

CommsDay Summit 2010

Mike Quigley
CEO NBN Co

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NBN Co Supporting Retail Service Providers (RSPs)



Retail Service Providers (RSPs)

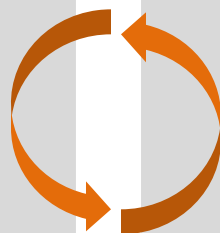
Driven by innovation

Differentiation is key

Diverse product set

End user segmentation

Deliver value to end users



Simple products

Wide coverage

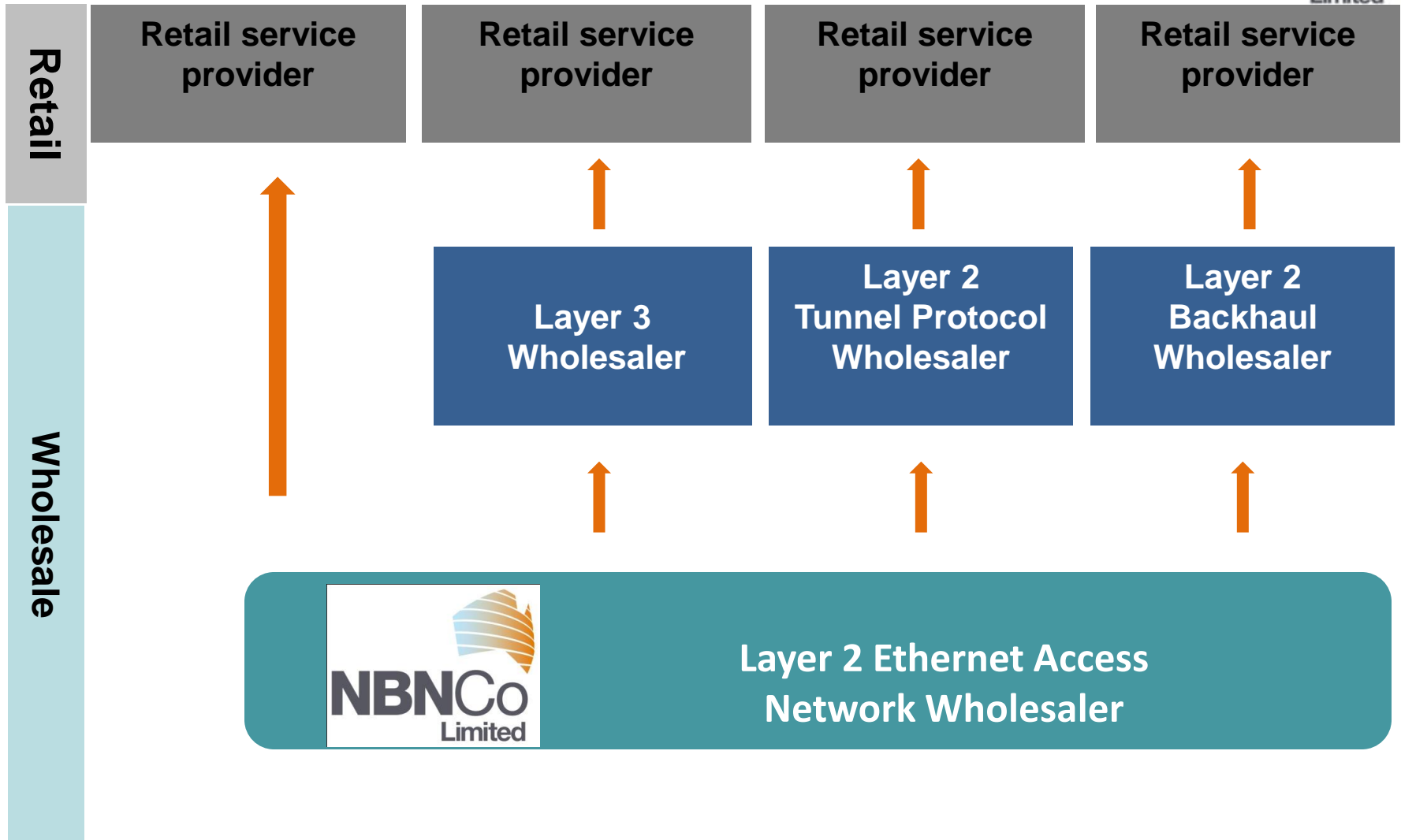
Effective B2B interface

Cost effective

Support diversity of RSP business models

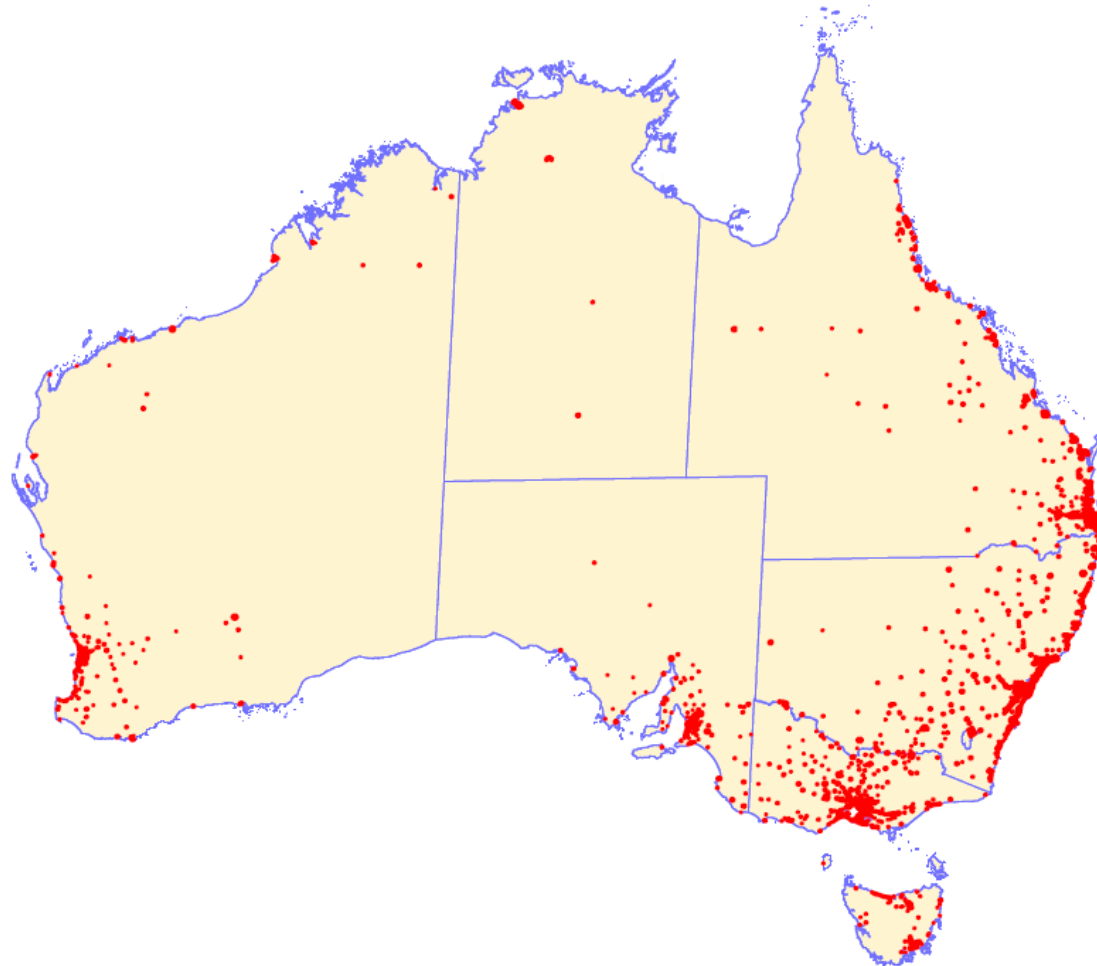
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A Diversity of Wholesale and Retail Business Models



