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INTRODUCTION

Dear WiMAX Community,

With summer holidays approaching, our activities are kicking into high gear! The **WiMAX Forum** staff and the associated **Working Groups** are focused on three main initiatives with particularly strong efforts this month. These priorities include impressive efforts on WiMAX advanced, continued strong execution on industrial markets and finalization of the WiMAX Forum's **Request For Proposal (RFP)** for devices.

With respect to WiMAX advanced, a well-resourced team including representatives from **Huawei Technologies**, **KDDI**, **Samsung**, **UQ Communications**, **YTL Communications**, **Korea telecom** and **Telrad**, assisted by **Rich Hawkins** and Roger Marks have made great strides in initiating specification development and clarifying the requirements for WiMAX 2.2 (WiMAX Advanced).

The end game for this group is to describe the technical means whereby spectrum limited operators may introduce alternative radio access technologies (such as TD-LTE and Wi-Fi) into their networks while maintaining service for their existing WiMAX customer base. This is a critically important activity for WiMAX operators who desire access to the promise of an expanded ecosystem of devices. For further information on this initiative, please contact Rich Hawkins at Rich.Hawkins@WiMAXForum.org.

The WiMAX Forum staff is organizing two separate events over the coming months in support of industrial markets. **OilComm** is a repeat performance for the WiMAX Industry and we will be hosting a **WiMAX Oil & Gas Event** within this conference for oil and gas users to discuss WiMAX applications and explain their requirements. Last year's conference attracted over 150 participants.

Additionally, we are very excited to organize a **WiMAX Aviation Summit** within the confines of our September **Member Conference** in Washington DC. This conference, jointly sponsored by the WiMAX forum, the FAA, and Eurocontrol, will attract members of the AeroMACS Community from across the globe to discuss the aviation community's requirements, spectrum issues, and deployment timelines. For further information on either of these events, please reach out to Alessandra Rocha at **Alessandra.Rocha@WiMAXForum.org**.

The WiMAX Forum participated in the annual **Utility Telecom Council** Event in Houston last month at which the Smart Grid Working Group met, and CenterPoint Energy, the host utility, told the several thousand conference attendees about their impressive GE installed WiMAX Network. WiMAX technology has increasingly become a mainstream solution for this growing market segment. For more information about this and other WiMAX Smart Grid Networks, please visit: **WiMAX Smart Grid**.

The WiMAX forum initiated an **RFP** for the original design manufacturer community to address the needs of the small to mid-size operator community. We are delighted to report the participation of Gemtek, Infomark, Dimewave, KZ Broadband, and Green Packet. The aggregated volume represented in this **RFP exceeded 1,000,000 devices**. We are analyzing the responses and expect to report back soon on winning respondents. **Stay tuned!** For further information, please contact WiMAX forum president Declan Byrne at **Declan.Byrne@WiMAXForum.org**.

If you have questions regarding any of this or our organization's activities, please reach out to us.

Best Regards,

The WiMAX Forum

CERTIFICATION

As the exclusive organization dedicated to certifying the interoperability of **IEEE 802.16e products**, the WiMAX Forum defines and conducts conformance and interoperability testing across many vendor systems and devices. Passing the suite of tests in one of our WiMAX Forum Designated **Certification Laboratories** will earn your company's product the "WiMAX Forum Certified™" designation.

WiMAX Forum **Certified Products** enable worldwide interoperability. Products that have been through the certification program will reduce investment uncertainties for all parties across the access network value chain from technology providers to service providers to end users.

Latest Products Certified

Model Name: WiMAX-WiFi Router

Model Number: URoad-Aero; URoad-AeroII; URoad-SS21; URoad-SS22; URoad-SS23

Vendor: Modacom Co. Ltd.



The URoad-Aero is a super slim portable size WIMAX-Wi-Fi router for Indoor and outdoor deployment. It creates a personal Wi-Fi hotspot and connects Wi-Fi Support devices to the internet anywhere within WIMAX service area. The URoad-Aero comes with a rechargeable Li-ion battery providing several hours of operating and USB tethering.

The URoad-Aero also supports external cradle dock system for both LAN communication and Charging simultaneously. You can share your WIMAX connection with friends, family or colleagues on the road, at home and in the office. It supports 802.11b/g/n Wi-Fi and is designed for easy and simple deployment.

