INTRODUCTION

Dear WiMAX Forum Members,

We would like to begin this last newsletter of 2011 by wishing all of our members a wonderful holiday season! While the weather here in the Northern Hemisphere is getting colder, the WiMAX industry continues to heat up as vertical markets such as Smart Grid, Aviation, Oil & Gas, High Speed Rail and more look to WiMAX as the ideal technology for their communications needs. Throughout 2011 the WiMAX Forum has built support within the organization for these markets, including the formation of our Smart Grid Working Group, and our participation and partnership with global aviation organizations.

As a part of this push into vertical markets, the WiMAX Forum would like to welcome RuggedCom back as a Principal Member of the WiMAX Forum. In welcoming RuggedCom back as a member, we are also pleased to announce that Tony Burge, Business Development Manager at RuggedCom has been appointed by Declan Byrne, WiMAX Forum Smart Grid Working Group Chairperson, to be a Vice Chair of the Smart Grid Working Group.

“"I am honored to be appointed as a Vice Chair in the Smart Grid Working Group of the WiMAX Forum,” said Tony Burge, Business Development Manager at RuggedCom. "I have worked on WiMAX-based solutions for the Electric Power market since 2007, and have found the WiMAX Forum to be an invaluable resource for developing profiles with features unique to the Electric Power market. I look forward to working with the team to continue to provide the most secure broadband solution for our global Smart Grid customers.”

Tony Burge has nearly 20 years of technical, product management, and business development experience in mission critical wireless communications and software development including early Military Tactical Digital Interface Links (TADILs) to proprietary licensed RF solutions, to Industrial broadband and WiMAX solutions. He received his Bachelor of Science degree from the University of the State of New York in Albany, New York, and earned 16 hours towards his MBA from Old Dominion University in Norfolk, Virginia. He has held senior development and management positions with Comptek Federal Systems, VisionAIR (commercial wireless division), and GE MDS. Since May 2010, Tony has served as Business Development Manager for RuggedCom’s RuggedWireless Division.

Congratulations to Mr. Burge on his appointment!

In other exciting news from the WiMAX Forum this December, we have just announced our 2012 WiMAX Forum Operator Summit Series. The 2012 events series will include 7 events in strategic locations across the globe, and will provide ample opportunity for members and non-members alike to learn and do business. For more information on our 2012 events, please see our official announcement: WiMAX Forum 2012 events.

As a reminder the WiMAX Forum is currently in the middle of its renewal season. Many of our 200+ 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. As a final note, we would like to remind you that the WiMAX Forum is currently in the middle of its renewal season. Many of our 200+ 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 2012.

Best Regards,

The WiMAX Forum

WORKING GROUP UPDATE

The WiMAX Forum 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 Regulatory 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.

Regulatory Working Group (RWG)

The Regulatory Working Group (RWG) promotes worldwide access to spectrum “fit for purpose” for WiMAX Forum Certified systems with sufficient harmonization of frequency ranges to facilitate significant economies of scale; and encourage adoption of appropriate regulatory frameworks based on principles of technology and service neutrality, allowing service providers to deploy the most appropriate solutions for their markets. The WiMAX Forum asked RWG Chair Jayne Stancavage from Intel for more details.

WiMAX Forum: What are the advantages of RWG connections?

Stancavage: RWG, working closely with other WiMAX Forum groups like TWG and CWG, has been able to provide information about WiMAX specifications to global, regional, and local regulatory bodies.

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

Stancavage: The primary focus of RWG has been at the ITU (including both IMT-Advanced and IMT-2000), regional activities such as European ECC, and responding to relevant national consultations.

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

Stancavage: This year, WirelessMAN-Advanced (IEEE 802.16m) was accepted as one of two IMT-Advanced technologies. Final approval of this standard, as well as the WiMAX Forum transposition of the standard, by the International Telecommunications Union is slated for January 2012.
WiMAX Forum: What are the future plans for the RWG?

Stancavage: RWG will continue to work on providing updated information about WiMAX to relevant bodies such as the ITU and ECC.

MEMBERSHIP SERVICES UPDATE

There are currently 213 members of the WiMAX Forum in good standing. WiMAX Forum would like to extend a special welcome to the newest members of our organization:

- SpeedConnect LLC
- Côte d’Ivoire Telecom

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 will participate in and promote a series of events in 2012. January will be a busy month with Working Group Face-to-Face co-located with WiMAX Forum Buenos Aires Operator Summit and two Industry events.

The WiMAX Forum 2012 Events Draft Schedule has been released. Please CLICK HERE for the latest version of the document.

The WiMAX Forum upcoming endorsed industry events include:

- DistribuTECH
- National Telecommunications Cooperative Association (NTCA)

WiMAX Forum CWG/TEG/NWG Face-To-Face

The WiMAX Forum is pleased to announce the WiMAX Forum CWG/NWG/TWG Face-to-Face, which will take place at the Marriott Plaza Buenos Aires on January 30-February 2, 2012.
The WiMAX Forum is also excited to announce that this Working Group Face-to-Face will be collocated with its first operator summit of 2012, **WiMAX Buenos Aires 2012**, which will be held in the same location from **January 30-31, 2012**. This event will focus specifically on supporting the Latin American operator community in deploying profitable WiMAX networks.

