



BY FIERCETELECOM

► Latin America is a vast continent with wide variations in geographical and social conditions, from wealthy neighborhoods in Buenos Aires, São Paulo or Santiago, through poor hillside favelas or ramshackle coastal communities. Likewise. Latin America's telecom service providers offer a broad range of services, including everything from traditional wireline voice services to state-of-the-art wireline Next Generation Networks (NGN) services such as VoIP and a growing base of 3G wireless services.

Not surprisingly, NGN means different things to different people, with no single category of technology or strategy fitting all. Telecom operators and cable companies are eving a wide range of technologies such as VDSL/Fiber-to-the-node (FTTN), or Gigabit PON/FTTH, as well as DOC SIS 3.0, which delivers high-speed data over cable.

Most carriers in Latin America have already invested in NGN. Brazil, which accounts for almost a third of Latin America's mobile subscriber base, saw its largest fixed-line operator Oi rolling out Fiber to the Home (FTTH) in wealthier neighborhoods in the coastal city of Rio de Janeiro. Elsewhere

in Chile – which has the region's highest broadband penetration – cable MSO VTR offers IPTV while Venezuela's cable TV company NetUno is rolling out the country's first FTTH service to connect a new housing development in Caracas.

Even the region's three largest operators, Spain's Telefónica, and Mexico's Telmex and América Móvil – both which are owned by one of the world's richest men, Carlos Slim - deploy varying strategies in different countries, regions or states.

Although most of Latin America's fixed and mobile operators have implemented some form of NGN. there's still room to grow. Fixedmobile convergence and new legislation in Brazil will help to propel growth of NGN and to deliver a wealth of new services such as VolP. IPTV. games, conferencing and cutting-edge applications. Interestingly, all of these NGN deployments are creating opportunities for competitive wholesale providers to sell network connectivity into the U.S., Asia-Pacific and Europe.

In this eBook, FierceTelecom will discuss the diverse strategies, technologies and challenge Latin American service providers are facing in adopting NGNs.

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NTT America

Defining the NGN Opportunity the Traffic

NGN Roundup: **Operators Move** Carefully Ahead Industry A&D

Latin America See Cutting-Edge

Seen Boosting Competition



Defining the NGN Opportunity

BY FIERCETELECOM



► Definitions of NGN vary widely and escape easy categorization, according to those in the telecom industry. Indeed, NGN means different things to different service providers. For instance, regional players are betting on different technologies such as VDSL/ FTTN, or GPON/FTTH, as well as DOCSIS 3.0, but all share the common belief that new services will help to transform the market and generate news revenue streams. Companies are, therefore, eyeing opportunities ranging from VoIP and IPTV through to social networking and collaborative services.

Martin Creaner, a specialist at Telecom IT industry association TM Forum, said that many people think that NGN is anything in the future from 3G and 4G mobile networks to FTTH to applications and fiber-based services. The term NGN is really related to packet-based broadband with quality of service (QoS) and enabled transport for differentiated services. The term, however, has "morphed" to sometimes relate to devices such as iPhones and iPads, he said.

NGN is a kind of "hype technology" to converge a suite of services.

The definition also tells only part of the story. João Paulo Bruder, a telecom analyst at U.S. research firm IDC in São Paulo, Brazil, explained that NGN is currently like a brand new highway. "The highway is very important, but you also need good drivers and nice cars." Software companies and carriers will need to be the "drivers" to develop new services on the highway, Bruder said.

David Berrios, NTT America's manager of business development for Latin America, said NGN technology can transform the old voice network to adopt new technology, especially voice over packets and data, and open the door to new services.

Indeed, operators are assessing a wide range of new services. They include everything from VoIP, infrastructure for data centers or virtual storage, IPTV, streaming video, document sharing, and social networks, as well as initiatives such as e-health or e-education.

"In the past, operators offered primarily voice and currently they need to be more flexible," Berrios said. "The challenge with convergence is to take on all of these technologies for wireline and wireless in one pipe."

Other industry experts also see Latin America developing these new technologies close behind the U.S. and Europe. Research firm Gartner surveys show that while Latin America used to trail behind the U.S. by two to four years, this lag is currently down to one to two years, according to Elia San Miguel, an analyst at Gartner in São Paulo.

San Miguel said that NGN is a kind of "hype technology" to converge a suite of services. "The attraction for telecom operators is being able to provide access to a wide range of new services such as social networking and collaboration sites, as well as above and beyond pure voice," she said.

