

# WiMAX Forum® Industry Research Report

Review of June, 2009

## **About**

The WiMAX Forum® Industry Research Report is a monthly summary of primary and secondary research and news, provided by WiMAX Forum to the industry. It includes the latest updates on WiMAX Forum-tracked statistics, product certification, regulatory information, technology standards and more. This report will be published and made available on the WiMAX Forum website the first week of every month. If you have any questions or comments regarding the research contained herein, please contact Jonathan Singer, the WiMAX Forum's Market Research Manager at [Jonathan.Singer@wimaxforum.org](mailto:Jonathan.Singer@wimaxforum.org).

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## **Executive Summary**

- WiMAX Forum currently tracks 484 WiMAX Deployments in 141 Countries.
- Yota launched its paid commercial Mobile WiMAX™ service in Russia on June 1<sup>st</sup>. Presenting at WiMAX Forum Global Congress in Amsterdam, CEO Dennis Sverdlov announced Yota’s WiMAX service is adding 1300 subscribers per day.
- WiMAX Forum certified 10 new products including its first full notebook and netbook certifications.
- This month, WiMAX Forum features a profile of Dutch WiMAX provider Worldmax.
- Finnish 2.5GHz spectrum auction to be held in November 2009
- 8 new Mobile WiMAX operator case studies written by Huawei are now available on the WiMAX Forum website. Visit here to read them: [http://www.wimaxforum.org/resources/documents/marketing/success\\_stories](http://www.wimaxforum.org/resources/documents/marketing/success_stories).

## **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](http://www.wimaxmaps.org). Please note that the numbers below do not represent total WiMAX networks in existence, but rather the total deployments that we currently track. Every month we find more data on new deployments 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](mailto: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).*

<b>Total Deployments Tracked</b>	484
<i>Total Deployments Tracked Last Month</i>	475

<b>Total Countries** with WiMAX Deployments</b>	141
<i>Last Month</i>	140

*\*\*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.*

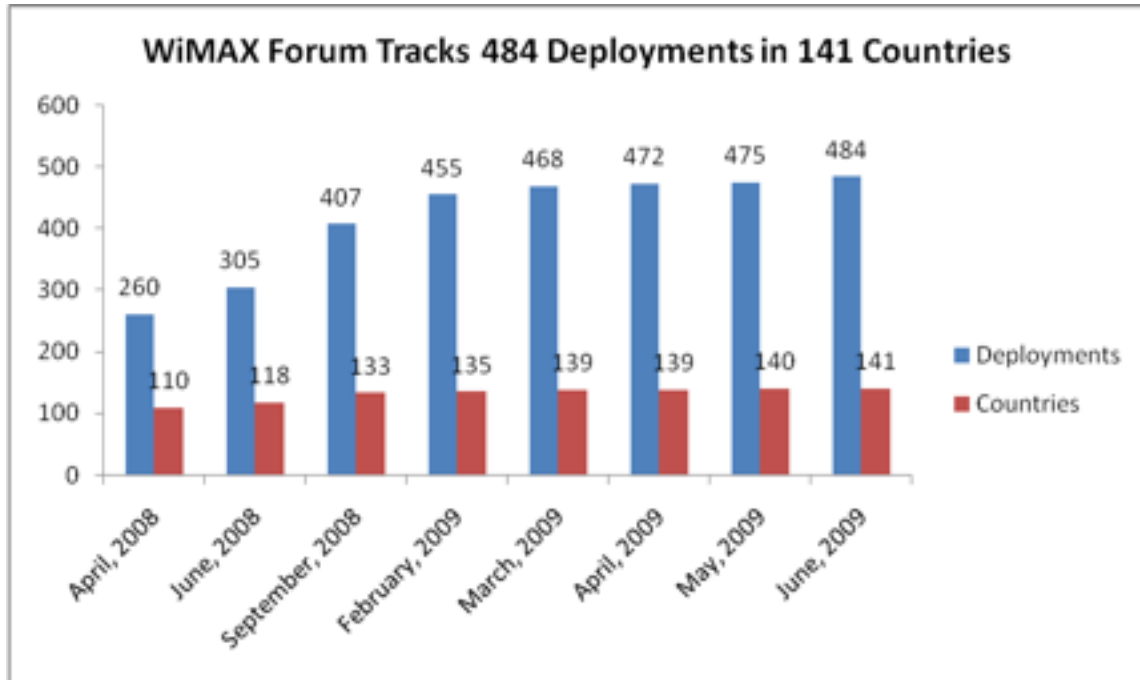
## DEPLOYMENTS BY REGION

<b>Africa</b>	100
<b>Asia-Pacific</b>	76
<b>CALA</b>	97
<b>Eastern Europe</b>	77
<b>Middle East</b>	18
<b>North America (USA/Canada)</b>	48
<b>Western Europe</b>	68

## DEPLOYMENTS BY FREQUENCY

<b>2.3 GHz Deployments***</b>	29
<b>2.5 GHz Deployments***</b>	63
<b>3.3 GHz Deployments***</b>	9
<b>3.5 GHz Deployments***</b>	240
<b>5+ GHz Deployments***</b>	20

*\*\*\*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, 2009, WiMAX Forum announced that WiMAX service providers cover at least **430 Million** people. Below is a regional breakout of the estimate:

Region	POPs Covered
<b>Africa</b>	52,000,000
<b>Asia-Pacific</b>	205,000,000
<b>CALA</b>	49,500,000
<b>Eastern Europe</b>	45,300,000
<b>Middle East</b>	20,000,000
<b>North America</b>	28,000,000
<b>Western Europe</b>	34,600,000
<b>TOTAL</b>	434,400,000

*\*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.*

Since this research was conducted, many operators have announced changes in POPs coverage. Below are some highlights:

- US operator Open Range Communications announced a \$100M deal with Alvarion to build a WiMAX network that will reach 6 million people in underserved regions.
- Maltese WiMAX operator Go launched a Mobile WiMAX network in the 3.5 GHz band that is expected to reach 99% population coverage by the end of 2009.
- Clearwire began a soft-launch of its Mobile WiMAX services in Las Vegas. In total, Clearwire is expected to launch nine commercial mobile WiMAX markets under the Clear brand in 2009.

