

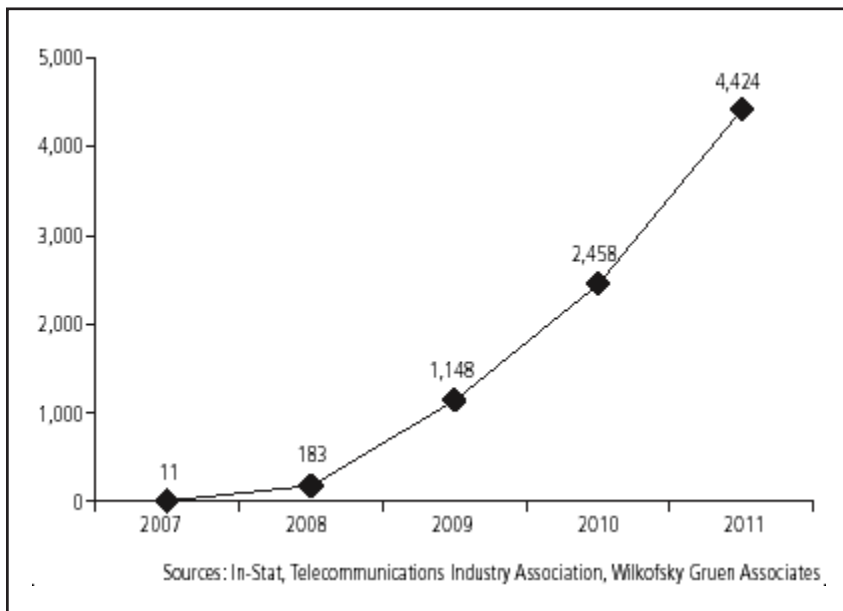
Wi-MAX MONTHLY NEWSLETTER

Covering WI-MAX and Wireless Local Loop Developments Worldwide

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WiMAX Subscribers in the United States
(Thousands)



TOP NEWS

Sprint selects Mformation mobile device management to support XOHM mobile WiMAX service initiative

Mformation Technologies Inc., a provider of mobile device management (MDM) software, announced that SPRINT has selected its Mformation Service Manager to provide seamless device management capabilities for new WiMAX-capable mobile devices as part of the XOHM WiMAX mobile broadband initiative.

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Device management ensures that WiMAX devices can be remotely activated and provisioned irrespective of their source, ensuring they work seamlessly and deliver a true mobile Internet experience. “Advanced device management is critical to delivering the best possible user experience over WiMAX and enabling the broadest and most compelling suite of WiMAX devices,” said Barry West, president of Sprint’s XOHM business unit.

“The ability to remotely manage and support any WiMAX device — irrespective of where it has been bought — will create the first truly open wireless marketplace, allowing customers to purchase their own devices and activate them when they choose with or without a contract in place.”

XOHM intends to significantly enhance the mobile Internet, allowing users to access advanced data applications and personal content from anywhere in the XOHM WiMAX coverage area, on any WiMAX-certified device at broadband speed. Studies show that consumer uptake of new mobile applications and services is directly related to early, positive user experiences and services that work seamlessly right out of the box.

Sprint will use Mformation’s advanced MDM technology to remotely activate, configure, diagnose, update, secure, and manage a diverse fleet of WiMAX-capable devices throughout all phases of their lifecycle. This will ensure that services and applications are delivered smoothly across Sprint’s WiMAX network, helping the company make the most of its WiMAX investments.

With support for more than 1,400 devices across any mobile network type, Mformation’s integrated MDM platform supports Sprint’s current CDMA device portfolio and offers the flexibility to evolve to support new network types, devices, and value-added services. With Mformation, the devices in the subscribers’

hands are always configured and working optimally. Mformation has significant expertise in managing different classes of devices. Mformation’s deep experience with the OMA DM protocol and leadership role in managing OMA DM devices are especially critical to the seamless management of WiMAX-based devices, which use this protocol.

“Working with Sprint on this very important mobile broadband initiative is great validation of the power of our comprehensive MDM platform,” said Mark Edwards, CEO for Mformation. “We have consistently demonstrated our ability to support Sprint on their existing device portfolio where our advanced MDM platform is delivering a seamless, intuitive customer experience. Our ability to activate and manage their mobile devices to support their CDMA subscribers has been a huge success. We look forward to supporting them on XOHM and many further initiatives.”

Alvarion sets off first mobile WiMAX Internet service in the US

Alvarion Ltd., a provider of WiMAX and wireless broadband solutions, announced the commercial rollout of mobile WiMAX Internet service by DBC (DigitalBridge Communications) offered over Alvarion’s WiMAX Forum Certified BreezeMAX 2.5GHz solution. The network is already up and running with broadband Internet to businesses and homes across Jackson Hole, Wyoming.

As part of a popular resort area drawing thousands of tourists year round, Jackson Hole’s businesses, municipal offices, and residents require high-speed connectivity. DBC’s new network enables wireless connectivity with full coverage for businesses and public offices, enabling employees to stay online via a mobile office in their vehicles and access to services such as video, voice, and data communications

on the go. New mobile Internet service will offer consumers the benefits of anytime anywhere broadband connectivity using WiMAX PC cards in their laptops. Visitors at the resort can also use the service to send real-time pictures and movies while on vacation. Using a certified solution to build the network will allow the introduction of third-party devices from the open market into the network. "We are delighted to turn Jackson Hole into the first U.S. Mobile WiMAX community, offering true mobile broadband Internet service to both residential and business customers," said Kelley Dunne, CEO of DBC. "Building on our strong relationship with Alvarion, we leverage the company's WiMAX innovations once again and offer the Jackson Hole area, and similar communities in the near future, advanced and affordable mobile services."

"We are pleased to turn on mobility using our certified Mobile WiMAX solution for the first such network in the U.S. together with our long standing partner DBC," said Tzvika Friedman, president and CEO of Alvarion. "Our base station presents a robust and stable platform for the benefit of operators worldwide; and DBC's commercial deployment of Personal Broadband applications over WiMAX is a first and most important milestone for the evolving WiMAX industry, supported by a strong OPEN WiMAX ecosystem."

DBC will continue to expand its mobile WiMAX service in the Jackson Hole area where its network reaches more than 3,000 homes and businesses, and then add mobile capabilities throughout its 200,000-household footprint.

POLICY

WiMAX Forum supports European Commission decision on harmonization of the 2.6GHz frequency band

The WiMAX Forum congratulates the European Commission on the completion and

publication of an important new regulation relating to the 2.6GHz (2500-2690MHz) frequency band. The 2.3-, 2.6-, and 3.5-GHz frequencies are key bands for mobile WiMAX technology and will contribute to providing suitable spectrum for WiMAX consumer and business services around the world.

