

# ExchangeAsia

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## India

### **Mobile operators to oppose three, 3G licence plan**

***Mobile operators are likely to fiercely oppose the government's move to allow only two private operators apart from BSNL/MTNL in the 3G space, according to the Times of India.***

The newspaper reported on 29 March that the Telecom Commission intended to auction licences to only three operators in 3G, with an initial allocation of 10MHz spectrum each rather than six operators with 5MHz each. It has also proposed that one of these three operators should be state-owned BSNL/MTNL, which will be required to match the highest bid from private operators when the auction occurs.

This development leaves at least four of the existing six operators and nearly all of the new operators without 3G spectrum. This, the Times said, is "a fearful thought for companies whose valuation and growth is acutely linked to the availability of spectrum in 2G and migration to 3G."

The paper quoted a number of operator executives speaking on conditions of anonymity. According to one, "The government's 3G proposal is both flawed and totally inconsistent with its policy of open competition in the 2G arena. How can the country have up to 12 operators per circle in 2G and merely three operators in 3G?"

"Experts feel that a combination of MHz-10MHz in 2G with 5MHz in 3G would be an ideal and in fact, potent combination for many operators," The Times said.

## Thailand

### **Thailand first in Asia to get quantum cryptography**

***Thailand will become the first country in Asia with Quantum encryption capability following the purchase from Australian company Senetas Corporation of its Cerberis hybrid quantum encryption technology.***

The National Electronics and Computer Security Center (NECTEC), part of Thailand's National Science and Technology Development Agency, will establish a quantum encryption training and demonstration centre of excellence for Thai government and business at its campus in Pathumthani, near Bangkok.

Senetas and its Quantum technology partner, idQuantique, will provide initial training in classical and quantum encryption, and will host a seminar series for Thai business and government agencies on the importance of information security. Senetas CEO, John Du Bois, said he believed the opportunities for sales of Senetas technology in the Kingdom were growing.

"The Bank of Thailand recently reporting economic growth running at six percent and with the new Thai government expected to continue investing in major infrastructure to improve industrial competitiveness, the business climate is certainly positive. As Thailand further integrates into global supply chains for banking, insurance and manufacturing, the need to actively demonstrate a commitment to the security and veracity of data flowing over networks between suppliers and multinational customers is crucial. We congratulate Thailand on seizing the initiative to implement world-leading information security in the region," he said.

Principal researcher and head of NECTEC's optical and quantum communications Laboratory, Dr Keattisak Sripimanwat, said the facility "will be a part of our technological development platform that will support industrial partners to familiarise and train them on information security with this kind of modern technology. It will also provide Thai academia with an encryption R&D test bed."

Senetas' technology combines classic key encryption in its Layer 2 hardware devices with the latest developments by Senetas' Swiss partner idQuantique in which quantum physics theory is applied to secure critical data, and to immediately detect any disturbance to information transmitted using individual photons.

The company claims that "The combination of classic and quantum cryptography makes it possible to achieve an unprecedented level of security while leveraging the high-speed data throughput of Senetas CypherNet."

## **Nortel & Loxley to trial mobile WiMAX**

***Nortel and Loxley have announced an agreement to demonstrate mobile WiMAX wireless broadband services including VoIP, high-definition video streaming and other interactive applications.***

It will be the first WiMAX trial for Nortel in Thailand. Loxley intends to roll out WiMAX services once commercial licenses are awarded by the Thai Government. "We believe that service and product innovation are key to differentiating us from our competitors and will give our customers what they demand," said Mr Sith Chokpipatpaiboon, senior vice president, Loxley.

"We selected Nortel for our WiMAX trial because they have a high-performance WiMAX solution that will help deliver mobile multimedia services - spanning voice, data, video and interactive applications - which are currently not available to customers in Thailand. The trial with Nortel will clearly demonstrate the range of higher-bandwidth applications that will come on stream as Thailand moves toward the next-generation of wireless broadband services."