*\*\*If you are a WiMAX operator and wish to be mentioned here, please contact Jonathan Singer, the WiMAX Forum’s Market Research Manager at [Jonathan.Singer@wimaxforum.org](mailto:Jonathan.Singer@wimaxforum.org).*

### **Monthly Featured Operator Case Study**

*WiMAX Success Stories: Worldmax*

*Worldmax Operations B.V. is an Amsterdam-based Dutch telecommunications company founded in August 2006 to supply 4G mobile broadband in the Netherlands. The company received significant investment from Greenfield Capital Partners and Intel Capital. Through Enertel Holding, Worldmax owns a nationwide license for 80 MHz of spectrum in the 3.5 GHz band (3500 – 3580 MHz). In June of 2008 Worldmax put its license to use, launching a Mobile WiMAX™ network under the brand name Aerea. Aerea offers mobile access to the internet via Mobile WiMAX, enabling applications such as high-speed browsing, online gaming, internet TV, VoIP.*

*[For the full report visit: <http://www.wimaxforum.org/resources/documents/marketing/casestudies>]*

### **WiMAX Forum Certified™ Products**

In June, 2009, WiMAX Forum certified 10 new devices. This includes its first netbooks and notebook computers.

	<b>This Month</b>	<b>Last Month</b>
<b>Total WiMAX Forum Certified Products</b>	<b>114</b>	<b>104</b>
<i>Base Stations</i>	<i>48</i>	<i>47</i>
<i>Subscriber/Mobile Stations</i>	<i>66</i>	<i>57</i>

### **Recent Certified Devices**

Below is a list of the WiMAX devices certified in June, 2009:

<b>Company</b>	<b>Product Name</b>	<b>Product Type</b>	<b>Frequency</b>
Panasonic	Let'snote F8 PC	Mobile Station	2.5 GHz
Onkyo	C204 Netbook	Mobile Station	2.5 GHz
Sony	The VAIO® P Series Mobile Station	Mobile Station	2.5 GHz
Fujitsu	FMV BIBLO LOOX R/ D70N	Mobile Station	2.5 GHz
Toshiba	Dynabook SS RX2	Mobile Station	2.5 GHz
Mitsumi Electric Co	Mitsumi Mobile WiMAX USB Dongle	Mobile Station	2.5 GHz
Seowon	SWU-3220 WiMAX USB Modem	Mobile Station	3.5 GHz
Sony	Vaio Z Series Notebook	Mobile Station	2.5 GHz
ZTE	ZTE E9200 (W100\200)	Base Station	2.5 GHz
Intel	WiMAX/WiFi Link 5150 MC	Mobile Station	2.5 GHz

### WiMAX Forum Certified Product Vendors

<b>WiMAX Vendors with WF Certified Products</b>	<b>Total</b>
Base Station Vendors	<b>25</b>
Subscriber/Mobile Station Vendors	<b>34</b>

- Base Station Vendors
  - Airspan Networks, Alcatel-Lucent, Alvarion, Aperto Networks, Axxcelera, Cisco Systems, E.T. Industries, Huawei Technologies, Motorola, NEC, Nokia Siemens Networks, Nortel, PointRed Telecom Pvt Ltd, POSDATA, Proxim Wireless Corporation, Redline Communications, Runcom Technologies Ltd., Samsung, Selex Communications, SEQUANS Communications, Soma Networks, SR Telecom, Telsima, WiNetworks, ZTE Corporation
- Subscriber/Mobile Station Vendors
  - Airspan Networks, Alcatel-Lucent, Alvarion, Aperto Networks, Axxcelera Broadband Wireless, Beceem, E.T. Industries, Fujitsu, GCT Semiconductor, Inc., Gigaset Communications, Huawei

Technologies, Intel Corporation, MITSUMI ELECTRIC CO.,LTD., MODACOM Co., Ltd., Motorola, NEC, Oki Electric Industry Co., Ltd., Onkyo, Panasonic, POSDATA, Redline Communications, Runcom Technologies Ltd., Samsung, Selex Communications, SEOWON INTECH Co., Ltd., SEQUANS Communications, Siemens AG, Sony, SR Telecom, Telsima, Toshiba, Wavesat Inc., ZTE Corporation, ZyXEL Communications Inc.

## **Regulatory Update**

In partnership with WiMAX Forum Regulatory Working Group, AT4 Wireless maintains a detailed [Spectrum & Regulatory database](#). The database provides regular monthly updates detailing global regulatory proceedings. Below is a free, extracted highlight from this month's report:

- **Finland: 2500-2690 MHz auction announced for November 2009** - The Act on Spectrum Auctions was adopted at the plenary session of the Government on June 18, 2009, and will come into force on July 1, 2009. According to the Act, the licenses for the 2500-2690 MHz band will be issued by auction, which the Finnish Communications Regulatory Authority (FICORA) will hold in November 2009. FICORA is currently drafting a regulation on the auction rules and the technical conditions of the radio licenses to be granted in that band. The authority will hold a public consultation on the draft regulation and the technical conditions of the radio license during the summer of 2009. By law, the licenses will have a maximum duration of 20 years and will be granted with up to 50 MHz of spectrum.