The 2.6GHz decision was unanimously supported in the European Commission's Radio Spectrum Committee, and it allows European Union administrations to make decisions in relation to the technology, services, and usage that can be deployed within the band. It also offers administrations flexibility over the balance of paired (FDD) and unpaired (TDD) spectrum that can be awarded to operators and provides the essential technical framework. The intention is that the market can decide which technology to deploy in this band, determine the most appropriate use of this spectrum, and create significant opportunities through opening the spectrum, which will benefit all consumers.

"The 2.6 GHz decision is the result of many months of work by the European Commission, supported by the CEPT Electronic Communications Committee (ECC) and its project teams," said Ron Resnick, president of the WiMAX Forum. "The WiMAX Forum Regulatory Working Group — and its European Regional Task Group in particular — contributed extensively to support and encourage this work via participation in the relevant ECC activities. The WiMAX Forum is excited to see additional progress being made in Europe to further empower the individual governing bodies to make decisions on telecommunications service availability for its citizens."

This decision was made in addition to the recently published European Commission Decision 2008/411/EC harmonizing the 3.5GHz band for electronic communications services and represents a key milestone in the drive to advance new liberalized approaches to

spectrum management within the European Commission WAPECS (“Wireless Access Policy for Electronic Communications Services”) initiative.

“The 2.6GHz decision is fully in line with the WiMAX Forum’s policy on spectrum flexibility, and we commend the European Commission and the ECC on the strong leadership they have shown in moving forward the spectrum management paradigm in Europe,” said Tim Hewitt, director of regulatory and spectrum policy for the WiMAX Forum. “The acceptance of the 2.6GHz decision provides a great deal of regulatory clarity for administrations. The EU administrations can now justifiably, and with the knowledge they are backed by the full weight of European Union policy, question the now inappropriate, ECC Decision (05)05, which is holding back the development of a fully competitive European mobile broadband market.”

With the 2.6GHz regulations now in place, EU administrations can proceed with spectrum awards for this band as a matter of priority.

“The WiMAX Forum encourages the EU administrations to take bold and imaginative decisions to realise the full social and economic benefits of the opportunities that the 2.6 GHz decision has created,” said Resnick.

The WiMAX Forum Subscriber and User Forecast Study projects that growth within the region is expected to be strong, especially in Eastern Europe, where cable and fixed broadband Internet is less prevalent. Europe had the second-highest WiMAX user penetration by the end of 2007 and is anticipated to have the largest number of operators, followed by Asia-Pacific, Africa/Middle East, Americas, and North America.

According to the same report, by 2012 there will be more than 133 million WiMAX users globally, and approximately 70 percent of

forecasted WiMAX users will use mobile and portable WiMAX devices to access broadband Internet services. Currently, there are more than 305 deployments of WiMAX services in 118 countries worldwide.

For more information on the WiMAX Forum or get additional information on the WiMAX Forum Subscriber and User Forecast Study, please visit the WiMAX Forum Web site at www.WiMAXforum.org.

NEW PRODUCTS

IXYS announces WiMAX power amplifier modules

MicroWave Technology Inc. (MwT), a wholly owned subsidiary of IXYS Corporation, announced that it had started shipping WiMAX power amplifier modules in production volume for 4.9-5.9GHz OFDM (orthogonal frequency division multiplex) digital radio applications.

An innovative supplier for high-performance GaAs-based semiconductor devices, MMICs (monolithic microwave integrated circuits), and microwave amplifiers modules for microwave and wireless communications, MwT released a family of eight high-linearity power amplifiers (PA) for Wi-Fi (802.11) and WiMAX (802.16d/e) standards for all three frequency bands, 2.4-2.7GHz, 3.3-3.7GHz, and 4.9-5.9GHz.

MwT has started shipping its WPS-545922-02, a high-linearity power amplifier module (PAM), to a first-tier telecom system company in production volume for high-data-rate wireless communication applications including OFDM digital radio systems.

“We are very pleased that our high linearity PAM, WPS-545922-02, has been selected to be the key component for the wireless radio systems,” said Dr. Greg Zhou, general manager of MwT. “The WPS-545922-02 leverages our strong expertise in

semiconductor devices together with our high linearity PA architecture. Customers have selected our linear power amplifiers due to their superior linearity performance and other critical RF characteristics. Our high quality PAM products provide wireless infrastructure players the enabling technology to achieve the highest data rate under complex digital modulation schemes.”

The WPS-545922-02 is a highly integrated PA module with fully matched input and the output terminals. No external matching elements are required. The PAM belongs to the WPS (Wireless Power Series) PAM products family targeted for 802.16 WiMAX, 802.11 Wireless LAN, and other high-data-rate wireless radio link applications. This WPS product family includes high linearity PAM products operating at 2.5-, 3.5-, and 5.9GHz frequency bands with up to 5W peak power and up to 1W linear average output power at 2 percent EVM (Error Vector Magnitude) under 64QAM digital modulation scheme, enabling radio systems to achieve highest data rate with minimum power consumption.

For a complete listing of MwT products and detailed data sheets, please go to www.mwtinc.com.

LitePoint targets MIMO, WiMedia, and GPS

LitePoint Corporation, a provider of wireless test-system solutions, launched three new systems for testing four wireless standards. The new IQnrxn system offers true multistream signal capabilities for Wi-Fi and WiMAX MIMO development. IQultra — the industry’s first ultrawideband (UWB) EVM test system — covers both development and manufacturing testing of UWB devices. And the new IQnav test system is aimed at high-volume manufacturing testing of the proliferating, embedded, GPS-equipped devices. “From our position of strength in Wi-Fi and Wi-Fi MIMO testing, we are

expanding into UWB and GPS markets with uniquely competitive offerings,” stated Benny Madsen, LitePoint’s chief executive officer.

LitePoint’s new IQnrxn MIMO R&D test system comes at just the right time in both the Wi-Fi and WiMAX MIMO development cycles to help ODMs and OEMs verify designs and get them into production, and into the market, sooner and at lower overall cost.

“There simply is no more effective way to test MIMO devices in development than using synchronized, modular, VSA/VSG test systems,” stated John Lukez, head of product management at LitePoint. “In the real world, MIMO devices will have multiple radios sending simultaneous signals and receiving simultaneous signals while dealing with natural impairments. A development test system must be capable of recreating that same kind of environment,” he explained. “WiMAX Wave 2 devices demand a way to truly test 2x1 devices, and IQnrxn is designed for doing exactly that.”

