

## HOT TOPICS IN TELECOMMUNICATIONS (Regulatory, New Offerings, New Technologies and More)

June 2008

**Time Warner Inc.** said it will completely spin off its cable business, seeking to improve performance by separating **Time Warner Cable** from the world's largest media company. **Chief Executive Jeffrey Bewkes** announced the widely anticipated decision as Time Warner released first-quarter financial results that were largely in line with the expectations of Wall Street analysts. Bewkes said he expects the terms of the cable spinoff to be completed "very soon," but revealed few details.

**Verizon Wireless** has agreed to buy **Alltel Corp.** for \$5.9 billion, which would make it by far the largest cellular carrier in the United States. Verizon Wireless also would assume \$22.2 billion in debt in the deal, bringing the total value to \$28.1 billion. The acquisition comes just seven months after Alltel was taken private by **TPG Capital** and a unit of **Goldman Sachs Group**. Alltel has 13.2 million subscribers in 34 states, mainly in rural areas away from the coasts. Added to Verizon Wireless' 67.2 million subscribers, the size of the combined company would surpass the current U.S. cellular leader, **AT&T Inc.**, with 71.4 million subscribers.

**Sprint Nextel Corp.** will turn its new high-speed wireless network into a joint venture with **Clearwire Corp.** Sprint will get more than \$3 billion in funding from companies such as **Intel Corp.** and **Comcast Corp.** for the network, which uses a technology called **WiMax**. With the funding, the venture is valued at about \$12 billion. WiMax blankets entire cities with Internet access for mobile phones and laptops, providing a wider range than today's wireless-fidelity, or **Wi-Fi**, networks. Separating the WiMax unit may remove a \$2 billion annual drain on Sprint's cash.

**HP's** bid to buy **EDS** for \$13.9 billion could shake up the IT services industry, knocking rival **IBM** out of the top spot. HP needs to handle the mega-acquisition better than previous deals, such as Compaq, and make sure the integration goes smoothly. Shifting greater numbers of EDS workers to offshore locations will be the key to success, say industry watchers. EDS is the No. 2 vendor in IT services (behind IBM), reporting \$22.7 billion in revenue for fiscal 2007.

In the wake of collapsed talks with **Yahoo**, **Microsoft** reportedly is sniffing around social-networking site **Facebook** as a possible acquisition target. Neither company would comment on the rumor. The **Wall Street Journal** reported there are no active talks between the two. **Microsoft CEO Steve Ballmer** and **Bill Gates**, chief software architect, were quoted saying Microsoft would focus on an independent strategy and won't be replacing the failed Yahoo bid with other acquisition efforts.

**Rep. John Conyers (D-Mich.)** has sponsored the **Internet Freedom and Nondiscrimination Act**, along with **Rep. Zoe Lofgren (D-Calif.)**. The legislation requires ISPs to interconnect with the facilities of other network providers on a reasonable and nondiscriminatory basis. It also requires them to operate their networks in a manner so that all content, applications and services are treated the same and have an equal opportunity to reach consumers. ISPs that do not follow these **net neutrality rules** would be subject to antitrust enforcement.

**Leap Wireless International Inc.**, the pay-as-you-go wireless operator that targets low-income customers, recalled about 285,000 phones after some failed during 9-1-1 calls. The company will provide software updates to customers who bought the \$90 Cricket EZ phone between February and March, the **U.S. Consumer Product Safety Commission** said. No injuries were reported as a result of the glitch.

**Microsoft** launched its **WorldWide Telescope**, bringing the free Web-based program for zooming around the universe to a broad audience. WorldWide Telescope, knits together images from the **Hubble Space Telescope**, the **Chandra X-Ray Observatory Center**, the **Sloan Digital Sky Survey** and others. The site lets users choose from a number of different telescopes and switch between different light wavelengths.

