

## WiMAX Forum News

Weekly Clip Report December 8 – 14

### Articles of Note

#### **Grand Rapids Chooses WiMAX**, December 8, Unstrung

Choosing a relatively untried technology for municipal wireless deployments, the city of Grand Rapids has chosen deep-pocketed startup Clearwire LLC to build and operate a WiMAX-based network over the town's 45 square miles. The choice of Clearwire's proprietary "pre-WiMAX" technology means that Grand Rapids is breaking with other U.S. cities that are moving forward rapidly with municipal WiFi networks. Calling the Clearwire system "cost effective and sustainable," Grand Rapids city manager Kurt Kimball described the network as the first large-scale municipal WiMAX network in the country.

[http://www.unstrung.com/document.asp?doc\\_id=112476&WT.svl=news2\\_1](http://www.unstrung.com/document.asp?doc_id=112476&WT.svl=news2_1)

#### **Viettel offers trial WiMAX service in Hanoi**, December 11,

Thanhniennews.com

The military telecom company Viettel began Monday a trial offer of WiMAX, a broadband wireless technology, in Hanoi. During the pilot, Viettel is providing 10 fixed transmission stations, allowing capacity for around 3,000 subscribers in Hanoi's urban districts with data rates of up to 10 mbps (megabytes per second) over distances of up to 32km. Viettel also plans to roll out mobile WiMAX service in early 2008. WiMAX is the broadband access version of Wifi wireless internet access technology with a maximum flux of 70 mbps and a maximum range of 50km against Wifi's 50m. With WiMAX, users can access the internet anywhere while Wifi limits users to access only in certain places where hotspot equipment has been installed.

<http://www.thanhniennews.com/education/?catid=4&newsid=23111>

<http://english.vietnamnet.vn/tech/2006/12/643169/>

[http://www.telegeography.com/cu/article.php?article\\_id=15836&email=html](http://www.telegeography.com/cu/article.php?article_id=15836&email=html)

#### **TurboConcept's TC1000WiMAX turbo decoder Core incorporated in Sequans' WiMAX chips**,

December 11, Design and Reuse

TurboConcept announced that Sequans Communications is using TurboConcept's Convolutional Turbo Decoder technology, TC1000WiMAX, in its fixed and mobile WiMAX semiconductor solutions based on the. The use of turbo codes allows significant link budget gain over legacy forward error correction codes. Sequans' products exploit the full benefits of TurboConcept's advanced decoder solution. "TurboConcept's TC1000WiMAX core gives us the best error correction performance possible from the turbo code and the best complexity vs. performance implementation results," said Bertrand Debray, Sequans VP of engineering. "The integration of the core within our PHY layer hardware proved to be very smooth and effective. The core is now used in all our WiMAX semiconductor solutions for both fixed and mobile profiles and field measurements confirm excellent performance."

<http://www.us.design-reuse.com/news/news14836.html>

#### **WiMAX-certified gear a year from widespread rollout: Yankee Group**, December 13, IT

Business

Although the IEEE's 802.16e WiMAX standard has been approved, standardized mobile WiMAX will not be in place for at least another year, according to a market research firm. The Boston-based Yankee Group recently published a paper, titled *When Will WiMAX Become a Reality*, which predicts the pre-standard equipment already purchased or installed is a potential source of frustration for users. "There definitely could be a deal of frustration from the customer side especially if they invested a ton into the pre-standard" equipment, said Tara Howard, The Yankee Group's analyst for enabling technologies, service provider.

<http://www.itbusiness.ca/it/client/en/home/News.asp?id=41510&cid=5>

**Jacket Micro Devices Announces Mobile WiMAX Front-End Module**, December 13, RF  
Globalnet

Jacket Micro Devices announced it will begin sampling what it claims is the market's first complete mobile WiMAX RF front end module in January 2007. The new product, M30001, is a WiMAX front end containing all active and passive components required to interface WiMAX transceivers directly to an antenna. The single 7x7x1.2 mm QFN package is suited for mobile phone, laptop, and consumer electronics applications. The size of the M30001 allows WiMAX interfaces to be integrated along with other wireless and computing functions into small form factor products such as PCI Express, USB, and handsets. M30001 is targeted for production release in Q2 2007. "We are convinced that WiMAX will offer consumers a new and exciting option for mobile broadband connectivity," said Jim Stratigos, JMD's CEO. "Our modules will greatly simplify the design of WiMAX products and turn what could be a challenging RF circuit design with many disparate active and passive components into a single tested and ready to use component."