LitePoint IQnrxn test systems are a modular approach to MIMO R&D testing. Each module contains its own vector signal analyzer (VSA) and vector signal generator (VSG). A synchronizer subsystem ensures that the modules work in lockstep. One can develop test programs on this system and then easily port them to a single IQmax tester for production testing.

The systems can be configured from a 1x1 (e.g., one module and a synchronizer subsystem) to a 4x4 (e.g., four modules and a synchronizer subsystem). The modules support Wi-Fi and WiMAX frequency ranges of 2.15-2.7GHz, 3.3-3.8GHz, and 4.9-6.0GHz. The included graphical user interfaces (GUIs) — IQsignal for Wi-Fi and IQsignal for WiMAX — provide powerful analysis and display capabilities for single, multistream, and beamforming adaptive-antenna functionality testing.

Because the IQnxn system shares the same architecture as LitePoint's IQmax manufacturing test system, there is consistency across development and manufacturing test processes and results that simplify and speed up design-problem resolution. In fact, the IQnxn modules can also be used for automated manufacturing testing to provide additional test capacity during periods of increased demand.

For more details, see <http://www.litepoint.com/content/view/216/196/>.

The IQultra WiMedia test system features a special-purpose vector signal analyzer (VSA) combined with an attenuator for UWB receive testing. The system can capture and analyze all WiMedia band groups (1 to 6) and time frequency codes (TFCs; 1-10).

"There's no other wireless standard besides UWB that spans over seven GHz of spectrum with signal bandwidths of 528 MHz and maximum power of -41 dBm per MHz," said Lukez. "Testing UWB poses a choice between very expensive instruments, or very long test times, or both.

But IQultra, like all of our other wireless test solutions, changes the rules of the testing game. It enables single-signal capture and analysis without posing frequency or signal-bandwidth constraints. This allows you to do quality measurements, like EVM, which is critical to verifying the high data-rate capabilities of UWB," he explained.

"When we first saw LitePoint's WiMedia test system prototype, last December, we were very impressed by its ability to fully verify the capabilities of our latest UWB chip set," said Dr. David Shoemaker, Alereon's vice president of engineering and operations. "The resulting IQultra is even more impressive. It is an excellent WiMedia development or production test solution."

The new systems come with LitePoint's IQsignal for WiMedia graphical user interface

(GUI) that controls the unit and supports signal analysis. Using IQultra's C++ software application program interface (API), users can quickly and easily create automated test programs.

LitePoint's IQultra WiMedia test system comes in two versions: IQultra-300 for triple-band capture and IQultra-100 for single-band capture. Both support from 3.1- to 10.6GHz, and support MB-OFDM PHY layer specification version 1.2.

For more details, see <http://www.litepoint.com/content/view/108/143/>.

The GPS market is on a huge, sustained roll. In-vehicle navigation has become ubiquitous in Japan and is being followed closely by North American and European countries, according to RNCOS, a market research firm in Delhi, India.

RNCOS writes that personal navigation devices, in 2007, accounted for 90 percent of the GPS market, but by 2012, the firm believes that GPS-enabled handsets will grab a 78 percent market share.

The firm also expects the 2008 Olympic Games in Beijing and the Shanghai World Expo in 2010 to "trigger an explosion" in China's commercial telematics market. LitePoint's new IQnav system is designed to improve test coverage of GPS devices while simultaneously lowering those test costs.

The multichannel IQnav enables both C/No measurements and location-fix test to be performed in a single connection to the device under test (DUT). This saves time (up to 50 percent) compared to sequential test approaches.

Additionally, the IQnav offers synthetic power sweep (SPS) capabilities where up to six C/No measurements are made simultaneously, saving additional time.

Finally, the price of a six-channel IQnav compares with that of competitive single-

channel testers, thus adding capabilities without affecting acquisition costs.

IQnav is available in 1- and 6-channel models, both supporting L1 GPS frequencies (1575.42MHz) over a power range of -60 to -145dBm.

The IQnav features specialized trigger capabilities that support testing of assisted GPS (A-GPS), commonly used in CDMA one and CDMA 2000 handsets.

“By applying GPS IC design techniques to the IQnav, LitePoint has been able to produce a GPS test instrument which allows thorough test coverage while simultaneously reducing test costs. It is another example of LitePoint looking at the entire test process and developing optimal solutions,” Lukez added.

For more details, see <http://www.litepoint.com/content/view/237/212>.

All of LitePoint’s new products will be available worldwide in August 2008.

IQnxn systems can be ordered with a choice of configuration from a single module (IQmax-750) to a two-module tester plus synchronizer. All configurations are equipped to test both Wi-Fi and WiMAX devices. Prices for IQnxn systems will range from \$55,000 for a single IQmax-750 to \$129,000 for two IQmax-750s and multistream MIMO subsystem. Systems can be configured up to a 4x4 test solution.

The price for a triple-band capture IQultra WiMedia test system — IQultra-300 — will be \$55,000. The single-band model — IQultra-100 — is priced at \$42,300.

The new IQnav six-channel GPS manufacturing test solution has a single-unit price of \$12,500; the single-channel version will sell for \$9,500. All of the above prices are for orders and deliveries in the US.

For pricing information in other world regions, contact the appropriate regional sales offices listed on www.litepoint.com.

FINANCING

SOMA Networks secures additional \$51 million in financing

SOMA Networks Inc., a provider of mobile WiMAX products and professional services, announced that it has secured an additional \$51 million of equity financing in an over-subscribed round. Investors include Daiwa Securities Group Inc., Daiwa Securities SMBC Principal Investments Co. Ltd., Ridgeway Capital Partners Ltd., and India Knowledge Fund, a private equity fund of Japan-based SBI Holdings Inc. and SBICAPS, among others.

The financing has been earmarked for continued expansion of international operations and deployments, including ongoing support of the industry’s largest WiMAX network with Bharat Sanchar Nigam Ltd. (BSNL), India’s state-owned telecommunications company. BSNL and SOMA announced an agreement earlier this year to roll out a mobile WiMAX network across three of India’s fastest-growing telecom circles: Gujarat, Maharashtra and Goa, and Andhra Pradesh.

“We are encouraged by the great opportunities that lie ahead for SOMA Networks, particularly in light of the growing demand for broadband services in one of the world’s largest markets,” stated Toshihiko Onishi, deputy president of Daiwa Securities SMBC Principal Investments Co. Ltd. “We look forward to supporting SOMA as they continue to execute on the major market opportunity at hand.”