## **Japan**

### **Orbcomm ramps up Japanese presence**

***Orbcomm, a global satellite data communications company focused on providing two way machine-to-machine (M2M) communications, has completed the acquisition, through its wholly-owned subsidiary, Orbcomm LLC, of a 37 percent stake in Orbcomm Japan.***

Orbcomm Japan is Orbcomm's representative in Japan and the owner of a gateway earth station in Japan. Orbcomm LLC plans to acquire additional shares, increasing its ownership in Orbcomm Japan to a controlling 51 percent. According to Marc Eisenberg, Orbcomm's CEO, "This is a valuable opportunity for us to seamlessly provide Orbcomm's services to new and existing customers in Japan, and to international value added resellers that operate in Japan."

The Japan gateway earth station is the terrestrial link to Orbcomm's network of low-earth orbit satellites and impacts the quality of service in that region. Orbcomm provides low-cost, near real-time, two-way machine-to-machine (M2M) satellite communications in Japan and surrounding countries. Orbcomm says the acquisition of Orbcomm Japan will make it better able to ensure the best possible level of service in Japan and surrounding countries serviced by the earth station.

Orbcomm's initial 37 percent stake in Orbcomm Japan was acquired through the conversion of a portion of the debt owed to it by Orbcomm Japan. Orbcomm expects to increase its stake to 51 percent when it executes a country representative agreement for Japan, which will replace the existing service license agreement Orbcomm Japan presently has with Orbcomm, which is due to expire in June 2008.

In addition, Orbcomm anticipates that the terms of the new country representative agreement will enable it to market its services directly to its international value added resellers in Japan which was not the case under the existing license agreement.

## Hong Kong

### **SmarTone-Vodafone picks Ericsson for HSDPA & MBMS**

***Ericsson has been selected by mobile operator SmarTone-Vodafone to be the sole supplier of a HSPA-enabled radio access network, including multimedia broadcast multicast service (MBMS), that will enable mobile-TV services to be broadcast.***

The deal also includes a fully IP-based core network, including IP Multimedia Subsystem (IMS), Ericsson's mobile softswitch and Redback Network's (an Ericsson subsidiary) SmartEdge routers. Ericsson will also be responsible for a range of professional services including network design, systems integration, spare parts management service, support services and network deployment and integration.

According to Ericsson, "The network enhancements will allow SmarTone-Vodafone to cost-efficiently introduce more new services and to further increase broadband speeds to support more advanced video and mobile applications over time."

Ericsson has a 16 year long relationship with SmarTone and is the sole supplier of SmarTone-Vodafone's core and radio networks, including GPRS and WCDMA/HSPA.

## New Zealand

### **Telecom NZ separation to go ahead**

***New Zealand's communications minister, David Cunliffe, has finally accepted amended operational separation plans put forward by Telecom NZ, just a day before 'Separation Day': 31 March.***

Cunliffe said the Commerce Commission would be responsible for "ensuring full, timely and effective implementation of the approved undertakings and this process will be rigorous...Our strategy is to improve market conditions to increase competition, innovation and investment to support New Zealand's transformation to a stronger, more productive knowledge-based economy and society."

He added: "While today is a significant step forward for the telecommunications sector it is not the end of the road for enhanced market competition. Work will be ongoing in the Telecommunications Service Obligations, the broadband pathway, the Digital Strategy refresh and several other regulatory matters."

Telecom NZ CEO, Paul Reynolds, said: "[The Ministry of Economic Development] and Telecom people have worked tirelessly on the detail of the [operational separation] undertakings for close to a year and as a consequence of thousands of hours of conversations, we have a clear understanding of both the words and the spirit of the undertakings...The milestones attached to the Undertakings are challenging but achievable. Meanwhile Telecom New Zealand's people have hit the ground running, with a number of very large infrastructure investment projects in train....A central feature of the Undertakings, our commitment to the accelerated rollout of a world-class fast broadband network, is already under way. Installation by our Chorus networks business of the 3,600 roadside cabinets that are the building blocks of this network is happening now."

Telecommunications Users Association of New Zealand (TUANZ) CEO, Ernie Newman, said: "We welcome the very positive approach Telecom has taken to these changes, driven by chairman Wayne Boyd and chief executive Dr Paul Reynolds. These sweeping changes have been made much easier by their very collaborative attitude, which augers well for New Zealand and for Telecom as we move ahead."

