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Welsh Rural Broadband

Quietly, the wireless wheels have been turning in Monmouthshire.

WBNet of Newport, Wales has been rolling out a wireless infrastructure that will cover nearly the entire county of Monmouthshire. With the SD20 project, WBNet and Monmouthshire County Council are nearing completion of a wireless network that will offer speeds of up to 6Mbps symmetrical.

"We are all aware of the advantages of FWA, but WBNet has gone a step further", co-founder Steve Goodall explains, "We need to be able to offer these higher speeds, but also to drastically bring down the price of quality high-end bandwidth within not just Monmouthshire but Wales as a whole. We are working with Rick Longford of MCC to ensure that residents of Monmouthshire have real choices in the broadband market."

Establishing headquarters in South Wales and owning bandwidth rights back to Tele-house in London have helped WBNet to vastly reduce bandwidth costs in Wales. Chairman Joss Goodall told the BWA that they expect to be matching London prices on bandwidth for business within mid-year.

So is WBNet just staying in Monmouthshire? Joss gave some insight to their plans. "We started this company in order to address the issues of the lack of broadband in rural communities, hence our logo of Connecting Communities Seamlessly. We are looking into every area in Wales to extend our network."

WBNet is able to offer services far beyond what traditional copper based

technologies can offer, and "at a price that makes sense". They are now quoting lease line services at half the cost of local prices.



So why has WBNet been so quiet about all of this? Steve explains their wish was to ensure that they had a robust network in place, and be able to deliver without hype. "We observed the hype and mistakes made by some other wireless companies in services level and customer support. We did not want to run into these problems."



What is next for WBNet? Joss gave us this insight. "In addition to being able to offer traditional ADSL services in enabled exchanges, we offer wireless services in Newport and Monmouthshire. We are now preparing to address areas in the west and north Wales. Our entire network is WIMAX ready.

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WBNets goal is to raise the bar of expectation of wireless broadband. We now want to ensure that SME's in Wales have affordable 2-6 Mbps connections. The 512k and 1 Mbps options are already becoming yesterday's news as these services are not for the coming technologies. We see the US now offering cable based 4Mbps connection at £40 per month, and that is where we are heading."

"WBNets still sees the cost of the subscriber equipment as a limiting factor, but we are working extremely hard with the SME's and the Welsh Development Agency to address these issues. Our vision is clear; to have an environment in Wales where the local SME can make their calls via their VOIP phone without per minute issues worldwide, watch a key speech being delivered via streaming video across the seas, and also to chat real time full screen video with a client of theirs in another county regarding the products on their website, that they can house themselves right there at their work place."

It is an ambitious dream, but one that WBNets is already fulfilling. The final word goes to Joss, "It is all about working together, we have forged some important relationships to reach this point. We are constantly looking for new alliances and partnerships. At the end of the day we achieve progress quicker by working together."

WBNets can be reached on 01633 718 002 and/or at their website www.wbnet.co.uk

UK 24GHz Exemptions

Ofcom have given notice of their proposal to exempt the use of automotive short-range radar equipment at 24 GHz from Wireless Telegraphy licensing.

For details please go to <http://www.ofcom.org.uk/consult/condocs/24ghz/>

UK Internet connectivity

For February 2005
– statistics released in April

The latest monthly update to the survey of Internet Service Providers (ISPs) shows that between February 2004 and February 2005 there was a 1.9 % increase in the number of active subscriptions to the Internet. The market share for permanent connections continued to increase in February and now accounts for 43 % of all connections. This compares with a market share of 23.6 % a year earlier.

Dial-up versus permanent Internet subscriptions

In February 2005, the indices of active subscriptions for dial-up and permanent connections were 77.3 and 7496 respectively when compared to their base of 100 in January 2001. Dial-up Internet connections continued to decrease, with a year on year fall to February 2005 of 24 %. The latest monthly decrease, from January 2005 to February 2005, was 2.8 %.

Permanent Internet connections continued to increase their market share and made up 43 % of all subscriptions in February 2005, up from 41 % in January 2005. There was a year on year increase of 85.9 % for subscriptions for permanent connections, with a monthly increase in February of 5.7 %.