“We are pleased to receive this latest round of financial support from our partners, as the continued investments further validate our successful strategy of providing broadband voice and data services to bridge the digital divide,” stated Yatish Pathak, founder and chief executive officer of SOMA Networks. “We are in a position of strong international growth in emerging markets, as service providers around

the world are realizing the far reaching benefits of deploying our WiMAX system technologies.”

SOMA's WiMAX technology is designed to serve the broadband-to-the-home (BTTH) market and narrow the digital divide for the more than 1.7 billion households that do not currently have access to broadband services and the Internet economy. In Southeast Asia, SOMA has been the preferred choice of Malaysia-based Jaring, AlwaysOn Networks Bangladesh, Cambodia Data Systems, and many other service providers in the region. Elsewhere, the system has been deployed by carriers in the United States such as AT&T, and by network operators in Eastern Europe and Africa.

The FlexMAX Mobile WiMAX System is a complete broadband wireless system that enables service providers around the world to implement standards-based solutions that offer wireline performance and deliver a superior subscriber experience to residential and business subscribers. The FlexMAX System includes base stations, multiple types of mobile station devices, advanced multi-antenna processing, capacity-boosting technology, integrated applications, network management, and network gateways — all backed by world-class partners, global field support, and professional services.

BridgeWave enables transition to WiMAX and LTE by expanding mobile backhaul efforts with \$10 million Series 4 round

BridgeWave Communications, a supplier of Gigabit wireless solutions, announced that it has received \$10 million in Series 4 funding. This round was co-led by Intel Capital and a new investor, Core Capital, with participation from prior-round venture capital firms Cipio Partners, SDL Ventures, and Merifin Capital.

BridgeWave will use the funding to extend the company's position in Gigabit wireless enterprise and fixed operator networks

into the next-generation Gigabit mobile backhaul space. This move will help address the data transport challenges facing 4G WiMAX and long-term evolution (LTE) deployments.

“As WiMAX deployments continue to gain momentum, there needs to be a major push to expand backhaul capacity in order to support high bandwidth requirements, particularly in high-density metro areas,” said Sriram Viswanathan, director, Mobility Sector, Intel Capital. “BridgeWave is well-positioned to address this need as their technology provides full line-rate Gigabit speeds and utilizes the wide spectrum available between 60GHz and 90GHz.”

“The vast increases in mobile data traffic enabled by 3G and 4G technologies, including WiMAX and LTE, will not be fully realized without a corresponding increase in backhaul transport capacity,” said Tom Wheeler, managing director at Core Capital and former CEO of the CTIA. “BridgeWave's technology is poised to play an important role in delivering mobile backhaul capacity, when fiber-optic base station connectivity is unavailable.”

As a result of the financing, Pascal Luck, managing director at Core Capital, will be joining the BridgeWave board of directors.

“As operators look to make 4G WiMAX and LTE networks a reality, they first need to address the roadblocks associated with them—one being the shortage of mobile backhaul to accommodate customer demand for bandwidth-intensive data services,” said Andy Fuyentes, senior analyst at Visant Strategies. “This being the case, Gigabit fixed wireless technologies from companies like BridgeWave are poised to meet the growing need for 4G mobile backhaul and play a crucial role in energizing WiMAX and LTE.”

BridgeWave believes that the strong response for Gigabit wireless solutions will continue to grow as organizations and carriers

look to wireless connectivity as a highly viable alternative to fiber. The total addressable market for high-capacity, short-range wireless products is growing 60 percent per year, according to an EJL Wireless Research report from September 2007.

“We thank Intel Capital for their investment and welcome Core Capital to the BridgeWave team,” said Amir Makleff, president and CEO of BridgeWave Communications. “This round of funding ensures that BridgeWave will have all the means necessary to address the requirements of first-tier mobile network operators, enabling the transition to next-generation mobile deployments worldwide.”

CONTRACTS

Alvarion chosen by GO Mobile for nationwide mobile WiMAX deployment in Malta

Alvarion Ltd., a provider of WiMAX and wireless broadband solutions, announced that it has recently been chosen by GO Mobile, Malta’s mobile operator, for a nationwide mobile WiMAX network deployment. Using Alvarion’s 4Motion solution with BreezeMAX as its RAN (radio access network), GO Mobile plans to provide voice and data services at the 3.5GHz frequency band to the residents of the island of Malta.

Rollout of the commercial network is expected to begin in the next few weeks. The new network will offer an enhanced portfolio of high-quality wireless broadband services over Alvarion’s mobile WiMAX solution, opening opportunities for high-speed Internet, as well as video, TV, and gaming. Alvarion’s partner for this deployment project is SIAE MICROLETTRONICA, an Italian-based, technology-focused microwave company.

“With the challenge of expanding network service throughout the entire island, we

specifically looked for a robust and feature rich solution with secure future advantages,” said Norbert Prihoda, chief mobile operations officer of GO. “We chose Alvarion because it was the one vendor to answer to all our demands, enabling us to guarantee nationwide coverage for optimized broadband experience. This technology will augment our already nationwide 3G-3.5G/HSDPA wireless coverage. This underpins our multi-access nationwide data strategy with the utilization of different technologies to provide the best value proposition for our customers. Furthermore, Alvarion’s commitment to OPEN WiMAX solutions will allow us to provide advanced and high quality service with competitive package deals, for the benefit of our customers,” Mr. Prihoda added.

“We are pleased to be selected by GO Mobile, a most innovative and leading mobile operator in Malta,” said Tzvika Friedman, president and CEO of Alvarion. “Increasing network capacity with our OPEN WiMAX solution can promote lower operational costs and enable GO Mobile to offer wireless broadband at affordable rates and ensure the same quality of service and innovation for forthcoming expansions.”

As an awarded licensee of the 3.5GHz frequency band in Malta, GO Mobile is required by MCA (Malta Communication Authority) to complete network rollout and provide 99 percent nationwide coverage by October 2009. MCA supports open networks and believes that OPEN WiMAX encourages beneficial competition and promotes a state-of-the-art broadband market.

Comstar to use Nortel equipment to develop mobile WiMAX network in Moscow

Comstar — United TeleSystems JSC, an integrated telecommunications operator in Russia and the CIS, announced that it has

selected Nortel equipment to develop the first mobile WiMAX network in Moscow. 160 base stations are expected to be built in Moscow by the end of 2008. The overall investments in the project are expected to amount to approximately US\$ 20 million in 2008.