**Advanced Micro Devices** plans to release processors with 12 cores, which changes its product road map and kills earlier plans to release eight-core chips. The 12-core processor, code-named **Magny-Courts**, will be targeted at servers and is due for release in the first half of 2010. AMD is jumping from a six-core chip code-named **Istanbul**, due for release in the second half of 2009, straight to 12-core chips the following year. Twelve-core chips will handle larger workloads better than eight-core chips and are easier to manufacture. The shift also allows AMD to avoid competition with **Intel** in eight-core chips.

**NASA**, **Intel**, and **SGI** are teaming to crank up the space agency's supercomputing power, making it as much as 16 times more powerful than it is today. Specifically, **NASA's Ames Research Center**, Intel and SGI will work together on a project called **Pleiades** to develop a system with a capacity of 1 petaflops peak performance (1,000 trillion operations per second) by 2009 and a system with a peak performance of 10 petaflops (10,000 trillion operations per second) by 2012. **NASA's Columbia system** has a theoretical peak of 88.88 teraflops. The new power would likely bring Columbia into the top five.

**High-speed Internet access** will be returning to aircraft next year through a new service being offered by **Panasonic**. **ExConnect** should be available in early 2009 and will be the first intercontinental, high-speed Internet service available on aircraft since 2006. Panasonic's ExConnect will offer speeds comparable to public Internet hot spots and also allow airlines to feed live television into the aircraft's in-flight entertainment system.

**Qwest** signed a five-year deal with **Verizon Wireless** to market and sell Verizon's wireless services and handsets beginning sometime this summer. The two companies said the deal will give Qwest's broadband, video and voice customers access to Verizon Wireless handsets, smart phones and BlackBerry devices. Additionally, Qwest customers will be able to use Verizon's wireless broadband services for their e-mail and Internet access.

In what is sure to become more fodder for Mac vs. PC ads, **Consumer Reports'** latest tech-support survey shows that **Apple** has the best help-desk support for both laptops and desktops.

**Sprint Nextel** has announced that **WiMAX** has met its commercial-deployment standards and is due to be launched later this year. Sprint says it has been using several metrics to test its WiMAX technology, including its overall performance, its handoff performance, and its handoff delay. The tests have been carried out in the lab environment of **Sprint's Xohm business unit** and on its prototype commercial-service network that has been deployed in the Baltimore-Washington, D.C. area.

**Verizon Wireless** is throwing its support behind **mobile Linux**, becoming the first U.S. operator to join the **LiMo Foundation**, a group working to unify mobile-Linux development so that applications can run across phones with different Linux implementations. In addition to Verizon, the LiMo Foundation announced that **Mozilla, SK Telecom, Infineon Technologies, Red Bend Software, Sagem Mobiles, SFR and Kvalberg AS** are joining the group.

More than a third of the 24 agencies graded by **U.S. Rep. Tom Davis (R-Va.)** for the seventh annual report card on computer security at federal departments and agencies received F's for 2007. The good news: The overall grade of a C was up from a C- the year before.

Consulting firm **Ovum** released a study projecting that the **global market for managed services** will deliver \$66 billion in revenue by 2012. The study, which collected data from more than 1,300 users of enterprise managed services in 14 countries, projects that managed IP-based services will see a compound annual growth rate of 18 percent over the next four years. Overall, the study finds that the managed services generating the most interest among corporate users are managed metro Ethernet, managed IP VPNs, managed VoIP, and managed security. Among these, VoIP services will experience the fastest growth over the next four years with a 39 percent CAGR. The study was commissioned by **Cisco**.

**AT&T** has completed (was to have been completed by the end of June) its **3G mobile broadband network**, thus becoming the first U.S. carrier to fully deploy **High-Speed Packet Access** technology over its network. HSPA is a mobile broadband technology comprising two wireless broadband protocols, known as **High Speed Downlink Packet Access** and **High Speed Uplink Packet Access** that operate on 3G mobile devices. AT&T's HSPA network delivers data download speeds as fast as 1.4 Mbps and upload speeds as fast as 800Kbps. AT&T's HSPA services are available in around 275 markets in the United States. The company says they will be available in 350 U.S. markets by year-end.

