Ku-BAND COMMERCIAL BROADBAND SATELLITE SOLUTION…

A New VSAT Concept

The first iDirect VSAT we have brought to the market was a revolution: a highly integrated solution, with true dedicated bandwidth, bi-directional QoS and TCP acceleration – all inside a small satellite router. It was a quantum leap forward from prevailing DVB-RCS and legacy TDMA systems in terms of both efficiency and functionality. Today, iDirect is an acknowledged business connectivity standard worldwide. And after a decade of innovation, we've raised the bar yet again.

Meeting the challenges of a modern business requires a fast, reliable and secure connectivity 24/7. But how well do VSAT systems handle this task? With Internet traffic growing steadily, users always demand more throughput. They rely on ISPs to maintain local networks, protecting from internal and external threats all the time. Traditionally, this required on-going investments in complex IT engineering, bandwidth management, and the resulting IT staff training. Many businesses find it expensive or even impossible to keep up the chase, especially when locations are remote and hard to reach.

We have refined, re-thinked and re-engineered our approach inside and out to address these challenges. The subscriber gets a VSAT terminal that now becomes a comprehensive networking central at the remote site. Instead of just routing packets over satellite, the VSAT became smarter. Our solution delivers Layer 7 bandwidth management, optimization and PEP acceleration, NAT firewall, user authentication, accelerated VPN, fail-over, load balancing, real-time reporting and monitoring, and many other advanced networking features and services, without adding anything to the cost. In fact, the return on investment is now quicker than ever.
This managed concept has been available to high end, Enterprise-level customers, and is now bringing it to the small business market. This allows us to deploy efficient remote networks without wasting satellite capacity or investing into expensive equipment. All this makes a better broadband experience for the end users.

Smart VSAT

The new concept means a world of change in VSAT business. The subscriber can now delegate a wide range of network management tasks to the reseller, or the NOC. The satellite network became cleaner and the bandwidth abuse is a easier to identify and resolve. The service provider, empowered with an insight into their subscriber's LAN, delivers better technical support. The service provider is better immersed into client's IT infrastructure, and with the help of our NOC, the most complex networking tasks can be resolved. This includes building secure and accelerated VPN networks, supporting specialized business applications with SLA, redundant connectivity, deploying Wireless Hot Spots, and much more.

Bandwidth Management

In the core of this approach is strong bandwidth management. The VSAT now allows to deliver guaranteed level of service to customer's LAN on a per-host basis. The reseller or the NOC can control maximum bandwidth per each device in the network, as well as prioritize certain applications via QoS, in order to avoid abuse. For example, the VSAT service can be configured to allocate each PC a certain bandwidth level, and allow bursts when idle capacity is available on the satellite link. The service can be configured to support business quality Voice over IP and Video conferencing on 24/7 basis. Shaping and QoS rules can be monitored and changed at any time via Web interface by both the NOC and our partner.

PEP Acceleration

Delivering reliable uplink was always a challenge in the VSAT business. If the uplink circuit is congested then acknowledgment packets will not be able to get out of the remote network. PEP allows to reduce outbound traffic up to 90% if compared to standard HTTP and TCP protocols. This eliminates sluggish response time and speeds up Web page downloads, even with very busy uplinks. PEP also helps to mitigate packet loss effects during adverse weather conditions. All this is already included in our service costs. No changes to PC software settings required.

Billing Solution

The VSAT terminal now includes a complete Billing solution that allows to deploy WiFi Hot Spots, Cyber Cafes, Hotel networks and provide access to communities. The VSAT authenticates local users via Web interfaces and enables Internet access on a limited time basis (per hour, per day, or any other timeframe), or using traffic limits, or without any limits at all. The VSAT owner can generate and sell Internet access vouchers to local users. The solution can be set up to work with 3rd party accounting software via RADIUS protocol. Internal user management interface and database is included.

