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DEDICATED TO PROVIDING THE LATEST INFORMATION, TRENDS, TECHNOLOGY AND FRAUD ON VOIP &VOICE BYPASS IN THE INTERNATIONAL TELECOMMUNICATIONS INDUSTRY

Telecom After The Elections

In the final days before the federal elections, most commentators are focused on what will happen when the Republicans run the House, and tighten up the margin in the Senate, if not lead that chamber as well. But even before the next Congress opens in 2011, Members have the "Lame Duck" session following the elections in which to pass legislation.

In telecom, there are several pieces of "low hanging" fruit that could be fairly easy to move onto the Floor, or perhaps be just too tempting to resist trying. In the House, Chairman Waxman has suggested he might possibly move his Net Neutrality bill to the floor, bypassing the Committee review process where his Republican Members object to the measure. However, even if he were to succeed, and his Senate counterpart were to move his very different Net Neutrality bill to the Senate floor, Republican Senators would most likely stop Chairman Rockefeller's bill in procedural rules.

There are also the non-controversial spectrum bills – the spectrum inventory and relocation bills – that have been pending for some time on both Floors, having passed out of their respective Commerce Committees. If Senate concerns on paying for the costs of federal agency implementation of the bills could be addressed, it is possible that the two bills could be passed during the Lame Duck session.

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Fixed Gives Way to Mobile in Latin America

Telecommunications is generally a high-growth industry in Latin America and the Caribbean (LAC), particularly the mobile and broadband sectors, but the fixed-line market is mostly stagnant. Telecom infrastructure varies from rudimentary or even non-existent in some of the poorer rural areas to well advanced in the major cities. Despite a low 19% teledensity (in most Western European countries teledensity ranges between 40% and 60%), fixed-lines in service have grown little since 2001, with consumers favouring mobile devices over traditional phones. In fact, Latin America's fixed-line market is even shrinking in some countries, with incumbents reluctant to invest in fixed infrastructure. New entrants using VoIP, wireless technologies, or triple play solutions are attracting a growing number of subscribers, but their market share remains comparatively small. Almost invariably, the incumbents continue to dominate the fixed line industry.

Local Loop Unbundling is rare in this region and wholesale activity not very well developed. In the broadband sector, most incumbents have secured a virtual monopoly in the delivery of ADSL access. The only broadband competition is across technologies, from cable modem and WiMAX services.

The concern many governments face is the shortage of fixed line infrastructure, tied to the fear that operators will cease to invest in their network if they are forced to unbundle their local loop or lower wholesale prices. Of course, telecom companies have done their best to encourage this fear. Nevertheless, a few governments are looking into network sharing and Local Loop Unbundling (LLU), which could boost both the fixed-line and broadband markets. The implementation of fixed number portability in several Latin American countries may also help new market entrants.

The fixed broadband options available in the region are ADSL, cable modem, wireless broadband, and Internet via satellite. Of these, ADSL has emerged as the clear leader.

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However, more likely is that the Ranking Member, and possibly new Chairman in 2011, Senator Kay Bailey Hutchison, will introduce a comprehensive spectrum bill in the new Congress.

Finally, there is the issue of universal service reform. All parties agree that the fund is broken and must be reformed. Republicans in both the House and Senate have concerns with creating a second broadband fund, while keeping a fund subsidizing voice. Both of the current Ranking Members from the House and Senate Commerce Committees come from Texas, an 85% rural state. However, the current House Ranking Member would prefer to eliminate the USF program all together, although would settle for very targeted needs-based subsidies, while the Senate Ranker is supportive of reducing the size of the fund, but not to the degree tantamount to elimination. However, all sides on the Hill agree that the Federal Communications Commission has current statutory authority to address reform, whereas the Commission itself – through a statement by its General Counsel – claims that without reclassifying broadband into a common carrier service, it does not have authority to reform USF.

Accordingly, one possible development during the Lame Duck session is to provide the FCC with clarified statutory authority to reform USF to cover broadband subsidies, but without reclassifying broadband as common carriage.

The other possible development also relates to subsidies, although of another form. The American Recovery and Reinvestment Act of 2009, which governed the almost $800 billion in stimulus funds, directed a portion of those funds – about $7 billion – to broadband subsidies, administered by the Commerce Department's National Telecommunications and Information Administration ("NTIA"). NTIA has distributed the funds, but has no current appropriation from Congress for operational funds with which to oversee the implementation of recipients' build-out plans. Much of the short Lame Duck period will be spent by the Commerce and Appropriation Committees addressing that conundrum, possibly through a Continuing Resolution, or through a more permanent appropriation.

However, even these seemingly non-controversial bills may be too much in too little time. While November 2d still leaves two full months in the calendar year, the actual Lame Duck will only be three weeks.