**Sprint Nextel** reported losing nearly 1.1 million wireless customers in the first quarter, marking the sixth time in the last seven quarters that the company has lost postpaid wireless customers. Overall the company reported a net loss of just over \$500 million for the quarter.

After winning a 15-month, acrimonious battle to get **Office Open XML (OOXML)** approved as a standard by the **International Standardization Organization (ISO)**, **Microsoft** said it would add support for alternative file formats in Office 2007 by the middle of 2009. Support for the ISO version of OOXML probably will come in the same time frame as part of the next full release of Office. The **European Commission** added, "The Commission will investigate whether the announced support of OpenDocument Format in Office leads to better interoperability and allows consumers to process and exchange their documents with the software product of their choice."

The **Society for Information Management** conducts an annual survey to determine what keeps a CIO up at night. In recent years, one of the top 10 causes for worry has been **IT governance**. The timing of this issue making the list is not surprising; it closely follows the forced compliance with the **Sarbanes-Oxley Act**, as well as such other regulations as the **Health Insurance Portability and Accountability Act (HIPAA)**. SOX was enacted in 2002 in response to the numerous corporate and accounting scandals of the day. SOX spurred an increased focus on corporate governance, risk, and compliance (GRC) with laws and regulations concerned with business oversight. GRC encompasses the people, processes, and technology that organizations invest in to comply with regulations and manage risk as part of running the company effectively and ethically.

Software suites that integrate **governance, risk and compliance tools (usually referred to as IT-GRC)** are being hyped by vendors and abetted by analysts as the **next great wave of IT management solutions**. Combining these functions under one roof, IT-GRC packages promise to enable corporate management to ensure the organization is meeting enterprise risk-management goals and complying with requirements set by regulators and business partners. But just as the best financial-management systems and a bevy of auditors have not substantially stopped the flow of financial malfeasance and misconduct, this promise also will fundamentally miss the mark unless the issue of **security** is addressed. As evidenced most recently in the **Hannaford data breach incident**, in which an estimated 4.2 million payment cardholders had their trust violated through a security flaw, an organization can have a risk-management program and a compliance program and still not be secure.

**Novell** reported net income of \$5.8 million for its fiscal 2008 second quarter, pulling earnings up from a loss of \$2.8 million in the same quarter last year. The company said it showed healthy growth in its core business units around the **Linux** operating system, identify- and access-management software, and systems-management tools. Net revenue of \$236 million was relatively flat compared with the \$232 million in net revenue from the second quarter of 2007. Still, for the fifth quarter in a row, Novell's revenue numbers exceeded analyst estimates. The most exciting development during the quarter for the Linux business unit was a partnership with **SAP**, which will deliver its all-inclusive platform for small-to-midsize businesses exclusively on SUSE Linux (another Novell variation of Linux).

The **FCC** soon will vote on a plan to auction the 25 MHz piece of spectrum in the 2155 MHz band, with the winner required to use a specified amount of the spectrum to deliver **free wireless-Internet access**. The operator could choose to use any technology, but WiMAX or many of the mobile technologies would make sense in that range.

**Long Term Evolution-based services** are garnering a lot of attention in the mobile broadband industry, despite the fact that they are at least two years away from being deployed. LTE, considered by many analysts to be the next big wave in 4G wireless technology, is due to be launched commercially in 2010 by **Verizon** and **AT&T**, roughly two years after the **Clearwire** coalition's big commercial WiMAX launch slated for later this year. LTE is a modulation technique that is the latest variation of **Global Systems for Mobile Communications (GSM)** technology. GSM is by far the dominant mobile standard worldwide, with more than two billion global customers. In the United States, however, the only carriers that currently use GSM are **AT&T** and **T-Mobile**. Verizon is due to move over to the GSM side when it launches its own LTE network in 2010.