The increase in the market share for permanent connections reflects the continuing move from slower dial-up connections to the quicker broadband, cable and leased line technologies. The share of dial-up connections dropped to 57 % of all connections in February 2005.

Type of subscription

In February 2005, 31% of active subscriptions used free access or billed access, compared with 38 % a year before. The percentage of those paying a fixed rate for unmetered dial-up access decreased to 22 % compared with 33 % a year before. The percentage of active subscriptions

using a mixed subscription type (fixed rate plus calls) remained at 4 %, while always-on subscriptions rose to 43 % compared with 24 % in February 2004.

Aperto to use Intel's System-on-Chip

Aperto Networks announced on April 18 that it is integrating the Intel(R) PRO/Wireless 5116 broadband interface into the Aperto WiMAX architecture, and Aperto's ongoing participation in Intel's WiMAX Ecosystem.

Aperto is implementing Intel's WiMAX silicon technology and System-on-Chip (SoC) architecture into its consumer customer premises equipment, for the 3.5 GHz, 2.5 GHz and 5 GHz frequency bands. The Intel PRO/Wireless 5116 allows broadband subscriber units to wirelessly connect end-users' homes or small offices with WiMAX base stations.

By incorporating multiple components on the same chip, Intel makes it less expensive for equipment manufacturers like Aperto to build residential subscriber units, and to meet the rapidly rising market demand for powerful and affordable consumer WiMAX solutions.

Aperto is already engaging several of its carrier customers in planned lab, field and market trials, and in upcoming WiMAX Forum Plugfests to demonstrate multi-vendor interoperability.

For more information go to www.apertonet.com

Minneapolis WiFi Initiative

Minneapolis, USA, plans to launch a privately-owned municipal WiFi network at a cost estimated around USD15 M. Service is expected to start within 6-12 months for 1Mbps and 3Mbps at a cost of USD18 to USD24 a month.

Red Herring

Cambridge Broadband has won an award placing it amongst the 100 private European and Israeli firms driving the future of technology. The Red Herring Award is made annually and last week the organisers announced the winners for 2005.

Red Herring has previously identified companies like Google and eBay.

For more information please contact Sandra Gilligan
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IPWireless to Trial UMTS TDD in France

Orange has launched technical and marketing trials of UMTS TDD (TD-CDMA) targeting the enterprise market in Lille, France with equipment supplied by IPWireless, the companies have announced.

UMTS frequency allocation traditionally comprises a paired band (FDD) and an unpaired band (TDD). Like nearly all UMTS operators, Orange has been allocated, depending on the country, a number of FDD frequencies and a block of TDD frequencies. To date, most UMTS deployments have focused on WCDMA utilising the paired frequency bands.

Orange's large-scale WCDMA deployment will deliver of a variety of services including voice, SMS, supplementary services, videophone, and packet data transmission at data rates of 64/128kbps and 64/384kbps. Data rates will increase with the planned FDD band evolution to HSDPA.

TD-CDMA technology tests and market research from the trials with IPWireless will enable Orange to decide when and how to use its unpaired TDD frequency allocations.

The technical aspects of the trials on the French corporate market in the

Lille business area will enable Orange to assess the real time performance of TD-CDMA and the coverage area, capacity, number of simultaneous users per carrier, and the coexistence of TDD and FDD networks.

Alvarion Demonstrates CPE using Intel WiMAX Chip

Alvarion has announced the first lab demonstration of a working WiMAX-ready CPE using the Intel(R) PRO/Wireless 5116 broadband interface.

Alvarion has now successfully integrated the PRO/Wireless 5116 into its BreezeMAX(TM) 3500 CPE, the culmination of a strategic development effort with Intel, which began in mid-2003.

Major operators, systems integrators, and other WiMAX Forum members had an opportunity to observe the live demonstration of the system at the Cetecom laboratory during the organization's Face2Face in Malaga, Spain last week. Cetecom is the first lab selected by the WiMAX Forum to perform certification testing of WiMAX equipment.

For more information, visit www.alvarion.com

USA Broadband Market grows

The USA broadband market is expected to reach 56.9 million subscribers by 2008, growing from 32.5 million subscribers in 2004, according to the 2005 Telecomms Market Review and Forecast, an annual study of the Telecommunications Industry Association (TIA).