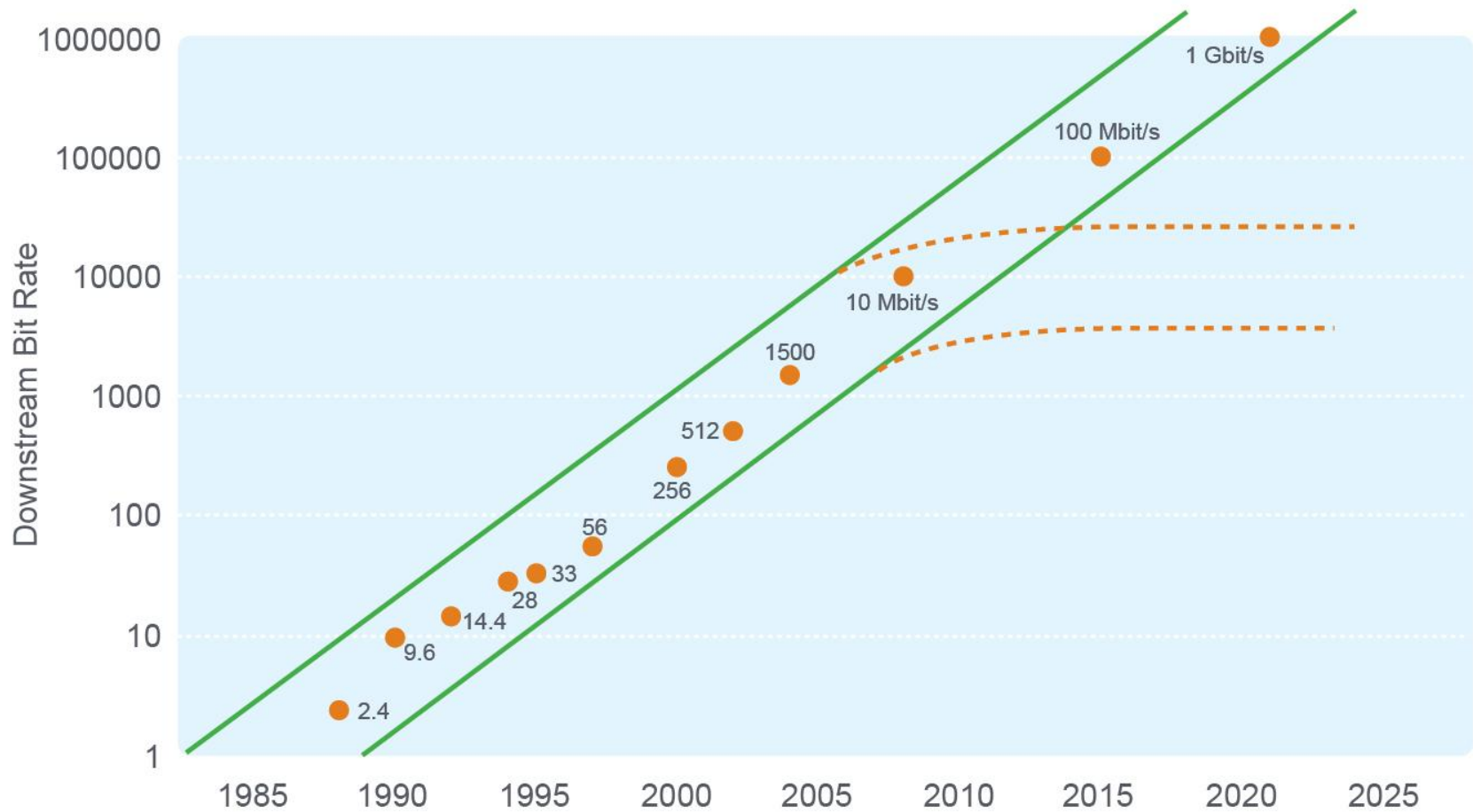
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Australia – At least 90% Fibre Coverage