**Microsoft** has further extended the life of **Windows XP** so that computer makers can include the operating system on low-cost desktop PCs. In April, Microsoft extended its deadline for selling XP licenses for low-cost laptops, such as the **Asus** Eee PC, until 2010. Now it has also extended the deadline for low-cost desktop makers to include XP in those systems until 2010. Microsoft said the extension applies to "**nettops**," a term coined by **Intel** to refer to low-cost desktops that have limited system configurations and are intended for simple tasks such as surfing the Internet and sending email.

A **virus** that encrypts data so the victim can't unscramble it without paying a ransom has reappeared, potentially posing a major threat. **Kaspersky Lab** says the new variant of the Windows-based encryptor virus **Gpcode**, which hasn't been spotted for about 18 months, is more of a threat this time because it is using strong encryption that has defied efforts to crack it. In addition, Gpcode.ak is difficult to detect because it attempts to self-destruct after encrypting.

A new study from **ChangeWave Research** finds that while **corporate IT spending** will likely remain fairly anemic throughout 2008, there are faint signs of stabilization. Among 2,049 respondents, 11 percent said their companies have spent “more than planned” on IT spending in the second half.

**AT&T** unveiled a new set of managed encryption services designed to help companies prevent data loss and stay in compliance with electronic-storage regulations. The service package, dubbed **AT&T Encryption Services**, includes encryption for email and attachments, an email gateway that enforces enterprise security policies, tools to encrypt entire folders or network drives, and a document-delivery application that uses a trusted email standard to securely send sensitive documents. AT&T says it will centrally deploy and manage the services, and it will integrate with antivirus, antispyware, and archiving services. Pricing plans for the encryption services were not immediately available.

As **Microsoft** continues to recommend that business customers not pass over **Vista** in favor of the forthcoming **Windows 7**, the company has been working quietly to improve its software for desktop virtualization, which could in the future alleviate such obstacles as application compatibility that have plagued Vista adoption. Microsoft closed its acquisition of **Kidaro Technologies**, a desktop-virtualization software vendor, and plans to use technology from that company to create a new product called **Microsoft Enterprise Desktop Virtualization**, which the company has targeted for release in the first half of 2009. Desktop virtualization software allows a business to run an entire desktop, including the operating system, as a virtualized container on a network.

**Google’s application-hosting service** suffered an outage on June 17, highlighting one of the downsides of the new cloud-computing services. A significant percentage of users trying to access the service during that day were unable to do so because of a bug in Google’s datastore servers.

**U.S. federal government officials** are expected to declare an early victory on the **Ipv6** front. But meeting their much-heralded June 30 deadline for Ipv6 compatibility is just the opening salvo in a long-term battle to get their networks ready for the Internet of the future. Under a White House policy issued in August 2005, all federal agencies were to demonstrate the ability to pass Ipv6 packets across their backbone networks by the June deadline.

**Avaya** and **Cisco** have addressed a report that their **VoIP gear** is vulnerable to a variety of attacks. VoIPshield Laboratories found the vulnerabilities, which also impact certain **Nortel** gear. In its testing, VoIPshield found that Avaya’s Communication Manager 3.1x contained 29 vulnerabilities that, if exploited, could result in remote code-execution, unauthorized access, denial-of-service and information harvesting. Cisco’s Unified Communications Manager versions 5.x and 6.x, as well as Call Manager 4.x, were affected by 12 vulnerabilities. Nortel’s Communications Server 1000 4.50x, Multimedia Communications Server 5100 3.x, and SIP Multimedia PC client 4.x were cited for four vulnerabilities. Avaya is issuing advisories to customers and providing service-pack updates. Cisco is releasing software updates that address the vulnerabilities. Nortel did not respond to questions about its response to the VoIPshield warnings.

**Nokia** announced that it had agreed to purchase **Symbian** and open source some of the code in the widely used Symbian operating system for mobile phones. Nokia’s partners in the original Symbian joint venture, including **Sony**, **Ericsson**, **Motorola**, and now **AT&T** and **Samsung**, are launching a foundation to unite all of the current platforms based on the Symbian universe, including the S60, UIQ, and MOAP(S) mobile platforms.

