The need for mobile bandwidth in Latin America and the Caribbean is increasing exponentially. At the same time, cellular operators are searching for new ways to meet the growing demand for video and data services.

While the amount of fiber coming into the region has risen, it is being matched by the demand for data services – a trend that represents a significant opportunity for satellite. This appears to be the region’s time for an explosion of new data and video service usage via wireless devices.

The region’s market for wireless backhaul via satellite has experienced steady growth and penetration, particularly in rural and remote areas where 2G to 2.5G services have been provisioned.

Universal Service Obligations, as well as saturated urban markets, require wireless telcos to provision 3G and even 4G services in rural markets.

More than ever, major satellite operators are assisting the region’s telcos by providing services that include Internet backbone and instant, middle-mile and last-mile connectivity to local loop capabilities in areas lacking the terrestrial infrastructure to access major fiber routes. These operators provide the satellite links to help telcos complete their service offerings.

Expanding Telcos’ Service Offerings

Satellite services help telcos expand their offerings rapidly on a local, national and international scale. Intelsat services, for example, can easily be integrated to complement, augment or extend communications networks.

These services help telcos overcome geographical barriers, terrestrial network limitations and other constraining infrastructural issues. With a robust ground and space network and transmission reliability levels of 99.99 percent, the region’s telcos have long depended on Intelsat to help them deliver uninterrupted service for mission-critical applications.

Cellular Backhaul Extension

For telcos operating in areas where terrestrial capacity is unavailable, unreliable, too costly or simply not suitable for expansion, leading satellite operators offer viable solutions. For example, telcos now can bypass terrestrial network limitations and expand their wireless networks with Intelsat’s cellular backhaul service. Flexible, scalable and highly reliable, Intelsat’s solution enables telcos to expand
their coverage and reach more customers. Intelsat supports more than 60 cellular backhaul customers worldwide.

Regardless of which cellular-based service that a telco’s customers are using – from domestic and international voice communications, to prepaid accounts, roaming, wireless data, e-mail or Internet access – Intelsat’s cellular backhaul service supports it, regardless of the network protocol used.

**Ample Capacity via High-Throughput Satellites**

A new development worth watching is the emergence of several High-Throughput Satellites (HTS). These HTS will bring abundant capacity to constrained regions and are promising significantly lower costs for satellite service. This improvement will help enable mobile operators to profitably expand their services into untapped markets.

Intelsat’s entry into the HTS category is its Intelsat EpicNG platform. Intelsat EpicNG is an innovative approach to satellite and network architecture utilizing C-, Ku- and Ka-bands, wide beams, spot beams and frequency-reuse technology to achieve a major design breakthrough for increased throughput and performance. This next-generation platform delivers high performance, increased customer control of their offerings and all-region coverage.

Designed as a complementary overlay, Intelsat EpicNG is fully integrated with Intelsat’s existing satellite fleet and global IntelsatOne terrestrial network, positioning our customers for operational and business success.

Initially, the Intelsat EpicNG platform will feature two next-generation satellites. Intelsat 29e, scheduled for launch in 2015, will serve the Americas as well as mobility customers in the North Atlantic. Intelsat 33e is scheduled to follow in 2016. Combined, the Intelsat EpicNG satellites will serve every populated region in the world.

HTS delivers higher throughput at lower costs. Across the industry, it’s widely expected that HTS will significantly lower the price of capacity. That’s important when you consider that it takes much more capacity to backhaul data in contrast to voice traffic. The advent of HTS, combined with highly efficient shared IP satellite infrastructure, makes satellite backhaul of 3G and 4G traffic highly feasible.

Latin America and the Caribbean remain a strategically important market for satellite operators. The influx of new technologies creates more opportunity to develop low-cost wireless voice and data offerings.

Even though other technologies compete with satellite for market share, the growth in wireless penetration is clearly increasing demand for backhaul services based on satellite.