VPN

Need to deploy a VPN network? The VSAT now includes full client and server. The built-in VPN solution accommodates a wide range of configurations, including remote access and site-to-site VPNs. It supports clients on a wide range of operating systems including all the BSDs, Linux, Apple OS X, Solaris and Windows. The security model is based on the SSL and is fully accelerated via satellite. It implements OSI Layer 2 or 3 secure network extension using the SSL/TLS protocol.

Reporting & Monitoring

Built-in monitoring and reporting tools enable full understanding on how the satellite bandwidth is used at any particular remote. The terminal can report Top 20 hosts in the LAN by traffic, with charts showing bandwidth utilization over 2 day, 8 day, 40 day and 400 day periods; or real-time statistics breaking down connections by protocol, direction, source and destination IP, packet and byte rates.

Service Delivery Example

The illustration below provides an example of how Internet access service can be delivered to local users. Example prime costs, assuming 20 users
Standard 1 Hour Internet Access Voucher: $0.50 (2000 leones)
1 Day Voucher: $4.00 (17,500 leones) 1 Month,
Unlimited Access Voucher: $120
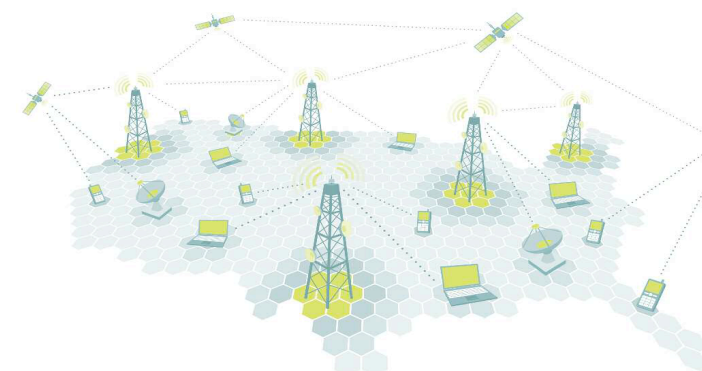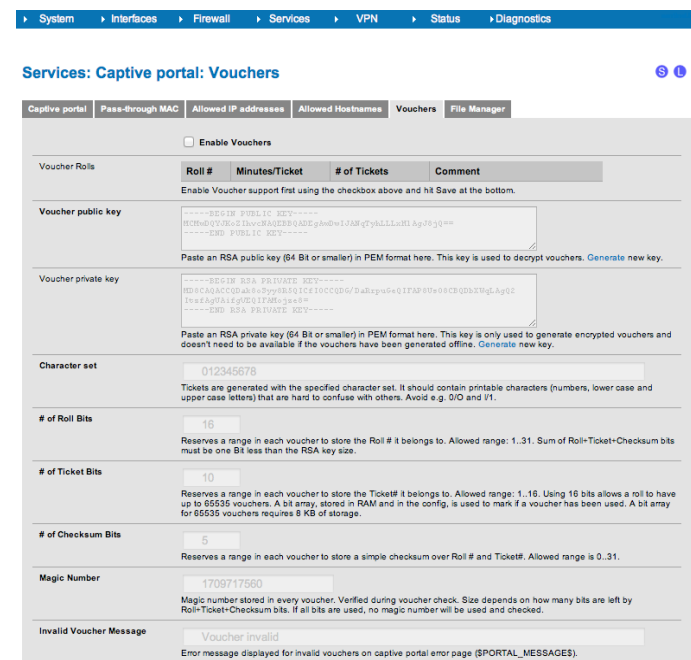
What's Included

* Unlimited Traffic (no FAP)
* SLA
* Dedicated CIR Bandwidth
* 99.5% Guaranteed Network Uptime
* iDirect PEP Acceleration and Optimization
* Web and DNS Caching
* Bandwidth Management Appliance
* VPN Client & Server
* Reporting & Monitoring Tools