**Yahoo Inc.**'s management ranks are rapidly thinning as the Internet pioneer fends off a shareholder mutiny threatening to culminate in the firing of **Chief Executive Jerry Yang**. Three more executives have decided to jump ship, according to reports published by two blogs and the **New York Times**. The company already had lost four prominent leaders in the past week. Spurred on by shareholders upset with Yahoo's handling of the **Microsoft** negotiations, activist investor **Carl Icahn** is campaigning to oust the company's board in an Aug. 1 election.

Incriminating messages that two indicted former **Bear Stearns Cos. Hedge Fund** managers allegedly sent show even sophisticated professionals disregard dangers of putting sensitive information in emails, an ex-prosecutor said. "It is pretty dumbfounding that people still use email in such a casual way," said **Carl Bruce**, a former federal prosecutor now with a Washington law firm. **Ralph Cioffi, 52**, and **Matthew Tannin, 46**, were charged with misleading investors. Their indictments cited emails in which the men described looming problems in their funds.

**Google** said it's on schedule to deliver the first mobile phones that run on its **Android operating system** by the second half of this year. Google is developing Android – which will let users check email, search the Web, and watch videos on their phones – to compete with systems offered by **Microsoft, Apple**, and **Research In Motion Ltd.** Android-based phones might not make it onto the market until the end of 2008 or sometime next year.

**Connie Browning**, president of **AT&T Ohio** for the past six years has stepped down in order to begin working as an "AT&T loaned executive" for the **Susan G. Komen Race for the Cure Foundation** and the **James Cancer Center at Ohio State University** in Columbus. Browning will remain on AT&T's payroll, but primarily work on initiatives of those organizations. **Thomas C. Pelto**, regulatory vice president for **AT&T Texas**, will take over her role overseeing the company's regulatory, legislative and community affairs activity in Ohio.

A federal appeals court upheld the **FCC's** authority to set rules meant to make it easier for new cable TV competitors to gain local franchises. The FCC overstepped its authority, the local governments argued in a series of lawsuits that were consolidated in the **6<sup>th</sup> U.S. Circuit Court of Appeals** in Cincinnati. A three-judge panel ruled unanimously for the FCC, which it said provided evidence that the local franchising process was "unreasonably impeding competitive entry into the cable television market."

**U.S. FCC Chairman Kevin Martin** is recommending his agency approve **Sirius Satellite Radio Inc.**'s purchase of **XM Satellite Radio Holdings Inc.** The only two U.S. pay-radio companies agreed to not raise rates and to sell smaller packages of channels at lower prices.

If ever a Web trend was destined to be a hit on mobile phones, it was **social networking**. That's just the sort of thinking that's driving **Facebook** and **MySpace** users to mobile versions of the popular social networking services and, at the same time, leading entrepreneurs to ramp up efforts to create newfangled social networking hot spots meant just for phones. The runaway hit among the phone-centric social networking spots is **Twitter**, a service that's all about sharing telegraphic status updates ("Eating a yummy burrito," "Stuck on the train"), but it's far from the only one. And what do these services provide? That varies, but you generally have an always-on, easy-to-access way to keep tabs on your buddies, zap photos and messages to them, view their profiles and status updates, and maybe even track down their current locations – all with an interface designed for the phone. In the end, all social networking will inevitably become **mobile social networking**.

**AT&T** said it is moving its corporate headquarters to Dallas from San Antonio for easier access to customers and operations around the world. AT&T said the move would begin within weeks and is expected to be complete around the end of the year. The move will put AT&T closer to many of its technology suppliers and help cement the Dallas area as a telecom hub. **Nokia, Nortel Networks, Ericsson** and others have major operations there.

**Yahoo** agreed to let **Google** sell some of the advertisements it runs alongside Internet searches, seeking to shore up sales after ending talks with **Microsoft** about a combination. The deal may add \$800 million a year to Yahoo sales. The companies will delay implementing the program for up to 3 ½ months to give the **U.S. Justice Department** time for review.