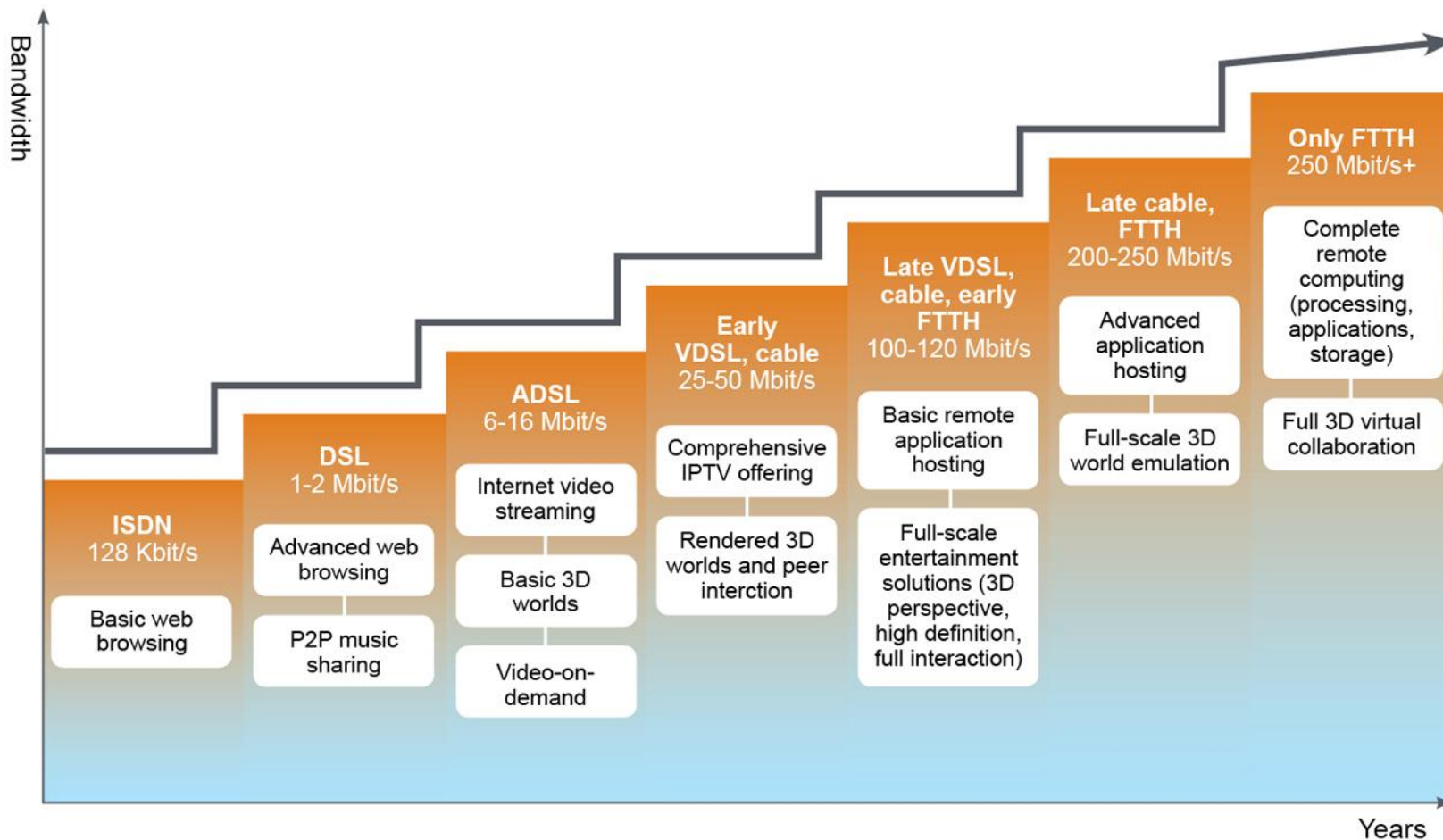


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Fixed Bandwidth Demand



Applications Evolution



Consumer and Business Wholesale Products



Consumer Products

Asymmetric speeds

Consumer grade

Mass roll out

Business-grade Products

SOHO & SME
(single site)

Top-end SME
(multi site)

Enterprise
(Large/branch n/w)

Guaranteed reliable bandwidth

Symmetric, higher speeds

Available across entire NBN footprint

High availability

Business-grade Ethernet features

Better response and restoration timeframes

Both GPON and point-to-point fibre will be used to deliver Business-grade products

Small Business Bandwidth Drivers

A small graphic design firm specialising in 3D design and animation. They currently operate across two sites and employ eight staff.

Bandwidth Requirements

Up to 5mbps



Email designs to clients globally.



Skype for international voice calling.



Online banking for invoicing & payroll.

10mbps Symmetrical



Regular remote backup of important data.



Software-as-a-Service for invoicing & payments, HR management & anti-virus.



High-definition voice & video conferencing.



Online collaboration with remote workers & clients.

+50mbps Symmetrical



Real-time remote backup of all data.



100% thin-client computing.



Interactive online training of new staff or for new services via video-on-demand.



3D video-conferencing & collaboration across multiple parties – locally & globally.

