WiMAX FORUM® NEWSLETTER

IN THIS ISSUE

INTRODUCTION

Dear Members and Friends –

Although it seems like much of the world in the Northern Hemisphere is away enjoying summer Holidays, we at the **Forum** continue to feel the pace is hectic but rewarding! We have much going on, which we feel is directly relevant and value-added to the **Membership**.

WiMAX Advanced continues to gain momentum. The **TWG and NWG** are meeting Face-to-Face in Tokyo (graciously hosted by **UQ Communications**) to advance the technical dialog for stage 2 and 3 development with a goal to getting much of the work set for review at the **Member Conference** in DC in September. Thanks to UQ for hosting this important F2F and the participating companies for volunteering so much time and effort to this initiative – WiMAX Advanced will be a revolutionary capability for our WiMAX Operators seeking to introduce other Radio Access Technologies into their networks.

Staff is working hard as well to organize a very professional and interesting engagement at the **European Utility Communications Conference** - we are designing a booth and panel to highlight WiGRID successes and to help our member companies better understand and serve Utilities in the European geographic area.

Our **Aviation Summit** (co-located with the September **Member Conference**) is off to a roaring success in registrations and planned content! Many thanks to sponsors **CelPlan Technologies** and **Hitachi**! We have over 70 registrants for the event already, representing regulators from Europe, the United States and Japan – plus a "who's who" of industry actors. For more information, please contact Alessandra Rocha at **Alessandra.Rocha@WiMAXForum.org**.

Finally, we are hard at work finalizing the RFP for Devices, which the Forum has issued – we have complete responses from multiple vendors received and scored. Staff is meeting with key operators to finalize the results after which we'll announce the endorsed solutions. Stay tuned for more info on this groundbreaking benefit for Operator Members!

Enjoy the rest of your Summer and we'll see you in DC!

Declan Byrne

EVENTS

In August, 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. The 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 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 - Wednesday, September 10-11, 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.
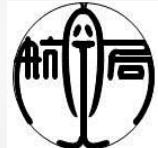
The WiMAX Forum will host a cocktail reception for networking purposes on the evening of Tuesday, September 10th that will be open to attendees of both events.

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 is 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**

Supported By:

Sponsored By:

CelPlan Technologies - **Diamond Sponsor**

Hitachi - **Platinum Sponsor**

WiFi World Summit 2013

The **WiFi World Summit 2013 on September 25-26, 2013 at Thistle Marble Arch, Central London** offers a better understanding of how the Wi-Fi ecosystem fits together and where business opportunities lie for organizations. Innovative case studies from retail, transport, enterprise, and social & public Wi-Fi will be featured.

The WiMAX Forum will be at WiFi World Summit 2013!

Come see WiMAX Forum President **Declan Byrne** participate in the **Interactive Operator Panel Discussion: How are operators integrating Wi-Fi into their overall mobile broadband network strategy.** The panel will take place on **September 25, 2013 at 12:20pm**.

For additional information and registration, please visit: **WiFi World Summit 2013**.

EUTC 2013

The **European Utility Telecom Conference (EUTC)** on **October 23-25, 2013** will be held at the **NH Grand Hotel Krasnapolsky in Amsterdam**. This annual conference that is now in its 12th year gathers the largest group of telecommunications and technology leaders from Europe's utilities and their technology partners.

The WiMAX Forum will be at EUTC 2013!

- Educational Session: WiMAX - A Suitable Solution for Smart Grids.

This will be a group discussion on the afternoon of **Wednesday, October 23rd** with a dynamic format that allows interaction between attendees and speakers, providing opportunities for dialog.

- WiGRID powered by the WiMAX Forum featuring **Accenture**, **Cisco**, and **GE**.

More details are coming soon; you cannot miss it!

For more information, please visit: **EUTC 2013**.