<http://www.wirelessnetworksonline.com/nl/179505/797545>

Woosh Wireless

New Zealand-based mobile broadband service provider Woosh Wireless has announced that it has placed an order for 180 additional UMTS TDD base stations from network equipment provider IPWireless, in order to expand its network.

Ultrawideband

Ultrawideband set to make its commercial debut but the innovation is beset by a "standards war between small companies who want to see the technology develop as soon as possible and a cabal of large, established vendors who are keen to protect their status quo from a potentially disruptive technology", according to networking expert Andy Hopper. "Ofcom should implement large-scale field trials to assess whether UWB does cause any problems to existing service operators, and to find solutions if needed."

zdnet.com, page 904, 20-Apr-2005

Further controversy about the regulation of broadband, especially in the UK, is covered in

"Academics call for UWB licensing - Cross people in both camps"

http://go.theregister.com/news/http://www.channelregister.co.uk/2005/04/20/yahoo_earnings_q1_2005/

Swiss WiMAX Consultation

A public consultation has been launched by the Swiss regulator, BAKOM (Communications Bureau).

BAKOM aims to give interested parties a chance to make comments until April 30. Comments are sought on what kind of tendering process will be used, how many licences will be granted, and what the bandwidth will be per licence.

Based on the results, BAKOM plans proposals this summer.

SR Telecom 2004 Results

SR Telecom has reported its results for the fourth quarter and fiscal year ended December 31, 2004.

Consolidated revenues for the fourth quarter of fiscal 2004 totalled \$24.8 million, compared to \$41.6 million in the fourth quarter of fiscal 2003. The consolidated operating loss for the fourth quarter of fiscal 2004 was \$20.9 million, compared to an operating loss of \$12.8 million in the same period in 2003. The consolidated net loss for the fourth quarter of 2004 was \$41.9 million, compared to a consolidated net loss of \$14.2 million in the corresponding period in 2003.

Expenses were reduced, primarily due to the effects of the restructuring that was implemented in the second and third quarters of 2004. However, the benefits of the restructuring were partially offset by a provision of \$1.9 million related to an account receivable in the Middle East, by the effect of eliminating the expected sub-lease revenue of \$1.6 million on the U.S. operating lease, and by a \$0.9 million provision for an offer of settlement of a litigation.

Research and development expenses in the core wireless business increased from \$6.6 million in the fourth quarter of 2003 to \$9.2 million in the fourth quarter of 2004. The increase is solely due to a \$4.2 million adjustment to the utilisation of the federal investment tax credits as management has determined that there is insufficient evidence of reasonable assurance that this amount will be realized within the remaining life of the investment tax credits.

Detailed financial results for SR Telecom's fiscal 2004 are filed with SEDAR and EDGAR and are also available on the Company's website at <http://www.srtelecom.com>.

Skype Hits 100 Million Downloads

Skype has announced a major milestone: the 100 millionth download of the software. Skype has now enabled more than 7 billion high-quality minutes of talk time worldwide.

Bangladesh Broadband

DNS SatComm, a large data communications company developing comprehensive communications infrastructure supported by Bangladesh government equity, has chosen Cambridge Broadband's VectaStar multi-service broadband wireless platform to make their broadband services available to a new, wider range of customers.

DNS is deploying a metropolitan area network in Dhaka, delivering communication services to banks, multinational corporations, manufacturing companies and educational institutions.

RedKite 1, 2, 5 & 10Mbps

More businesses in Oxford can now enjoy high-speed symmetric Internet access at a fraction of the usual cost thanks to RedKite, the new wireless Internet service. For just £95 per month companies in the city can get a 1Mbps symmetrical connection. This opens up the real possibility of companies implementing widespread VOIP services, hosting their own web sites and applications or just using the Internet more over a far faster connection.

RedKite has been developed and launched by local Internet Service Provider, Community Internet plc. The company has built its own wireless network, which enables it to deliver RedKite in a matter of days

across the city. RedKite also boasts 99.9% availability with a service level agreement and ongoing technical support as standard for all of its customers.