<http://www.rfglobalnet.com/content/news/article.asp?DocID=%7B8A19F099-B18D-4C3E-A901-22146EE8B1F2%7D&Bucket=Current+Headlines>  
<http://www.bbwexchange.com/pubs/2006/12/14/page1423-382675.asp>

**Samsung sees future: 4G is WiMAX**, December 13,  
EETimes

Samsung used its second annual Mobile Summit in New York City today to lay its stake in the ground on the future of wireless, and it is mobile WiMAX, based on the IEEE 802.16e standard. "4G is WiMAX. We're very clear about that," said Philip Garrison, mobile strategist for Samsung Telecommunications America (STA). The company used the summit to celebrate the 10-year anniversary of STA, a milestone marked by \$4 billion in revenue for the Samsung subsidiary, as well as 100 million units having been sold in the U.S. "And we will launch 60 new models this year," said Garrison. In his introductory keynote, Dale Sohn, president of STA, put forth the company's mantra—The world in your hands—referring to the ability to communicate anytime, anywhere and with anyone. "We're on a journey to mobile multimedia computing," said Garrison.

<http://www.eetimes.com/news/latest/showArticle.jhtml?articleID=196604360>

**Mobile operators defensive over 3G auctions**, December 14,  
ZDNet

O2 has called for tight controls to be imposed on market entrants, while Orange and T-Mobile refused to comment on the auctions. O2, along with Vodafone and 3, all sought to downplay the possibility that the auctions might lead to new competition in the 3G market. Ofcom said this week it would auction its largest-ever portion of radio spectrum, which the regulator believes is most likely to be used for 3G or mobile WiMAX. "We have assumed that deployments in the 2500-2690 MHz band [the largest band on offer] will be UMTS FDD, UMTS TDD [both expected evolutions of 3G] or mobile WiMAX," said Ofcom. It is six years since the original 3G auctions, for which the mobile operators paid a total of £22.5bn. Observers say the new licences will be available for a fraction of that price.

<http://news.zdnet.co.uk/communications/0,1000000085,39285154,00.htm>

**Beceem makes grade with Windows**, December 14,  
Telephony

While the entire WiMAX industry is eagerly awaiting the first rounds of mobile certification this month, Beceem has sought certification from a more unlikely source: Microsoft. The CPE and chipset maker announced today it has received Windows Hardware Quality Lab certification from the software giant, insuring its WiMAX chipsets and drivers are compatible with Microsoft's pervasive operating system. Beceem will have to pass the WiMAX Forum trials like everyone else in order to market a WiMAX-certified product, but it's already preparing for the bigger picture of future sales and integration opportunities. The

fact remains that Mobile WiMAX will primarily be a laptop-driven service—at least in its first iterations—and the majority of the world's laptops run on a Windows OS.

[http://telephonyonline.com/wimax/news/beceem\\_windows\\_wimax\\_121406/](http://telephonyonline.com/wimax/news/beceem_windows_wimax_121406/)

### [WiMAX Forum Member Company News](#)

**Intel completes design of mobile WiMAX chip**, December 8, domain-b.com

Intel Corporation, the world's largest semiconductor manufacturer and the leading manufacturer of the x86 series of microprocessors, has announced the completion of the design for its first mobile WiMAX chip, which is expected to find its way into new laptops, handheld PCs and mobile phones within the next two years. Together with the company's previously announced single-chip, multi-band WiMAX/Wi-Fi radio, the pair creates a complete chipset called the Intel WiMAX Connection 2300. Intel demonstrated a Centrino Duo-based laptop with mobile WiMAX 802.11n Wi-Fi and high-speed downlink packet access (HSDPA) 3G capabilities at the 3G World Congress and Mobility Marketplace in Hong Kong. The mobile processor successfully accessed the internet at 'broadband' speeds over a mobile WiMAX network during the demonstration.

[http://www.domain-b.com/companies/companies\\_i/intel/20061208\\_completes.htm](http://www.domain-b.com/companies/companies_i/intel/20061208_completes.htm)

[http://www.toptechnews.com/story.xhtml?story\\_id=020001YSS3M4](http://www.toptechnews.com/story.xhtml?story_id=020001YSS3M4)

<http://www.technewsworld.com/story/54630.html>

**Nortel wins contract to supply WiMAX Yilan network in Taiwan**, December 8, The China Post

Nortel Networks Corp., North America's biggest maker of telephone gear, won a contract to supply equipment for Chunghwa Telecom Co.'s WiMAX network in Taiwan, gaining its first mobile client for the wireless standard. The shares surged. The high-speed wireless technology will allow mobile phone users in the northeastern county of Yilan to access the Internet anywhere in the area, Toronto-based Nortel said in a statement yesterday. Nortel didn't disclose the terms of the deal. Chief Executive Officer Mike Zafirovski is aligning with Chunghwa, Taiwan's largest phone operator, to offer WiMAX as he focuses on products for which he says Nortel can get a 20 percent share of global sales. Nortel has more than doubled investment in the standard this year to keep up as clients adopt the latest technologies.