Here & Now

Emerging

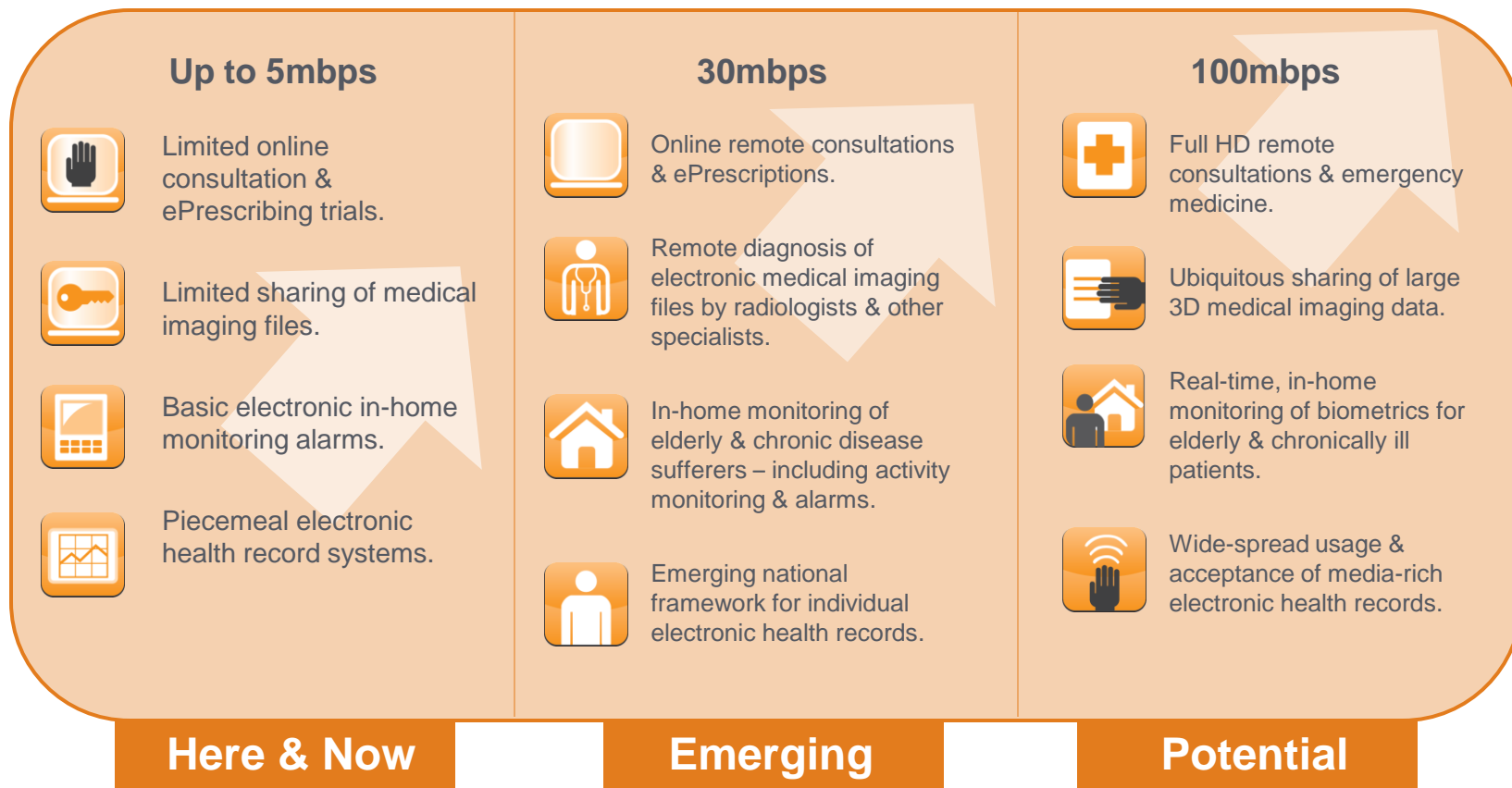
Potential

Industry Bandwidth Drivers:

The Healthcare example

The Australian healthcare industry is facing significant challenges around an ageing population, chronic disease, skills shortages & remote/rural service provision.