WiMAX Interop

Alvarion, Airspan Networks, and Redline Communications have announced the initiation of the industry's first stage of private interoperability testing of IEEE 802.16-2004 systems, upon which WiMAX is predicated.

The three companies initiated the first phase of Base Station and CPE testing using Alvarion's BreezeMAX™ platform, Airspan's AS.MAX product line, and Redline's AN-100U line of carrier-class Base Stations. The testing is designed to support the official WiMAX Forum™ certification which is scheduled to begin in July.

The focus of private interoperability testing is compatibility at the PHY layer, which supports the smooth transmission of data packets between the Base Station and multiple CPEs on the same channel. Interoperability will provide network operators with multi-vendor choices and competitive prices, helping to accelerate mass market adoption.

The next phase of testing will focus on MAC layer and be based on the completing the tests with the WiMAX Certification test suite.

Intel Results

Intel has announced first-quarter revenue of \$9.4 billion, up 17 % year-over-year and down 2 % on last quarter.

First-quarter net income was \$2.2 billion, up 25 % year-over-year and up 1 % sequentially. Earnings per share were 34 cents, up 31 % from 26 cents in the first quarter of 2004 and up 3 % from 33 cents in the fourth quarter of 2004. Intel's first quarter included an additional week of business because 2005 is a 53-week fiscal year.

London's biggest broadband wireless hot zone

London's biggest wireless broadband hot zone is now live, providing free Internet access over a wireless mesh network from BelAir Networks.

The London Borough of Islington now hosts the "Technology Mile", built on wireless mesh networking equipment from BelAir Networks.

The "Technology Mile" is an unbroken wireless hot zone stretching the length of Upper Street, which links The City to the A1 main artery into north London. The one-mile hot zone is covered by seven BelAir200 Wireless Multi-service Switch Routers and one BelAir100 Wireless Multi-service Node.

The network was conceived by Islington Borough Council in partnership with Cityspace, the UK's leading provider of outdoor urban digital networks, and is financed as part of the Council's A1 Regeneration project.

The project was implemented to provide Internet access to all - anyone with a Wi-Fi enabled device can access the Internet for free along Upper Street. In addition, the Council is providing a number of local businesses - from cafes to dental surgeries - with PCs so they can offer customers free Internet service, providing everyone in the area with an equal opportunity to benefit from Internet access.

Broadband in Zambia

AfriConnect has announced the launch of its 'iConnect' wireless broadband internet service in Zambia.

AfriConnect is a UK-based company that offers systems integration and a full range of internet connectivity and related services throughout Africa,

with offices in Zambia, Tanzania and Ghana.

AfriConnect have partnered with NextNet Wireless Inc to use their OFDM wireless non line-of-sight technology operating in the licensed 2.6Ghz frequency band.

At present, iConnect is available in Greater Lusaka and the service is delivered by a single base station.

The cost of the service is about USD 75 + tax per month for home users and USD 150 + tax per month for corporate users.

Airspan buys Arelnet Ltd.

Arel Communications and Software has announced that Arelnet Ltd., in which Arel holds approximately a 17.8% share on an issued and outstanding basis, has signed a definitive agreement to sell all of its issued and outstanding shares to Airspan Networks for \$8.7 million.

This will be made up of \$4.7 million of Airspan shares and \$4 million in cash, of which \$500,000 will be placed into a one-year escrow.

Following the closing of the transaction, Arel expects to receive its ownership share of the transaction's consideration, composed of approximately \$700,000 in Airspan shares and \$600,000 in cash, of which approximately \$75,000 will be placed into the one-year escrow. Arel expects, after the closing, to record a net capital gain of approximately \$1 million.

Arel Communications and Software, a technology leader in interactive web communications, develops, markets and sells a universal conferencing software solution for enterprise-wide deployment of integrated voice, video and data web conferencing and collaboration and training applications.

For more information go to www.arelcom.com

Tropos and NetMotion to provide Seamless Mesh Roaming

NetMotion Wireless and Tropos Networks have announced a joint marketing agreement to provide secure, seamless and high-performance roaming solutions among metro-scale Wi-Fi mesh networks and wide area networks.