WiMAX Oil & Gas 2013

WiMAX Oil & Gas 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 2013 will be an interactive conference. Participation in this event is free to attendees of the OilComm Full Conference Program. WiMAX Oil & Gas 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 2013**

WiMAX Africa 2013

WiMAX Africa 2013 will be collocated with Informa Telecom & Media's **AfricaCom** on Monday, November 11th at the Cape Town Convention Centre in Cape Town, South Africa. Last year's WiMAX Africa event attracted over 100 attendees including 46 representatives of 32 different WiMAX operators. This year's event will focus specifically on supporting the African operator community in developing and managing profitable growth of WiMAX network deployments.

WiMAX Africa 2013 is an event for all participants, both operators and vendors, 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 Africa.

WiMAX Africa 2013 will be an interactive working event, and there is no registration fee. Membership in the WiMAX Forum is not a requirement to attend.

For additional information and registration, please visit: **WiMAX Africa 2013**

The WiMAX Forum 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.

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**.

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

MEMBERSHIP SERVICES

There are currently 107 members of the WiMAX Forum in good standing. The WiMAX Forum would like to extend a special welcome to the newest members in 2013:

- **Busyinternet**
- **ConvergEX**
- **RuggedCom**
- **Synkro Southwest, LLC (Local Loop)**
- **Xcel Energy**

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 the 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!

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 and to vote on working group output.

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

- **SPWG** - Service Provider Working Group - *Requirements*
- **SEWG** - Smart Energy Working Group - *Requirements & WiGRID Initiative*
- **AWG** - Aviation Working Group - *Procedures & Aviation Initiative*
- **NWG** - Network Working Group - *Technical*
- **TWG** - Technical Working Group - *Technical*
- **CWG** - Certification Working Group - *Technical*
- **GRWG** - Global Roaming Working Group - *Technical*
- **RWG** - Regulatory Working Group - *Advisory*

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 Working Groups are gearing up for the upcoming WiMAX Forum Members Conference in Washington DC where Working Groups will have face-to-face sessions related to WiMAX Forum Initiatives like WiMAX Advanced, Aviation, and WiGRID. TWG has begun to develop specifications for WiMAX Advanced based on the **Release 2.2 Requirements** that was published this month. SEWG continues to work towards a WiGRID PlugFest event, producing the first "WiGRID Certified" products.

In conjunction with the Member Conference, the WiMAX Forum will host its first Aviation Summit, focusing on a wide range of topics from delivering AeroMACS to certifying products in the Aviation Industry, which will shape the AWG activity for the coming year.

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**

INDUSTRY SPOTLIGHT

● WiMAX Networks for Smart Grid Applications
By Richelle Elberg, Senior Research Analyst, Navigant Research

Worldwide Interoperability for Microwave Access (WiMAX) wireless technology is the most mature of the so-called 4G wireless standards. While WiMAX may have lost the battle to become the "VHS" of wireless broadband access for consumers, supplanted by the more recent Long Term Evolution (LTE) standard, it has been used in some volume for smart grid applications by utilities worldwide.

Today, backers are pushing hard to firm up WiMAX's place within the smart grid communications arena. New trials and deployments are underway, particularly in Latin America and Asia Pacific, and the WiMAX Forum industry association is working to develop a new system profile based on a new 802.16 specification that will optimize WiMAX for utility smart grid applications. This new profile is referred to as WiGRID.