Bandwidth Requirements

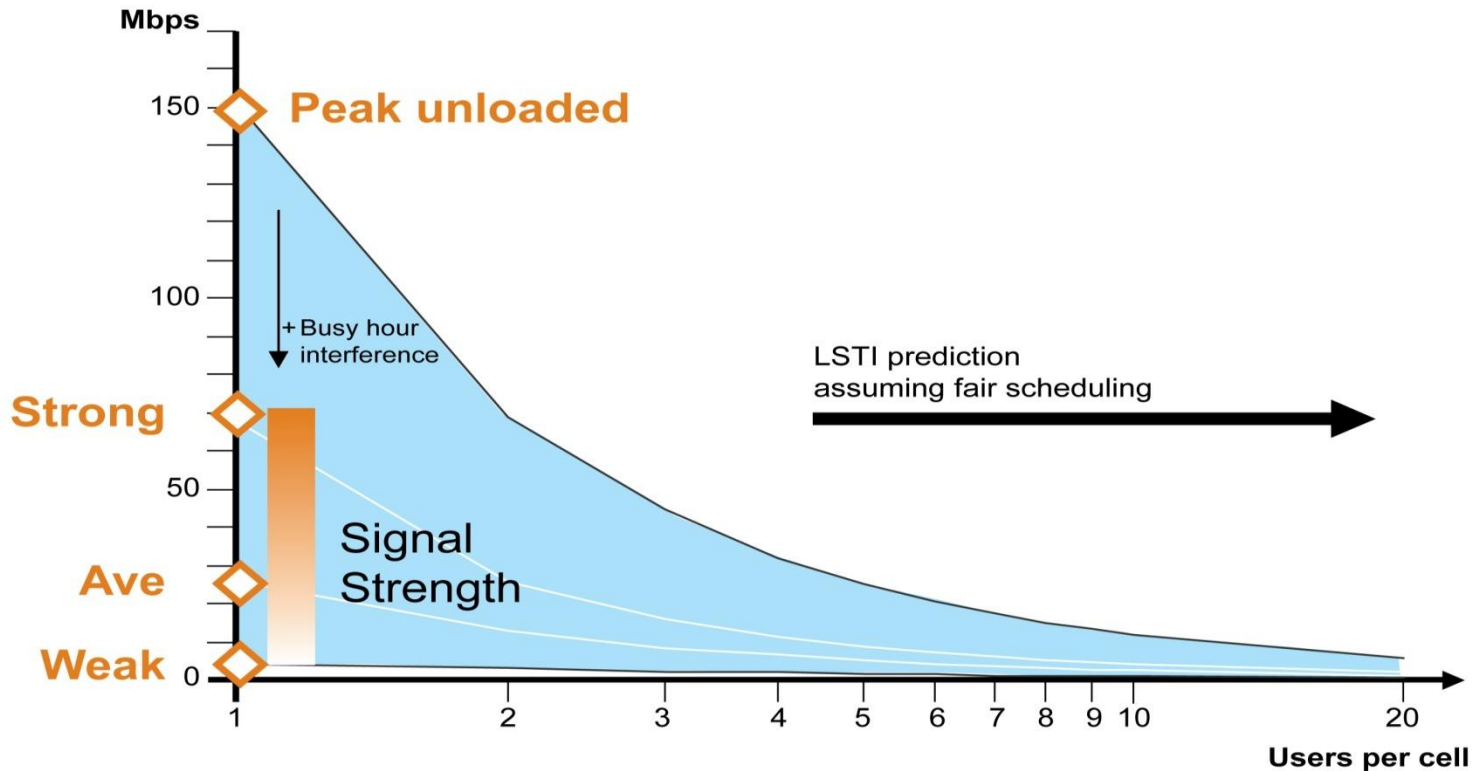


Efficiently using scarce resources and enhancing quality of life.

Latest LTE/SAE trials show significant differences