The Internet Society of New Zealand (InternetNZ) executive director, Keith Davidson, said that, if Telecom followed the spirit of the approved separation plan, it should

provide a robust framework for the future of broadband telecommunications in New Zealand. "Thee plan appears to contain strengthened requirements on Telecom compared with the version released in February, and InternetNZ is pleased that the minister and Telecom have been able to resolve a range of outstanding issues that prevented the earlier adoption of operational separation...The separation plan is legally enforceable and we hope that there will be little need for the Commerce Commission to intervene to enforce the requirements of the separation."

InternetNZ and TUANZ had earlier voiced significant concerns with the initial and second draft plans submitted to the minister by Telecom NZ, and rejected. Both organisations were particularly concerned that incentives for senior execs in the separated units were too closely tied to the performance of the organisation overall, and that there were many minor loopholes in the plans which could be exploited by Telecom NZ to undermine the intent of operational separation.

## Vietnam

### **CDMA user numbers surge**

***The CDMA Development Group (CDG) says that CDMA user numbers are growing rapidly in Vietnam, up from 1.9 million the end of 2006 to 6.3 million the end of 2007.***

"This impressive growth rate is expected to continue at its current pace, increasing to 10.5 million users by the end of 2008 and 15.5 million users by the end of 2009," CDG said. "On the whole, the greater Asia-Pacific region is host to 49 percent of the world's CDMA2000 deployments."

S-Fone, Vietnam's first CDMA network, has witnessed notable success due to its investment from SK Telecom, CDG says. "With mobile and WLL services available in all 64 of Vietnam's provinces, S-Fone's CDMA2000 network currently serves 3.7 million subscribers, making it Vietnam's largest CDMA operator. Having launched its high-speed EV-DO broadband network in five major cities, the operator is well on its way to expanding multi-megabit-per-second broadband access to Vietnam's untapped marketplace, where only three million out of the 85 million residents have broadband access to the Internet.

"In addition to providing Internet access to hospitals and schools, S-Phone will be providing world-class broadband connectivity to Vietnam's highly coveted enterprise customers and its growing number of small- and medium-sized businesses."

In 2005 EVN Telecom launched its CDMA2000 1X network in the 450MHz band and is now serving more than 2.7 million subscribers, making it the largest CDMA450 network outside of China. EVN is focused on promoting its post-paid WLL service to the more than 78 million households that do not have access to a traditional fixed-line telephone service. Like S-Fone, the operator is also upgrading its CDMA450 network to EV-DO.

## Malaysia

### **Celcom moves to single core network for GSM & WCDMA**

***Celcom has become the first mobile operator in Malaysia to establish a single core network platform for both GSM and WCDMA technology with the deployment of an Ericsson mobile softswitch.***

According to Ericsson, the move is in line with Celcom's plans to upgrade its network to deliver classic telephony services over a more modern and cost efficient network while creating a common foundation for new services. The deployment of Ericsson

Mobile Softswitch also marks the first step for Celcom in migrating its core network to an all-IP architecture.

"Celcom will benefit from the convenience and simplicity of having a single, common infrastructure that can handle both 2G and 3G network services, including the current available voice, data and TV services such as MMS, mobile broadband and mobile TV," Ericsson said. "The common infrastructure will also enable Celcom to be ahead of its competition in introducing innovative services such as dual numbers in one SIM card or same number in multiple devices, 3G services on 2G SIM card and mobile number portability, to name a few.

"By deploying Ericsson Mobile Softswitch, Celcom is able to introduce a layered architecture design in its GSM/WCDMA mobile circuit core. Layered architecture enables separation and centralisation of the equipment responsible for call control and network intelligence, enabling a reduction in the number and size of main core network sites for Celcom. This will ultimately provide significant savings for Celcom and reduces the company's core network operating expenditures (OPEX)."

## Sri Lanka

### NTT Com sells Sri Lanka Telecom stake

NTT Communications (NTT Com) has sold its 31.2 percent stake in Sri Lanka Telecom to Global Telecommunications Holdings NV, a wholly-owned subsidiary of Usaha Tegas Sdn Bhd, a Malaysia-based investment holding company, for \$US299 million.