Service Contracts

Bandwidth: From 256 kbps to 4 Mbps
Minimum Term: 3 month with automatic renewal
Security Depsoit: 1 month
Payment: Wire transfer in advance
Cancellation Policy: 30 business days advance notice
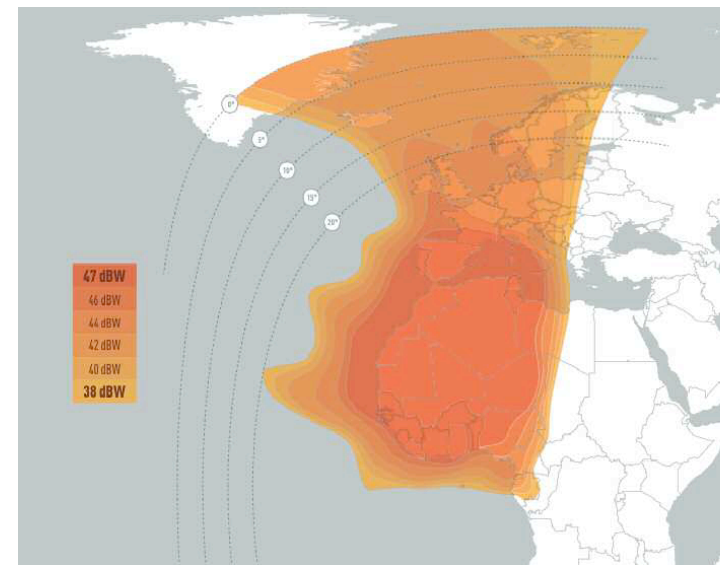
Platform Details

Platform: iDirect Evolution DVB-S2/ACM
Satellite Spacecraft: Eutelsat E21B and Telstar T11N
Frequency Range: Ku-Band
Teleport: DE1, Germany

Supported Modems: All iDirect Evolution series modems

Ku-Band FOOTPRINT

Ku-Band Satellite Pricing

West Africa Ku-Band Coverage E21B & T11N

Premium Services (80% BIR)

DOWNLOAD SPEED	512kbps	512kbps	1Mbps	1Mbps	2Mbps	4Mbps	4Mbps	8Mbps
UPLOAD SPEED	128kbps	256kbps	256kbps	512kbps	512kbps	512kbps	1Mbps	1Mbps
MONTHLY COST	$400.00	$500.00	$750.00	$1,000.00	$1,500.00	$2,450.00	$2,750.00	$5,200.00

DEDICATED BANDWIDTH

DOWNLOAD SPEED	512kbps	512kbps	1Mbps	1Mbps	2Mbps	4Mbps	4Mbps	8Mbps
UPLOAD SPEED	128kbps	256kbps	256kbps	512kbps	512kbps	512kbps	1Mbps	1Mbps
Monthly Cost	$1,175.00	$1,400.00	$2,275.00	$2,725.00	$4,525.00	$8,125.00	$9,000.00	$15,000.00

* Higher Bandwidth is Available however additional hardware may be needed (Contact your SPEEDNET AGENT for details)
** There are other Ku-Band Services Available (Contact your SPEEDNET AGENT for more details)

VSAT Hardware

SpeedNet Broadband Services VSAT Hardware Kit Includes:
* Ku-Band VSAT Antenna
* 3 Watt BUC & Ku-BAND LNB
* Ku-Band Antenna
* iDirect Evolution Modem
* Sentinel D2W Server/Access Point
* Cables/Accessories

1.2m Antenna VSAT Hardware Kit $1,975.00	
1.8m Antenna VSAT Hardware Kit $3,575.00	

Advanced NOC Support Services

The services below are optional, in case you would prefer Speednet's NOC to manage certain aspects of service configuration. The same services can be performed by the end users who are proficient in accessing the Sentinel PF Operating System. Speednet will provide free consultation to all customers.