between peak rates and end-user throughput

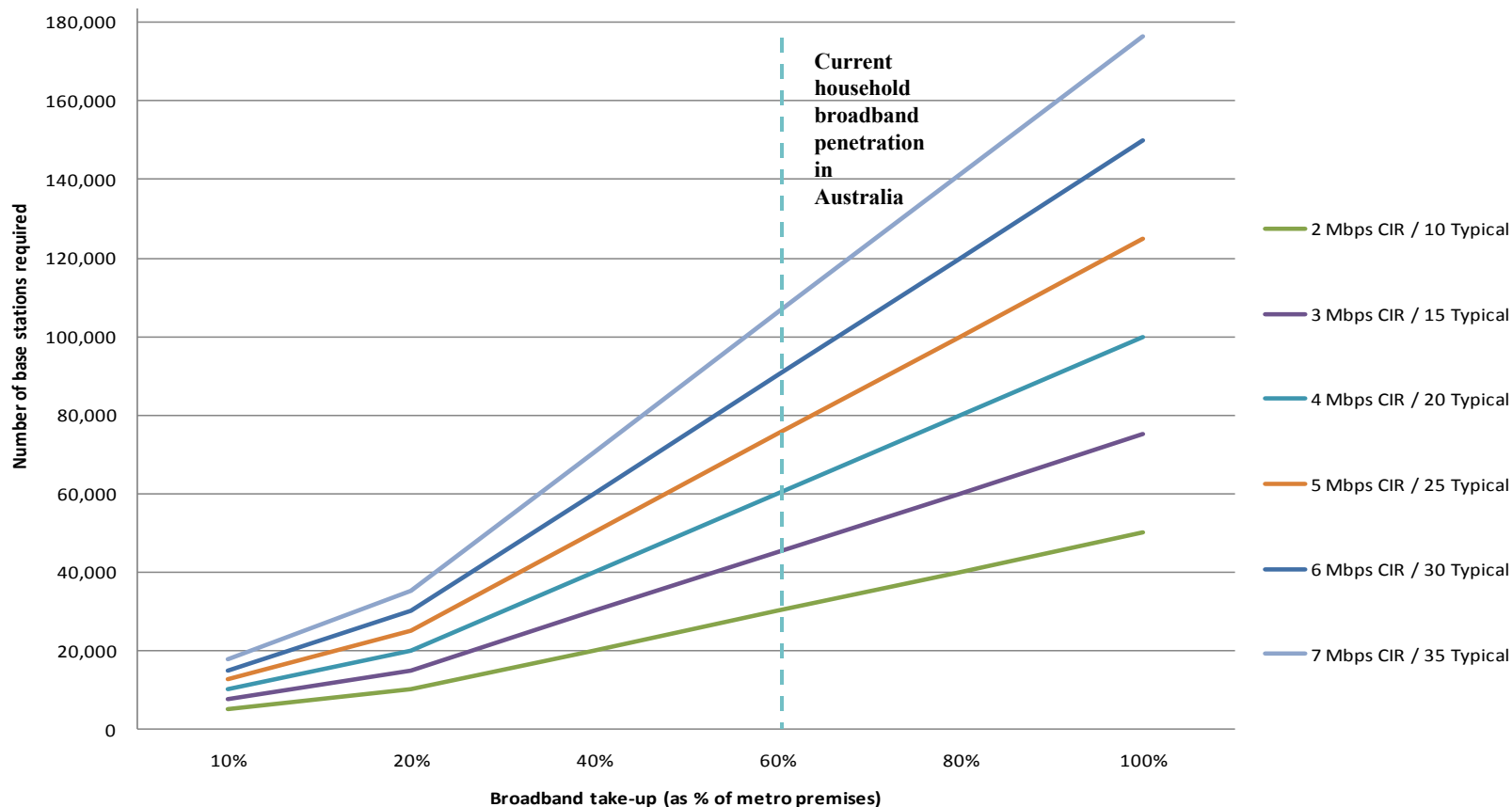


LTE proof of concept peak rates



Notes: 2x20MHz, 2x2 MIMO
Source: LTE/SAE Trial Initiative (Oct 2009)