The WiMAX Forum will be hosting a cocktail reception for networking purposes on the evening of January 31st that will be open to attendees of both events.

To Register for the WiMAX Forum Working Group Face-to-Face, please click on the following link: [Working Group Face-to-Face Registration Website](#).

Please note that early registration **cut-off date is January 8, 2012**. After the cut-off date, the fee will increase from $500 to $550 per person. We encourage you to register early to help us with planning. If you are interested in attending the Operator Summit, please note that there is a separate registration process. The registration link is provided below.

For any questions regarding this event, please contact Julia Rueb at [Julia.Rueb@wimaxforum.org](mailto:Julia.Rueb@wimaxforum.org)

**WiMAX Buenos Aires 2012 Operator Summit**

WiMAX Buenos Aires 2012 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 Latin America.

According to data provided to **WiMAX Maps** by Informa Telecoms and Media, there are currently 118 WiMAX networks operating in 33 countries across Latin America and the Caribbean. This event is constructed specifically to allow these operators to network, share key lessons and work together for the benefit of the industry. Our goal is for attending operators to gain concrete knowledge that will help them build profitable WiMAX businesses.

**Topics of discussion will include:**

- Exploring Different Go-to-Market Strategies for WiMAX operators
- Operational Considerations for Greenfield WiMAX Networks
- Timing and Planning Considerations for WiMAX network construction
- Backhaul Considerations and more…

WiMAX Buenos Aires 2012 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**.

To register for the WiMAX Buenos Aires 2012 Operator Summit, please click on the following link: [Operator Summit Registration Website](#).

For any questions regarding this event, please contact Jonathan Singer, WiMAX Forum Marketing Communications and Market Research Manager: [Jonathan.Singer@wimaxforum.org](mailto:Jonathan.Singer@wimaxforum.org)
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*

“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

<table>
<thead>
<tr>
<th>REGION</th>
<th>DEPLOYMENTS</th>
<th>COUNTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>116</td>
<td>41</td>
</tr>
<tr>
<td>CALA</td>
<td>118</td>
<td>33</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>99</td>
<td>24</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>88</td>
<td>22</td>
</tr>
<tr>
<td>Western Europe</td>
<td>77</td>
<td>18</td>
</tr>
<tr>
<td>North America (USA/Canada)</td>
<td>56</td>
<td>2</td>
</tr>
<tr>
<td>Middle East</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>
DEPLOYMENTS BY FREQUENCY

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 GHz Deployments***</td>
<td>48</td>
</tr>
<tr>
<td>2.5 GHz Deployments***</td>
<td>113</td>
</tr>
<tr>
<td>3.3 GHz Deployments***</td>
<td>10</td>
</tr>
<tr>
<td>3.5 GHz Deployments***</td>
<td>309</td>
</tr>
<tr>
<td>5+ GHz Deployments***</td>
<td>21</td>
</tr>
</tbody>
</table>

***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](http://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:

<table>
<thead>
<tr>
<th>Region</th>
<th>POPs Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>87,347,832</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>322,666,970</td>
</tr>
<tr>
<td>CALA</td>
<td>117,846,830</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>102,503,669</td>
</tr>
<tr>
<td>Middle East</td>
<td>33,509,544</td>
</tr>
<tr>
<td>North America</td>
<td>127,000,000</td>
</tr>
<tr>
<td>Western Europe</td>
<td>32,526,407</td>
</tr>
<tr>
<td>TOTAL</td>
<td>823,401,252</td>
</tr>
</tbody>
</table>

*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, 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 December:

- WiMAX Forum® announces 2012 Operator Summit Series
- Radiocom passes 2,500 WiMAX customers milestone
- Sprint likely to reintroduce unlimited WiMAX for tablets, USB modems in 2012
- VelaTel snags 75 percent stake in Balkan WiMAX duo
- Alvarion awarded with IBM SAFE certification for smart grid solutions
- Award-winning Samsung Epic 4G Touch receives retail price drop
- Clear 4G Internet services
- Chile opens a bidding process for 4G under new conditions
- University in India installs BSNL 3G/WiMAX connection
- BSNL plans WiMAX services in Kullu, India
- Altai Technologies completes successful commercial trials of Super Wi-Fi solution in rural towns
- Anadigics introduces WiMAX/LTE power amplifier
- NewNet plans to acquire Nokia Siemens Networks WiMAX business
- DoT may de-license spectrum for utility services
- Kenya’s Safaricom buys 2nd WiMAX operator
- Greenpacket gives modems to support e-learning in schools
- Alvarion completes acquisition of Wavion
- Sprint iPad 2 with 4G WiMAX coming soon?
- Delivering broadband mobility on the go
- Tatung InfoComm moves to partner with cable TV operators
- Fiber speeds without the fiber
- WiMAX ‘offers hope’ for Africa broadband
- Sharp unveils world’s 1st WiMAX-supporting Android tablet
- CCT 4G CCTmax technology supports BSAFE 24-Hour Challenge
- PowerStream chooses RuggedCom’s WiMAX broadband solution for distributed generation
- Sprint introduces 3G 4G/WiMAX mobile broadband data plans with more GB
- Sharp will stick with tablets, reveals new 7-inch model
- Wireless Ethernet communications
- Smartphone prices shrink as 1st-time buyer numbers increase