



**WiMAX**  
FORUM®

# WiMAX Forum® Industry Research Report June, 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 Market Research Manager at [Jonathan.Singer@wimaxforum.org](mailto:Jonathan.Singer@wimaxforum.org).

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## Executive Summary

- WiMAX Forum currently tracks 593 WiMAX Deployments in 14 Countries
- Packet One Networks formed a strategic alliance with and received a \$100 million investment from Korean 3G operator SKT to continue expanding its WiMAX network in Malaysia.
- Learn more about the ongoing Mobile WiMAX rollout by BSNL in India via this EliteCore Tech-

nologies case study.

## 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 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](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>	593
Total Deployments Tracked Last Month	592
<b>Total Countries** with WiMAX Deployments</b>	149
Last Month	148

\*\*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
Africa	117	43
CALA	117	33
Asia-Pacific	113	23
Eastern Europe	86	21
Western Europe	78	17

North America (USA/Canada)	53	2
Middle East	29	10

**DEPLOYMENTS BY FREQUENCY**

2.3 GHz Deployments***	54
2.5 GHz Deployments***	115
3.3 GHz Deployments***	9
3.5 GHz Deployments***	311
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](http://www.wimaxmaps.org)

**Quarterly WiMAX Equipment Update**

This section provides a cumulative look at the total WiMAX equipment shipped since 2006. The data is provided cour-

tesy of Emmy Johnson at [Skylight Research](http://Skylight Research). For more detailed data on WiMAX equipment numbers, please contact Ms. Johnson at [Emmy@skylightresearch.com](mailto:Emmy@skylightresearch.com).

1Q 2006 – 3Q 2009 Cumulative WiMAX Equipment Sales	
Frequency	Total Shipped
2.3 GHz	\$243M
2.5 GHz	\$679M
3.x GHz	\$1.5B
5.x GHz (includes 4.9)	\$84M
Other	\$12M
TOTAL	\$2.5B

### 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

Region	POPs Covered
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.

### Below are some industry highlights showing WiMAX's progress across the world:

- Packet One Networks formed a strategic alliance with and received a \$100 million investment from Korean 3G operator SKT to continue expanding its WiMAX network in Malaysia.
- Clearwire expanded its US presence by launching its WiMAX services in St. Louis, Salt Lake City and Richmond and Kansas City; as well as expanded its networks in Washington DC and Baltimore.
- MTNL announced that it would look to franchise its upcoming rollout of WiMAX services in India.
- Imagine announced a new service specifically targeting home office and small business users in Ireland. In addition, Imagine continues to expand its consumer services, launching in an average 15 new towns each month.
- Nepal's Minister for Information and Communications recently announced that the government plans to build WiMAX services to support its e-governance needs.
- Mena Telecom announced plans to expand the scope of its WiMAX network in Bahrain.
- US WiMAX operator Digital Bridge Communications won a \$4.3 million stimulus grant from the United States government to expand its WiMAX networks.
- WiMAX operator Enforta announced the launch of a WiMAX network in Kaluga, Russia. Enforta plans to launch in 25 more new cities by the end of 2010.

### WiMAX Forum Certified™ Products

In May of 2010, WiMAX Forum certified 5 new devices.

<b>Total WiMAX Forum Certified Products</b>	<b>219</b>
Base Stations	60
Subscriber/Mobile Stations	159

## Recent Certified Devices

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

Company	Product Name	Product Type	Frequency
Gemtek Technology Co.	WIXS-181	Mobile Station	2.5 GHz
Toshiba	Libretto W100 Series	Mobile Station	2.5 GHz
Oki Electric Industry Co.	BR3200	Mobile Station	2.5 GHz
Toshiba	Portege/dynabook	Mobile Station	2.5 GHz
Intel	512ANXMMW	Mobile Station	2.5 GHz
Intel	512ANXHMW	Mobile Station	2.5 GHz
Infomark	IMW-C610W	Mobile Station	2.5 GHz

## WiMAX Forum Certified Product Vendors

WiMAX Vendors with WF Certified Products	Total
Base Station Vendors	<b>25</b>
Subscriber/Mobile Station Vendors	<b>50</b>

### Base Station Vendors

Airspan Networks, Alcatel-Lucent, Alvarion, Axxcelera, Cisco Systems, E.T. Industries, Harris Stratex, 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, WiNetworks, ZTE Corporation

### Subscriber/Mobile Station Vendors

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., Gigaset Communications, Harris Stratex, Huawei Technologies, Intel Corporation, Interbro, Japan Radio, Kouziro 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. The database provides regular monthly updates detailing global regulatory proceedings. Below is a free, extracted highlight from this month's report:

- Thailand approves plan to allocate 2.3 GHz – 2.5GHz spectrum – The Thai National Telecommunications Commission (NTC) approved in principle a plan to reallocate unused wireless broadband spectrum in the 2.3GHz-2.4GHz and 2.5GHz-2.69GHz bands, with a focus on covering rural or underserved areas.