantly, they are beginning to offload data traffic onto other networks, primarily WiFi.

It is this dire need for carriers to find bandwidth quickly where available, that has presented some unique business opportunities, which are highlighted in this report.

While basic-feature handsets still make up 88% of the mobile telephone market, and home gateways and other wireless devices will continue their traditional growth, data traffic consumption is rapidly moving to a new generation of smartphones, tablets and laptops/netbooks.

At the same time, important market drivers are making themselves felt. Education, healthcare and business, to name just a few, are rapidly moving toward greater use of mobile data.

For example, one of the greatest disruptive influences in today's mobile networks is machine-to-machine (M2M) data traffic, namely, the communications between separate electronic devices without human intervention. This "Internet of things" promises to remake a host of industries and by itself will present an enormous source of bandwidth demand, including widely proliferating wireless sensors, healthcare devices, and consumer electronics like televisions, game consoles and cameras.

Another big problem the world over is bringing broadband access to those who, because of geography, limited resources and lack of proximity to digital infrastructure, have been left behind. Internet access is inherently more difficult to bring to sparse populations due to higher costs, given the greater number of network links that are required to reach the population.

Wired solutions, preferable both in cost and performance, do not generally reach locations of low population density, which has left much of the rural population underserved or unserved.

The unserved/underserved market in the US is 3 to 6% of the population, almost all in rural locations. In many nations, the percentage is much higher. The main focus in reaching rural customers is on wireless technology, which will in many cases serve to extend existing fiber or other fixed wired networks outside their normal ranges.

Understand the Opportunities

The way out of the current crisis largely lies on a path similar to that taken by fixed wired broadband technologies, optical fiber in particular. An entire industry has sprung up around optical fiber networks offering dark fiber and wavelength services. Users are able to lease or purchase optical fiber already in place, or merely lease specific wavelengths on existing "lit" fibers or portions of a fiber cable's capacity.

Emerging technologies such as TV white space and millimeter waves will be key components in bringing a similar model to bear on wireless networks, where wireless links can be set up for the purposes of offloading wireless data traffic from 4G / LTE networks, or simply to lease capacity, or entire links, to anyone who needs it.

While these new alternatives will be employed by large carriers, they need not be.

Smaller firms, similar to those managing dark fiber and wavelength services, are well situated to offer solutions specifically designed to address the burgeoning wireless bandwidth demand.

Bandwidth leasing, in a time of crisis for today's telecommunications industry, presents an unusual opportunity for industry players and other investors. Opportunities in Broadband Leasing presents an analysis of those opportunities, relying on in-depth interviews with industry executives, market development managers and other experts. The report provides a survey of the imminent bandwidth crunch, its driving forces, the response of the telecommunications industry, a detailed discussion of potential alternatives such as TV white space and millimeter waves, markets available to those alternatives, and demand for wireless broadband leasing over the decade. Forecasts are provided out to 2020.

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