Directing the Traffic

NTT America Stays Strong During the Telecoms Downturn but the Business is Expanding Far from Its Home

NTT America, a wholly owned subsidiary of Nippon Telegraph and Telephone Communications (NTT), has been able to leverage its presence in Asia and its global IP network is helping it to deliver transport services across Asia, North America, Europe and increasingly South America.

With NTT America's global IP network organized horizontally across NTT Communications, the subsidiary benefits from a global team devoted to the network that spans far beyond the U.S. market.

"IP transit is NTT America's bread and butter product, it's a big part of what will help the company grow," says Michael Wheeler, vice president of the global IP network business unit at NTT America. "We truly provide the wholesale connectivity to large telco ISPs and Fortune 1000 business customers. That is really what drives the network usage for the company."

GROWING VOLUMES

The South American market is emerging as a key growth market for NTT America. Sao Paulo has the largest Japanese population of any city outside Japan and NTT America is well positioned to service this unique demographic.

NTT America is using its POPs in Miami, New York, Dallas and Los Angeles to deliver services to the South American market. Its U.S. presence acts as a bridge for traffic from Asia to Europe and most recently South America. A global network with ever increasing capacity demands across the Pacific allows NTT America to compete.

STABLE AND CONSISTENT

Wheeler notes that stability is one of NTT America's key differentiators. He says: "NTT Communications is a \$100 billion a year company. Our stability and consistency is a major selling point to the

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Fortune 1000 class of customer."

Brownlee Thomas, analyst at Forrester Research, says: "Increasingly, multinational companies are buying telecom services on a geographic basis instead of single-sourcing. This is partly due to marketplace volatility and also to the gradual maturing of the underlying IP technologies, including MPLS."

As China and India emerge as major economic powers, having a reliable provider that knows the Asian market is becoming increasingly important to companies worldwide. In the future, NTT America is certain to see increased interest from European and U.S. companies.

CUSTOMERS: The NTT Communications Global IP Network focuses sales to bandwidth intensive businesses including: ISPs, telecoms and MSOs providing consumer broadband and enterprise data; webhosting, cloud computing, DNS, managed security and other infrastructure as a service companies; CDNs, rich and streaming media, video-on-demand and IPTV; content providers with high volume of upload/download, user interactions, and sharing all forms of media.

NETWORK: The NTT Communications Global IP Network (AS2914) is a global Tier 1 IP network with direct paths, routing options, and private peering points that utilize a single autonomous system number, allowing for a ubiquitous route view worldwide. With around the globe coverage across Asia, Oceania (including Australia), Europe, North America and back, the network utilizes the most advanced routing hardware to deliver IP transit speeds up to 10GigE, with future plans to 100GigE.



NGN Roundup: Operators Move Carefully Ahead

BY FIERCETELECOM

Companies in Latin America's telecom sector have already begun to invest in various NGN initiatives. Despite the attractions, most of the main operators and players in the region are treading carefully and are cherry picking by offering their new services to a few carefully selected neighborhoods or the most attractive customers.

Caio Klein, a systems engineering manager at equipment vendor Juniper in Brazil, said that most Latin telecoms operators most developed countries. VTR competes head-to-head with Telefónica's incumbent fixed-line player Movistar with its Fiber to the Home (FTTH) deployments such as in the capital Santiago.

Outside of Chile, Spanish giant Telefónica's last mile strategy is centered around a combination of FTTH and Fiber to the Node (FTTN)/VDSL. Meanwhile, rival regional heavyweight, Telmex/ America Movil, owned by the region's richest man Carlos Slim, is centered on cable-based

"All operators are playing the game to provide services for corporate customers, but they are cautious about investing large amounts."

EDUARDO TUDE, PRESIDENT OF LOCAL TELECOM CONSULTANCY TELECO

have adopted NGN in a gradual and phased way. "Big projects are out, while small incremental projects are in," he said. In a case where a maintenance contract expires for an old technology, the company adds new switching or trunks. These projects allow both voice traffic and new services.

Chile's cable company VTR Globalcom is often viewed as one of the region's forerunners with its IPTV roll out. The company – spurred by technology friendly legislation – has deployed its services in one of the region's DOCSIS 3.0 technology outside of Mexico. In its home turf of Mexico, Telmex provides fiber to cover the last mile.