The building of the IEEE 802.16e standard (2.5-2.7GHz range)-based network has already started and is expected to be completed by the end of 2008, with Kvazar-Micro (now renamed as SITRONICS Information Technologies) acting as the equipment supplier and Intellect-Telecom as the project designer.

Sergey Pridantsev, president and chief executive officer of Comstar UTS, commented, "The mobile WiMAX network, which will be added to other broadband Internet access technologies, will allow us to provide a very broad range of telecommunications services to our subscribers in Moscow, whether at home, in the office or on the street. The offering, which comprises a wide spectrum of unique solutions, will increase our subscriber loyalty and strengthen our position in the Moscow broadband Internet access market."

For further information, please visit www.comstar-uts.com

Alcatel-Lucent WiMAX solution selected by DISA for Joint Capabilities Technology Demonstration

LGS, a subsidiary of Alcatel-Lucent dedicated to serving the US government community, announced that the Defense Information System Agency (DISA) has chosen Alcatel-Lucent's WiMAX wireless broadband technology after a rigorous technical and interoperability analysis under its Tactical Service Providers (TSP) Joint Capabilities Technology Demonstration (JCTD).

The JCTD aim is to demonstrate potential warfighting applications and the usefulness of

a hybrid communications architecture that uses emerging standards-based, COTS (commercial off-the-shelf), satellite communications and wireless technology to extend global, wideband communications and services in a mobile tactical environment.

Through LGS, Alcatel-Lucent will provide a turnkey WiMAX radio access network that includes a WiMAX base station, WiMAX Access Controller, and WiMAX Operation and Maintenance Center that will support the latest WiMAX standard, 802.16e-2005 (Rev-e).

The next phase of the project will include live demonstrations in the field and over-the-air transmission verification of further interoperability testing to validate the equipment capabilities and any unforeseen limitations.

The Defense Information Systems Agency is a combat support agency responsible for planning, engineering, acquiring, fielding, and supporting global net-centric solutions to serve the needs of the US president, vice president, secretary of defense, and Department of Defense personnel, under all conditions of peace and war.

Alcatel-Lucent's Universal WiMAX solution integrates the latest technological innovations, such as "beam forming" and multiple-input/multiple-output (MIMO). Beam forming enables dramatic reductions in the number of radio sites needed to provide coverage — in some instances by as much as 40 percent — while reducing interference and ensuring better indoor penetration of the radio signal. MIMO helps make radio links more robust, nearly doubling the capacity delivered in dense urban environments.

ELRO selects ECI Telecom to build Denmark's first nationwide WiMAX network

ECI Telecom, a global provider of networking infrastructure solutions, announced that it has signed a three-year framework

agreement with Danish utilities company ELRO for the deployment of a nationwide WiMAX network across Denmark, beginning in the area of Randers.

ELRO was granted a national WiMAX license in 2007 and will be deploying the wide area network for the provisioning of voice and broadband Internet services as part of the company's SkyLine service. The nationwide network rollout is expected to be completed by 2010.

"By integrating best-of-breed solutions, ECI allows us to benefit from a cost-optimized, one-stop-shop for simplified administration, maintenance and provisioning coupled with a single point-of-contact for integration and interoperability," said Søren Møller CTO broadband of ELRO.

"This is a milestone network for Denmark, with a future-proof path to transition to an all-IP-based mobile service provisioning, providing our customers with a complete offering for all their communication needs."

Joining ECI to build this advance, integrated WiMAX and transport network solution are Alvarion Ltd., a provider of WiMAX and wireless broadband solutions, and Ceragon Networks, a provider of high-capacity Ethernet and TDM wireless backhaul solutions.

The network will showcase a comprehensive integrated transport, WiMAX, and radio wireless backhaul solution based on IP over next-generation SDH, combining ECI's XDM and BroadGate Multi-Service Provisioning Platforms (MSPP), Alvarion's BreezeMAX WiMAX platform based on its OPEN WiMAX strategy, and Ceragon's FibeAir microwave technology.

To simplify operation, administration, and maintenance (OAM), the joint network will be managed under ECI's LightSoft Network Manager, enabling end-to-end provisioning under a single, unified management platform.

With its unified graphical user interface, LightSoft improves efficiency by providing users with a clear picture of the entire network and available resources.

Comstar completes building first WiMAX network in Armenia

Comstar — United TeleSystems JSC, an integrated telecommunications operator in Russia and the CIS, announced that Cornet-AM, an Internet services provider and a part of Comstar Group, has built the first mobile WiMAX network in the Republic of Armenia.

The wireless broadband network, based on the 802.16e standard, consists of 24 base stations that are connected to each other via radio relay lines and rented telecommunications channels. Airspan Networks (US) has provided network equipment.

The 3.6-3.8GHz frequency range was allocated for the network on the territory of nine regions of the Republic of Armenia.

The network has a high data transmission capacity and enables the provision of a full range of telecommunications services, such as data transmission, digital telephony, high-speed Internet access, conference calling, and creating virtual private networks (IP VPNs), for residential and corporate subscribers.

Victor Koresh, vice president of Comstar for regional development, commented, "We have implemented the first part of our strategic project aimed at expanding our presence in Armenia. The next step involves the development of the voice services in the Republic. Earlier this year, Cornet-AM applied to the Public Service Regulation Committee of the Republic of Armenia to obtain the numbering capacity of 60,000 telephone numbers." For further information, please visit www.comstar-uts.com

BUSINESS**CalAmp awarded additional smart antenna patents**

CalAmp Corp., a provider of wireless products and engineering services, announced that the US Patent and Trademark Office has awarded CalAmp two new US patents: "Calibration methods and structures in wireless communications systems" (Number 7,392,015) and "Adaptive beamforming methods and systems that enhance performance and reduce computations" (Number 7,339,979). The '015 patent outlines a system and method for wireless transceivers that receive and transmit signals from an array of antennas that are connected to spatial processing channels. The patent's claims cover calibration methods and structures that compensate for the relative gain and phase errors of transceivers using frequency-domain spatial processing algorithms. The '979 patent outlines computational methods which increase real-time performance and reduce implementation complexity and cost by processing spatial information progressively on delay-optimized subarrays.

These two patents are the latest of a series of five patents awarded to CalAmp related to smart antenna technology. Other related patents that have previously been awarded include "Wireless communications structures and methods utilizing frequency domain spatial processing" (Number 7,072,693), "Wireless communication structures and methods with enhanced range and performance" (Number 7,035,652), and "Spatial-temporal methods and systems for reception of non-line-of-sight communication signals" (Number 6,947,507).