## Pan Asia

### AT&T scores \$US1.6b five year contract from Shell

***AT&T has scored what it says is its largest contract win to date outside the US: \$US1.6b five year contract from Shell to connect thousands of locations, manage mobility needs and deliver services and applications to 150,000 Shell employees worldwide.***

According to AT&T, "It is one of the largest commercial contracts ever signed by AT&T, and it's the largest agreement signed with a company that is headquartered in Europe. "

The agreement is one of three outsourcing contracts signed by Shell with key suppliers for networking and IT services. Deutsche Telekom's T-Systems division has been awarded a \$US1.6b contract to provide global hosting and storage services to Shell. It will take over and run Shell's global data centres, including three in the Netherlands, one in Malaysia and one in the US, taking on about 900 Shell staff in the process.

EDS has also won a five-year, \$US\$1 billion contract to provide "end-user computing services including desktop, service desk, on-site services, back-up and disaster recovery, mobile information protection and managed messaging services," Almost 3,000 workers - about 1,800 staff and 1,100 contractors - will transfer to the three contractors.

AT&T will provide managed network services to Shell and its subsidiary companies in more than 100 countries and will deliver wide area and local area networks, voice services (including Internet-based telephony), managed security solutions and mobility services. AT&T will provide direct connectivity to 1500 Shell corporate and operating unit locations and will manage more than 600 separate third party contracts with more than 300 vendors around the world.

Approximately 560 Shell networking staff located predominantly in the Netherlands, Malaysia, the UK and the US are expected to transfer to AT&T and AT&T will create dedicated service units in these key hubs to support Shell.

Commenting on the deal, Ovum analyst David Molony, said: "What's arresting in this announcement is the range of global services that AT&T has been entrusted to manage for Shell, especially LANs and global mobile services as well as WAN, fixed telephony and managed security services.

"Winning the LAN part of this deal could be a breakthrough for AT&T and telcos that still have ambitions to be end-to-end ICT service providers. In our review of 82 global services contracts won by telecoms operators in the second half of 2007, we found eight which included LAN management or elements of LAN services as a significant part of the deal. But of 19 contracts won by SIs or IT services companies, six included LAN management."

However, T-Systems will be responsible for LAN management in the five global data centres it will take over from Shell, in the major asset transfer of the deal. AT&T will, however have as many as 600 local networked sites to manage for Shell worldwide.

## **Southern Cross Cable adds capacity**

***Capacity on the Southern Cross Cable Network has been increased with the lighting of another 260Gbps of capacity - 130Gbps on each of its two cables that connect Australia and New Zealand to the US mainland.***

Plans for the upgrade were announced last August and, according to director of sales and marketing Ross Pfeffer, "when completed later this year the current upgrade will take our total installed capacity to 860Gbps."

Pfeffer said: "The current upgrade allows each fibre pair to provide ten times more capacity, lowers capacity cost, enhances the network's resilience and increases the range of services we can provide...High speed broadband requires both capacity cost to reduce and capacity supply to each subscriber to increase considerably. Our upgrades make this possible and the impact is already evident with existing and new customers recently making substantial capacity purchases from Southern Cross to support the high speed broadband services they provide."

He added: "The current upgrade allows the Southern Cross Cable Network to keep ahead of demand for just a short time and we are already planning additional upgrades during the remaining 16 years of the Network's engineering design life that will continue to take advantage of ongoing technological improvements in transmission technology.

Southern Cross opened in 2001 total with installed capacity of 80Gbps. In January 2003 total network was expanded to 480 Gbps and by end-2008 will be 860Gbps. At present it is the only direct link between Australia/New Zealand the US mainland - The AJC, Se-Me-We-3 and Jasaurus cables go via Asia - but it will soon face competition from Telstra's planned link from Sydney to Hawaii where it will interconnect with other cables providing direct access to mainland USA in which Telstra already owns capacity and from Pipe Networks' link to Guam.

