

IN THIS ISSUE

- **Introduction**
- **Letter from the WiMAX Forum Chairman**
- **Events**
- **Membership Services**
- **Working Group**
- **wi-cam CPE Operation and Management System**
- **WiMAX Forum News**

INTRODUCTION

Dear WiMAX Community,

Happy New Year! We at the **WiMAX Forum** hope that you all had a wonderful holiday season! We believe that 2013 is going to be a great year for the WiMAX ecosystem and for our membership. We as an industry body, with the help of our participating member companies, are busy doing important work to keep WiMAX technology moving forward.

This year you can expect to see more announcements concerning our work on WiMAX Advanced, our support for vertical markets, and support for current WiMAX operators through initiatives such as our **Joint Device RFP**.

In fact, the WiMAX Forum just announced the completion of an important document: **WiMAX Forum[®] System Profile Requirements for Smart Grid Applications**.

This document codifies work done on WiGRID[™] by the WiMAX Forum's **Smart Grid Working Group**, which is composed of technical representatives from major electric power utilities, WiMAX vendors and industry experts. This document will be freely available on the WiMAX Forum website in early February.

The WiMAX Forum is also excited to continue its work in bringing strong events to our global community. The WiMAX Forum recently announced the first Operator Summit of 2013: **WiMAX Asia 2013**, which will be held at the **Prince Hotel and Residence** on **March 12th, 2013**.

This event will focus specifically on supporting the Asian operator community in managing profitable development and growth of their WiMAX networks. **WiMAX Asia 2013** will be collocated with our upcoming **WiMAX Forum Member Conference**, held in the same location from **March 11 – 14, 2013**. We hope to see you there!

As a reminder the WiMAX Forum is currently in the middle of its renewal season. Many of our 150+ members renew their annual membership at the end of the year, and our membership and finance teams have been working together to make certain that the next few months go smoothly for everyone.

Many of your companies should be hearing shortly from our membership team, and they will be happy to answer any questions that you have. If you have questions regarding your membership status, please send a message to membership@wimaxforum.org, and we will respond as quickly as possible.

We look forward to continuing to work with you in 2013.

Best Regards,

The WiMAX Forum

LETTER FROM THE WiMAX FORUM CHAIRMAN

Dear WiMAX Community,

I would like to begin by wishing you all a very happy New Year. I was recently asked by a colleague in the industry what the WiMAX Forum is up to in 2013, and I realized that now would be an excellent time to share this bit of my vision with the entire membership. Here are three key initiatives that our organization will focus on this year:

1. WiMAX Advanced: Our work on WiMAX Advanced is critical to the continued evolution of WiMAX technology. In late 2012 the WiMAX Forum approved WiMAX Release 2.1 to focus on support for multiple radio access technologies. In 2013 the WiMAX Forum working groups are already hard at work on the requirements for WiMAX Release 2.2, which will further address the advances of Release 2.1 within the network. I encourage interested member companies to join our working groups and participate in the creation of our newest standards.

2. WiGRID: WiGRID is an Ethernet-based profile of IEEE 802.16 that includes numerous new features allowing uplink centric data communications, lower latency, extended range, and the use of new frequency bands available to various utilities. Our Smart Grid Working Group recently published a System Profile Requirements Document to support the adaptation of WiMAX technology for Smart Grid networks, and we look forward to its continued support of the industry.

3. Wireless Carrier Ethernet Services: We as an organization recognize WiMAX technology's capacity to act as a wireless backhaul solution for carrier networks. Work has already been initiated with the IEEE on the P802.16r project to address this potential at the air interface and Ethernet convergence layers, and the WiMAX Forum has likewise assembled an informal task group to investigate how the Forum can support this market with an architectural framework capable of supporting Ethernet services over a variety of wireless air interface technologies. A requirements project on this topic has already opened within SPWG. Look to see more news on this subject in the coming months, and if you are interested in participating and supporting this effort, please let our technical team know!

I hope this gives you all a better idea of our goals for this year. As always we love to have the participation of our member companies, so if any of these items piques your interest, please get in touch with our technical team on how you can help!

I wish you all the best in 2013, and look forward to doing business with you.

Best Regards,



Dr. Mohammad Shakouri
Chairman, WiMAX Forum

EVENTS

In 2012 the WiMAX Forum hosted a strong series of its own events and also participated in a range of important industry events spanning the globe.

In 2013 we will continue in our efforts to bring you quality events directly hosted by the WiMAX Forum, and will also have a presence at key industry events. The WiMAX Forum team is looking forward to seeing you at our events this year!