Base station requirements to deliver a "best-efforts" wireless broadband service to metro Australia

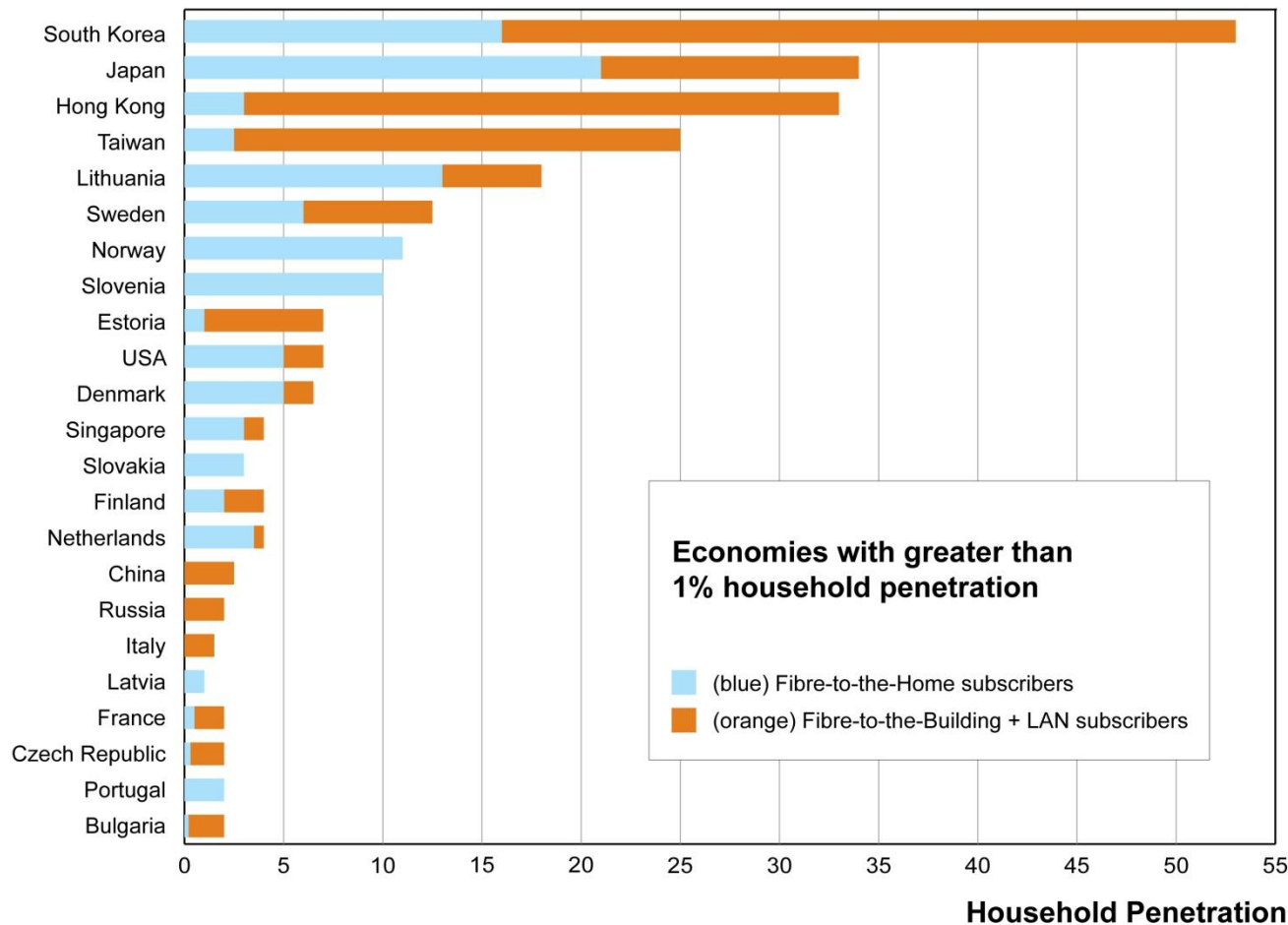


Notes:

1. Assumed radio capacity is 360Mbps per site, based on LTE (3 sectors) operating at 700MHz with 120 MHz of spectrum and benefits of 1.6x spectral efficiency uplift from IMT Advanced.
2. Provisioning of capacity assumes a contention ratio of 1:5 (e.g.: 1 in 5 subscribers active at any one time).