The chairman of the **FCC** laid out a plan to regulate the **high fees that cellular phone companies charge** consumers for canceling their contracts early. Martin's plan would require the fees be related to the actual cost of the phones. A fee for a \$50 phone would be higher than for a \$5 phone, he said. Martin said such fees should be prorated, or reduced over the time of the contract. The chairman also said the contract should be a "reasonable length of time" and extension of contracts should not necessarily include a renewal of the termination fee. Finally, he said consumers should have a chance to examine their first bill before they are subjected to the fees.

**IBM researchers** believe that sloshing water through hair-thin pipes inside chips will solve a vexing problem facing next-generation computers. That problem is **heat**. In a future microprocessor design IBM is exploring – in which chips are stacked vertically to save space and enhance performance, rather than arrayed next to each other – the heat-to-volume ratio exceeds that of a nuclear reactor. To address that, IBM researchers say they could pipe water in between chips that are sandwiched together. The system, which IBM planned to explain at a technical conference, uses pipes that are just 50 microns wide – 50 millionths of a meter. The tiny tubes are sealed to prevent leaks and electrical shorts.

**Microsoft** continues to sign up partners to support its mission to create an online repository for patient information. The company announced a partnership with **AT&T** and **Compuware subsidiary Covisint** to set up an Internet-based information exchange between the companies' e-health systems. The deal is similar to a pilot set up between Microsoft and **Kaiser Permanente** earlier to share data between **HealthVault**, Microsoft's central repository for patient health records, and **Kaiser's My HealthManager e-records systems**. Microsoft's HealthVault acts as an online storage system for patient information; patients have the power to choose what information they want to store in the vault and make available to physicians and health care providers. The success of HealthVault depends on third parties, such as hospitals and insurance companies, being willing to open up protocols to their own information systems to communicate and store information with the system.

We could see some strange new **Web URLs** in the future, now that the group that oversees them has changed the rules. Now, people can apply for any domain extension, instead of sticking with the familiar, ".com" or ".org". For example, **Coca-Cola** could use ".coke" in its URL, or **Yahoo** could apply for the ".yahoo" domain. Direct navigation may become a relic of the Internet, however, when companies start throwing all kinds of domain names at us like "drink.bud," "kodak.camera" or "shop.ebay." And that could be good news for **Google**, because it'll all be so confusing that we'll have to rely on search engines even more to get us to the Web sites we want. The new domains will cost at least \$100,000.

The company at the bottom of the customer-service heap is **Time Warner's AOL**. A remarkable 47 percent of people who had an opinion of AOL's customer service said it was "poor." Analysts said that rating may have something to do with its effort to transition from an Internet service provider – where it still has more than 9.3 million paying subscribers – to an ad-supported Web portal. Other telecom companies in the top 10 are **Comcast, Sprint Nextel, Qwest, Time Warner Cable, and Cox Communications**.

**AT&T** will roll out a **new digital phone service** to much of Northeast Ohio that allows customers to manage voicemail, contacts, and call history from a television set or computer. It's the latest addition to the company's set of **U-verse** services that run over its new multibillion-dollar data network. AT&T began offering television and high-speed Internet service in the region over the mostly fiber-optic network last year. The new phone service will be \$30 or \$40 a month for a 1,000-minute or unlimited calling plan, respectively, and is only available to those who also buy U-verse television service.

Talking on a cell phone while driving? Don't do it with a handheld device in California or Washington state starting July 1. Those are the **latest states to ban drivers from using handheld phones** – joining Connecticut, New Jersey, New York, Utah, and the District of Columbia. In California, cops will be able to pull over any driver caught holding up a phone, issuing a ticket that could total \$100. In Washington, drivers must also be committing some other offense to get the \$124 ticket.