Southern Cross says that, "With new technology continually improving potential transmission speeds, the ultimate size of the Southern Cross Cable Network is likely to considerably exceed the current limit of 2.4Tbps." The Southern Cross Cable Network is owned by Telecom NZ (50 percent), SingTel-Optus (40 percent) and Verizon Business (10 percent).

## **Private equity firms to buy Gilat Satellite for \$US475m**

***Israel's Gilat Satellite Networks is to be acquired by a consortium of private equity investors that includes The Gores Group LLC, Mivtach Shamir***

***Holdings, companies affiliated with Roy Ben-Yami, Ami Lustig and Eytan Stibbe and DGB Investments for approximately \$US475 million.***

Gilat shareholders will receive \$US11.40 per share in cash, a premium of approximately 38 percent on the recent average share prices. The deal is expected to close by September 2008.

CEO and chairman, Amiram Levinberg, said, "In the last eleven months, we have evaluated our strategy going forward and after careful and thorough analysis, and with the completion of extensive negotiations with the buyers, the board has decided to endorse this transaction as being in the best interest of our shareholders and recommends that it be approved by them.

India's Bharti Airtel has been a Gilat customer since 2001 and serves thousands of corporations, bank ATMs and other customers across the country through its networks based on Gilat technology. Earlier this year it chose Gilat to supply a broadband satellite network comprising more than 13,000 Gilat SkyEdge IP VSATs which it will use to offer services in Gujarat.

Also, India's Tatanet has been a Gilat customer since 2005 and serves thousands of corporate and enterprise sites across the country through a SkyEdge network. Earlier this year it chose Gilat to build a broadband satellite network to serve the SME and industry vertical market segments.

## **Nortel names new Asian marketing director**

***Nortel has appointed Phil Goldie as director, product and solutions marketing, for its Enterprise and Carrier Solutions division across Asia.***

Goldie has worked for Nortel for the past seven years in a variety of engineering and marketing positions most recently leading the Microsoft Innovative Communications Alliance in Asia, a position recently filled by Kirsten Gilbertson. He will be based in Sydney.

In his new role he will retain responsibility for Nortel's unified communications business, contact centre, data, SMB and services portfolios in the regions and also for promoting Nortel's carrier solutions across Asia. Goldie said: "My goal for the next six months is quite simply to give our partners and customers in the region the knowledge of how Nortel solutions can change their business - we're unique in our offerings to the market and I want to make sure everyone knows about it."

## **Vanco Asia Pacific gets a new CEO**

***Global virtual network operator Vanco, has named Tim Sullivan as CEO of Vanco Asia-Pacific.***

He will be based in Sydney, and will be responsible for teams based in Hong Kong, Tokyo, Delhi and Shanghai. Singapore general manager, Hong Meng Lee, will also report direct to Sullivan. An native of Brisbane, he has worked for Vanco outside Australia for over 10 years in senior sales and management roles across and before that spent several years with Telstra in Sydney. He replaced Diarmid Massey, who has left after just over a year in the role.

## **ITU symposia on ICT and climate change**

***The ITU will hold two global symposia in the first half of 2008 to promote better understanding of the relationship between ICT and climate change.***

The meetings will take place April 15–16 in Kyoto, co-organised and hosted by Japan's Ministry of Internal Affairs and Communications (MIC); and 17–18 June in London, supported and hosted by BT.

According to the ITU, ICTs contribute between two and 2.5 percent of global greenhouse gas emissions. "These percentages are likely to grow as ICTs become

more widely available. At the same time ICTs can be a major linchpin in the effort to combat climate change." The Symposia will be available as a webinar so that remote participants can see and hear presentations.

## Technology

### **WiMAX tipped to be big**

***Two research companies have separately issued very bullish forecasts for mobile WiMAX technology.***

Juniper Research says its region-by-region analysis found a significant opportunity now for WiMAX as a DSL substitute technology. The study explored how WiMAX is well suited to rapid deployment in the many underserved areas, not only in developing areas, but also in developed countries.

