



wimax FORUM[®]

NEWSLETTER

October 2011

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INTRODUCTION

Dear WiMAX Forum Members,

This October the WiMAX Forum has been busily preparing for the next in our successful 2011 series of operator summits, which is now just weeks away! WiMAX South Africa 2011 will take place in Cape Town, South Africa on November 8th. We already have over 30 African WiMAX operators registered to attend, and we have a fantastic speaker lineup. For more information on this event, please visit: <http://wimaxforum.org/events/operator-summit-series/wimax-south-africa-2011>.

Also coming up is the next WiMAX Forum Member Conference, which will take place from October 31st – November 4th. If you have not registered and plan to attend, please do so here: <http://wimaxforum.org/events/member-conferences/wimax-forum-member-conference-miami-fl>.

While the WiMAX Forum continues in its goal of providing opportunities for its members within the traditional telecommunications industry, the WiMAX Forum is also working on providing similar opportunities within vertical markets. In particular, the WiMAX Forum is currently focusing heavily on both the Smart Grid and Aviation industries. During October, the WiMAX Forum made strides to support each.

On October 6th General Electric was kind enough to host a WiMAX Forum Smart Grid Working Group (SGWG) meeting at its GE Grid IQ Center in Atlanta, Georgia. Led by Declan Byrne, WiMAX Forum's interim SGWG Chair, and Vice Chair Paul Senior of Airspan, this event made significant progress towards organizing the WiMAX industry's efforts in targeting the Smart Grid market. Companies such as Alvarion, Airspan, GE and RuggedCom presented case studies of WiMAX Smart Grid networks already in deployment, showcasing the early strength of this important market. During the week of October 10th, WiMAX Forum President and Chairman Ron Resnick travelled to Frankfurt, Germany for the 7th meeting of WORKING GROUP 82 (WG-82), a combined meeting of EUROCAE WG 82, SJU P15.2.7, SJU P9.16 and RTCA SC-223. EuroCAE is the aviation regulatory body of EuroControl responsible for writing the standards for the aviation industry in Europe. The RTCA is the aviation regulatory body of the United States FAA (Federal Aviation Agency) responsible for writing the standards for the aviation industry in the U.S.

This year the WiMAX Forum entered into a formal liaison relationship with the RTCA and also with EuroCAE to assist in their commitment to develop new data link technologies to support their industry's requirements. Attendees at the meeting included members from all parts of the aviation ecosystem including standards, government agencies, aircraft manufacturers, system integrators and WiMAX systems manufacturers, RTCA, FAA, Eurocontrol, EuroCAE and others. The Working Group has settled on WiMAX as the standard for next generation airport terrestrial communications, and is working closely with the WiMAX Forum on the initial stages of developing system requirements. Expectations are to see deployment of WiMAX in this industry beginning in 2014 – 2015.

Also this month the WiMAX Forum staff is continuing to prepare for what our members know is one of our busiest times: renewal season. Many of our 200+ members renew their annual membership in the next three months, and our membership and finance teams have been working together to make certain that the next few months go smoothly for everyone. Over the next several months your

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

As a part of our renewal season, the WiMAX Forum recently released its annual membership survey, and we hope that if you have not yet had the chance to, you will please take the time to respond. Your responses are essential to our providing you with the quality of service and membership experience that you deserve. The staff made certain that the survey is both brief and efficient; and we will use your responses to better serve you, our members.

We look forward to hearing from you, and to continuing to work with you in 2012.

Best Regards,

The WiMAX Forum

WORKING GROUP UPDATE

The WiMAX Forum Working Groups (<http://wimaxforum.org/about/technical-activities-and-working-groups>) are the key to the development of WiMAX technology. In this monthly column the WiMAX Forum Member Newsletter will feature a Working Group through an interview with one of its representatives. This month the **Network Working Group** will be the subject.

The questions and answers in the interview will consolidate a variety of important information to keep members updated on special projects, activities and developments of each specific group. The WiMAX Forum team welcomes your feedback; please share your comments, suggestions, news and ideas by writing to Alessandra.Rocha@wimaxforum.org.

NETWORK WORKING GROUP (NWG)

The Network Working Group (NWG) provides end-to-end networking and network interoperability (NWIOT) with specifications for fixed, nomadic, portable and mobile WiMAX systems, beyond what is defined in the scope of IEEE 802.16. The WiMAX Forum asked NWG Chair Phillip Barber from Huawei (www.huawei.com) for more details.