Other examples of diverging strategies and technologies in Latin America is with telecom services operator Maxcom in Mexico and Telecom Argentina S.A. in Argentina. Both are betting on a mix of FTTH, FTTN, Fiber to the Curb (FTTC) and Fiber to the Premises (FTTP). Telecom Argentina is currently integrating its traditional telephone infrastructure to NGN, which reached 590,000

new high-tech lines at the end of last year.

Alternatively, Costa Rican Internet operator Radiografica Costarricense, or Racsa, the subsidiary of state-owned operator ICE, is deploying DOCSIS 3.0. The company provides data applications such as videoconferencing, virtual private networks, VoIP services, IP multicasting and broadband internet connectivity.

Latin America's largest country, Brazil, highlights similar trends. Eduardo Tude, president of local telecom consultancy Teleco, said that operators are providing just small pieces of the NGN network. "They target corporate customers or wealthier neighborhoods with NGN solutions, he said. "All operators are playing the game to provide services for corporate customers, but they are cautious about investing large amounts."

In Brazil's fast-paced mobile phone market – which reached 179 million subscribers in March – the rush to NGN is more aggressive than the stuttering fixed-line market with around 42 million customers.

Industry participants say that Brazilian fixed line operator, Oi, which recently merged with the third largest fixed-line operator, Brasil Telecom, is often viewed as one of the most advanced players related to NGN. Oi and Brasil Telecom have made large strides in converging mobile and fixed operations to deliver data and voice across a single IP infrastructure.

Elsewhere, Spanish fixed-line telecoms giant, Telefónica, which

provides voice and broadband services in the industrial hub of São Paulo, is laying fiber in a wealthy São Paulo neighborhood.

Telefónica along with Portugal
Telecom jointly controls Vivo, Brazil's No.1 mobile phone operator.
Although Telefónica in 2007 tried
to buy Vivo outright from its Portuguese partner, the mobile operation
still remains jointly controlled. As
a result, any desire to converge
Telefónica's fixed operation in São
Paulo and Vivo remains fraught both
technical and ownership barriers.

Elia San Miguel, principal analyst at Gartner, said that the adoption of NGN won't come at once. Fixed-line operators need to invest gradually because they have already made hefty investments in legacy infrastructure across the giant country from wealthy regions and poor regions alike. "Mobile phone companies also need to pump resources into technologies such as 3G," she said.

To convince fixed-line operators to part with their expensive legacy networks, San Miguel said operators face an internal tug of war. They need to assess consumers' desiring more services and carriers' desire for more revenues with the costs of old legacy structures and new investments. "Operators want to push new services to leverage new revenues," she said.

Moreover, San Miguel adds that Latin America's fixed-line operators need to partner with new players in order to integrate their services into the world of unified computation, which gives customers a single service via fixed-mobile convergence but with a better experience.

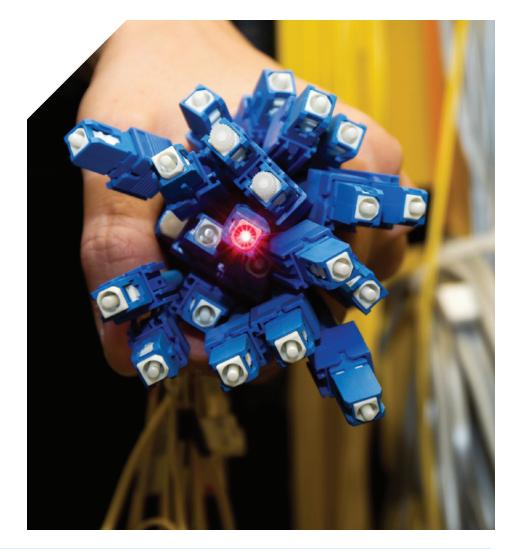
Competition is fierce between mobile operators such as Vivo, Brazil's No.1 mobile operator, and Claro the No.2, as well TIM and Oi that have been adapting their networks to provide 3G services. As a result, as mobile operators replaced their core network for voice, they have also upgraded it to IP to allow faster data transmission.

San Miguel says that NGN investment should also be boosted by rising sales technologies such as PCs and notebooks through to smart phones and mobile devices as the region's population are increasingly seeking to buy new IT equipment. San Miguel recalls that it was only a few years ago when PCs and broadband were only available to the Brazilian elite or the A and B social classes. Now government programs help to bring PCs to the homes of the new middle class,

"Operators want to push new services to leverage new revenues."