For the long-term, the telecom agenda and its pace is even less clear. Not only will both Committees have a large swath of new Members, but those new Congressmen and Senators will need to be educated by industry and congressional staff before telecom legislation can move in the new Congress. And the Chairmanship of the Committees is unclear at this point.

On the Senate side, industry will not know until after The First Tuesday in November who will Chair Senate Commerce – either the current Chair, Senator Rockefeller, or Senator Hutchison, if the Republicans actually do win a majority.

Every informed commentator predicts a Republican Majority in the House, but the Ranking Member of House Energy & Commerce is not likely to become its Chairman again. The House Republicans have a six-year term limit for leadership positions on Committees. When House Republican Leadership was asked by the current Ranker, Rep. Joe Barton, if only his years as Chairman prior to the Democrat take-over in January 2007 counted towards the six years, the Republican Leadership answered no – six years means six years as either Chair or Ranker. He has now submitted a waiver request, which Leadership says it will rule on after the elections. Most likely, the third most senior Republican, Rep. Fred Upton of Michigan will assume Full Committee Chair, and Rep. Cliff Stearns of Florida will be the telecom subcommittee chair. The second most senior, Rep. Ralph Hall of Texas, will likely content himself with the Chair of House Science.

Both Chambers may agree that they need to move on spectrum management policy, including on additional spectrum for public safety for interoperable broadband, as well as address cybersecurity and on-line privacy in the next Congress, but these politically complex issues will take a long time to sort out with such a large proportion of new Members - candidates who have presumably spent the last two years educating themselves on healthcare and Cap and Trade, and may want a little break before delving into incentive auctions for broadcast spectrum and universal service reform.

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Hispanics and the US Telecommunications Market

The nation's minority communities continue to grow more rapidly than the general population. In fact, the US is well on its way to becoming a "majority-minority" nation where less than 50 percent of the population will be non-Hispanic white, and the Census 2010 will reaffirm that the Hispanic demographics continue to grow at a faster rate than many other population groups. Expectations are that Hispanics will surpass the 50 million mark and that they will command over $1 trillion in buying power. The importance of the Latino youth market to telecommunications carriers cannot be overemphasized. They are the fastest growing segment of the US population, and younger people tend to have higher levels of disposable income.

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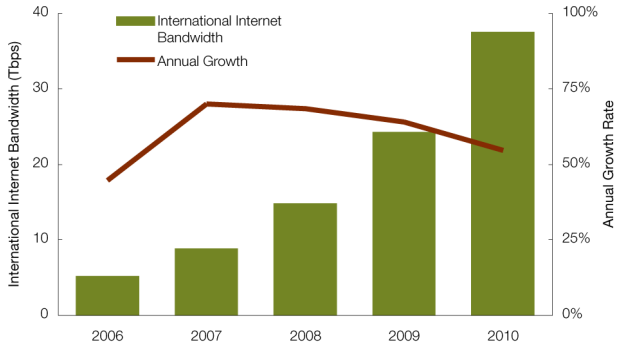
International Internet Capacity

Demand for international Internet service appears to be recession-proof. International Internet traffic and network capacity have grown rapidly throughout the deep recession and slow economic recovery of the past few years. Many developing countries experienced triple-digit traffic growth, and Internet backbone operators responded to this traffic growth by deploying vast amounts of new capacity. The strong pace of demand helped to offset the continued erosion of IP transit prices, which have declined by 25 percent per year in major hub cities since 2007. TeleGeography's *Global Internet Geography Research Service* provides analysis and statistics on Internet capacity and traffic, IP transit pricing, and backbone operators.

Internet Traffic and Capacity

TeleGeography's annual survey of Internet backbone operators tracks Internet capacity deployments as well as peak and average network traffic volumes. International Internet capacity increased 55 percent in 2010, with the addition of 13.2 Tbps of new capacity—an amount only slightly smaller than *total* international Internet capacity in 2008. Between 2006 and 2010, international Internet capacity grew at a compounded annual rate of 64 percent (see Figure: International Internet Bandwidth Growth, 2006–2010).

International Internet Bandwidth, 2006–2010



Notes: Data represent Internet bandwidth connected across international borders as of mid-year. Domestic routes are excluded

Internet service providers are deploying this capacity to keep pace with rapidly growing volumes of Internet traffic. Average international Internet traffic increased 62 percent in 2010, while peak traffic rose 56 percent. South Asia, the Middle East, and eastern Europe experienced the fastest growth. Peak and average international Internet traffic from all three regions has grown at a compound rate exceeding 95 percent. Growth in seemingly mature markets has also remained solid—for example, between 2006 and 2010, average traffic on links connected to the U.S. & Canada grew at a compound annual rate of 54 percent.