CalAmp's smart antenna development has resulted in beamforming technology that can be used to enhance the performance and coverage of wireless networks such as Wi-Fi

(802.11), WiMAX (802.16), broadband wireless access in "white space" UHF frequencies, and 700MHz mobile. It uses multiple antennas and powerful digital signal processing to dynamically form an antenna pattern optimized for each network user, based on interference and other wireless channel conditions. The complex spatial processing cancels interference by better using high multipath, non-line-of-sight channels, thereby substantially improving data throughput performance.

These performance improvements and the reduction of "dead spots" can significantly enhance the user experience, in particular with demanding and often mobile applications such as voice-over-IP.

Garo Sarkissian, CalAmp's vice president of corporate development, commented, "The issuance of these patents further expands CalAmp's intellectual property portfolio and demonstrates CalAmp's innovation in developing wireless communications solutions. Patents are an important aspect of the wireless markets addressed by CalAmp. As we develop and introduce innovative new products and services, CalAmp will look for opportunities to capture the full value of its intellectual property."

Alvarion earns USDA's first WiMAX Rural Development acceptance and 'Buy American' status for FCC licensed frequencies

Alvarion Ltd., a provider of WiMAX and wireless broadband solutions, announced that its 802.16e BreezeMAX 2300 and 2500 base stations received USDA Rural Development acceptance and "Buy American" status from the US Department of Agriculture Rural Utilities Service. This comes after months of evaluation of performance documentation and detailed testimonials from multiple operators with commercial BreezeMAX networks.

RUS (Rural Utilities Service) acceptance and “Buy American” status are required for operators requesting federal funds from the Rural Broadband Access Loan program for the purpose of purchasing and deploying broadband systems. From 2001 through 2007, RUS has provided almost \$6.5 billion in telecom grants, loans, and loan guarantees for rural development.

“Rural Development acceptance of a licensed WiMAX system is something the USDA has never done before,” noted Kelley Dunne, CEO of DigitalBridge Communications, an Alvarion customer using BreezeMAX equipment in 14 US markets serving thousands of customers. “Not only can 2.3- and 2.5GHz operators across the U.S. now leverage the hundreds of millions of federal dollars available each year for rural broadband access, but they get to do it with the market’s benchmark WiMAX solution for these bands.”

“We are proud to be the first to receive the RUS licensed WiMAX acceptance for our BreezeMAX solution,” said Greg Daily, president of Alvarion Inc. “Timing is perfect with WiMAX so much in the news lately and our BreezeMAX 2.5GHz being one of the first base stations to achieve the WiMAX Forum Certified seal. Now license holders of WCS and BRS/EBS frequencies can access federal funds to deploy WiMAX for the first time.”

BreezeMAX 2300 and 2500 form the radio access network (RAN) foundation of Alvarion’s 4Motion Mobile WiMAX solution. The acceptance covers the full RAN solution portfolio to include both micro and macro base stations, the variety of CPEs, antennas, and mounting systems.

Airband Communications completes WiMAX expansion in Phoenix

Airband Communications Inc., a fixed-wireless company for businesses in the United

States, announced expanded coverage of its high-bandwidth solutions in Phoenix. As part of its national expansion strategy, the company has significantly increased its market reach and service area and now provides WiMAX-based services to businesses in the Greater Phoenix area, including Scottsdale, Tempe, Deer Valley, Chandler, and Mesa. The expansion also includes an upgrade of Airband’s existing network equipment and capacity, driven by local customer demands for higher-bandwidth services.

“Through this recently completed expansion, we are able to serve a greater number of businesses in Phoenix as well as offer our regional and national account clients more options in the Greater Phoenix area,” said Layne Levine, president of sales and marketing for Airband. “Phoenix’s topography is ideal for fixed-wireless services, and we’re delighted to further invest in this community and give local businesses a better choice for last-mile access, one with unprecedented scalability and speed to install.”

Airband owns and operates a fixed-wireless network based on WiMAX technology. The company focuses solely on businesses, delivering broadband data services — including dedicated bandwidth up to GigE speeds and voice-over-IP (VoIP). Airband’s network bypasses the traditional wireline infrastructure, so customers benefit from faster installations, rapid bandwidth upgrades, and more-accessible customer care. Airband currently serves more than 3,500 customers nationwide.

“In the almost four years that we’ve been an Airband customer, they’ve never let us down,” said Jordan Geotas, chief technology officer and chief financial officer for Phoenix-based Di-Matrix Precision Manufacturing. “Also, when we needed additional Internet service installed quickly at one of our new facilities, Airband had our high-bandwidth data services up and

running within one day, and without charging us any extravagant fees.”

Airband first entered Phoenix in 2002, making it the company’s first market outside of Texas. As part of its Phoenix expansion, Airband has blanketed the metropolitan area — including Scottsdale, Tempe, Chandler, Deer Valley, and Mesa — with broadband coverage. In addition, Airband upgraded equipment and network capacity across the Phoenix-area base stations with WiMAX technology to further broaden service capabilities. Today, Airband offers a comprehensive portfolio of high-speed data, VoIP, virtual private network (VPN), and other managed solutions, delivered over the industry’s most scalable last-mile network. Customer benefits include the following:

- Faster installations than traditional wireline services;
- Services delivered via Ethernet for easy LAN connectivity and WAN extension;
- Significant cost savings;
- Guaranteed 100 percent network uptime.

The Phoenix expansion is part of a larger national expansion strategy as Airband seeks to grow to new markets while expanding coverage in its existing markets, including Atlanta; Austin, Texas; Baltimore; Charlotte, North Carolina; Dallas/Fort Worth; Greensboro, North Carolina; Houston; Los Angeles; Miami; Ft. Lauderdale; Orange County, California; Philadelphia; Raleigh/Durham, North Carolina; San Antonio; and San Diego.

EVENTS

WiMAX World 2008 keynote speakers to showcase the changing face of WiMAX in the global market

Industry leaders will come together at the WiMAX World 2008 Conference & Expo (<http://>

global.WiMAXworld.com/) to present their perspectives on the state of WiMAX deployments and new market opportunities. The conference, which is being held September 30 to October 2 at McCormick Place in Chicago, will feature a comprehensive lineup of more than 150 presentations by operators, service providers, vendors, and analysts. Executives from Clearwire, Motorola, Intel, Samsung, and Nortel are among the many high-profile speakers that will be providing audiences with global insights and perspectives on the latest WiMAX deployments, enabling technologies, and trends in demand generation.

