Vodacom Develops its Converged Satellite Service with Intelsat

The Challenge
In Vodacom’s endeavor to expand their service offerings to small and medium-sized enterprises across Africa, they needed to provide both managed and broadband services over a common existing infrastructure with varying levels of management and bandwidths. Vodacom choose to partner with a satellite company that could accommodate their existing service design requirements and scale as their customer base increased.

With the introduction of Vodacom Business Converged Satellite (VB-Sat), the company expanded its delivery of fixed wireless services through a VSAT-based offering that speeds up the process of deploying broadband services for enterprises. This move enabled Vodacom to provide ubiquitous coverage, a wide range of service plans, a clear migration path into the future and a single vendor solution.

VB-Sat is designed for enterprise, corporate, SME and government markets with centralized or distributed IT infrastructures across metropolitan or outlying areas. The solution leverages satellite broadband service plans with Hughes advanced broadband satellite routers and hubs to provide a true enterprise-grade IP networking platform. Combining technology and spectral efficiencies with uniquely designed service plans make it possible to deliver satellite-based services cost-effectively.

The network architecture consists of VSAT deployments located at customer sites that communicate via geosynchronous satellites and the main earth stations, where the VSAT hub baseband systems are located and connected to the managed Vodacom Business IP network. A typical customer site consists of a "satellite access point," which is configured with a Hughes broadband VSAT router, 120cm and 98cm satellite antennas, and a 2watt radio, connected to their local area network, primarily via an Ethernet port.

Vodacom considered multiple satellite delivery options for its VB-Sat service. Through a partnership with Intelsat, Vodacom was able to quickly launch a satellite service on their existing infrastructure with a business model that allowed them to scale their network on pace with their geographic expansions and subscriber acquisitions.

As part of the evaluation process, Vodacom reviewed the total cost of ownership that would be required for each of its go to market options including comparing up Ku- vs Ka-band deployments. The Kar-band option would have required additional investment in new infrastructure or use out-of-country or third-party teleport options. This would have limited network control, increased infrastructure investments and added to the complexity of integrating Vodacom’s operating and billing support systems.

Intelsat delivered on its commitment in assisting Vodacom to get the most out of their equipment and assets they already have in place, providing a scalable solution for both broadband and managed satellite services over existing hardware platforms, with streamlined deployment processes.

Intelsat provides scalable growth through the largest global fleet of satellites in the industry and the ability to apply the most appropriate

The Solution
Intelsat’s solution helped Vodacom transform current satellite commitments into a service model that would support a broader range of objectives, including the delivery of broadband and a managed satellite services offering access to broadband Internet and IP Talk offerings as well as MPLS VPN and dedicated Internet services.

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BENEFITS

- With Intelsat, Vodacom was able to launch its Broadband Connect Satellite service on existing infrastructure, avoiding costly capital investments process
- Future-proof architecture allows Vodacom’s infrastructure to scale over time and incorporate next-generation high throughput offerings
- Proven Ku-band technology provides the highest reliability and availability for Vodacom’s applications
- Vodacom maintains its brand and ownership of the subscribers, giving them flexibility to define the service offerings and direct management of the subscriber experience

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frequency band for the customer’s application. Ku-band’s higher availability and lower susceptibility to signal degradation and rain fade provides Vodacom with a quality edge in the market. Since the VB-Sat service was specifically targeting enterprise customers, Vodacom could rely on the carrier-grade platforms on which they had built their success in other vertical markets.

Augmenting the largest pool of capacity serving the African continent, the upcoming high throughput Intelsat EpicNG platform will also allow Vodacom to further drive down the cost per bit for services delivered. Intelsat EpicNG is designed to be backwards compatible with customers’ existing infrastructure, meaning Vodacom does not have to invest in new ground infrastructure to take advantage of the new higher throughput capabilities.

Finally, Vodacom maintains its branding and total ownership of the subscriber relationship, with complete control over the service plans and user experience. This gives Vodacom more flexibility in its service offerings, direct management of its client relationships and the ability to innovate its future offerings.

The Outcome
Vodacom has been successful in its efforts to target enterprise clientele with its managed and broadband services both locally and across Africa. Additionally, leveraging the experience of their successful implementation of VB-Sat, Vodacom has been actively helping Nigerian businesses overcome the challenges of modern information and communications technology upgrades.

Vodacom was able to simplify complexities, drive overall success in its pursuit of small to medium enterprise relationships and play a central role in Africa’s communications and technology framework expansions. With Intelsat, Vodacom was able to avoid costly capital infrastructure investments with a business model that allowed them to scale their satellite network on pace with their geographic expansions and subscriber acquisitions.