The companies are dominant in the public safety sector in their respective fields

Their first joint installation is in the City of Milpitas, CA, where the combination of Tropos MetroMesh (TM) and NetMotion Mobility XE (TM) enables seamless roaming over the town's entire ten-square-mile network for police officers, firefighters and other city workers.

For more information visit <http://www.tropos.com>

Luxembourg Consultation

Luxemburg has announced a consultation to define the needs of operators and to give them the opportunity to establish wireless networks, including WiMAX, taking into account the existing applications on different frequency bands.

All supplementary contributions and remarks are welcome. In the past, ILR assigned different licences to WLL-operators in the frequency bands 3.5GHz and 26GHz. In this context, technical constraints could be imposed by ILR in some cases, more specifically, in order to avoid interference with existing systems in the concerned frequency bands.

Contributions are due at latest May 15th 2005.

Redline WiMAX

Redline Communications has launched its RedMAX family of IEEE 802.16-2004-compliant products, which it will present for WiMAX certification in July.

The new product family consists of the RedMAX Base Station (AN-100U) - which will interoperate with any WiMAX-certified subscriber unit; RedMAX Subscriber Units - available in both outdoor (RedMAX SU-O) and indoor (RedMAX SU-I) versions; a RedMAX Backhaul solution - based on the AN-100U; and a network management system - the RedMAX NMS.

In addition to upcoming WiMAX certification, the RedMAX Base Station, RedMAX SU-O and RedMAX SU-I are currently being field tested with other equipment manufacturers to ensure interoperability, and with Intel to fine-tune Redline's subscriber units' use of Intel(R) PRO/Wireless 5116 broadband interface to deliver cost-competitive units for general availability in Q4, 2005.

For more information, visit www.redlinecommunications.com

GigaBeam and ADAPTIX to offer WiFiber and WiMax

GigaBeam and ADAPTIX have announced that they have entered into an agreement to co-market their complementary product offerings targeting the market for broadband communications access.

ADAPTIX patented WiMax and WiBro compatible SDR technology enables deployment for the increasing flexibility and mobility demands of enterprises and residential broadband subscribers.

For more information, visit <http://www.gigabeam.com>

Alvarion in Donegal

O2 plc and Siemens have successfully completed a test of Alvarion's BreezeMAX(TM) 3500, a WiMAX-ready solution. The system was used to provide broadband services to households and small businesses in Gleann Cholm Cille in Donegal, Ireland.

The trial was conducted over the span of a four month period and concluded in early 2005.

For more information, visit www.alvarion.com

Australian De-regulation Moves

Australian Communications Minister Helen Coonan visited London in April to look at UK regulation of the telecomms and broadcasting sectors ahead of Australia's plan to fully privatise Telstra Corp and water down media-ownership rules.

In particular, Coonan will study features of the proposal to split BT's wholesale and retail operations and how this model might apply to Telstra, Australia's dominant phone company.

Telstra, like BT, is fending off calls from industry players to structurally separate its business.

In response to Ofcom's strategic review of the UK telecom market, BT has offered to ring-fence in a separate division the parts of its business that offer competitors access to its exchanges. BT hopes to avoid an Ofcom-enforced complete separation of its network from its service business.

A Telstra sell-off is expected to raise A\$30 billion. The government is expected to divest its remaining 51.8% stake in the company in 2006.

'No Link between Mobile Phone Use and Brain Tumours'

A Danish study questioned 427 people with brain tumors and 822 people without brain tumors about their cell phone use. The study found no increased risk for brain tumors related to cell phone use, frequency of use, or number of years of use.

For more information, visit <http://www.wirelessnetworksonline.com/nl/179500/797545->

UK Radio Astronomy Spectrum

Ofcom has issued a consultation on Recognised Spectrum Access as applied to Radio Astronomy.

Please go to <http://www.ofcom.org.uk/consult/condocs/astronomy/>

BelAir WiMAX Mesh Roadmap

BelAir Networks has announced a new architecture for the next generation of WiMAX wireless networks - Wireless Multi-Service Architecture (WMSA).

WMSA allows carriers, service providers and network operators to deploy high capacity wireless infrastructure that will support emerging access technologies, without forcing customers to incur future costly and disruptive network replacements.