Model Name: WiMAX-WiFi Router

Model Number: IMW-C1000W

Vendor: Infomark



IMW-C1000W is a portable WiMAX to Wi-Fi Router which is fully compliant with Mobile WiMAX Wave2 profiles based on the IEEE 802.16e-2005 standard. This device lets the users of Wi-Fi devices connect to a WiMAX Network. And it supports USB Tethering mode (RNDIS), it supports to connect to a WiMAX Network by USB. It supports the high speed access in the Mobile WiMAX Network. Using this device, it makes multiple users access to the internet.

Model Name: WiMAX Module MWM-W561

Model Number: MWM-W561; MWM-W562; MWM-W563; MWM-W564; MWM-W565

Vendor: Mitsumi Electric Co. Ltd



The MWM-W56x series supports all M.2(NGFF) features to optimize performance, power consumption, and usability. The module has advanced features such as TX diversity and high throughput in uplink-downlink.

Model Name: CDMA HWD13

Model Number: CE1EC5075M Ver.A

Vendor: Huawei Technologies



Huawei HWD13 Wireless Router (hereinafter referred to as the HWD13) is an Evolution Data Only (CDMA2000 1x EVDO) and WiMAX universal Wireless Router. The HWD13 supports CDMA2000 1x EVDO 800/1900MHz and WiMAX IEEE802.16e-2005 standard. It provides a wireless way to access the network.

Huawei HWD13 is designed mainly for Business people. The HWD13 provides the wireless Internet accessing function, you can connect to the HWD13 via Wi-Fi, or connect to the HWD13 via USB into network. In the service area of the EVDO and WiMAX network, you can surf the Internet and send/receive messages/emails wireless.

Additionally, the TFT of HWD13 can provide a friendly indication: Signal Strength, 3G (EVDO CDMA) or 4G (WiMAX) status, Wi-Fi On, Clients, Location On, Battery status, etc.

In a word, the HWD13 can provide EVDO rate up to 3.1 Mbps on downlink and 1.8Mbps on uplink, and WiMAX rate up to 10Mbps on downlink and 4Mbps on uplink. The HWD13 is fast, reliable, and easy to operate. Thus, mobile users can experience many new features and services with the HWD13

EVENTS

In June, the WiMAX Forum continues to stay busy planning and attending events. The WiMAX Forum team looks forward to seeing you at our events this year. Following is the summary of the upcoming events:

WiMAX Member Conference Washington DC 2013



The WiMAX Forum is delighted to announce the next **WiMAX Forum Member Conference**, which will take place September 9-12, 2013 in the historic Washington, DC, USA.

WiMAX Forum Members are encouraged to register for the Member Conference and reserve a hotel room as soon as possible.

Please contact Sophia Chang at **Sophia.Chang@WiMAXForum.org** if you have any questions about the Washington DC Member Conference.

WiMAX Aviation Summit 2013



The WiMAX Forum is also pleased to announce the first Aviation Event in the WiMAX Forum: **WiMAX Aviation 2013**, which will be co-located with our **Member Conference** at the **Hilton Crystal City**, on Tuesday, September 10 through Thursday, September 12, 2013.

This newly renovated hotel is ideally located next to the Reagan National Airport along the Potomac River with dramatic views of Washington DC. This event will focus specifically on supporting the global Aviation Community in managing profitable development and growth of their WiMAX networks.

The WiMAX Forum will host a cocktail reception for networking purposes on the evening of Tuesday, September 10th that will be open to attendees of both events.

WiMAX Aviation 2013 is an event for all participants to meet, exchange ideas, and develop business and cooperative relationships. The event will highlight the opportunities, challenges, and strategies involved in operating a profitable WiMAX network in the Aviation field. This event is constructed to allow the global Aviation Community to network, share key lessons, and collaborate for the benefit of the industry. Our goal is for attending participants to gain concrete knowledge that will help them build profitable WiMAX businesses.

WiMAX Aviation 2013 will be an interactive working event and **there will be no registration fee**. Participation in this event is free and open to all participants of the WiMAX ecosystem, and **membership in the WiMAX Forum is not a requirement to attend**.