“This year has seen some significant breakthroughs as industry leaders demonstrate their commitment to moving WiMAX forward as the mobile broadband solution of choice,” said Eliot Weinman, conference founder, co-chair, and president of Trendsmedia. “Great strides have been made in terms of standards development, vendor support and industry collaboration; and we have already witnessed a large number of successful deployments in various regions around the world. WiMAX World 2008 will be the largest WiMAX event ever held, and will provide an ideal opportunity for stakeholders and those interested in this growing market to hear first-hand about the latest developments and meet with the entire ecosystem of WiMAX business and technology executives.”

Keynote speakers for WiMAX World 2008 include the following:

- Ron Resnick, president and chairman of the WiMAX Forum, will address the state of the WiMAX market, certification efforts, and WiMAX Forum initiatives;
- Ben Wolff, CEO of Clearwire, will showcase the new Clearwire and its latest initiatives in supporting WiMAX deployment;

- Dan Moloney, president of Motorola Home & Networks Mobility, will outline the latest developments on the 4G front;
- Siavash M. Alamouti, CTO of Intel Corporation's Mobility Wireless Group will present Intel's perspective on a technology roadmap for mobile Internet;
- Scott Wickware, general manager of WiMAX for Nortel, will discuss the wireless broadband revolution;
- Shankar Prasad, Tata Communication president, will provide a first-hand perspective on how WiMAX is driving broadband growth in India;
- Hwan Chung, senior vice president, Samsung Telecommunications America, will look at how WiMAX will drive market demand;
- Atish Gude, SVP mobile broadband operations for Sprint Nextel's XOHM Business Unit, will provide an overview of the business logistics behind WiMAX delivery;
- Tzvika Friedman, CEO of Alvarion, will offer an overview of the first commercial rollout of mobile Internet service in the US;
- Sue Spradley, president, North America, Nokia Siemens Networks, will discuss how WiMAX is reinventing the connected world.

A full list of speakers is available at <http://global.WiMAXworld.com/speakers/>.

WiMAX World 2008, which is expected to showcase more than 200 exhibitors, is supported by more than 375 corporate, media, analyst, and association sponsors. Motorola is once again the official corporate host, while Xohm is the flagship service provider. Premier sponsors include Alvarion, Juniper Networks,

Nokia Siemens Networks, Nortel, Redline Communications, and Samsung Telecommunications America. Platinum sponsors include Aperto Networks, Cisco Systems, Intel, picoChip, POSDATA, SEQUANS Communications, Siemens Home and Office Communication Devices GmbH, and Telsima Corporation. Gold sponsors include Airspan, Beceem Communications, Bridgewater Systems, Cedar Point Communications, Comsys, DragonWave, Fujitsu Network Communications, GCT Semiconductor, Huawei Technologies, NextWave Wireless, Proximity, SOMA Networks, Starent Networks, Texas Instruments, WebNet Global Communications, WiChorus, and ZyXEL Communications

For additional information on WiMAX World, or to inquire about attending, sponsoring, or exhibiting, visit <http://global.WiMAXworld.com/>.

MARKET INTELLIGENCE

Falling WiMAX chipset prices spell good news for adoption of smaller mobile devices, says ABI Research

The WiMAX chipset market is advancing quickly. There are solid two-chip designs consisting of a single-chip baseband IC and a single-chip RF IC that are bringing power consumption down. Beceem, GCT Semiconductor, and Sequans have single-chip designs that include both the baseband and RF. Most importantly, WiMAX chipset ASPs are dropping rapidly.

“Even as the mobile WiMAX chipset market has barely gotten its feet wet, chipset ASPs are declining rapidly due to heavy competition and greater integration in designs,” said ABI Research principal analyst Philip Solis. “Prices for the baseband and RF components of the chipset have come down from the \$35 range a few years ago to below \$25, and will

drop below \$10 in 2011. These falling WiMAX chipset prices are critical for inclusion of the technology in smaller mobile devices.”

Even when global subscriber numbers reach the high tens of millions, ABI Research expects chipset shipments to be well into the hundreds of millions. Many devices will include WiMAX capabilities well before users subscribe to WiMAX-based service plans, and some consumers may never use the WiMAX capabilities included in their equipment, as more devices start to include other wireless wide-area network connectivity features. In addition, some WiMAX subscribers will have multiple WiMAX-enabled devices on one subscription plan.

“WiMAX will look a bit like Wi-Fi in terms of rapid ASP declines and moves towards 100 percent penetration in laptops,” continued Solis. “Expansion into various mobile devices including Mobile Internet Devices and consumer electronics will be critical to the growth of the WiMAX chipset market.”

A new ABI Research study, “The WiMAX Chipset Market” (http://www.abiresearch.com/products/market_research/WiMAX_Semiconductors) examines chipset vendors’ activities and products. Forecasts include shipments and revenue by a variety of segmentations, including device CPE, mobile devices by type, region, main frequency band, and 802.16e/16m. It forms part of the firm’s Wireless Semiconductors Research Service (http://www.abiresearch.com/products/service/Wireless_Semiconductors_Service) which also includes other Research Reports, ABI Insights, an ABI Vendor Matrix, and analyst inquiry support.

Laying the foundation for WiMAX deployment in Asia-Pacific for 2008

Research and Markets announced the addition of the “Laying the Foundation: WiMAX in Asia/Pacific 2008” report to their offering.

WiMAX, as a new broadband wireless access technology, is finally getting momentum in the Asia-Pacific region. Korea leads the world with homegrown WiBro technology (very similar to mobile WiMAX), while Australia has one of the earliest adoption for fixed WiMAX.

With large number of licenses issued by telecom regulators, WiMAX now becomes an important investment area in the telecom field.

Pakistan’s Wateen telecom has one of the largest mobile WiMAX networks in emerging markets, worth \$200 million. Leading operators in India have outlined their plans to invest billions of dollars on WiMAX for better broadband coverage. Operators in Indonesia are expecting licenses in mid-2008.

With expectation of new deployments on a large scale, the Asia-Pacific region is viewed as the most exciting place for WiMAX take-up, and the game has just started.

The authors estimate the total WiMAX services market at US\$58 million in 2007, which will grow at a CAGR of 148 percent to reach US\$5,456 million in 2012. Total subscribers will grow from 230,000 in 2007 to 33.9 million in 2012.

For more information, please visit http://www.researchandmarkets.com/research/db5461/laying_the_foundat.

Global WiMAX market and Taiwan’s WiMAX equipment industry major investments and trends in 2008 and beyond

Research and Markets announced the addition of the “The Global WiMAX Market and Taiwan’s WiMAX Equipment Industry, 2008 and Beyond” report to their offering.