<http://www.chinapost.com.tw/business/detail.asp?ID=97037&GRP=E>

**Maxis selects Alcatel for WiMAX field trial**, December 9, The Star Online

Alcatel-Lucent and Maxis Communications Berhad, have signed an agreement to conduct a WiMAX trial of a Universal 802.16e-2005 WiMAX solution. The field trial is touted as an important step towards offering commercial services and satisfying growing demand for wireless broadband access, especially in residential areas in Malaysia. Maxis' head of products and new businesses Dr. Nikolai Dobberstein said, "Alcatel-Lucent is a leader in WiMAX technology and Maxis is particularly impressed with the effective time-to-market strategy that Alcatel-Lucent has adopted. "It has a clear product roadmap hence the commercial availability of Universal WiMAX IEEE 802.16e-2005 standard equipment for initial network deployments."

<http://star-techcentral.com/tech/story.asp?file=/2006/12/8/technology/20061208170151&sec=technology>

**Redline Provides 3.5GHz WiMAX Products to Asia Pacific Wireless ISPs**, December 11, Broadband Wireless Exchange Magazine

Redline Communications launched its RedMAX WiMAX products for the 3.3 - 3.5 GHz frequency band at ITU Telecom World 2006 in Hong Kong. The introduction of the 3.3 - 3.5 GHz RedMAX products enables operators across the Asia Pacific region to access Redline's proven WiMAX solutions to deliver the broadband services their customers need today. The 3.3 - 3.5 GHz RedMAX products are now being

deployed by several operators in India and Vietnam and will be commercially available in the first quarter of 2007. The new RedMAX products join Redline's complete WiMAX Forum Certified(TM) systems that are being trialed and deployed by more than 75 operators in 39 countries. The new RedMAX products will include the AN-100U base station, SU-I indoor subscriber unit and SU-O outdoor subscriber unit. Redline is featuring its RedMAX family of WiMAX solutions as well as its RedCONNEX(TM) broadband wireless infrastructure products at its booth Hall 11 of the ITU Telecom World 2006.

<http://www.bbwexchange.com/pubs/2006/12/11/page1423-375221.asp>

<http://www.zdnetindia.com/cstech/voip/reviews/stories/164600.html>

<http://www.80216news.com/pubs/2006/12/11/page1299-375221.asp>

**Intel Designs WiMAX Connection 2300 Chipset**, December 11, EFYtimes.com

The Intel WiMAX Connection 2300 chipset design was demonstrated during executive vice president and chief sales and marketing officer Sean Maloney's keynote at the 3G World Congress and Mobility Marketplace in Hong Kong. Intel Corporation has completed the design of its first mobile WiMAX baseband chip. Combined with the company's previously announced single-chip, multi-band WiMAX/Wi-Fi radio, the new chip creates a complete chipset called the Intel WiMAX Connection 2300.

<http://www.efytimes.com/efytimes/fullnews.asp?edid=16052>

**Qualcomm expects Brazil to hold 3G auction in 1H07**, December 13, Cellular-News

US mobile technology firm Qualcomm expects Brazil's telecoms regulator Anatel to hold an auction for 3G spectrum licenses in the first half of 2007, Marco Aurélio Rodrigues, president of Qualcomm in Brazil, told BNamericas. "Anatel set aside the spectrum in 2000.... There is no reason why the auction should be later than the first half of next year," Rodrigues said. However, at the moment Anatel is keeping its cards close to its chest. "Anatel does not have an official deadline to hold a 3G auction," a company spokesperson told BNamericas. However, "the [Anatel] counselors will possibly study the issue next year," he said. Anatel started a public consultation for the use of the five frequencies for 3G mobile services in July.

<http://www.cellular-news.com/story/20944.php>

**Cisco approaches WiMAX with caution**, December 14, IT Business

Cisco Systems Inc. taking a wait and see approach to WiMAX technology while continuing to market to what it sees as a largely untapped small to mid-sized business market. Charlie Giancarlo, Cisco's chief development officer, said his company is not planning on entering the radio market any time soon. "We've been sitting on the sideline for a number of reasons," he said during a press conference Wednesday at CScape, Cisco's annual analyst conference. Although WiMAX has been "moving a lot over the past three years," one of the major applications is last-mile access in regions without adequate wired infrastructure.

<http://www.itbusiness.ca/it/client/en/home/News.asp?id=41565>

**Intel Demonstrates Mobile WiMAX Baseband Chip**, December 14, SDA India

Intel has completed its first mobile WiMAX baseband chip. Combined with the company's previously announced single-chip, multi-band WiMAX/Wi-Fi radio, the pair creates a complete chipset called the Intel WiMAX Connection 2300. The Intel WiMAX Connection 2300 chipset design was demonstrated during Executive Vice President and Chief Sales and Marketing Officer Sean Maloney's keynote at the 3G World Congress and Mobility Marketplace in Hong Kong. Maloney showed an Intel Centrino Duo mobile technology-based laptop with mobile WiMAX Wi-Fi, and high-speed downlink packet access (HSDPA) 3G capabilities successfully accessing the Internet at broadband speeds over a mobile WiMAX network, as per a statement issued by the company.