ELIA SAN MIGUEL, PRINCIPAL ANALYST AT GARTNER

C and D social classes. "The idea of mass adoption should help the trend in NGN,"San Miguel said.



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Industry Q&A

With Jose Otero, President of Signals Consulting
BY FIERCETELECOM

► Latin American service providers may be rolling out Next Generation Networks (NGNs), but they are still hampered by an outdated regulatory regime. Despite the future promise NGNs will bring, Jose Otero, president and founder of Signals Telecom Consulting, says that high speed broadband network deployments, for example, are being initially rolled out initially to high density and wealthy neighborhoods first. Fierce Telecom recently caught up with Otero to talk about his views on how the Latin American NGN market is shaping up.

FierceTelecom: Where do you see some of the most groundbreaking or advanced deployments in Latin America regarding NGN?

Otero: Chile has always been characterized for being Latin America's leader on regulatory transparency and innovation. The country's market dynamics have promoted an early adoption of new fixed technologies, as the market was largely divided among three strong players. For example, CATV operator VTR

Globalcom – considered by many as the frontrunner of bundled services in the region – is strongly pushing for the adoption of DOC SIS 3.0 services, while incumbent fixed-line player Movistar has started deploying FTTH in some neighborhoods of Santiago, the capital city. Indeed, one could argue that Telefónica uses Chile as testing ground of new technologies prior to introducing them in other Latin American markets.

FierceTelecom: What sets Chile apart from other countries in Latin America and helps to foster these advances?

Otero: Chile's technological advances are mostly due to a transparent regulatory framework with independent regulatory bodies, which is not easy to find elsewhere in Latin America. Chilean regulators understood that they could help foster competition and innovation – leading to differentiation – by not favoring any specific market player. Chile's telecoms regulations are technology-agnostic and prioritize coverage goals for all of the concession contract holders.

FierceTelecom: What is the regulatory environment like elsewhere in Latin America?

Otero: The regulatory environment in many Latin American countries tends to be restrictive. The rules often limit competition and, in some cases, show strong favoritism towards the

incumbent fixed-line operator. For example, in Mexico foreign investment in fixed services operators is restricted to 49 percent, which blocks Telefónica from becoming an integrated player. While Argentina's largest CATV operator, Cablevisión Multicanal, hasn't been permitted to offer telephony services. However, the main barrier that Signals observes in the region involves allowing fixed-line operators to offer pay-TV services without resorting to third parties. This can be observed in Argentina, Brazil and Mexico.

FierceTelecom: How do you see the status of the main operators in Latin America?

Otero: Unless they are financially crippled, telecom operators are heavily investing in NGN networks throughout the region. One needs to be cautious, however, about the immediate commercial impact of these rollouts as many players advertise the availability of residential broadband connections of 20, 50 or even promise 100 Megabits per second (Mbps). But, the reality is often very different, as initial connections to these services will only be available to a few blocks in wealthy neighborhoods or in regions with a high density of small and mediumsized enterprises. Nevertheless, we see a recurring effort from operators to approach construction firms to install fiber to reach

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NTT America



Best Practices

Martin Creaner, a specialist at industry association TM Forum, said that the term NGN is very inspirational. But often telecom operators wanted to continue with their same services after a major NGN deployment and this hindered their progress. The network should be about a complete change in the business model, he said.

Choosing where to begin is also complex. Ironically, the network isn't always the best place to start. You need to find the low hanging fruit. In the case of British Telecom it was the network, for Telstra the systems, and for Telecom Italia it was processes.

"Companies need to identify the road blocks and have a plan to migrate over the years," he said

Juan Pablo López, responsible for Alcatel-Lucent's wireline product support, said an example of a best practice is to deploy a dedicated team with field experience – from the U.S., Europe or Latin America—to create a network design to handle smooth operations. You need a clear design and clear process, as well as adequate tracking and monitoring, he said.

Also, López explained that operators need solutions to help their day-to-day operation which can measure complaints and



the operational impact. It helps to extract statistics or to know what happened regarding quality and measurements.

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buildings in multi-dwelling complexes as they are built. For instance, Telefónica and Telmex use this method across their regional subsidiaries, while Maxcom does it in Mexico and Cable & Wireless does it in Panama.

FierceTelecom: Are you seeing a strategy evolving in terms of how operators roll out NGN services across the region?