Report author Howard Wilcox said: "We determined that the vast majority of the WiMAX 802.16e trials and network contracts which are being announced almost daily will begin by providing fixed broadband. WiMAX can deliver broadband not only to unwired areas, but can also improve speeds for subscribers who are on the fringe of DSL coverage in metropolitan areas. We anticipate that mobile usage will develop after initial demand for fixed and portable services – WiMAX 802.16e is a flexible platform that can operate in all three modes of usage."

Juniper Research's analysis of the global opportunity for mobile WiMAX 802.16 to deliver local loop broadband connectivity forecasts that WiMAX will begin to take off from 2009 to 2011 and have more than 47 million subscribers globally by 2013. Juniper Research predicts that around 12 percent of the forecast DSL subscriber base for 2013 will be replaced by WiMAX, that global WiMAX service revenues, as a DSL replacement technology, will grow to over \$US20b per annum by 2013 and that the top WiMAX regions for DSL substitution will be: The Far East; North America; Western Europe and Africa/Middle East.

However, Juniper cautions that the two key issues dictating take-up for the technology will be the availability of suitable devices, and timely network construction. "Service providers need to complete build programmes on time in order to achieve sustainable WiMAX based businesses and they also need to translate the many, usually well-publicised trials, into commercial networks offering reliable and attractively-packaged services."

### **WiMAX Forum sees 133m users by 2012**

Meanwhile, the WiMAX Forum is projecting more than 133 million WiMAX users globally by 2012, based on the results of an independently commissioned research study that it plans to publish later in April. According to the Forum, "additional data from the study estimates that approximately 70 percent of the forecasted WiMAX users by 2012 will utilise mobile and portable WiMAX devices to access broadband Internet services."

The report, *WiMAX Forum Worldwide Subscriber and User Forecasts*, examines the progress of WiMAX service providers, equipment vendors, content developers and users in regions around the world. The WiMAX Forum released preliminary results at the CTIA Wireless show in Las Vegas. According to Forum president, Ron Resnick, "this new subscriber and user forecast is a solid proof point of the future growth of the thriving mobile Internet ecosystem and presents reasonable predictions of the positive progress our industry is working to achieve... WiMAX is here now and is the catalyst in the marketplace to grow demand for mobile broadband Internet access."

According to the Forum, the study identified a key driver of WiMAX subscriber and user growth as being "the ambitious adoption of WiMAX technology in specific

regions, including Asia Pacific and the Americas, where WiMAX technology is anticipated to be the leading technology selected to deliver broadband Internet access to a greater geography of these regional populations."

The first Mobile WiMAX certified products are expected to achieve certification in Q2 2008 and the Forum estimates that by 2011 there will be more than 1,000 Mobile WiMAX Forum certified products on the market.

### **Ericsson claims first LTE chipset**

***Ericsson says it has the first commercially available chipset to support the long term evolution of 3G cellular, capable of delivering 100Mbps downstream and 50Mbps upstream and suitable for inclusion in both infrastructure and end user devices.***

Samples of ASICs will be available during 2008 and commercial release is set for 2009, with products based on the platform expected in 2010. The chipset, the M700, supports channel bandwidths between 1.4 and 20MHz and up to six frequency bands, including the 700MHz band just auctioned in the US. Martin Bäckström, vice president network, Ericsson South East Asia told *Exchange*: "We think that handset vendors will have product available well in time for general availability of our infrastructure products, which is Q3 2009."

He said GSM and existing HSPA base stations would be upgradeable to LTE in parallel with supporting current technologies and claimed that in testing, the technology had delivered downstream speeds between 20Mbps and 156Mbps with an average of 80Mbps, and average upstream speeds of 40Mbps. But added "this performance depends on how carriers are dimension their networks now many users they want to support in a cell site. If you are using the same spectrum as HSPA you will have only a little improvement in the top speed but a big improvement in the cell border speed."

Bäckström suggested that even carriers that have invested in the latest HSPA technology would have an incentive to make an upgrade to LTE because the infrastructure was very economic for delivering high data speeds and that, absent addition licence costs, the cost per bit delivered would be lower than HSPA. In particular, for some operators a big attraction would be that "for most consumer LTE will exceed the speed you can get in fixed network XDSL technologies." And, according to Bäckström could be offered at prices competitive with ADSL. In Sweden, he said HSPA services were already being offered for as little as \$US10 per month for a 1.8Mbps service with unlimited data volumes, and that the HSPA USB dongle was the highest selling broadband access device.