Fibre penetration in key economies

Economies with the Highest Penetration of Fibre-to-the-Home / Building + LAN



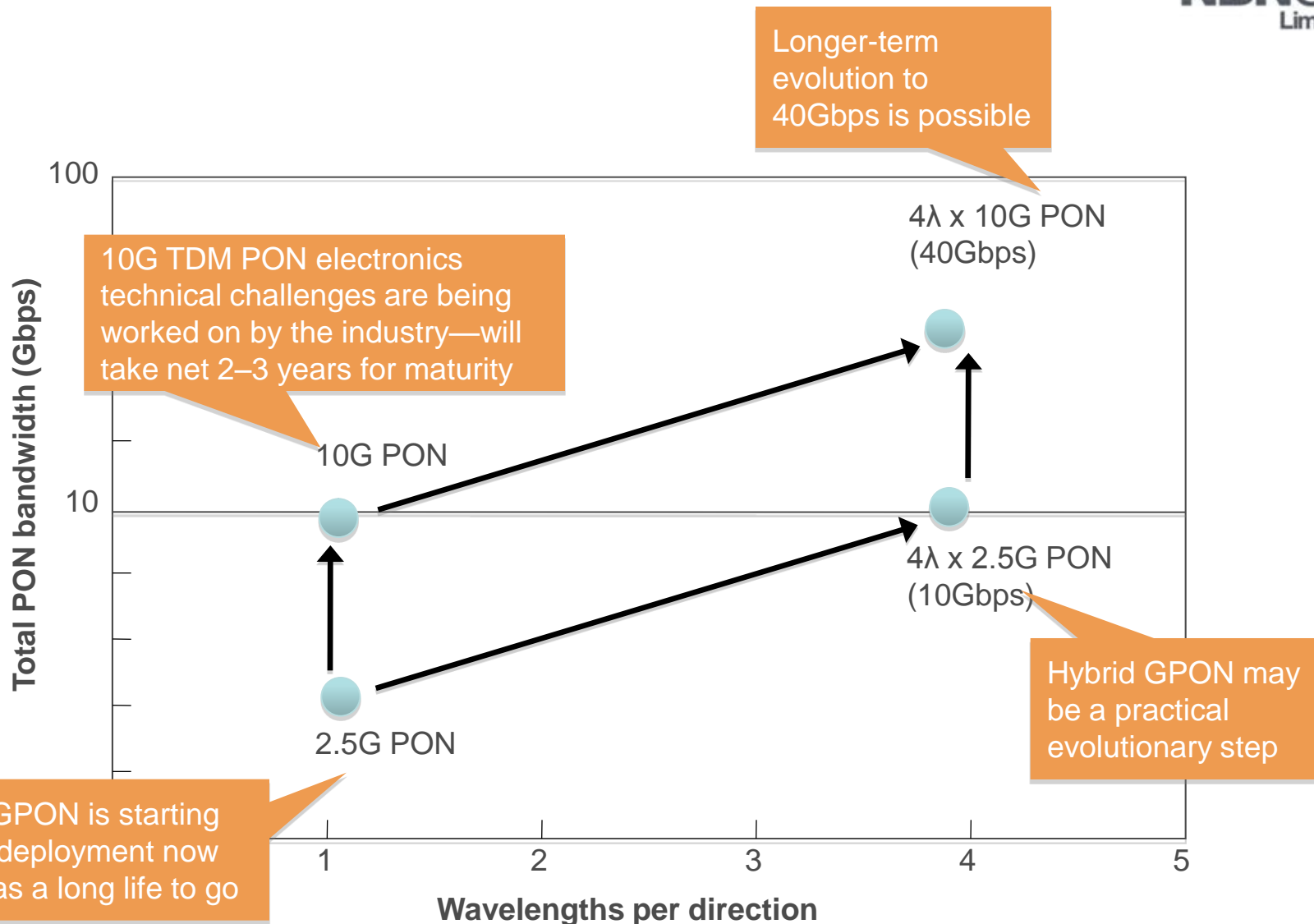
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Regional Initiatives



Country	Fibre Backbone	Last Mile	Speeds for Local Access	Fibre Coverage
Australia	✓	✓	100 Mbps	90%
Japan	✓	✓	100 Mbps	Over 90%
Korea	✓	✓	1 Gbps	100% homes and businesses
New Zealand	✓	✓	100 Mbps	75% homes and businesses
Singapore	✓	✓	1 Gbps	100% homes and businesses
Malaysia	✓	✓	10 Mbps + download	38% homes and businesses

PON Evolutionary Paths



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