Otero: As mentioned earlier, operators are heavily investing in NGN networks. That said, it's important to highlight that most market players are following a hybrid

approach. For instance, depending on the target region, they deploy different architectures such as VDSL/FTTN, GPON/FTTH, and/or DOCSIS 3.0. Telefónica in Brazil, for example, deploys GPON/FTTH in Jardins, a wealthy neighborhood in São Paulo city but we see them leaning towards VDSL/FTTN in the interior of São Paulo state. On the other hand, Telmex is deploying DOCSIS 3.0 in many countries where it controls CATV operations such as Colombia or Peru, while opting for VDSL/FTTN and GPON/ FTTH in Mexico.

FierceTelecom: What impact do you think that the World Cup in 2014 and the Olympics in 2016

will have on investments in NGN in Brazil?

Otero: As (with) any major global event, the 2014 World Cup and the 2016 Olympic Games will trigger telecom investment in Brazil. First, Signals expects operators to focus on the cities that will be hosting games during 2014 with "pocket investments" directed at modernizing stadiums like Maracanã or Morumbi and to wire tourist areas (hotels, attractions, etc.) in order to offer high connectivity either directly or through a 4G BTS with fiber backhaul. On the mobile side. telecoms companies will place new emphasis on having 4G networks ready and roaming agreements for

advanced services in place prior to the start of these events.

FierceTelecom: What do you see as the main barriers to expanding NGN and related services in Latin America?

Otero: The main obstacle to the expansion of NGN in the region is outdated regulatory constraints. This slows investment from telecom operators throughout the region.

Moreover, we can see two main

regulatory roadblocks taking place in Latin America, such as blocking CATV operators from offering voice services or PSTN and CLECs from offering PayTV services. Some regulators still need to understand that limiting competition translates into putting a hold on technological innovation.

Finally, a recent trend in the region is the revival of import substitution policies by some governments. Countries such as Argentina, Ecuador and Venezuela have decided to enact high

"Chile has always been characterized for being Latin America's leader on regulatory transparency and innovation."

JOSE OTERO, PRESIDENT OF SIGNALS CONSULTING

taxes on imports of technological products in order to force foreign manufacturers to open assembly plants in their countries.

Brazilian Mergers & Acquisitions Helps Propel Converged Networks

BY FIERCETELECOM

Latin America's largest country, Brazil, has seen a wave of mergers and acquisitions as the main telecom companies jostle to compete for existing and new customers. As a result, heavyweight telecom operators – especially with fixed and mobile operations – see NGN as an opportunity to offer a common platform to deliver additional services, tap synergies and target burgeoning new markets.

Other players have also been snapping up smaller rivals.

Mergers include Oi and Brasil Telecom that established a

ACQUIRER	ACQUIREE	FOCUS	DEAL COST
Oi	Brasil Telecom	Wireless/ Wireline	\$3.5 billion
Telefonica	TVA	Pay-TV	No details disclosed
Vivendi	GVT	Wireline Services	\$549.4 million
America Movil	Telmex	Wireline Services	\$21 billion

national champion to fend off regional players such as Telefónica and América Móvil. Oi's wireless operation has also recently stormed into the São Paulo market to woo new subscribers. The company also controls local company, Way TV Belo Horizonte S.A..

Other players have also been snapping up smaller rivals.
Spain's Telefónica has acquired pay-television company TVA and jointly owns Brazil's No.1 mobile phone company, Vivo. Likewise, Mexico's América Móvil, owned

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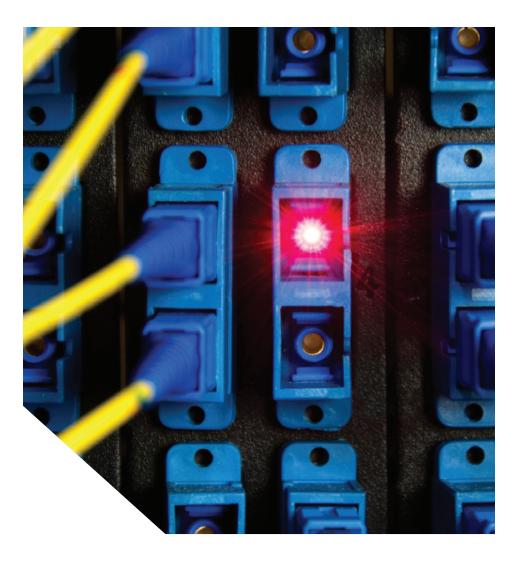
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by Carlos Slim, controls cable TV company NET Serviços de Comunicação; long distance carrier Embratel and mobile phone company Claro.

