

Broadband deployments and products

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New devices and applications are rapidly overloading existing networks

Commerce



Information



Productivity



Entertainment



Medical



Communication



Education



New wired networks are mostly not feasible:
too expensive, deployment needs too long,
and no mobility

WiMAX global momentum continues to build

51

Price / Performance³

2-4x Today's 3G Solutions
Scalability To 10x In The Future

103

69

84

Deployments²

Over 500 Planned &
Commercial Fixed +
Mobile Networks In
Over 140 Countries

21

112

84


Vendors¹

More than 20 Infrastructure Vendors
Almost 90 Companies Offering Over
350 Client Device Designs!

1. Infrastructure: ABI Research, 2009; Client devices: Orr Technologies, 2009.

2. Infonectics, 2009

3. 2-3x based upon actual network performance in Korea, US, Russia, Taiwan & Japan; 10x per IEEE 802.16m Systems Requirements Document

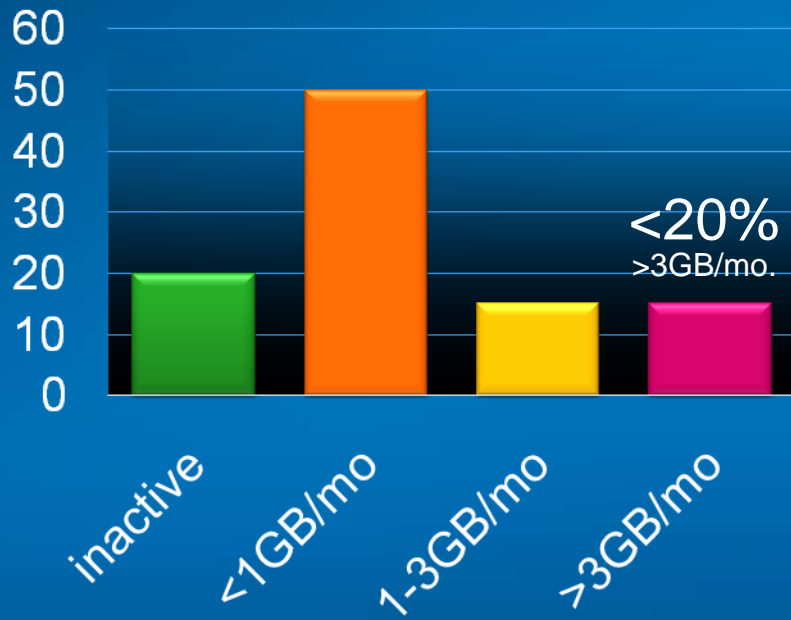


Broadband basing on OFDM is
the best choice
to deliver the future today

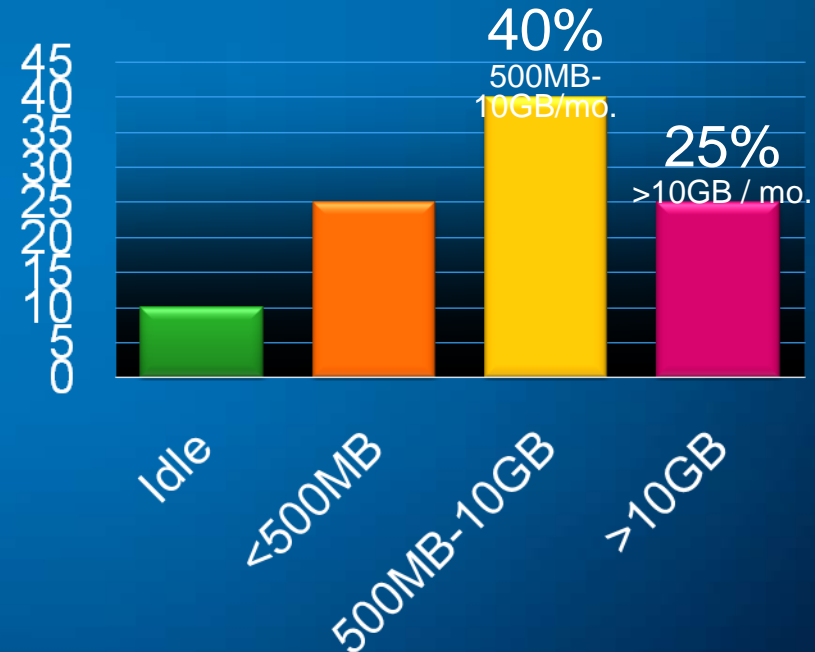
- Most Spectrally Efficient
- All IP Network
- Cost-Effective Equipment Choices
- Open Mobile Internet Business Model