TeleGeography Update

For more information please visit TeleGeography at: http://www.telegeography.com/product-info/pricingdb/index.php

Fixed Gives Way . . . continued from page 1

Bandwidth has been increasing in most countries, leading to higher speeds and lower prices, and the fixed broadband market is expected to increase substantially over the years to 2020. With the growing awareness of how important broadband penetration can be for a country's economic development, governments are looking at ways to promote Internet access through universalisation projects and regulatory reforms.

On the other hand, fixed broadband is close to saturation in some of the region's major urban centres, while provincial towns and rural areas may end up turning to mobile rather than fixed broadband.

Indeed, mobile broadband has become an important option for broadband services throughout Latin America. The service is commonly used with either a USB modem that plugs into a computer, or with netbooks, notebooks, or laptops that have a built-in 3G receiver. In 2008/09, several Latin American mobile operators entered into agreements with manufacturers to launch mobile broadband plans with a netbook or notebook included.

Like the rest of the world, Latin America is turning increasingly towards mobile solutions and away from the traditional telephone. Actually, Latin America is well ahead of the world average, having reached 93% mobile penetration in mid-2010 against a global rate of around 73%. We must bear in mind, however, that over 80% of the region's mobile subscribers are on prepaid plans.

Many Latin American countries have passed or are close to passing the 100% mobile penetration milestone, and growth is set to continue beyond this mark. More and more people own multiple mobile accounts – either one phone for work and one for personal use, or one phone for each mobile company in order to take advantage of special offers. The growing popularity of mobile broadband also means that an increasing number of users require at least two SIM cards, one for their mobile phone and one for their USB modem.

Market highlights:

- Number portability has been launched in Mexico, Brazil, Ecuador, and Peru, and is in the process of implementation in Argentina, Chile, Colombia, Costa Rica, and the Dominican Republic.
- Telecom liberalisation is under way in Costa Rica, with the first alternative operators launching services in mid-2010 and a mobile spectrum auction to be held before end-2010.
- Telmex and America Móvil have announced plans to merge operations, creating a single regional telecoms giant capable of offering bundled fixed, mobile, broadband, and pay TV services.
- Telefónica is changing its trading name to Movistar in order to unify all services (fixed, mobile, broadband, and pay TV) under the Movistar brand, previously used only for mobile telephony.

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- Panama has become one of the first countries in the world to offer free wireless access nationwide with a speed limit of 256Kb/s, reaching 80% of the population.
- Brazil's government has been drawing up plans to spread broadband across the vast country in one of the world's largest infrastructure projects.
- A new media law in Argentina seeks to open the broadcasting market to new players, promote competition, and restrict monopolistic trends in the pay TV market.
- América Móvil and Telefónica compete against each other in most of Latin America's major economies. Between them, they serve about 62% of the region's mobile subscribers.
- For every minute spent talking on a mobile phone, the average Venezuelan sends two SMS messages.
- Driven by the shortcomings of the fixed broadband market, the growth of mobile broadband in Latin America – and especially in Brazil – has been nothing short of spectacular. The success of mobile broadband is expected to continue, especially when the faster speeds of 4G mobile (LTE) become available.

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Hispanics and the US . . .continued from page 2

Hispanics are the youngest race/ethnicity segment and, more importantly, have the largest percentage of people under the age of 18. This is a critical factor that must be taken into account by broadband providers—and especially wireless carriers as the US begins to face market saturation at nearly 89% penetration, according to the 2009 CTIA Wireless Association Survey. Today, the nation's minority population of 112.8 million is larger than the total population of all but eleven countries in the world. Forty nine of the 50 US states, including the District of Columbia, show an increase in their Hispanic populations over the year 2000. The largest and youngest minority group in America is Hispanic, and one in four newborns is Hispanic.

The past five years have witnessed an explosion in cell phone usage among children, teens and young adults. Five years ago most children and teens did not have a cell phone, texting and other multi-media applications were relatively new to the marketplace, and those that did own a cell phone used it primarily for talking to others. Cell phones as a multimedia platform were just beginning to evolve. Flash forward to the present and one immediately sees an image of a teenager or even a child glued to their cell phone, texting away feverishly, listening to music, playing games, or watching videos.

Corporate America continues to increase its marketing efforts to reach the Hispanic consumer and the Hispanic consumer is learning to buy "brand" and establish their patterns of brand loyalty.

To access the Internet, 32% of Latinos use smartphones versus 20% in the general population and 18% use gaming devices versus 11% in the general population. The evolution of the cell phone to a smartphone has morphed into a media delivery platform enabling people to not only talk and text message, but to be able to listen to music, play games, watch TV, access the Internet, and download a plethora of applications.