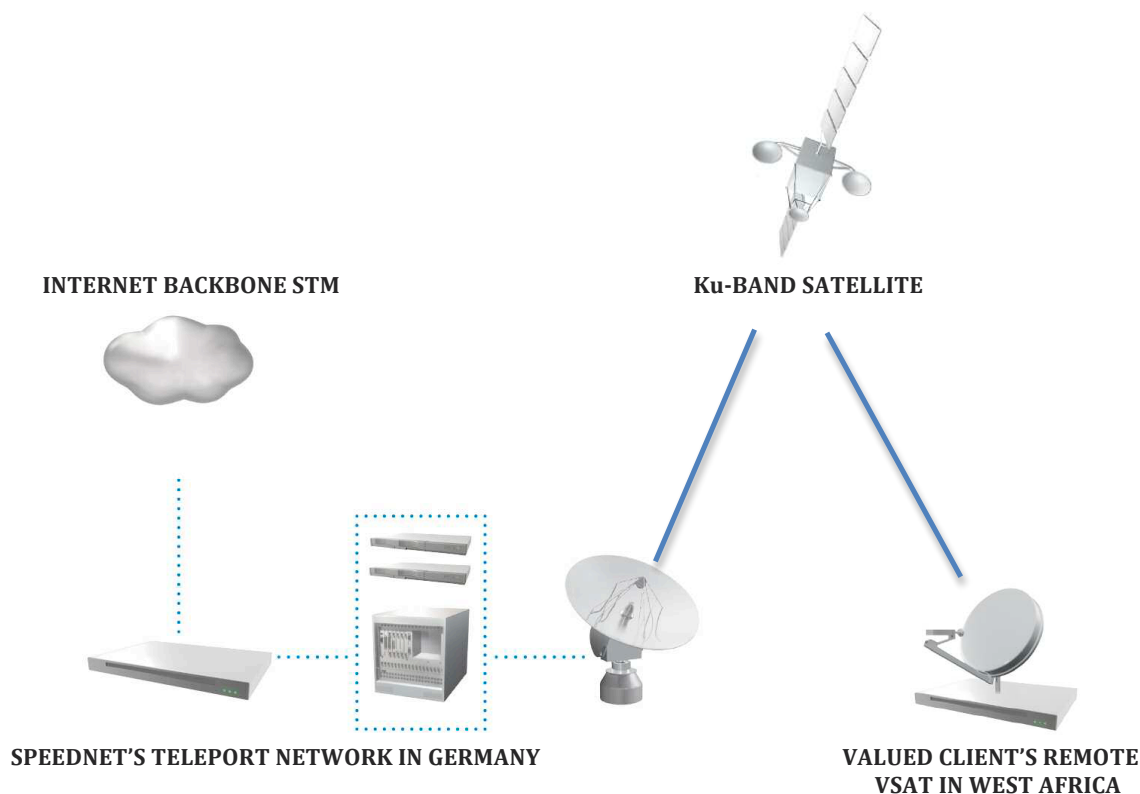| |
|---|
| **VPN Deployment** $100.00 per site |
| **Captive Portal and Voucher System Setup** $100.00 per site |
| **Bandwidth Management Configuration** $100.00 per site |
| **Miscellaneous Sentinel Configuration** Including configuration of routing, VLANs, tunneling, NAT, DHCP, Firewall, RIP, CARP (failover), load balancing and other tasks. $50.00 per h |

Optional Upgrades

Sentinel D2W Server/Access Point (Standalone) $295.00
Spare VSAT Electronics & Cabling Kit $980.00 BUC plus LNB
Upgrade to iDirect Evolution X5 Modem $550

INTERNET BACKBONE STM

Ku-BAND SATELLITE

SPEEDNET'S TELEPORT NETWORK IN GERMANY

VALUED CLIENT'S REMOTE VSAT IN WEST AFRICA

SNB COMMUNICATIONS SL LTD DBA: SPEEDNET BROADBAND
22 LIVERPOOL STREET • FREETOWN • SIERRA LEONE
Email: info@speednet-sl.com Website www.speednet-sl.com
Call us at: +232 (88) 55-55-44 or +232 (78) 55-55-44