Please find below a detailed description of upcoming WiMAX Forum events:

WiMAX Forum Member Conference in Kuala Lumpur



The WiMAX Forum is delighted to announce 2013's first **WiMAX Forum Member Conference**, which will take place March 11-14, 2013 in beautiful Kuala Lumpur, Malaysia.

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

Please contact Chelsea Nager at Chelsea.Nager@WiMAXForum.org if you have any questions about the Kuala Lumpur Member Conference.

WiMAX Asia 2013



The WiMAX Forum is also pleased to announce the first event in the WiMAX Forum 2013 Operator Summit Series: **WiMAX Asia 2013**, which will be co-located with our **Member Conference** at the **Prince Hotel and Residence**, on March 12th, 2013 in beautiful Kuala Lumpur, Malaysia.

This event will focus on the development and future roadmap of WiMAX technology, and on paving a path for the emerging markets of Southeast Asia.

The WiMAX Forum will be hosting a cocktail reception for networking purposes on the evening of March 12th that will be open to attendees of both events.

WiMAX Asia 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 Asia.

WiMAX Asia 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 for to attend.**

For additional information and registration please visit: [WiMAX Asia 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 sponsorships may best suit your needs, please contact Alessandra Rocha at Alessandra.Rocha@WiMAXForum.org.

Mobile Backhaul Asia 2013



The WiMAX Forum is an association sponsor of **Mobile Backhaul Asia 2013**

Building on the success of the Asia's biggest and best Mobile Backhaul conference 2012, which attracted over 400 telecoms professionals, the 5th Mobile Backhaul Asia conference will once again bring together Asia's telecoms industry to explore technology solutions and business strategies to cost-effectively upgrade your backhaul networks.

For additional information and registration please visit: [Mobile Backhaul Asia 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 157 members of the WiMAX Forum in good standing.

The WiMAX Forum would like to extend a special welcome to the newest members:

- [Synkro Southwest, LLC \(Local Loop\)](#)
- [UMAX](#)

Three new members have applied for membership in December:

- [Busyinternet Gh Ltd](#)
- [NET ILETISIM](#)
- [NOVI-NET d.o.o.](#)

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 Mike Wolleben at Mike.Wolleben@WiMAXForum.org - +1-512-470-9045.

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 GROUP

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 - *Requirements*
- **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*
- **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.

As a result of some recent vacancies we are currently in the middle of an Officer Election process. We have candidates that are nominated for offices in SPWG, NWG, and TWG. A call for candidates has been sent and elections will be scheduled by group. Below are some 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.

- **AWG** – Chair
- **NWG** - Vice Chair & Secretary
- **SGWG** – 2nd Vice Chair & Secretary
- **TWG** - Chair & Secretary

Your participation is important to the WiMAX community!

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 co-locates 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 Rich Hawkins at Rich.Hawkins@WiMAXForum.org

WI-CAM CPE OPERATION AND MANAGEMENT SYSTEM

Introduction:

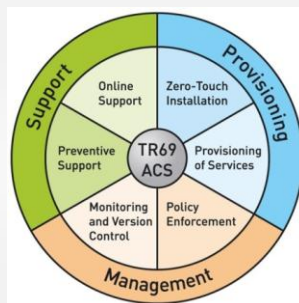
Delivering a competitive wireless broadband service in today's data hungry environment is an enormous technical, operational & business challenge for WiMAX service providers. To reduce customer churn operators must be able to offer their services with the best user experience and customer care.

Quality of Experience (QoE) in data service depends on many aspects. Our experience, at wi-tribe, indicates that most of the customer complaints relate to the user environment (viruses, wrong configurations etc. in user computers) and not to the network. A tool that allows a Call Center Agent to monitor the CPE (Customer Premises Equipment) can make it fairly simple to conclude if a customer complaint is related to the user or the network.

Such a tool would log and analyze CPE device behavior; information that can be used for optimizing the network for improving Customer QoE. In fulfilling these demands Wi-Tribe Pakistan took the initiative and developed state of the art tool (wi-CAM) for managing all types of WiMAX customer end devices. This tool has enabled wi-tribe to optimize its network experience and reduce customer complaint resolution time at the Call Center. This tool has been a competitive advantage for wi-tribe. Since June 2012 the tool has been developed into a product with its first international deployment in wi-tribe, Philippines.

What is wi-cam:

wi-cam is a low cost, CPE Operation and Management System developed by wi-tribe Pakistan. It is a standards based solution for provisioning, configuration and management of TR-069 and OMA DM (Open Mobile Alliance Device Management) compliant devices.