OFDM based technologies enables new mobile broadband experience

3G PC Data Usage



WiMAX Data Usage



- Data usage expands when true broadband becomes available
- WiMAX capable of providing primary broadband, not just mobile
- 3G cost/bit and performance unable to meet BB experience expectations

Today, Leading examples around the world



Fastest Network

Live notebook speed tests - 16 Mbps down, 4 up

MVNO (Mobile Virtual Network Operator) services since July

2nd largest GDP
in the world



New Emerging Market Deployment

Large 2.5GHz deployment, 30 K+ subscribers

1000+ base stations deployed

Pop of 100M
5.6% use
Internet*



Leading Emerging Market Deployment

Large 2.3GHz deployment, 130k+ subscribers

Acquiring
30% of all new
BB subs



Innovative Services

Yota Music: 600K+ licensed tracks to download

250K+ subscribers, EBITDA Positive after 5 months

Average Use
10GB/month

Leading Mature Market Deployment

2.5GHz Deployments in Tier 1 and Tier 2 US Metros

Comcast, TimeWarner Cable, and Sprint partners

120M Pops by
EOY 2010





“We actually welcome the use of heavy bandwidth data applications that conventional 3G network operators may discourage or simply can't support.

Scott Richardson
Chief Strategy Officer, Clearwire



WiMAX-Ready
LAPTOPS



Clear
MODEM



Clear USB
MODEM



Clear Voice
ADAPTER



Clear Mobile Broadband
ENTERTAINER



Clear
SPOT

- Over 35 notebook models from 5 manufacturers with 24 in retail (Jan 2010)
- Plug in your Clear access device and surf, often in less than 60 seconds
- Targeting coverage in over 80 markets by end of 2010
- Actual (typical) download speeds of 2-4 Mbps

3G/4G & Quadruple Plays Clear MVNOs – Affordable Bundles



Sprint 3G/4G
Service

Clear can access 100M potential customers via its operator partners.



Comcast 3G/4G Mobile
Broadband Dongles

Yota: Breakeven in Record Time



Yota

23 million

Population covered as of Dec 2009

2,300+

New customer adds per day

> 10 GB/month

Average traffic per user*

250,000+

Yota reached breakeven within 5 months after commercial launch.

* Cities and launch dates subject to change

Source: Yota, September 2009

Packet One, Malaysia

**Believe it
or not,
WiMAX
is plug
and play.**

- 130,000 subscribers at the end of 2009
- Winning 30% of all new broadband additions in its service areas!
- 45% population coverage by end of 2010 and 65% by end of 2012