[http://www.sda-india.com/sda\\_india/psecom,id,22,site\\_layout,sdaindia.news,14134,p,0.html](http://www.sda-india.com/sda_india/psecom,id,22,site_layout,sdaindia.news,14134,p,0.html)

**Alvarion Launches New Line of Wi-Fi/WiMax Converged Radio Products**, Broadband Wireless Online  
Alvarion Ltd, the world's leading provider of wireless broadband solutions and specialized mobile networks, today introduced two new converged solutions combining Wi-Fi functionality with both WiMAX and pre-WiMAX products. The BreezeMAX WI2 and BreezeACCESS WI2 enable carriers to capture additional revenues, while moving toward advanced Personal Broadband services, providing a powerful cost-effective, converged network that combines high performance Wi-Fi portability for IEEE 802.11b/g devices with WiMAX quality-of-service (QoS). Each WI2 solution consists of an outdoor Wi-Fi access point with integrated power module capable of connecting to various commercial power sources, either a BreezeMAX or BreezeACCESS VL unit for backhaul and network management software.

<http://www.shorecliffcommunications.com/magazine/news.asp?news=5751>

**Azimuth Systems Closes \$7.5 Million in New Funding for Wi-Fi, WiMAX and Cellular Expansion**, December 14, Broadband Wireless Exchange Magazine

Azimuth Systems, Inc. announced that it has received \$7.5 million in new venture capital funding from its current investors and that Jim Iuliano will join the company as chief executive officer. The new funding and management change position the company for expansion into the WiMAX and cellular markets. More than 100 wireless semiconductor, system vendors and service providers - including Atheros, Broadcom, Cisco, Marvell, Motorola and T-Mobile - rely on Azimuth's proprietary test solutions to speed time-to-market and improve product quality. According to market research firm ABI Research, Azimuth customers account for more than 95% of the Wi-Fi products that ship worldwide. "Azimuth has developed key intellectual property, pioneered the Wi-Fi test equipment market and established itself as the leader in its space," said founding CEO Ray Cronin. "Jim Iuliano's successful experience scaling systems businesses will enable Azimuth to accelerate its growth.

<http://www.bbwxchange.com/pubs/2006/12/14/page1423-382671.asp>

**Isle of Wight Builds Wireless Internet Service Provider with Aperto's WiMAX Gear**, December 12, Broadband Wireless Exchange Magazine

Aperto Networks announced that Wight Cable 2005 Ltd, the sole provider of telephone, broadband and cable TV services on the Isle of Wight, has launched a package of new wireless broadband services using Aperto Networks 5.8GHz WiMAX equipment. Expansion of the initial deployment will be done using Aperto's PacketMAX gear. PacketMAX is Aperto's industry-leading dual fixed and Mobile WiMAX solution architecture based on the IEEE 802.16d-2004 and IEEE 802.16e-2005 WiMAX standards. Marketed to its business and residential customers under the Wight Wireless brand, the service offering includes internet access with unlimited downloads, as well as local and national VoIP telephone service. It is currently available in East Cowes, Highview Estate, Westbury Homes, and Cowes, but will expand to other parts of the island in the coming months. "We are constantly looking at new technologies and new ways that enable us to provide improved or enhanced services to our customers," said Ian Renshaw, CEO, Wight Cable. "Aperto's industry-leading WiMAX platform gives us the ability to cost effectively extend our network, expand our product offerings, and attract new customers."

<http://www.bbwxchange.com/pubs/2006/12/12/page1423-380589.asp>

**Belair Networks Builds Wireless ISP for Bristol City Council in the United Kingdom**, December 12, Broadband Wireless Exchange Magazine

Bristol City Council in the UK has selected Cityspace, a UK provider of urban digital networks, to supply an extension to the Bristol wireless network, which Cityspace deployed as a pilot in 2004. The network will be extended to incorporate the city's main business areas, transport routes and a number of disadvantaged communities, supporting the council's plans for social and economic change across the city. The extension will provide mobile communications and reporting for council service teams; new community information, skills and training projects; and improve the city's network of real-time transport information services. It will continue to provide free broadband Internet access to the public and paid-for services for local businesses,

expanding on the current 3km network, which is used by more than 15,000 people each month. The network will be based on the BelAir Networks suite, which is interoperable with future WiMAX frequencies and is compatible with the current network, with testing of the first council applications due to start in March 2007. It comprises four radio nodes which enable 802.11b/g 56Mb/s access to be created across Bristol with relatively few fixed egress points, with 75Mb/s of backhaul capacity for each node.