For additional information and registration, please visit: WiMAX Aviation 2013

Sponsorship Opportunities:

Increase your presence at the WiMAX Forum events through a sponsorship! Our high-profile events offer sponsors excellent visibility before, during and after the event.

Sponsorship opportunities include:

- Media Sponsorship
- Diamond Sponsorship (WiMAX Forum Members Only)
- Platinum Sponsorship (WiMAX Forum Members Only)
- Gold Sponsorship (WiMAX Forum Membership **NOT** Required)

For more information about which event sponsorship may best suit your needs, please contact Alessandra Rocha at **Alessandra.Rocha@WiMAXForum.org**.

WiMAX Oil & Gas Event 2013



WiMAX Oil & Gas Event 2013 will be a pre-conference session at **OilComm** on Wednesday, November 6th, 2013 at the Hilton Americas in Houston, TX. The event will focus specifically on supporting the Oil & Gas community in deploying effective and affordable WiMAX networks to support their communication initiatives.

All operators and vendors are invited to this event to meet, network and discuss ideas with the goal of fostering a prosperous environment and future for the WiMAX Oil & Gas ecosystem. The event will highlight the opportunities, challenges and strategies involved in operating a profitable WiMAX network.

This event is constructed to allow the participants to network, share key lessons and work together for the benefit of the industry. Our goal is for attendees to gain concrete knowledge that will help them build profitable WiMAX businesses.

WiMAX Oil & Gas Event 2013 will be an interactive conference. Participation in this event is free to attendees of the OilComm Full Conference Program. WiMAX Oil & Gas Event 2013 is open to all participants of the WiMAX ecosystem, and membership in the WiMAX Forum is not a requirement to

attend.

For additional information and registration, please visit: WiMAX Oil & Gas Event 2013

The WiMAX Forum has plans to host and participate in other events over the course of **2013.** As details concerning these events are finalized, we will be certain to keep you informed.

If you have any questions regarding the WiMAX Forum events, please contact Alessandra Rocha at **Alessandra.Rocha@WiMAXForum.org**.

For more information about our events please visit: WiMAX Forum Events

MEMBERSHIP SERVICES

There are currently 121 members of the WiMAX Forum in good standing. The WiMAX Forum would like to extend a special welcome to the newest member in 2013:

RuggedCom

"RuggedComm is excited to join the WiMAX Forum and help set the direction for how standards based wireless technology can address the needs of critical infrastructure deployments," said Lee Lipes, Director of Product Management at RuggedCom. "There continues to be a strong demand for private 4G wireless solutions by our customer base. Our customers are turning to industry groups such as the WiMAX Forum to foster collaboration between vendors to help drive new applications and strengthen the global ecosystem, giving them the supply chain assurance they demand given their longer technology lifecycles."

The WiMAX Forum is committed to delivering the value necessary for our members to get the most of their association with the WiMAX Forum and we are always happy to engage with individual members to discuss how WiMAX Forum can better serve its membership.

If you have questions regarding your membership, please contact Raul Rigo at Raul.Rigo@WiMAXForum.org; +1-305-582-7590.

The WiMAX Forum is the best place for our members to access, leverage and influence the growth and development of the WiMAX industry. So be a leader in WiMAX and step up to get involved today!

INDUSTRY SPOTLIGHT

• WiMAX Networks Poised to Play a Growing Role in Smart Grid Deployments By Richelle Elberg, Senior Research Analyst, Navigant Research WiMAX technology may have lost the consumer wireless access war to rival 4G technology LTE, but the 802.16 WiMAX standard is poised to play a measurable role in smart grid deployments worldwide through the end of the decade. A relatively low-cost, high-performance solution, WiMAX is suitable for most non-critical smart grid applications, and it can be deployed cost-effectively in a private network by utilities concerned about reliance upon public networks. Driven by a range of factors, including the emerging IP-based WiGRID standard and the technology's relative maturity and low cost, new trials and deployments of WiMAX-based solutions are underway worldwide, particularly in Asia Pacific.

According to a recent report from Navigant Research entitled "WiMAX Networks for Smart Grid Applications", the number of WiMAX-based communications nodes shipped for smart grid use will grow at a compound annual growth rate of more than 70% between 2012 and 2020, surpassing 6.5 million by 2020. Regionally, Asia Pacific deployments are expected to be the largest, but WiMAX/WiGRID technology will also be used in North America and Latin America.