The tool provides real time access of customer device performance KPIs to Call Center Agents and NOC Engineers. This enables the customer care teams to resolve customer problems in real time. The tool also provides different reports on CPE KPIs that enable comparative analysis of different CPE types and give an overall view of network performance from subscribers' perspective. Statistical reports can be used to optimize network and device performance to improve QoE.

How can you get wi-cam?

To view more details about wi-cam, please visit the following link: [wi-cam CPE Operation and Management System](#)

If you are interested in deploying wi-cam in your network please contact Waqas Asghar at: Waqas.Asghar@pk.wi-tribe.com, Ph.: +92-3458885164.



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 January:

- [WiMAX Forum publishes Smart Grid utility requirements document for WiGRID Networks](#)
- [WiMAX Asia 2013](#)
- [Western Power Distribution](#)
- [Taichung, Taoyuan win smart community honors](#)
- [Dogon Telecom launches WiMAX service in Bamako, Mali](#)
- [Countrywide WiMAX Internet by August](#)
- [Ofcom UK opens bidding in superfast 4G Mobile Broadband auction](#)
- [Itron and Tantalus expand offering into South America with project in Guyana](#)
- [New MIMO Antenna further improves bandwidth efficiency and system reliability](#)
- [Firebird International seeks out startup and mid-sized media and technology businesses for investment and expansion, distribution in US](#)
- [IPSTAR 1st broadband satellite to provide backhaul for WiMAX services in Japan](#)

- **WiMAX market analysis**
- **National Grid selects BRIDGE Energy Group to lead delivery of the most comprehensive Smart Grid deployment in the Northeast**
- **Interoperability set to drive WiMAX adoption**
- **1st brochure for Mobile Backhaul Asia is now available for download**
- **21st Convergence India 2013, South Asia's largest ICT expo was held in New Delhi on Jan. 16-18**
- **Metro rollout of Texas MPLS business services, Ethernet broadband providers, VoIP service, T1 Internet and T3 line services via SolveForce**
- **Free Internet onboard Stena**
- **Encouraging investment: WiMAX forum president in Pakistan**
- **National Grid teams with best and brightest to deliver northeast's largest, most comprehensive smart grid pilot**
- **WiMAX industry needs out-of-the-box solutions to scale high**
- **Slovanet preparing to offer WiMAX Internet services**
- **Full Stream Wireless brings WiMAX service to mid-Missouri**
- **Western WiMAX PoPs up in Phoenix NAP**
- **Slovanet launching WiMAX 802.16e Internet services**
- **NT expands WiMAX service to Chitwan, Nepal**
- **WiMAX industry need out-of-the-box solutions to scale**
- **WiMAX pursuing government for transparent laws**
- **WiMAX launched in Leh, India**
- **Naeem Zamindar: Wateen grew remarkably in 2012**
- **TeliaSonera completes Alem deal; WiMAX firm to be merged with K'cell unit**
- **BSNL introduces new WiMAX plan in Kerala, India**
- **Home area networks: Which path to take?**

Top 20 most accessed articles from 2012:

- **Banglalion opens WiMAX service in Bangladesh**
- **WiMAX makes a strong showing in Pakistan, Bangladesh**
- **PLDT signs WiMAX deal with Alvarion for metro Manila hotspot project**
- **Overview Of WiMAX In Pakistan**
- **Is '5G' mobile broadband just around the corner?**
- **UQC: 'We definitely need WiMAX 2 to improve capacity'**
- **The WiMAX Forum extends WiMAX advanced road map to support multiple radio-access technologies**

- **UQ mulls adoption of WiMAX Release 2.1**
- **Digicel to go national with 4G network**
- **WiMAX Forum gets new president**
- **WiMAX makes a strong showing in Pakistan, Bangladesh**
- **Malaysia's 1st 4G Internet-enabled cars**
- **WiMAX Forum president describes road map wherein WiMAX, LTE are complementary**
- **Taiwan pledges support for WiMAX**
- **Why does my iPhone 4S now say 4G, not 3G? Because it is**
- **Mobile broadband watch: Alvarion wins deal**
- **WiMAX showing renewed potential and capabilities**
- **Freshtel expands WiMAX coverage further**
- **Greenpacket launches cutting-edge wireless router that compliments WiMAX devices worldwide**



© 2013 WiMAX Forum®. "WiMAX", "Mobile WiMAX", "Fixed WiMAX", "WiMAX Forum", "WiMAX Certified", "WiMAX Forum Certified", "WiGRID", the WiMAX Forum logo, the WiMAX Forum Certified logo and the WiGRID logo are trademarks or registered trademarks of the WiMAX Forum. All other trademarks are the properties of their respective owners.