<http://www.bbwexchange.com/pubs/2006/12/11/page1423-368303.asp>

#### **Sequans Appoints Zvi Slonimsky to Board of Directors**, December 11, Broadband Wireless Exchange Magazine

Sequans Communications announced that Zvi Slonimsky, former CEO of Alvarion, has joined its board of directors. "Sequans will benefit tremendously from Zvi's experience leading the world's most important broadband wireless equipment vendor, and we are very pleased to have his support and insight at this time when the rate of WiMAX network deployments is accelerating around the world," said Georges Karam, Sequans CEO. "Sequans' accomplishments in WiMAX are extraordinary from all points of view," said Slonimsky. "The company's speed in delivering fixed and mobile WIMAX chips for both base stations and subscriber stations, its high performing solutions, and its market traction are all signs of a winner, and I am pleased to contribute to their success." Zvi Slonimsky served as CEO of Alvarion from 2001 to October 2005, following Alvarion's establishment via merger of BreezeCOM and Floware in August 2001. Slonimsky was previously CEO of BreezeCOM. Prior to that, Slonimsky served as president and CEO of MTS Ltd. and was general manager of DSP Group, Israel. Today, in addition to serving on the board of Sequans, Slonimsky is chairman of the board of Teledata and a board member of Alvarion.

<http://www.bbwexchange.com/pubs/2006/12/11/page1423-377792.asp>

#### [General WiMAX News](#)

#### **Can WiMAX challenge 3G?**, December 8, SDA India

Research and Markets has conducted a survey, 'Can WiMAX Challenge 3G? Performance, Economics, and Opportunities' that reads 78 per cent of operators stated that they have considered investing in WiMAX. WiMAX has gained significant momentum over the last year. Its standardisation is complete, vendor and operator ecosystems are expanding, and the hype is getting louder. In this report, looks at real-world examples of pre-WiMAX deployments and review practical issues such as time-to-market, business models and pricing, device availability, economics of scale and spectrum availability, with an emphasis on a number of key questions, most notably, can WiMAX challenge 3G?

[http://www.sda-india.com/sda\\_india/psecom.id,22,site\\_layout,sdaindia.news,14015,p,0.html](http://www.sda-india.com/sda_india/psecom.id,22,site_layout,sdaindia.news,14015,p,0.html)

#### **Analysys: Place Your Bets on Fixed Broadband and Cellular, Not WiMAX**, December 8, TMCNet

Of late, particularly in Asia, carriers and governments have expressed interest in the potential of WiMAX technology to deliver wireless broadband services across large geographic areas. WiMAX shows potential for both satisfying the demands of customers and helping providers generate revenue. But in a recent report, research firm Analysys threw some cold water on the attraction of potential financial returns from WiMAX. Careful examination and modeling, the report says, shows that a secure, long-term business case cannot be made for WiMAX in most situations. "WiMAX operators and investors will have to select their targets with extreme care," report author Alastair Brydon warned in a statement. "Small returns in many situations, from low ARPU or take-up, make high up-front investments in network infrastructure, marketing and customer premises equipment (CPE) highly risky."

<http://voipforenterprise.tmcnet.com/feature/next-generation-mobility/articles/4036-analysys-place-bets-fixed->

**India to enter broadband, WiMAX manufacturing**, December 9, The Economic Times

India will soon see the advent of broadband and WiMAX manufacturing. The recently merged Alcatel-Lucent alliance has decided to utilise India for manufacturing broadband and WiMAX equipment through a transfer of technology and contract manufacturing arrangement with state-owned ITI. This will happen at the ITI plant at Naini in Uttar Pradesh. ITI plant in India will be used by Alcatel-Lucent for telecom equipment manufacturing. Alcatel already has a tie-up with ITI for manufacturing of GSM towers, base stations and 3G equipment at ITI's Rae Bareilly and Mankapur plants.

<http://economictimes.indiatimes.com/articleshow/748769.cms>

**Lack Of PCs Will Thwart WiMAX In Developing Nations**, December 9, Information Week

While industrialized nations are enamored with the potential of WiMAX, the wireless wide-area broadband technology faces a major hurdle for its success in developing countries: WiMax usage generally requires a PC, and third world countries lack sufficient numbers of PCs. As a result, cellular systems will upstage WiMAX in developing countries, said market research firm Analysys in a report released at this week's ITU Telecom World 2006 show in Hong Kong. For instance, PC penetration in Bulgaria is 6% and less than 2% in India. As a result, the low PC numbers will hamper WiMAX deployment, the market research firm said. The low cost of cell phones will help the spread of mobile phone networks in developing countries, where citizens have low disposable incomes. "Cellular voice services will be much more appealing to most people, particularly as handsets are available very cheaply," said Mark Heath, the co-author of the report.