WiMAX Forum: What are the advantages of NWG connections?

Barber: Participation in the NWG provides vendors and operators access to development, refinement and updates of WiMAX network specifications. Participants not only access the specifications, but have the opportunity to interact with colleagues from other vendors and operators, to share knowledge and gain a greater understanding of the how and why of WiMAX defined network specifications. The NWG has developed over fifty network specification documents to date. These documents define the complex behaviors and functions. Participation in the NWG is not only an excellent way to directly impact these specifications, but also to access the combined knowledge of past and current participants.

WiMAX Forum: What is the NWG focused on at the moment?

Barber: The NWG recently completed a set of projects that it has been working on for the last eighteen months. Some of those new specifications were just published. Some are pending publication in the very near future. We are in the process of completing the last of these sets of projects, with our 16mCore network Stage 2 and Stage 3 specifications due for completion before the end of the year. The NWG is in the process of considering new projects for the next eighteen month cycle. Presently we have approved three Lawful Intercept amendment projects, to update current Lawful Intercept specifications to include support for some new, recently added features.

WiMAX Forum: Please share with us a recent accomplishment of the NWG?

Barber: The NWG recently approved updates to eighteen network specification documents. As the NWG accumulates a number of approved Change Requests, to fix identified and agreed bugs in the specifications, and as we approve new Amendments that add functionality to already available base specifications, we periodically update these documents to provide clean, current versions to the WiMAX Industry. This is a lengthy process and by necessity NWG Members take great care in facilitating these updates. NWG last updated specifications mid-2010, so these updated specifications will be welcomed by the industry.

WiMAX Forum: What are the future plans for the NWG?

Barber: The NWG will continue to develop specifications to add, enhance, refine and repair features and functions to WiMAX technology. With the tremendous breadth and depth of specification features already developed, the pace of NWG work may slow a bit. But NWG Members continue to work on new features and functions to enhance the WiMAX experience.

MEMBERSHIP SERVICES UPDATE

There are currently 209 members of the WiMAX Forum in good standing. WiMAX Forum would like to extend a special welcome to the newest members of our organization:

- **Panasonic Telecom Co., Ltd**

There has never been a better time to be a WiMAX Forum Member. We are 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 – 512-722-6138

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!

EVENTS UPDATE

The WiMAX Forum upcoming events include:

- **4G World in Chicago**
- **Smart Energy International in San Francisco**
- **WiMAX Forum Member Conference in Miami**
- **The Next Billion in Jakarta**
- **Android DevCon II in San Francisco**
- **WiMAX South Africa 2011**

If you have any questions regarding our upcoming events, please contact the WiMAX Forum Event Manager Julia Rueb at Julia.Rueb@wimaxforum.org

WiMAX FORUM MEMBER CONFERENCE IN MIAMI



We look forward to seeing all of our members at Miami Member Conference on October 31-November 4, 2011. The Conference registration fee is \$650 which includes:

- All meetings
- Lunches and break refreshments
- Cocktail Reception on Wednesday

Please click here for the Miami Member Conference Registration.

WiMAX FORUM OPERATOR SUMMIT IN SOUTH AFRICA



We have been very busy getting ready for our next Operator Summit in Cape Town, South Africa, scheduled for November 8th. The event is going to be co-located with AfricaCom – the largest annual communications event in Africa with over 5,000 attendees and 1,300+ companies.

The purpose of this Operator Summit is to educate African operators on the opportunity to deliver wireless broadband via WiMAX, and will help members and non-members alike make connections in the African market. As in past events, the South African Summit is free to attend. Companies that attend the WiMAX Forum Operator Summit will also receive discounts on attending and exhibiting at AfricaCom.