The use of WiMAX technology in the smart grid is growing thanks to a convergence of developments. First, WiMAX technology is more mature than the rival 4G wireless standard, which means that it has been produced in volume and at lower costs than LTE technology. Thanks to this maturity, WiMAX is considered cost-efficient in private deployments for those utilities unwilling to rely upon public networks. Second, WiMAX has been engineered for numerous spectrum bands, making it a candidate for smart grid communications in a variety of countries and regions with diverse spectrum availability. Finally, the new WiGRID standard is an all-IP standard specifically engineered for uplink traffic, making it highly suitable for smart grid applications.

After declining somewhat in 2012, demand for WiMAX solutions for smart grid applications has seen a slight uptick in 2013. WiMAX's popularity has waned in recent years as the newer Long Term Evolution (LTE) wireless standard has emerged, but the combination of a mature ecosystem for low cost equipment and easy access to unlicensed or lightly licensed spectrum should ensure steady growth through the remainder of the decade.

About Navigant Research

Navigant Research, the dedicated research arm of Navigant, provides market research and benchmarking services for rapidly changing and often highly regulated industries. In the energy sector, Navigant Research focuses on in-depth analysis and reporting about global clean technology markets. The team's research methodology combines supply-side industry analysis, end-user primary research and demand assessment, and deep examination of technology trends to provide a comprehensive view of the Smart Energy, Smart Utilities, Smart Transportation, Smart Industry, and Smart Buildings sectors. Additional information about Navigant Research can be found at www.navigantresearch.com

• Utilities Telecom Council (UTC)

The Utilities Telecom Council is a global trade association dedicated to creating a favorable business, regulatory, and technological environment for companies that own, manage, or provide critical telecommunications systems in support of their core business. For additional information please visit **UTC Website**

- UTC America Latina

On June 6th, 2013 the General Assembly for incorporation of UTC America Latina was held at Veirano Lawyers Office, in Rio de Janeiro, Brazil. Five Brazilian utilities were present as Founder Members: Furnas, Eletrosul, EDP Brazil Group, Elektro and UTC USA. All Board of Directors positions were occupied and Furnas representative was elected Chairman of the Board. Mr. Dymitr Wajsman was elected President and Mr. Ronaldo Santarem was elected Vice President and Financial Director.



- 2013 Canadian Utility Telecom Conference

Join Canada's leading experts on critical infrastructure networks and Information and Communications technology (ICT) at the only conference devoted to address issues in Canada that is specifically created for, and by, utilities and their technology partners! For additional information about this event, please visit **UTC Canada Website**

WORKING GROUPS

The WiMAX Forum **Working Groups** are the key to the development of WiMAX technology. Working Groups are chartered by the WiMAX Forum to bring together content experts from member companies to contribute to and harmonize documents and specifications and perform other tasks that the WiMAX Forum has determined to be necessary or useful. Principal members of the forum have the opportunity to participate as officers of working groups when there are vacancies.

The WiMAX Forum organizes its technical activities through a number of Working Groups that produce technical requirements, technical specifications or advise the forum. These groups are coordinated by the Technical Steering Committee. The WiMAX Forum Working Groups include:

- AWG Aviation Working Group Procedures & Aviation Initiative
- **CWG** Certification Working Group *Technical*
- **GRWG** Global Roaming Working Group Technical
- **NWG** Network Working Group Technical
- RWG Regulatory Working Group Advisory

- **SPWG** Service Provider Working Group Requirements
- SGWG Smart Grid Working Group Requirements & WiGRID Initiative
- **TWG** Technical Working Group Technical

If you are not a member of a Working Group yet, you can request to join on the group's **Home**Page. Or if you want to take an active role in one or more of the Working Groups, you can use the group chair link on that same page to contact the chairman of the group and to see how you can help.

We still have remaining vacant officer positions. If you or someone from your company is interested in becoming an officer of a Working Group, please contact that working group's chair or the TSC chair for details.

- NWG Vice Chair & Secretary
- TWG Chair & Secretary

Your participation is important to the WiMAX community!

The WiMAX Forum Technical Steering Committee has formed a subcommittee to look specifically at the completed requirements for **WiMAX Advanced Release 2.2**. They are currently identifying gaps, proposing solutions and we help to initiate work items. If you would like to participate in the process, please contact the TSC Chair.