<http://www.informationweek.com/internet/showArticle.jhtml?articleID=196602357>

**Seasolve Software And NI Announce WiMAX Test And Measurement Solutions In India**, December 10, Wireless Design and Development Asia

SeaSolve Software Inc. and National Instruments have jointly announced the release of the Fixed and Mobile WiMAX RF Test and Measurement solutions. In an effort to simplify WiMAX Test and Measurement, the two companies will provide the hardware and software required for the efficient testing, analysis and troubleshooting of fixed and mobile WiMAX stations and chipsets. SeaSolve's SeaMAX-Fixed and SeaMAX-Mobile signal generation and analysis solutions integrate seamlessly with the NI PXI 5660 RFSA and 5670 RFSG. The software offers analysis of WiMAX transceivers with RF and Baseband Measurements in accordance with the IEEE 802.16-2004 and IEEE 802.16e-2005 standards. SeaSolve's RF test and measurement capabilities for the NI PXI instruments are designed to help RF engineers, researchers and wireless device OEMs to efficiently test, measure and analyze the performance of WiMAX Base and Subscriber Station transceivers.

<http://www.wirelessdesignasia.com/article.asp?id=3847>

**Strong start for German auction of 3.5 GHz WiMAX spectrum**, December 11, WiMAX Day

The auction of licenses for 3.5 GHz spectrum in Germany began yesterday at the Federal Network Agency, and today after twelve rounds, bidding has reached €53 million euro. The auction will continue today and end possibly tomorrow. The president of the Bundesnetzagentur, Matthias Kurth, announced before the auction began yesterday that "This procedure has a substantial meaning for the German economy." The Bundesnetzagentur has long supported a more competitive telephony market, and the introduction of WiMAX services in Germany should make the stagnant broadband market more competitive.

<http://www.wimaxday.net/site/newsletter>

<http://www.heise.de/english/newsticker/news/82453>

[http://www.telegeography.com/cu/article.php?article\\_id=15859&email=html](http://www.telegeography.com/cu/article.php?article_id=15859&email=html)

### **Defense Ministry will relinquish spectrum, December 11, WiMAX**

Day

After more than one year of operatic negotiations, the Italian Defense Ministry has agreed with the Italian Communications Authority (Agcom) that it will relinquish control of the 3.5 GHz spectrum it controls, in favour of auctioning the spectrum for use with WiMAX. The Defense Ministry stated on Monday that it has begun to work with Agcom "for the progressive movement of our own radars and systems of telecommunication from the 3.5 GHz band, giving demand for the development on the territory of the services supporting the WiMAX technology." While Agcom has already issued a public consultation for planned use of the spectrum, and the statements made by the Defense Ministry have been officially printed, there is still no firm date when the spectrum might be fully relinquished.

<http://www.wimaxday.net/site/newsletter>

### **BT confirms interest in WiMAX, December 11, WiMAX**

Day

Following the announcement of Ofcom that it intends to auction 2.6 GHz spectrum next year, The Independent in England yesterday published an article that reports the interest of British Telecom (BT) in obtaining this spectrum at auction, when available. The Independent stated that "BT is interested in offering the wider-ranging WiMAX technology but does not currently own appropriate spectrum to roll out the service." The article also quotes a spokesman for BT saying "We are naturally interested in the potential of this spectrum and we continue to assess its possible uses, including the possibility of WiMAX."

<http://www.wimaxday.net/site/newsletter>

<http://www.earthtimes.org/articles/show/13506.html>

[http://www.lightreading.com/document.asp?doc\\_id=112693](http://www.lightreading.com/document.asp?doc_id=112693)

<http://www.earthtimes.org/articles/show/13506.html>

[http://www.telegeography.com/cu/article.php?article\\_id=15843&email=html](http://www.telegeography.com/cu/article.php?article_id=15843&email=html)

[http://www.unstrung.com/section.asp?section\\_id=86](http://www.unstrung.com/section.asp?section_id=86)

### **Ofcom helps inflate the WiMAX hype bubble, December 11, The**

Register

It has announced "the UK's largest single release of radio spectrum, which could be used for a range of new services such as mobile broadband and advanced wireless services". The spectrum auction is rather like an auction for a building site in the middle of London's financial "City" district when a small family business goes under. Real estate this valuable doesn't often hit the market. "Ofcom is consulting on proposals to package and auction the spectrum to offer maximum flexibility," says today's announcement. Flexibility in the way that the bands could be used means no more than "we expect fierce bidding and high prices, and we're not going to impose requirements on the bidders". [http://www.theregister.co.uk/2006/12/11/ofcom\\_inflates\\_wimax\\_bubble/](http://www.theregister.co.uk/2006/12/11/ofcom_inflates_wimax_bubble/)