WiMAX is a widely-available wireless technology and has been deployed in smart grid applications on some scale globally. It is a relatively low-cost, high-performance standard, suitable for most non-critical smart grid applications, including neighborhood and wide area networks for advanced metering infrastructure (AMI-NAN and AMI-WAN), substation automation (SA), distribution automation (DA), and mobile workforce applications. It can cost-effectively be deployed in a private network by utilities concerned about reliance upon public networks. However, the newer LTE standard is gaining more attention for smart grid use, as well.
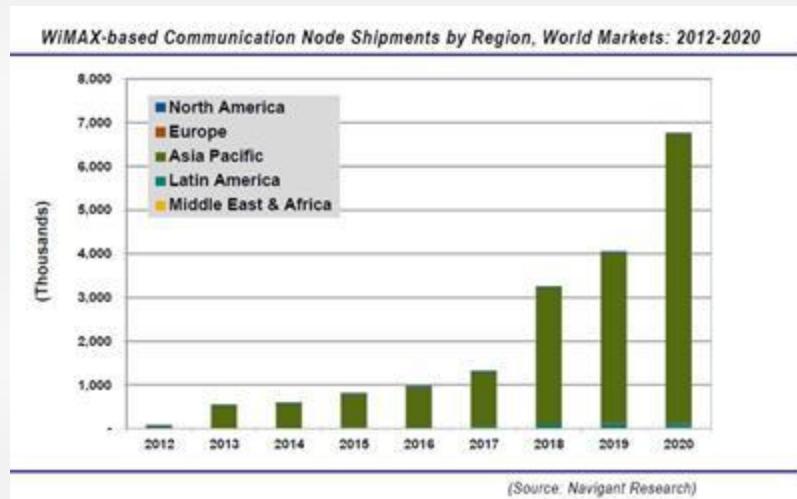
Driven by a range of factors, including the emerging IP-based WiGRID standard and the technology's relative maturity and low cost, new trials and deployments of WiMAX-based solutions are underway worldwide, particularly in Asia Pacific.

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.

WiMAX-based Communication Node Shipments by Region, World Markets: 2012-2020

(Source: Navigant Research)

If you are interested in purchasing the full report, please contact Navigant Research at **research-sales@navigant.com**.

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**

WiMAX FORUM NEWS

The 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 for the month of August:

- **Nepal Telecom's WiMAX base grows to 2,566**

- WiMAX for Aviation: AeroMACS webinar recording

- Sao Paulo considers introduction of WiMAX system

- Taiwan — Telecoms, mobile, broadband and forecasts

- WiMAX Forum events at a glance

- 4G Technologies and Network Design Boot Camp

- California high school proud of new stadium, tech gadgets

- Indonesia IT market: 18 percent CAGR expected between 2012-2016

- Giraffe offers new WiMAX modem

- Grupo TV Cable, Bireme Systems forge strategic alliance to drive cable and service provider industry growth in Latin America

- WiMAX Aviation 2013

- WiFi World Summit 2013

- WiMAX Oil & Gas 2013

- WiMAX Africa 2013

- Freshtel expands WiMAX network in Vinnitsya, Zaporizhzhya

- Softbank leads in July net adds

- Retelit board of directors approves the results of the 1st half of 2013

- MTN Irancell H1 revenue up 19 percent

- WiMAX Forum featured in global events

- Green Packet reports revenue, EBITDA gains in Q2

- LTT Libya: Increasing coverage and improving Internet services in Libya

- Freshtel starts WiMAX services in Yaroslavl

- BSNL starts 'fibre to home' service in city

- Upgrade of 2 Filament Winders and retrofit of control system

- Freshtel launches services in 4 agglomerations

- Additional 2.5 GHz-band spectrum has been allocated to UQ

- Cellular users reach 105 million, WiMAX users pass half a million

- Japan's UQ targets 1Gpbs download speeds by 2017

- **WiMAX Forum expects to issue WiMAX/TD-LTE network specs by year-end**

- **Toward harmonized aircraft communication**

- **Inmarsat and RigNet to provide M2M services for oil and gas industry**

- **Freemax activates WiMAX service in Arezzo**

- **Nepal Telecom's data market share rises to 46 percent**

- **AfriConnect Zambia outlines coverage expansion plans**

- **Siportal brings WiMAX to Catania**

- **Enforta provides PBX for taxi carriers in Ulan-Ude**

- **Securing the Internet of things, just got easier**

- **KDDI grows Q1 profit 33 percent**

- **July WiMAX Forum monthly newsletter**

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