



Industry Research Report

December 2010

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 Marketing Communications and Research Manager at Jonathan.Singer@wimaxforum.org.

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Executive Summary

- **WiMAX Forum currently tracks 592 WiMAX Deployments in 149 Countries.**
- WiMAX Forum welcomes SIRIM QAS to its family of Designated Certification Laboratories

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	592
Total Deployments Tracked Last Month	587
Total Countries** with WiMAX Deployments	149
Last Month	149

***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	33
Africa	117	43
Asia-Pacific	109	23
Eastern Europe	86	21
Western Europe	76	17
North America (USA/Canada)	57	2
Middle East	29	10

Deployments By Frequency

2.3 GHz Deployments***	55
2.5 GHz Deployments***	115
3.3 GHz Deployments***	9
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, 2010, WiMAX Forum announced that as of the end of 2009, WiMAX service providers cover more than **621 Million people**. This estimate shows that WiMAX is on track to reach last year's EOY2010 forecast of 800M+ people. WiMAX Forum now forecasts 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 2011. Below is a regional breakout of the estimate:

Region	POPs Covered
Africa	81,347,832
Asia-Pacific	237,148,673
CALA	113,246,829
Eastern Europe	82,887,886
Middle East	27,390,827
North America	47,000,000
Western Europe	32,549,629
TOTAL	621,571,679

**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 Clips

Every week WiMAX Forum provides a series of weekly press clippings on the WiMAX industry. Below is a summary of the previous month's clips:

- [BSNL Gets \\$520 Million Grant for Rural WiMAX Coverage – cellular-news.com, November 25, 2010](#)
- [Sprint and Clearwire deliver WiMAX to Los Angeles, Ohio, Miami and Washington DC, promise SF on December 28th - Engadget, November 29, 2010](#)
- [Greenpacket Pushing for WiMAX Adoption in Southeast Asia – TMCnet.com, November 23, 2010](#)
- [WiMAX Product Developers Urged to Make Use of SIRIM QAS Lab – Bernama.com, November 24, 2010](#)
- [YTL sees good demand for WiMAX service – biz.thestar.com, November 17, 2010](#)
- [Parts of Sub-Saharan Africa to Benefit from Alvarion's Mobile WiMAX Network – TMCnet, November 16, 2010](#)
- [All Clear in Sacramento - CedMagazine.com, November 15, 2010](#)
- [High Speed Internet Cuts the Cord in Sacramento – News10.net, November 12, 2010](#)
- [Aperto bags new WiMAX contract from Nostracom – TeleGeography.com, November 12, 2010](#)
- [WiMax Coming to LaLa Land – GoingWiMAX.com, November 12, 2010](#)

WiMAX Forum News Clips Continued

- New WiMAX network to launch in Iraq – Developing Telecoms, November 10, 2010
- Alvarion deploys 4G WiMax in Cameroon – Globes, November 10, 2010
- Max Telecom Bringing WiMax Up to Speed in Bulgaria – Going WiMAX, November 9, 2010
- Reality Check: Wholesale ... more exciting than you think – RCRWireless News, November 2, 2010
- BSNL to get additional subsidies, compensation for WiMAX operations – The Economic Times, November 6, 2010
- WiMAX Forum lashes out at Qualcomm – The Times of India, November 4, 2010
- 4G World: WiMAX carriers want to roam with LTE, not migrate to it – RethinkResearch, November 3, 2010
- WiMAX comes to the Big Apple – FierceHealthIT, November 2, 2010
- 8 WiMAX 4G Laptops Reviewed – PCMagazine, November 1, 2010

WiMAX Forum Certified™ Products

In November of 2010, WiMAX Forum certified 3 new devices.

Total WiMAX Forum Certified Products	253
Base Stations	62
Subscriber/Mobile Stations	191

Recent Certified Devices

Below is a list of the WiMAX devices certified in November, 2010:

Company	Product Name	Product Type	Frequency
PointRed Telecom	PointMAX2500	Subscriber Station	2.5 GHz
PointRed Telecom	PointMAX3000	Subscriber Station	2.5 GHz
NEC	Aterm WM3500R	Subscriber Station	2.5 GHz

WiMAX Forum Certified Product Vendors

WiMAX Vendors with WF Certified Products	Total
Base Station Vendors	26
Subscriber/Mobile Station Vendors	50

- Base Station Vendors

- o Airspan Networks, Alcatel-Lucent, Alvarion, Axxcelera, Cisco Systems, E.T. Industries, Harris Stratex, Huawei Technologies, Institute for Information Industry, 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, WiNetworks, ZTE Corporation

- Subscriber/Mobile Station Vendors

- o Acer Incorporated, Airspan Networks, Alcatel-Lucent, Alvarion, ApaceWave Technologies, Axxcelera Broadband Wireless, Beceem, Cisco Systems, C-motech Co. Ltd., D-Link, E.T. Industries, Fujitsu, GCT Semiconductor, Inc., Gemtek Technology Co. Ltd, Gigaset Communications, Harris Stratex, Huawei Technologies, Infomark, Intel Corporation, Interbro, Japan Radio, Kouzuro Co Ltd, Kyocera, Lenovo, MediaTek, Micro-Star Int'l co.,LTD, MITSUMI ELECTRIC CO.,LTD., MODACOM Co., Ltd., Motorola, NEC, Oki Electric Industry Co., Ltd., Onkyo, Panasonic, PointRed Telecom, POSDATA, Redline Communications, Runcom Technologies Ltd., Samsung, Selex Communications, SEOWON INTECH Co., Ltd., SEQUANS Communications, Siemens AG, Sony, SR Telecom, Toshiba, Ubee Interactive, 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](#). Below is a sample update from the database:

- **India's telecom regulator TRAI recommends the government revoke 62 spectrum licenses** – TRAI recommended that the licenses be cancelled on the grounds that either the spectrum owners have not rolled out services or the spectrum operators have improperly rolled out of services.

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