The WiMAX market continues to grow as the number of certified products is increasing rapidly. Significant market opportunities will emerge in the future, and the global WiMAX market is expected to reach US\$26.9 billion by 2012. The United States, Europe, and Asian

countries including Japan and Korea will invest heavily in the deployment of WiMAX networks. Taiwanese companies are playing a key role in the WiMAX industry, building upon their existing advantages in the network communications industry. This report examines the global WiMAX market, including technology and spectrum trends and major investment projects. The report also analyzes Taiwanese WiMAX equipment makers' product development and shipment outlook.

Report highlights:

- Provides a forecast of global WiMAX market scale until 2012;
- Examines technologies and spectrum used by WiMAX operators in their network deployment;
- Analyzes WiMAX investment projects by major operators around the world;
- Includes a forecast of worldwide WiMAX CPE and base station shipment volume until 2012;
- Looks at Taiwanese WiMAX equipment makers' shipment in 2008 and their current product development.

For more information, please visit http://www.researchandmarkets.com/research/cbd7c4/the_global_WiMAX_m

Latest developments in the South Korean WiBro market

Research and Markets announced the addition of the "WiBro Services and Strategies in South Korea" report to their offering.

This report provides an overview on the latest developments in the Korean market, where WiBro (mobile WiMAX) was commercially launched in June 2006. This report includes useful information on WiBro services and price plans offered by KT and SKT, as well as terminals available in the market, and analyzes the strategies of the two operators. The report

also presents a forecast on WiBro subscribers and revenues in the Korean market until 2011.

This report is useful for professionals and companies who are interested in WiBro (mobile WiMAX) services and price plans, terminals, and the Korean WiBro market. South Korea was the first country in the world to launch WiBro services commercially, and is a leading market full of potential players and new business ideas in terms of Internet services and technologies. This research report analyzes the recent trends in South Korea and provides useful information for benchmarking and market entry.

On June 30, 2006, a commercial WiBro service was launched in Korea, but due to insufficient CapEx investment, resulting in poor service coverage and device line-up, the subscriber growth was slow until KT started strong marketing strategies to attract subscribers in early 2007.

The two operators, KT and SKT, planned to spend more than 700 billion KRW and 400 billion KRW, respectively, until 2007, and 1.2 trillion and 700 billion, respectively, until 2010. However, their actual investments are far behind the goals. KT WiBro service subscribers began to increase rapidly as KT started full-scale WiBro marketing in 2007. The subscribers increased 5,600 in April 2007 to 106,000 in December 2007. In 2008, the subscribers are increasing by about 10,000 per month.

Now, KT and SKT have decided to expand their investment from 2008, and the WiBro market is expected to grow faster. Moreover, the availability of VoIP will have a significant influence on subscriber addition. But this will take a time, as it is unlikely that VoIP will be supported in the near future due to legal and other issues in the South Korean wireless market.

In spite of the situation, the number of WiBro subscribers is expected to increase from approximately 100,000 in 2007 to 250,000 in

2008 and to more than 2,500,000 in 2011. The market revenues are also expected to increase to 65 billion KRW by 2011.

Also, technology upgrades are important for the service to expand. Electronics and Telecommunications Research Institute (ETRI) in Korea developed NoLA, which is based on LAN technology in 2007 and is developing NeMA (New Mobile Access), an upgraded version of WiBro. NoLA is a mobile Internet technology for users who move at low speeds by walking or in a car to use the Internet at 3.6Gbps, 1,000 times faster than the current 3G data communication rate. NeMA is a technology for users who move at a high speed; it provides 100Mbps while moving at maximum speed of 120km/h. ETRI plans to combine these two technologies. If it succeeds, the Korean market could witness next year a service that allows

users to access the Internet in a moving vehicle on the highway.

However, the HSDPA camp is also developing next-generation HSDPA. An HSUPA (high-speed uplink packet access) network with 5.76Mbps data upload speed is being introduced. In addition, LTE, which uses the next-generation technologies such as OFDM and MIMO, is spreading globally.

Currently, the biggest disadvantage with WiBro service is that it fails to provide a “killer application.” To become a 4G mobile technology, voice support is a must for WiBro and a necessary element for competing with HSDPA and its next-generation version, LTE, in the 3G/4G mobile market.

For more information, please visit http://www.researchandmarkets.com/research/c6d22c/wibro_services_and.

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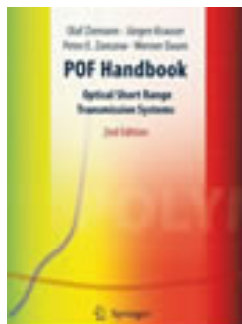
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Day 1: Active Components and Fibers

Wednesday - August 20, 2008

Transmitter and Receiver for POF Systems

Olaf Ziemann, POF-AC Germany

- LED and laser for data communication
- Large area photo detectors
- Comparison of different wavelengths for POF transmission
- Coupling technologies for active components

Wed. AM Tutorial 9:00 a.m. - 1:00 p.m.

Large Core Diameter Optical Fibers

Olaf Ziemann, POF-AC Germany

- Polymer Optical Fibers, hybrid and glass fibers
- Standards for POF
- Optical and mechanical properties of POF
- Measurement techniques for large core diameter fibers

Wed. PM Tutorial 2:00 p.m. - 6:00 p.m.

Day 2: Passive Components and System Design

Thursday - August 21, 2008 Thu. AM Tutorial

Design of POF Systems

Olaf Ziemann, POF-AC Germany

- Review of published transmission systems
- Power budget calculation for POF systems
- Commercial available systems

9:00 a.m. - 1:00 p.m.

Passive Components for POF

Karl-Friedrich Klein, FH Gießen/Friedberg, Germany

- Connectors
- Attenuators, filters and mode converters
- POF surface preparation
- Measurement and calculation of connector losses

Thu. PM Tutorial 2:00 p.m. - 6:00 p.m.

Day 3: Test and Measurement, Environmental Tests and Status

Friday - August 22, 2008

Measurements on POF

Olaf Ziemann, POF-AC Germany

- Attenuation and bandwidth measurements
- POF-OTDR
- Climatic behavior and lifetime measurements

Fri. AM Tutorial 9:00 a.m. - 1:00 p.m.

Specialty Optical Fibers

Karl-Friedrich Klein, FH Gießen/Friedberg, Germany

- Microstructured POF
- Silica glass and conventional glass fibers
- Fibers and light guides for power transmission
- UV fibers
- Specialty POF

Fri. PM Tutorial 2:00 p.m. - 6:00 p.m.

<http://www.pof2008.com/westmeetseast/>



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