Likewise, France's Vivendi, which owns Universal Media, last year bought Curitiba-based wireline provider GVT. The French company fended off a counter bid by Telefónica to make its first step into Latin America.

Eduardo Tude, president of local telecom consultancy Teleco, said that consolidation will help to spearhead developments in NGN in Brazil. A separate fixed and mobile network is expensive, so it makes economic sense to merge the two into a single network, he explained.

Vivendi's acquisition of GVT should also further spur NGN developments. Michael Wheeler, vice president in global IP networks at NTT America, says that Vivendi is expected to provide further investment for GVT. One of the barriers to GVT was lack of capital, and Vivendi will be able to provide this.



diversified portfolio of products and solutions for conventional

Moreover, many Latin American families remain unable to pay for new services touted by operators. Gartner's user survey found that customers in Latin America often considered social networking on mobile phones too expensive.

It will be worth waiting to see what happens, he said.

Meanwhile, GVT, which operates in 75 cities, has been rolling out NGN to corporate and mediumsized customers. GVT offers a

telephony, corporate data, ISP and VoIP markets with brands such as Pop and Vono.

Alexander Montesdioca, GVT's corporate products manager, said that GVT provides a modern tele-

coms network. The network is based on a single, integrated infrastructure that supports multiple protocols, with voice, data and IP. The company has extensive last mile coverage to offer customized products with bundled telecoms and Internet-related solutions, he said.

"GVT has been steadily investing to get ready to offer services such as IPTV, once the country's regulations permit," Montesdioca said. GVT has been rolling out fiber to the home and Fiber to the Business (FTTB) as well as offering internet speeds of up to 100 Mbps. Indeed, the research firm Yankee Group esti-

mates that GVT has rolled out fiber to around 600,000 homes.

Still, despite the progress Latin America's fixed and mobile phone operators have made in deploying NGNs, many challenges remain. Michael Wheeler, vice president of global IP networks at NTT America, said fixed-line operators invested heavily in legacy networks and have existing circuit-switched network or PSTN operations. This legacy network is expensive and costly to replace. "Often operators don't have another option because the voice switches are outdated and they need to move to a new NGN network or equipment," Wheeler said. "It is also difficult to expand the old network or find spare parts. They need to change because fixed voice isn't growing."

However, Dimas Dias, Huawei's Latin America's director for access networks, argues that Latin American operators need to calculate how to attend the old traditional voice customers while simultaneously adding new services. "New technology needs heavy investment and operators are still unsure which services will deliver an adequate return on investment. Large investments are needed to bring returns," he said.

Moreover, many Latin American families remain unable to pay for new services touted by operators. Gartner's user survey found that customers in Latin America often considered social networking on mobile phones too expensive. While, even SMS – which accounts for around 80 percent of data in the region – is expensive.

Vendors in Latin America See Cutting-Edge Competition

BY FIERCETELECOM

► Telecoms industry vendors say that all of Latin America's fixed and mobile operators have implemented some form of NGN project and, as a result, the top tier of vendors is already determined. Nowadays, vendors need to be a known player with a strong track record, they say. For the handful of established vendors – whether U.S., European, Chinese or local – the market will be lucrative, they say.

Nowadays, vendors need to be a known player with a strong track record, they say.

Juan Pablo López, responsible for Alcatel-Lucent's wireline product support including NGN in Brazil, estimates that the Brazilian market for NGN equipment was worth \$50 million in 2009 compared to \$100 million in 2008 as the global economic crisis slowed sales. Driven by the need to optimize the network, this growth should return to around \$100 million in 2010, López said.

He says that you have old out-dated switching and it is vital to put in NGN to remove some of the switches. "This year we'll see more growth

after the global financial crisis last year."

The Alcatel-Lucent executive sees NGN as "a hot area." Most of the investment is typically going directly to IMS-based technologies. For instance, with support for several thousands of users, the 5060 IP call server from Alcatel-Lucent is an example of the solutions being adopted, which allows both migration from legacy equipment and convergence with different access technologies, he said.

With major international vendors such as Alcatel-Lucent, Ericsson, Cisco and Nokia Siemens through to Chinese players such as Huawei in Latin America, the market has witnessed fierce competition to coax major operators to invest in large-scale deployments.

López recalls that international vendors did early testing of NGN equipment with operators. As a result, it is already known what is needed for a successful project and who has the experience, he says. Nowadays, operators won't buy from an unknown player," he said.