WMSA will also allow network operators to deliver high quality voice, video and data services on a metropolitan scale using a mix of Wi-Fi, WiMAX and 3G cellular technologies.

SkyTerra buys 50% of HNS

SkyTerra Communications has announced that it has completed the acquisition of a 50 % interest in Hughes Network Systems LLC (HNS) from The DIRECTV Group for \$50 million of cash and 300,000 shares of SkyTerra's common stock.

SkyTerra will be manager of the venture, with The DIRECTV Group retaining a 50 % stake in HNS.

Fujitsu WiMAX

Fujitsu Microelectronics America has introduced its highly integrated WiMAX system-on-chip, the MB87M3400, which complies with the IEEE802.16-2004 standard and will enable development of a new generation of WiMAX-compliant broadband wireless access (BWA) equipment.

The Fujitsu WiMAX SoC allows both base station and subscriber station implementation, and is aimed at bringing cost-efficient, high-quality, fixed broadband connectivity to Metro Area Network users, without the need for direct Line of Sight access to base stations.

The MB87M3400 is designed to enable deployment of BWA equipment for both base stations and subscriber stations in licensed or licence-exempt bands below 11GHz.

The MB87M3400 uses an OFDM 256 PHY that supports channels from 1.75MHz up to 20MHz, and can operate in TDD or FDD modes, with support for all available channel bandwidths. A programmable frequency selection generates the sample clock for any desired bandwidth.

When applying 64QAM modulation in a 20MHz channel and using all 192 sub-carriers, the SoC's data rate can go up to 75Mbps. Uplink sub-channelisation is also supported.

BelAir enables Bristol Wide-Area Network

Bristol now has wireless broadband services on the UK's largest wireless hot zone, built with BelAir Networks wide-area wireless networking equipment.

Known as "StreetNet" the Bristol network has been live since November 2004. It stretches from the top of Park Street down to St. Augustine's Parade, the Watershed and some surrounding key roads - approximately three kilometres squared - and supports multiple public and municipal networks and applications.

The network is built with BelAir200 Wireless Multi-service Switch Routers to provide 'always-on' access to the Internet and email and allow for council and city workers to access private networks (VPNs) while working on city streets.

The network also provides wireless connectivity for CCTV, allowing cameras to be deployed around street events and for general security surveillance.

The Bristol network was conceived by Bristol City Council in partnership with Cityspace, the UK's leading provider of outdoor urban digital networks.

Visit the Cityspace website for information, testimonials and press reviews www.cityspace.com

Aperto deploys Fujitsu Silicon

Aperto Networks and Fujitsu Microelectronics America have announced the results of their collaboration to test and integrate the Fujitsu MB87M3400 System-on-Chip (SoC) into Aperto's WiMAX systems development.

Aperto has selected Fujitsu's SoC as the standard silicon for its

PacketWave(R) base station systems and high-end series of business-grade customer premises equipment.

Aperto and Fujitsu have started pre-certification testing of all system functionalities, and are on-track for the WiMAX Forum(TM) July 2005 early-stage Plugfest and tests at the WiMAX Forum certification lab CETECOM in Malaga, Spain.

More Welsh Broadband

A recent survey has found almost 75% of large Welsh SMEs are now using broadband.

The survey, commissioned by the Welsh Assembly's Broadband Wales Programme, and undertaken by ORC International, analysed the broadband habits and opinions of more than 700 Welsh businesses.

It illustrates that as a catalyst for change, broadband is now widely understood amongst 97% of businesses for its power to provide a "faster Internet experience" and faster downloading. Small businesses in particular were attracted to the idea of "freeing up" the phone line, whilst larger companies highlighted the "always on" nature of broadband as an advantage. Other general uses cited include using the Internet for specific competitor or market research, or for email.

However, less than half of those surveyed said they use their broadband connection to improve customer services and business processes such as banking. Of those surveyed, only a quarter used the Internet to sell their goods or services online - this in stark contrast to the 70% that buy online.

The Welsh Development Agency's Broadband Support Scheme allows businesses to enjoy the benefits broadband can bring at a significantly reduced cost in the first year of use.

For details visit www.wda.co.uk/broadband