[Please click here for the South Africa Event Details and Registration.](#)

GLOBAL DEPLOYMENT UPDATE

This section describes the current state of WiMAX deployments across the world. The data for this tool is delivered to us courtesy of **Informa Telecoms & Media**, and can be viewed online in more detail at www.wimaxmaps.org. Please note that the numbers below do not necessarily represent total WiMAX networks in existence, but rather the total deployments that we currently track. Every month we find more data on new or existing deployments and add them to the database. If you are an operator, please check WiMAX Maps to make sure that your organization’s information is accurate. *If it is either not there or is inaccurate, please email deploymentdata@wimaxforum.org, and we will update our information immediately.*

TOTAL DEPLOYMENTS*

**Note: “Deployments” in this case refers to WiMAX networks that are either in service or planned/in deployment (i.e. base stations are being deployed, but there are few/no subscribers yet).*

TOTAL DEPLOYMENTS TRACKED	584
TOTAL COUNTRIES** WITH WIMAX DEPLOYMENTS	150

***Note: "Countries" in this case is representative of distinct telecommunications markets, and therefore this number may equal more than the total number of sovereign nations recognized by the UN. For example, Hong Kong and China have different regulatory structures, and are therefore treated as different markets.*

DEPLOYMENTS BY REGION

REGION	DEPLOYMENTS	COUNTRIES
CALA	118	32
Africa	116	43
Asia-Pacific	99	24
Eastern Europe	86	21
Western Europe	79	18
North America (US/Canada)	56	2
Middle East	30	10

DEPLOYMENTS BY FREQUENCY

2.3 GHz Deployments***	48
2.5 GHz Deployments***	113
3.3 GHz Deployments***	10
3.5 GHz Deployments***	309
5+ GHz Deployments***	21

****Note: In above table total deployment by Frequency may not add up to total deployments tracked. The missing deployments' statuses are unknown, and will be confirmed and updated.*

For more information please visit www.wimaxmaps.org.

POPs COVERAGE

In February, 2011, WiMAX Forum announced that as of the end of 2010, WiMAX service providers cover more than **823 Million** people. This estimate surpasses last year's forecast of 800M people, and signifies that WiMAX is still on target to reach the forecast that **by 2011 there will be over 1 Billion people across the world within WiMAX coverage**. This POPs update is a yearly project, and will be updated again at the beginning of 2012. Below is a regional breakout of the estimate:

REGION	POPs COVERED*
Africa	87,347,832
Asia-Pacific	322,666,970
CALA	117,846,830
Eastern Europe	102,503,669
Middle East	33,509,544
North America (US/Canada)	127,000,000
Western Europe	32,526,407
TOTAL	823,401,252

**These numbers represent an estimate conducted by WiMAX Forum via primary and secondary research of operator POPs coverage on an operator-by-operator basis. Where the operator could not or would not respond to direct inquiry, estimates were made based on public operator statements, number of base stations, government-mandated buildout requirements, and other available information. Proprietary networks (pre-WiMAX/non-WiMAX) were not included, and geographic overlap of operator coverage areas was taken into account.*

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:

<http://www.wimaxforum.org/wimax-forum-weekly-newsbriefs>

Below is a summary of the month of October:

- **'Sunayanam' - Protecting the light in your eyes**
- **WaveMax deploys Alvarion® 4Motion® for wireless broadband network in rural Italy**
- **Alepo names Randy Cook to head Worldwide Sales and Business Development**
- **Spectranet rolls out on WiMAX**
- **US wireless initiative stalls new billing rules**
- **US senators introduce 4G bill**
- **WiMAX Forum development in Latin America**
- **Airspan Networks supports smart grid 4G deployment in Austria**
- **Vee Telecom to wholly acquire Vmax Telecom**
- **Is there still hope for WiMAX?**

- **Alvarion signs nonbinding agreement to buy Wavion**
- **Steve Jobs' death: The world reacts**
- **Global Mobile targets 2012 break even**
- **Vee Time to acquire Vmax Telecom**
- **Menatelecom in WiMAX accord with India firm**
- **Franklin Wireless announces financial results for fiscal 2011**
- **Motorola Mobility brings powerful Motorola PHOTON WiMAX smartphone to Japan**
- **Broadband in the Tropics**
- **KDDI goes WiMAX with new handsets in Japan**
- **Menatelecom in deal to expand WiMAX network**
- **Apprion extends ION video application with WiMAX**
- **HTC Evo 4G: Simultaneous data and voice connectivity, Gingerbread upgrade**
- **Samsung Epic Touch 4G: Largest smartphone display, retail price, total tech specs**
- **Netscribes: Interactive services to foster widespread adoption of IPTV in India**
- **Speedy WiMAX phones from Sprint**
- **Value Packed WiMAX indoor modems from Greenpacket**