### **Buzz Technologies Signs Wi-Fi/WiMAX Agreement With Thai Military for Wireless ISP Services,**

December 11, Broadband Wireless Exchange

Magazine

Buzz Technologies will supply the following to test with the intention to purchase secure online communications: Wifi/WiMAX; Instant messaging (IM), Voice and Video; SMS/(Short message service) MMS alert services; secure dedicated web browser and a selection of Buzz Hardware Devices to troops deployed in the field and to provide coverage to military bases. These products have not yet been released to the public however some of these products will be available to the public in the coming weeks Thailand announced a 10-year military buildup in 2005, allocating \$6.6 billion to strengthen its armed forces. Thailand's Military has an annual operating budget of close to \$2 Billion Dollars.

<http://www.bbwxchange.com/pubs/2006/12/11/page1423-377384.asp>

### **Grand Rapids Muni Wireless Network is WiMAX, not Wi-Fi, December 11, ABI Research**

Grand Rapids, Michigan will be getting a municipal wireless network. It will not be a Wi-Fi mesh network, however, but a WiMAX network from Clearwire instead. The city anticipates having the network up and running in a year. Some of the objectives included service for public safety, economic development, and bridging the digital divide. Up to five percent of residents will be able to access the network from just under \$10 per month if they qualify. Many Wi-Fi mesh networks will layer in fixed and 802.16e WiMAX elements to the point where an end user device can access the Wi-Fi or 802.16e network. Initially, the Grand Rapids network will use Clearwire's proprietary 802.16e-like equipment, and will transition the network to 802.16e equipment. This municipal wireless network is significant because it is the first municipal wireless network to use WiMAX instead of Wi-Fi. The drawback with this is that the many Wi-Fi enabled devices in the area cannot access the network.

[http://www.abiresearch.com/Blog/Wireless\\_Blog/203](http://www.abiresearch.com/Blog/Wireless_Blog/203)

### **German Agency Kicks Off WiMAX License Auction With 6 Cos, December 13, Cellular-News.com**

German federal network agency Bundesnetzagentur Tuesday said all six companies that showed interest in a license for high-speed Internet access via the so-called WiMAX technology will get access to the license auction. The auction, which will be conducted over several different rounds, will begin Tuesday morning. Each round will take 120 minutes, the agency added, without saying when the process is expected to be finalized. Bundesnetzagentur said German companies Deutsche Breitbanddienste, EWE and Televersa Online, Luxembourg-based Clearwire Europe and MGM Productions Group of Italy will all participate in the auction. Three of the firms have applied for a countrywide license while the other three are looking for regional licenses. The Bundesnetzagentur will be auctioning licenses to utilize radio frequencies in the 3.5 gigahertz bandwidth - frequencies that can be used for WiMAX technology in Europe.

<http://www.cellular-news.com/story/20910.php>

### **Taiwan readies WiMAX auction, first major test site, December 12, Webwereld**

Taiwan is moving forward on its wireless broadband Internet initiative by finalizing rules for an upcoming WiMAX license auction and preparing its first major WiMAX testing zone, officials said Tuesday. The island hopes to be among the world leaders in adopting WiMAX. Part of the idea is to boost Taiwanese companies, which already manufacture a lot of related IT gear, by promoting the technology. Officials also want to ensure speedy wireless Internet access for even the most remote areas of the island. WiMAX base stations can send broadband Internet signals to far greater distances than the Wi-Fi technology it is meant to replace. Although estimates vary on how far WiMAX signals can go, in a densely populated place such as Taiwan, where users are not likely to be positioned within sight of access points, the distance should be between 2 km to 4 km.

<http://www.webwereld.nl/articles/44139/taiwan-readies-wimax-auction--first-major-test-site.html>

### **Is WiMAX secure?, December 12, Tech World**

WiMAX is the much-anticipated broadband wireless access mechanism for delivering high-speed connectivity over long distances, making it attractive to Internet and telecommunications service providers. Designed by the IEEE 802.16 committee, WiMAX was developed after the security failures that plagued early IEEE 802.11 networks. Recognizing the importance of security, the 802.16 working groups designed several mechanisms to protect the service provider from theft of service, and to protect the customer from unauthorized information disclosure. Authentication A fundamental principle in 802.16 networks is that each subscriber station (SS) must have an X.509 certificate that will uniquely identify the subscriber.

<http://www.techworld.com/mobility/features/index.cfm?featureID=3030&pagtype=samecatsamechan>

### **Siminn to launch Iceland's first WiMAX network**, December 12,

Telegeography

Iceland's fixed line incumbent Siminn (Iceland Telecom) will launch the country's first commercial WiMAX network early in 2007, following the successful trial of the service in the Grímsnes area which has been running since the summer. Siminn claims the pilot has been so successful that in the next few months commercial WiMAX services will be offered to customers living in Grímsnes as well as other outlying areas.