Working Group Meetings are held in-person ("face-to-face") or by teleconference. Dates and venues shall be determined taking into account Working Group needs and requests. To encourage cross Working Group discussions in support of the overall program goals, the WiMAX Forum colocates the face-to-face meetings of multiple Working Groups at our Member Conferences.

You can learn more about the Working Group activities by visiting the member's area in Kavi and viewing the outcome of recent Working Group sessions or joining groups to receive emails related to that group's activities. Working Group activity is integral to the success of the Forum.

If you or your company is interested in nominating someone for a working group leadership role, please contact the TSC Chair Rich Hawkins at **Rich.Hawkins@WiMAXForum.org**

DOCUMENTS & LINKS

The WiMAX Forum has many programs and initiatives planned for this year, including hosting the Operator Summit Series and quarterly Member Conferences. If you are not familiar with how to get the most out of your existing WiMAX Forum membership, please refer to the following documents:

WiMAX Forum Certification Program Overview

- WiMAX Public Key Infrastructure (PKI) (X.509 certificates)
- Technical Activities and Working Groups
- WiMAX Forum Events Overview and Calendar
- Contact Information for Regional Offices
- Procedures for Registration & Kavi Tutorial

These documents will assist you with the integration of your company into our organization. We look forward to your participation in the WiMAX Forum this year.

Please send a message to **membership@wimaxforum.org**, if you have any questions or comments.

WIMAX FORUM NEWS

WiMAX Forum, in partnership with Multiview, has launched its weekly WiMAX Newsbrief. This weekly summary of news from around the WiMAX ecosystem is intended as a benefit to our members. If you do not yet receive the Newsbrief and wish to do so, please sign up here: **WiMAX Newsbrief**.

Below is a summary of the month of June:

- Getting the right wireless connection: Build, partner or both?
- WiMAX Oil & Gas 2013
- Freshtel expands WiMAX network in Rostov
- EarthLink re-enters wireless as a Clearwire MVNO offering WiMAX
- Karma's 'social bandwidth' model has led to users sharing 1,000 GB of WiMAX data
- Aegis Graham Bell Awards 2013 Jury Round to be held July 8-11
- MTN Cameroon launches MTN Xtra Surf WiMAX service
- Re-imagine your world at work
- Wateen completes ABL network infrastructure
- Deploy and optimize 4G (WiMAX or LTE) networks
- UTC Canada 2013
- Deputy telecoms minister confirms flurry of licensing activity, cites WiMAX targets
- Freshtel expands WiMAX network
- WiMAX and EvDO cover 55.9 percent of total broadband subscribers
- Indiana hospital uses IPTV to educate patients
- ICF names Taichung City, Taiwan, as 2013 Intelligent Community of the Year, honors Mike Lazaridis
- Enforta launches services in Mari El
- Telecoms for smart grids
- Alepo deploys 4G services for Utande in Zimbabwe
- Dr. Mo Shakouri: Chairman, WiMAX Forum interview at 4G World India

- Libya: Telecom Ministry announces 4 principal plans
- Bangladesh looks to widen WiMAX usage by ISPs
- Cambium Networks and Kordia win 2013 Global Telecoms Business Wireless
 Innovation Award
- Japanese mobile carriers add 616,900 new subs in May
- Qubee connection in Comilla, Bogra, Pabna and Feni
- Telecoms for Smart Grids
- Freshtel expands network
- New spectrum for emergency services
- Ollo's WiMAX base hits 25,000
- How to manage a smart grid communications network
- Nepal Telecom's WiMAX base grows to 648
- MOSA webinar with UQ Communications Japan April 2013
- Enforta provides video surveillance for building companies
- Google Chromebooks land on Singapore's shores, the 2nd Asian market after Malaysia
- Enforta starts providing services in Yemanzhelinsk
- Raytheon wins follow-on surveillance ID system project; Richard Daniel comments
- Enforta expands network coverage in Kemerovo
- Atiur: Outsourcing can significantly contribute to economy
- Enforta provides services for textile company
- Raytheon to upgrade additional Netherlands air bases
- 4G technology and network design boot camp covering LTE and WiMAX
- 33 million Internet users in Bangladesh
- WiMAX Forum May 2013 Newsletter



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