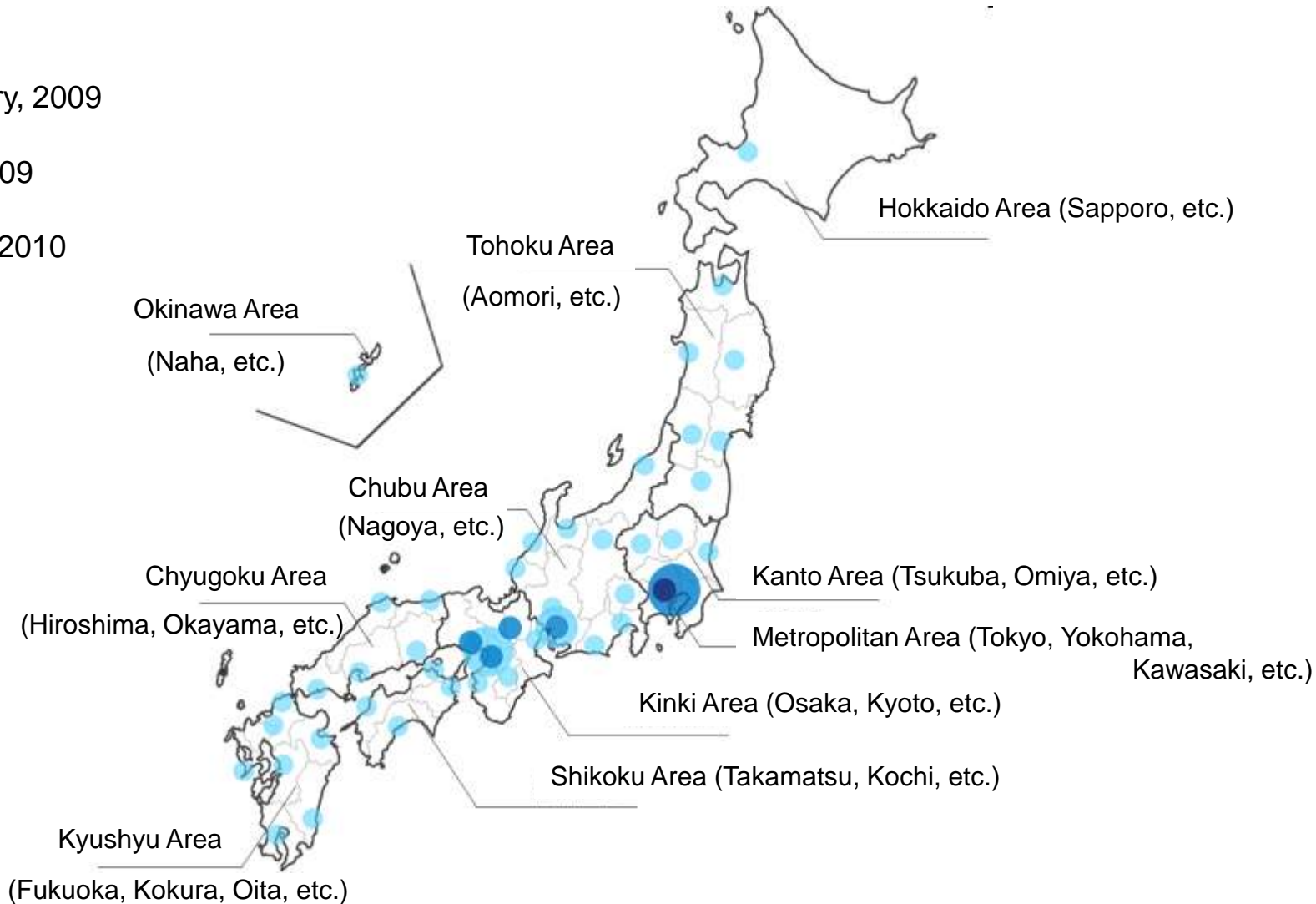


2009-2010 UQ Communications Rollout*

● February, 2009

● July, 2009

● March, 2010



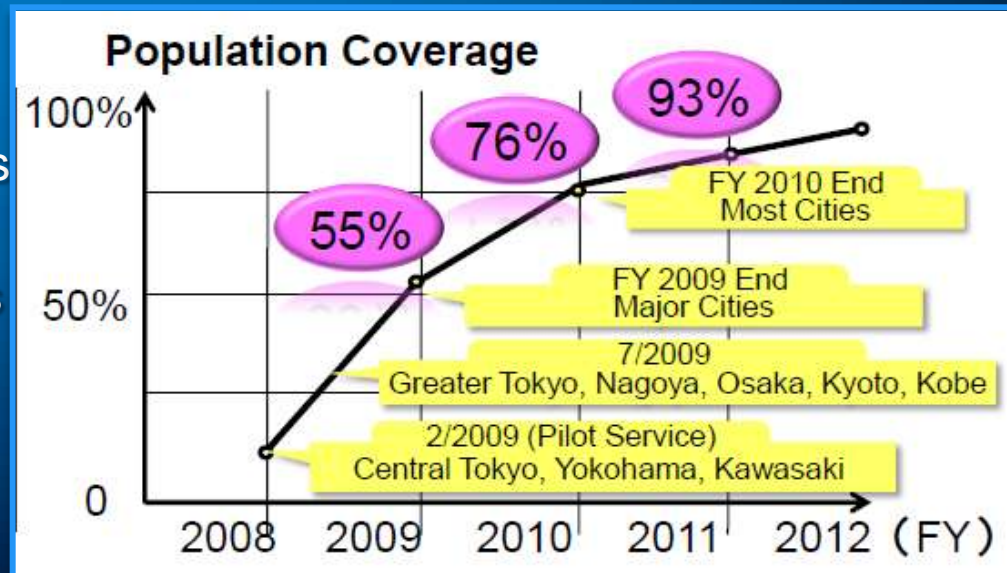
- Targeting 93% POPs covered by March 2013
- Network to cover 70 million people by March 2010



Faster and Cheaper:

Live speed tests on notebooks have reached about 16 Mbps down and 4 Mbps up, as simple, flat-rate pricing undercuts all current HSPA offers

- 7 PC OEMs shipping 18 models with embedded WiMAX notebooks as of Jan 2010
- Launched with 3 major electronics retailer MVNOs in mid 2009
- Unique railway and mobile application service offerings

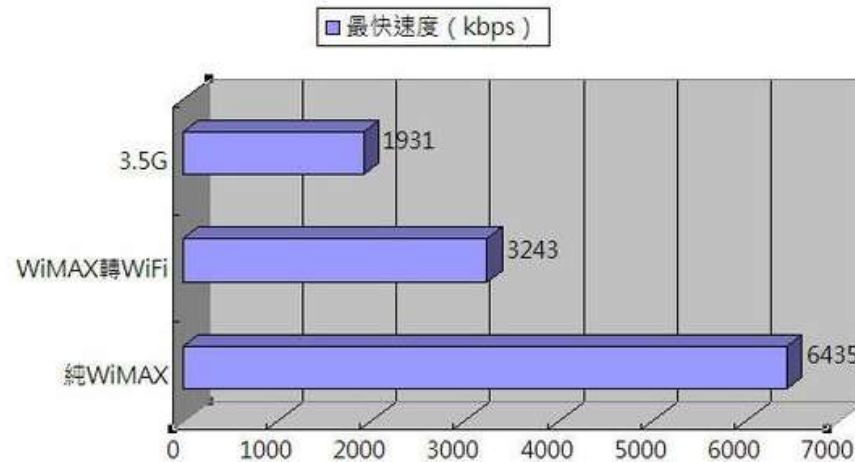




- Pre-commercial network shows 3x the performance of HSPA
- 30 MHz of spectrum in 2.5 GHz
- Start in Taipei and then expand into northern Taiwan



純WiMAX、WiMAX轉WiFi、3.5G之最高下載速度比較表





- Phase 1: Serve over 250,000 subscribers across 80,000 villages
- Phase 2: Serve 675,000 villages and ~ 1.1 million subscribers
- E-governance, telemedicine, distance education, e-travel, e-chaupal, e-legal services, and e-media access
- Plan to cover all urban India – 3 states already launched via franchisees

WiMAX Embedded Laptops & Netbooks Models as of Jan 2010

Intel TEM Focus

11 PC OEMs have notebooks with intel's embedded WiMAX solution certified for operator networks today.



MOTOROLA



HUAWEI

U.S.A.