Civil liberties groups and telecommunications industry representatives are up in arms about a suggestion that the **U.K. government** wants to keep track of every phone call, e-mail, and Web site visit made in the country. The U.K. government is preparing new telecommunications legislation that it says is necessary to deal with changes in the way we communicate, including the use of e-mail, instant messaging, blogs, and social network sites.

**XO Communications** has expanded the reach of its **Ethernet services** to include more than 500,000 businesses in 75 major metropolitan markets. The Ethernet expansion will improve its ability to deliver dedicated Internet access, converged IP and MPLS-based IP-VPN services, all of which can use Ethernet for network access. Currently, XO offers Ethernet services at speeds from 10M to 10Gbps through an 18,000-route-mile fiber-optic network.

A divided **FCC** has put a cap on **Universal Service Fund (USF)** payouts, but even the agency's majority calls it a stopgap measure for a program in serious trouble. Most analysts agree that the USF has to move from subsidizing conventional telephone service to helping extend broadband use to the nation's low-income and rural consumers.

**Deutsche Telekom** is said to be looking at a possible purchase of **Sprint Nextel**. Managers at Deutsche Telekom are reportedly studying different options such as a takeover or a merger. A decision has not yet been made.

**Nortel Networks** posted a bigger first-quarter loss as a series of charges weighed on results, but the telecommunications equipment maker reassured investors that it still expects to meet its full-year targets. Nortel reported a loss of \$138 million (\$1=\$1.02 Canadian), or 28 cents a share, compared with a loss of \$103 million, or 23 cents a share, a year earlier. Revenue was \$2.76 billion, up 11.1 percent. "The financials were very much better than people expected," said **Edward Snyder**, principal analyst at **Charter Equity Research**.

**FCC Chairman Kevin Martin** announced that **Wilmington, North Carolina** will be the first market to test the transition to digital television (DTV) in advance of the nationwide transition to DTV on **February 17, 2009**. The commercial broadcasters serving the Wilmington television market have voluntarily agreed to turn off their analog signals at noon on September 8, 2008. Beginning at 12:00 pm on September 8, 2008, these local stations will broadcast only digital signals to their viewers in the five North Carolina counties that comprise this television market.

**Vonage** is teaming with **Covad Communications Group** to offer a bundle of voice-over-IP and broadband services in an effort to compete with the triple and even quadruple bundles of telecoms and cable companies. The new service is expected to be rolled out by the end of 2008. Vonage will offer Covad DSL services with maximum download speeds of 3M bps to 6M bps for both residential and small business customers. The service will be known as **Vonage Broadband**.

**NEC Corp**, Japan's biggest maker of telecom network equipment, doubled its quarterly profit, helped by cost cuts and a healthy IT services business, but its outlook for the current year missed expectations.

According to a new **ABI Research study, 802.11n WiFi** will grow from 2.3 percent deployment at North American universities today to 99 percent availability by 2013. Primary and secondary schools will see slightly less, but still robust growth, over the same period.

And, finally, some important news on the **TRS** front. The **FCC** has taken important steps toward providing Americans with hearing and speech disabilities with access to the telephone network that is "functionally equivalent" to voice telephone services. **Telecommunications Relay Service (TRS)**, and newer, Internet-based forms of TRS, including **Video Relay Service (VRS)** and **Internet Protocol (IP) Relay**, allow persons with hearing and speech disabilities to communicate with hearing users of voice services. The Order adopts a system for assigning traditional ten-digit telephone numbers to Internet-based TRS users. This means that Internet-based TRS users will be able to reach and be reached by both hearing users of the traditional telephone network and other Internet-based TRS users by dialing a ten-digit phone number. Internet-based TRS users will also be able to port their numbers from one provider to another, and users will be able to use any Internet-based TRS provider they choose. In addition, to ensure that Internet-based TRS users have functionally equivalent access to emergency services, the Order requires providers to obtain and maintain the physical location of their users and to automatically route emergency calls from Internet-based TRS users to the appropriate emergency services authorities using such information.

**Respectfully submitted,**

*Doug*

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