



Scarlet B.V.

The Company

Scarlet B.V. is a Netherlands Antilles based wireless telecommunications carrier operating throughout the Dutch Caribbean. Before becoming a broadband provider, Scarlet was first an international voice company starting in 1999. It introduced broadband Internet in 2001 via a Proxim brand point-to-multipoint system operating in licensed 5.8 GHz band. Scarlet launched its flagship Scarlet One broadband service in 2005 using the Navini (now Cisco) proprietary CDMA-based system with its critical adaptive beam-forming technology. The system was converted to WiMAX™ in 2008, and operates in a 30 MHz block of the 2.3 GHz spectrum band. As of 3Q2009, Scarlet began work on again updating its WiMAX network.

Scarlet distributes Internet access services through an extensive wireless network in and around Willemstad, where 90% of the Curacao businesses and residents are located. In addition to its deployment in Curacao, it has also deployed a network in St. Maarten, and plans to build a Mobile WiMAX™ network in Aruba in 2010.

WiMAX Broadband Services Offered

Scarlet primarily targets both the residential and SMB markets with its WiMAX service. Its offerings include a variety of post-paid subscriptions with varying service levels. In addition to its post-paid model, Scarlet is offers prepaid WiMAX services by utilizing its voice softswitch to handle the billing. This means that customers can use Scarlet's prepaid calling cards to access prepaid WiMAX, thereby enabling Scarlet to use its extensive calling card distribution network. This includes over 200 established retail locations. Since initial offering of its prepaid plans, Scarlet has sold over 3,000 prepaid packages. Many Curacao residents are seasonal residents, and the prepaid plan allows them to have convenient access to broadband when they are on the island without worrying about subscriptions.

Scarlet's main device offering is the Cisco desktop CPE. Once Scarlet's current round of network upgrades is completed it plans to offer USB modems, for which it projects significant demand. It also anticipates strong demand for WiMAX-embedded laptops, which it believes is the ideal product for its market.

Wireless High Speed Internet Packages		Monthly Recurring Charges			
Scarlet One Wimax Basic		Open <input type="checkbox"/> 75	1 Year <input type="checkbox"/> 65	2 Years <input type="checkbox"/> 55	3 Years <input type="checkbox"/> 45
Scarlet One Wimax Fast		<input type="checkbox"/> 115	<input type="checkbox"/> 105	<input type="checkbox"/> 95	<input type="checkbox"/> 75
Scarlet One Wimax Faster		<input type="checkbox"/> 150	<input type="checkbox"/> 140	<input type="checkbox"/> 130	<input type="checkbox"/> 120
Scarlet One Wimax Fastest		<input type="checkbox"/> 195	<input type="checkbox"/> 185	<input type="checkbox"/> 175	<input type="checkbox"/> 165
Scarlet One Wimax Fast (Students and 60+)		<input type="checkbox"/> 95	<input type="checkbox"/> 85	<input type="checkbox"/> 75	<input type="checkbox"/> 65
Scarlet One Wimax Travelers (price per week)		<input type="checkbox"/> 75	Government Fee NAF. 10 per month		

Non Recurring Charges		Open	1 Year	2 Years	3 Years	
Modem Purchase	<input type="checkbox"/> New 295 <input type="checkbox"/> Refurbished 195 <input type="checkbox"/> PMX 375	Set-Up Fee	75	50	25	Free

Open packages are available with the minimum of 3 months * Open & Travelers packages requires NAF. 295 deposit and either credit card or prepayment in full for the entire term * Open packages available to non-residents only * Additional email account NAF. 10 per month * All prices are in NAF.

Approximately 50 - 60% of Scarlet’s current customer base uses the service on a nomadic basis, so Scarlet has accordingly built its promotional and functional strategies on offering truly mobile broadband delivered directly to the mobile device, as well as offering a reliable home Internet service. This also drives its network evolution strategy. Once current network upgrades are completed, Scarlet will use value-added bundling of voice services with broadband and TV to further compete with local ADSL. Scarlet’s target market share of the Curacao residential and SMB broadband markets is 30% by the end of 2010.

The End to End Network

Scarlet’s core backhaul network is comprised of a redundant microwave ring operating in 18 GHz from which broadband services are distributed through two point-to-multipoint wireless networks: one focused on high-bandwidth corporate users and individual super-users, and the other (its WiMAX network) focused on residential and businesses requiring 128kbps to 512kbps data delivery speeds.

Scarlet has microwave rings serving 26 sites with 60+ WiMAX base stations with sector antenna, and 3 base stations with omni antenna. Its network currently services over 10,000 subscribers.

Scarlet’s biggest network challenge (aside from its network upgrade) is adding new base stations fast enough to meet market demand. Scarlet began with just two base stations in 2005. These were located at the top of a 200 meter chimney in the center of the

WiMAX in Action:

“We operate on Caribbean islands with many personal watercrafts. WiMAX is very popular with boat operators. Also, taxi drivers plug their modems into their cars and browse the internet while waiting for fares at the airport. More development of in-vehicle mobile WiMAX solutions is needed. We developed a mockup kit in a small toolbox that can be plugged into the car cigarette lighter to create a WiFi hotspot using WiMAX backhaul.”

- Scarlet



city, and covered about 70% of the populace. It quickly found the need to install more and more, and now finds itself constantly trying to keep ahead of the demand for more coverage and more capacity.

Market Opportunity and Company Vision

Scarlet B.V. believes that convenient, immediate, personal access to broadband will rapidly become one of the foundations of developed society. By focusing on delivering mobile broadband via WiMAX, Scarlet hopes to tap into what it sees as a strong demand for anytime, anywhere access. Scarlet hopes that the WiMAX community's standardization efforts will open up the market to a host of new options in third party modems, laptops, smartphones, and other MIDs. It also sees significant benefit in WiMAX's superior modulation and quality of service for voice.

Scarlet has high hopes for roaming with WiMAX. It plans to allow roaming between its WiFi network and its WiMAX network locally, and allow global roaming with other WiMAX operators. It is expecting upcoming tri-band WiMAX radios and certification to solidify the potential for roaming between operators in the 2.3, 2.5, and 3.5 GHz spectrum bands.

For broadband, Scarlet's only substantial competition in Curacao is ADSL. Currently there is no cable company with broadband infrastructure, and there are no significant wireless operators. The two GSM mobile operators do not have a 3G offering as of yet. Scarlet's WiMAX service, particularly once its network upgrade is completed, in combination with its prepaid package is a strong competitive offering to incumbent ADSL. In the case of WiMAX, Scarlet believes that the "killer app" will be multimode devices that seamlessly integrate WiMAX, WiFi, and GSM, and are able to roam from network to network.