With Verizon in the US and carriers in Japan already committed to LTE, he predicted that handset and devices manufacturers would lose no time in producing products and demand would be sufficient to keep prices down. "There is no major handset manufacturer that does not want to have LTE devices in their showroom."

While Ericsson might be first it seems there will be no shortage of competition in the LTE market. Bäckström said a number of other manufacturer had announced or were about to announce their chipsets.

### **LiMo Foundation releases handset platform specs**

***The LiMo Foundation has released, on schedule, its Linux based platform for mobile devices, along with a set of freely available application programming interfaces, and has signed up Texas Instruments as a new core member.***

The LiMo Platform, Release 1, is claimed to be is the world's first globally competitive, Linux-based software platform for mobile devices. "With Release 1 of the LiMo Platform now completed, LiMo Foundation has established a scalable and

sustainable mobile device platform that will spur rapid innovation and contributions from all LiMo members," said Morgan Gillis, executive director of LiMo Foundation.

"In slightly more than one year, we have rolled out our deliverables on schedule, our membership has continued to grow strongly with broad engagement from across the mobile communications industry, and leading handset providers have already released a range of devices using LiMo technology."

The Google-initiated Open Handset Alliance is also working on a mobile handset platform, dubbed Android. Interviewed by LinuxWorld, Gillies claimed that the LiMo Platform will provide much greater choice than Android to handset companies and to consumers; the user interface can be selected freely, as can the applications and the content. For example, will it really be possible for a user to choose Yahoo! as the preferred search provider on an Android handset? I'm not sure."

The Foundation claims that all of the enabling technology within Release 1 - created by the foundation's founder members - has "now been commercially deployed and proven within multiple handsets enjoyed by consumers today, as well as in several reference and pilot devices that will be on the market later this year."

Release 2 of the LiMo Platform is now being specified and developed collaboratively by a number of LiMo members and is planned to be completed in late 2008. Third-party developers can use LiMo's application programming interface (API) specifications - available at [www.limofoundation.org](http://www.limofoundation.org) - to build new applications. Middleware components for the LiMo Platform can be implemented in either C or C++ programming languages. Software development kits for Native, Webkit and Java operating environments will be released from the second half of 2008.

The LiMo Foundation was launched in January 2007 by Motorola, NEC, NTT DoCoMo, Panasonic Mobile Communications, Samsung Electronics and Vodafone. Its newest core member is Texas Instruments. According to Avner Goren, TI's representative on the LiMo board and director of strategic marketing for TI's Wireless Terminals Business Unit. "Joining the LiMo Foundation is a natural complement to TI's commitment to provide solutions for all high-level operating systems, and in particular our long history in Linux development...We look forward to collaborating with the LiMo membership to influence the direction of the LiMo Platform."

## **ArrayComm and Korea's C-motech boost HSDPA speeds**

***ArrayComm - whose technology underpins the iBurst wireless broadband network - has teamed up with Korean device manufacturer C-motech to produce terminals for mobile networks that it claims will have up to double the throughput - without any changes to the network.***

The two companies have announced an integration of ArrayComm's A-MAS multi-antenna signal processing software (formerly called Intellicell) into C-motech's client and data device cards. C-motech will manufacture and distribute the devices "on a global basis." C-motech claims to offer a full line of the third generation mobile terminals including HSDPA, HSUPA, EV-DO, EV-DO rA WIBRO (the Korean version of mobile WiMAX).

ArrayComm claims that its A-MAS software improves network economics and user experiences through gains in coverage, client data rates, and capacity for all wireless communications protocols: in base station, client device, and MIMO architectures. It has been implemented in W-CDMA, HSDPA, WiMAX, PHS, GSM, and HC-SDMA networks. Steve Sifferman, president of ArrayComm, said: "We believe that C-motech and ArrayComm can create a significant opportunity for operators: data devices with up to 2X throughput—without making any changes to the network."