[http://www.telegeography.com/cu/article.php?article\\_id=15832&email=html](http://www.telegeography.com/cu/article.php?article_id=15832&email=html)

### **Cellular Base Station Silicon Makers Face WiMAX**, Other Challenges, December 13, RF

Globalnet

Just as 3G is deployed after years of delays, there is now a new potential fly-in-the-ointment, WiMAX, reports In-Stat. However, WiMAX is not the only threat to cellular base station semiconductor manufacturers. Not only has cellular subscriber growth started to slow, but also cheaper semiconductors from Asia are starting to enter the base station market. As a result, total semiconductor revenue from base stations is forecast to drop over the next few years. A recent report by the high-tech market research firm found the following: Total cellular base station semiconductor revenue is forecast to reach over \$4.5 billion in 2006. The rate of major cellular technology updates is slowing. Providers are upgrading to the fastest cellular technology as quickly as they can, and doing it while keeping the price pressure on infrastructure equipment makers.

<http://www.rfglobalnet.com/content/news/article.asp?DocID=%7B4C60F4B7-9ED3-4036-B103-D3B95BCEF1C4%7D&Bucket=Current+Headlines>

### **HSDPA & WiMAX for Wireless ISP Platform Research**, December 14, SDA

India

Research and Markets has added '2006 Australia—Mobile Data & Content—The Battle between HSDPA & WiMAX' to their offering. Cellular mobile networks have been built for voice services and even more importantly have been finetuned over the years for efficient and effective voice transmission. While both 2G and 3G allow, in principle, for a large range of mobile data services, these networks can never be optimised for that. Voice will remain the killer application for mobile with some data services included as support services and niche market services. WiMAX and 4G are the real solutions for mobile data but by then it will be called wireless personal broadband.

[http://www.sda-india.com/sda\\_india/psecom.id.102.site\\_layout.sdaindia.news.14141.p.0.html](http://www.sda-india.com/sda_india/psecom.id.102.site_layout.sdaindia.news.14141.p.0.html)

<http://www.80216news.com/pubs/2006/12/11/page1299-378487.asp>

<http://www.bbwexchange.com/pubs/2006/12/11/page1423-378487.asp>

### **Radio Makes Room for WiMAX**, December 14, RW

Online

It would seem that quite a few engineers in our business are giving up on any future for radio. To them, WiMAX is a torpedo dead ahead that is poised to sink radio broadcasting and its 90 years of legacy service. The following letter from Mark Krieger, responding to my support for AM translators on FM, is typical of the sentiments we often hear on this topic. He has already written radio's epitaph: Just read your article regarding supporting FM translator grants to AMs and I confess it evoked a couple of laughs. I too am a veteran radio engineer of 31 years, and an SBE officer and senior member as well. During that time I've had a variety of AMs and FMs under my watch, including a 50 kW AM with a five-tower DA. I used to love sending out QSL cards to Europe, just as I used to love listening to international broadcasting on my trusty Hallicrafters when I was 12 years old. I still have a basement full of every type of broadcast and utility receiver imaginable, the leavings of a lifelong love affair with radio.

<http://www.rwonline.com/pages/s.0048/t.553.html>

### **Is WiMAX going places? It depends who you ask**, December 14,

Electronicsweekly.com

Whether or not the spectrum issues surrounding WiMAX are settled has been a subject of some disagreement. According to Intel in its announcement of an integrated WiFi/WiMAX chipset the global frequency issue is settled. "With global frequency support for standards-based WiFi and WiMAX, scalable channel bandwidth, and high-performance multiple-antennas, the Intel WiMAX Connection 2300 will help bring about mobile communications and rich content across supported networks anywhere in the world," said an Intel statement following the introduction of the chipset by Sean Maloney, executive vice-president of Intel. Intel's statement about the status of the spectrum issues associated with WiMAX does not match the understanding of Peter Gardner, technology sector head for wireless communications at 3i Group, the venture capital investors.

<http://www.electronicweekly.com/Articles/2006/12/14/40372/Is+WiMAX+going+places+It+depends+who+you+ask.htm>

#### **Russia's Synterra constructs WiMAX network in Kursk, December 14, Cellular-News**

Russian telecommunication operator Synterra has completed construction of a WiMAX wireless broadband network in Kursk, the company said in a statement Thursday. This is the company's first WiMAX network in a Russian region, the company said. In April, Synterra launched its first WiMAX network in the Russian capital, Moscow. The network consists of three base stations that cover about 80% of the city territory, Synterra said. It will have a service capacity of about 1,500 clients. The company did not disclose its investments in the Kursk network.

<http://www.cellular-news.com/story/20977.php>