According to López, Chinese vendors such as Hauwei initially made a considerable impact

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as they began to target the Latin market. It is well known that they pushed down prices. Jose Otero, president of Signals Consulting, adds that Huawei is well known for offering virtually every end-to-end solution and product to compete head-to-head against the rival global players. "Although people like to verbally 'trash' the Chinese companies' reputations and quality, they still continue to use them," Otero said.

Indeed, Chinese companies refute accusations that they offer purely low-quality, low-cost products. Dimas Dias, Huawei's Latin America's director for access networks, emphasized that they have been operating in Brazil for 10

years. The technology is known by all the main players and it is adapted to the local market. "This isn't a barrier to entry," he said.

Marcelo Motta, Huawei's technology director, adds that Huawei has worked hard to get selected on major projects such as a NGN deployment for Embratel in 2004. The company also worked with Brazil's other major operators in 2008 which were forced to change part of their networks to account for number portability. They used this change to invest in NGN, he says.

Indeed, industry telecoms vendors say that as telecoms operators or companies seek to roll out new NGN deployments, a handful of vendors such as Alacatel-Lucent, Ericsson and Huawei will be gearing up to pounce. Although price is important, nowadays customers look at more than just the lowest bid. It is therefore

"Although people like to verbally 'trash' the Chinese companies' reputations and quality, they still continue to use them."

JOSE OTERO, PRESIDENT OF SIGNALS CONSULTING

clear that whether European, North American, Chinese or local, these players need to offer top quality equipment and services that compete head-to-head on an even playing field.



Pending Legislation Seen Boosting NGN Deployments

BY FIERCETELECOM

► Latin America's telecom regulators are assessing how to adapt legislation to a wave of cutting-edge technologies, flourishing new services and competition between traditional incumbents and their rivals. Although Chile has taken a laissez-faire approach to stimulate technology such as IPTV, many of Latin America's regulatory authorities are still grappling with the changing landscape. As a result, telecom industry participants expect pending legislation to help or hinder new services such as IPTV across the region.

Martin Creaner, a specialist at industry association TM Forum, believes that evolving telecoms regulation will be the key to heavier investments in new NGN technology across Latin America. The outcome of legislation that is currently being discussed in countries such as Brazil will stimulate development. "This is especially true if it allows for differentiated services," he said

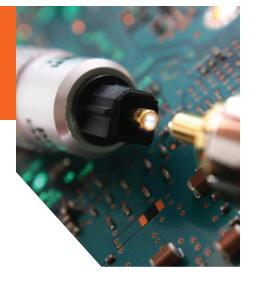
The NGN specialist believes that evolving telecom regulation will be the key to heavier investments in new NGN technology across Latin America. Creaner said that the outcome of legislation that is currently being discussed in countries such as Brazil will stimulate develop-

ment. This is especially true if it allows for differentiated services, he said.

Creaner said that Latin Americas regulators will carefully watch how legislation crystallizes in the United States. For example, in April the U.S. Court of Appeals sided with ISP Comcast, which disagreed with sanctions the FCC had slapped on it for slowing down the service subscribers who used the BitTorrent file-sharing application on its network. If operators in Latin America are allowed to somewhat restrain non-revenuegenerating services then they will be more willing to invest. But governments across the world have reservations about such restrictions, Creaner warned.

Other industry participants believe that lobbying groups need to promote common standards.

In Brazil, there is also legislation pending and industry participants expect decisions this year. João Paulo Bruder, a telecom analyst at U.S. consultancy IDC, said that new law is likely to emerge in the second half of this year to permit operators to, for example, offer video on demand.



Nonetheless, the Brazilian presidential election in October could postpone this decision.

Other industry participants believe that lobbying groups need to promote common standards. Latin American countries need a set of specifications to define how NGN will go forward. Juan Pablo López, responsible for Alcatel-Lucent's wireline product support including NGN in Brazil, recalled that in the past a wide variety of standards for switches and equipment existed and this led to confusion and high costs in the long-run. The IMS Forum is currently therefore lobbying for standards that make implementation easier and less costly, he said.

Dimas Dias, Huawei's Latin America's director for access networks, said that once new legislation permit operators to offer IPTV, then the region's telecoms operators can ramp up their investments in IPTV. New video traffic will bring more investment, he says. "IPTV will boost the decision of operators to invest more intensively," he said.

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