35+ certified models from 5 OEMs

24 models available in U.S. Channels NOW

Japan

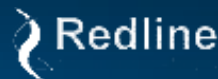
7 OEMs shipping 18 models

Russia

40+ Models Available from 6 OEMs



WiMAX Today. A Vibrant Ecosystem

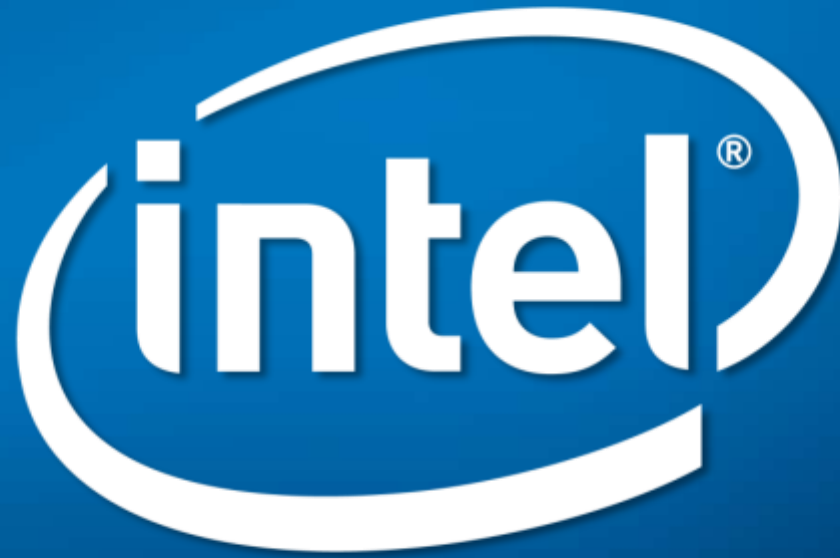


Harris

GCT



What Is Intel Doing



Multi-Comm Products To Connect Anywhere

2009



Echo Peak
Integrated WiFi,
WiMAX

2010



Puma Peak
WiFi

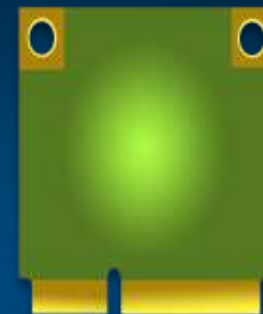


Kilmer Peak
Integrated WiFi,
WiMAX



Evans Peak
Integrated WiFi, WiMAX, BT, GPS

2011



Future Product
Fully Integrated
Comms

Intel® Centrino® Advanced-N + WiMAX 6250 (Kilmer Peak)



Multi-Band WiMAX

Single Globally Capable⁽¹⁾ Hardware
(2.3/2.5/3.5GHz) for future-proofing



Ultra fast Mobile Broadband

Significant boost in Peak Throughput (up to 20Mbps DL⁽²⁾) combined with QoS and power consumption optimizations



Greater Range and Penetration

Advanced MIMO, Interference Mitigation & Noise Cancellation



Includes Dual Band Wi-Fi

WLAN, Supports AMT6.0, and Intel® My WiFi Technology



Global solution extends the performance advantage

1. Hardware supports TDD only

2. WiMAX connectivity requires a WiMAX enabled device and subscription to a WiMAX broadband service. WiMAX connectivity may require you to purchase additional software or hardware at extra cost. Availability of WiMAX is limited, check with your carrier for details on availability and network limitations. Broadband performance and results may vary and have plan and network dependencies, environment factors and other variables.

What is Intel doing to enable broadband?



Silicon



Ecosystem Development



Interoperability Testing

Intel Is Investing In ...



Silicon Companies



Equipment and Infrastructure Companies



Service Providers

Reality:

1 Billion "Connected Mobile Clients" in 5 Years

Core Business

Client PCs



Windows, Mac OS



Strategic Growth Areas

CE
(Internet)



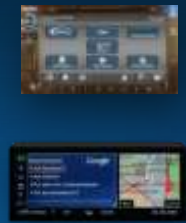
Mobile
Internet
Devices



Low-Cost
PCs



Embedded



Microsoft Windows / MeeGo Linux-based OS / Services Port of Choice



One Architecture Across Multiple Mobile Client Platforms



Thank You