An extremely important trend created by the smartphone is the rapid decoupling of the Internet experience from the desktop and laptop. Associated with this trend is that minority youth are the heaviest consumers of media content via cell phones. Who are the new broadband users? Born after 1980, "Millennials" are more ethnically and racially diverse than older generations, more educated and less likely to be working and they are slower to settle down. Nearly six in 10 Millennials (61%) are non-Hispanic whites. Hispanic Millennials are 20% of the total number of all Millennials, and they represent the first "always connected" generation. Raised in digital technology and social media, they view their multi-tasking hand held gadgets almost like an extension of their bodies. Millennials are the precursor to the Census Bureau's projections that by 2050 the White (non-Hispanic) population will be the minority. Millennials already display the highest proportion of diversity in the history of the US, and Hispanics are at the forefront of this demographic shift. Millennials go online for content delivery bypassing more traditional media, such as television and movies. Media downloads and advertising is becoming the matter in which Hispanic Millennials are attaining brand product information. Media content providers and marketers must learn to create downloadable content that engages Hispanic Millennials and other Hispanics online. Moreover, how they buy their access is also changing. The current US recession is driving more wireless users to prepaid plans and services. In the fourth quarter of 2009, 65% of net new subscribers were prepaid users. There was a time when prepaid cell phone users were considered bad credit risks or as only using their cell phones sparingly. This perception cannot be further from truth as today's prepaid market grows exponentially. Prepaid, or "pay-as-you-go," service is one the wireless market's major focuses. With the increasing popularity of prepaid services, the line between prepaid carriers and the major carriers like AT&T, Sprint and Verizon are blurring. The major carriers are competing with their unlimited nationwide plans against those offered by MVNOs (mobile virtual network operators).

As a result of its Hispanic push, the Cox Cable's Hispanic customers now make up a higher proportion of its customers than they do of the general population, with bundled services proving to be particularly attractive—more than 67 percent of Cox's Hispanic customers now take two or more services. At the end of 2009, the overwhelming majority of US households, 89%, according to the CTIA, have a wireless phone and a growing number of these households are abandoning their traditional landline. In the second quarter of 2009, according to the Nielsen 2009 Communications Report, over one in five households reported that they were wireless cellular only.

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What's News in Telecom

- U.S. Cellular Adds to Its Industry-Leading Programs to Prevent 'Bill Shock' With Overage Cap, Forgiveness
- Sprint Plunges Most in Eight Months on Wider-Than-Forecast Loss
- Apple iPad Available Oct 27 from Verizon Wireless
- T-Mobile USA to Be First to Sell Samsung Tablet
- HSBC Deploys Cisco's 30 Millionth IP Phone
- SIM Card Market to Approach 3.8 Billion Units in 2010, Says ABI Research
- Telcel Mexico Launches Smart SMS Service With Acision Message Plus
- I.D. Systems Wins U.S. Department of Defense Project for Wireless Industrial Vehicle Management Technology
- Motorola cellphone unit turns profit after 3 years
- Service Industry Revenues for Mobile Enterprise Customers to Reach $133 Billion Worldwide by 2014, Says ABI Research
- AT&T Will Let Customers Buy Digital Music, Movies with Phones
- Cablevision, Rejecting Verizon's Request, Refuses to Provide FiOS TV Subscribers - and Millions of Other Viewers - Access to New York Gubernatorial Debate
- Apple to sell iPhone with embedded SIM and without carrier contract

Meet with TJT at the Capacity Central America, 1 ~ 2 December 2010, Panama City, www.capacitymedia.com/conferences-events.asp

International Wholesale Spot Rates US$ (Reflects Bypass rates)

ARGENTINA MOBILE	0.0270	↓	GERMANY MOBILE	0.0640	↓	JAPAN MOBILE	0.0560	–
BANGLADESH MOBILE	0.0190	↓	HAITI MOBILE	0.1800	↑	MEXICO MOBILE	0.0580	↑
COLOMBIA MOBILE	0.0310	↓	INDONESIA MOBILE	0.0204	–	MOROCCO MOBILE	0.1740	↓
CUBA	0.3980	↓	IRAN MOBILE	0.0490	↓	PHILIPPINES MOBILE	0.0760	↓
DOMINICAN MOBILE	0.0683	↑	IRAQ MOBILE	0.0770	↑	THAILAND MOBILE	0.0032	↓

What is VIDS

VIDS (*Voice Intrusion Detection System*) is the first auditing service to detect voice Bypass at the entry point of a network, network faults and other unfavorable traffic conditions, including SIM Box Detection.

Usually fraud detection for Bypass is after the activity has occurred and the damage is done. With VIDS – Bypass activity is detected real-time.

Fixed line and mobile Bypass (GSM, CDMA, TDMA) are detected by VIDS whether the Bypass is VoIP over VPN or VSAT.

VIDS adapts to any network with no hardware or software investment by the customer, it's a service.

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