



Comms Day

11 October 2011

Mike Quigley

Disclaimer

This document sets out NBN Co's proposals in respect of certain aspects of the National Broadband Network. The contents of this document represent NBN Co's current position on the subject matter of this document. The contents of this document should not be relied upon by our stakeholders (or any other person) as representing NBN Co's final position on the subject matter of this document, except where stated otherwise. NBN Co's position on the subject matter of this document may also be impacted by legislative and regulatory developments in respect of the National Broadband Network.

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Agenda

1 Update on Progress

2 Why do we need this network?

3 Pricing Comparison – NBN vs. ADSL2+

4 Product Roadmap

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Update on Progress

2

Why do we need this network?

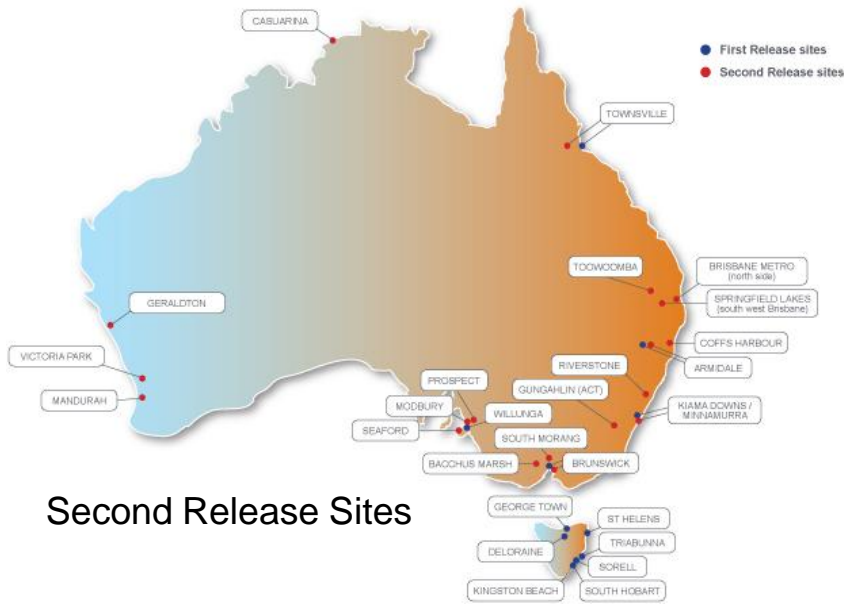
3

Pricing Comparison – NBN vs. ADSL2+

4

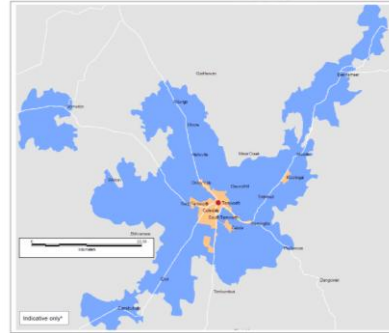
Product Roadmap

Update on Progress



Second Release Sites

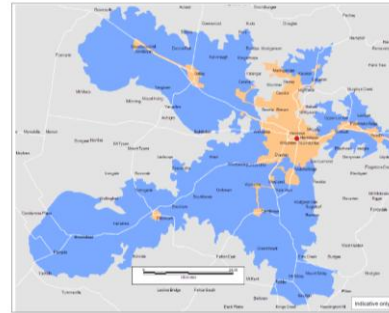
Tamworth surrounds
NEW SOUTH WALES



Ballarat surrounds
VICTORIA



Toowoomba surrounds
QUEENSLAND

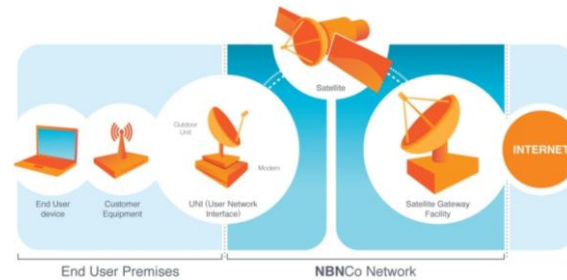


Darwin surrounds
NORTHERN TERRITORY



New Developments

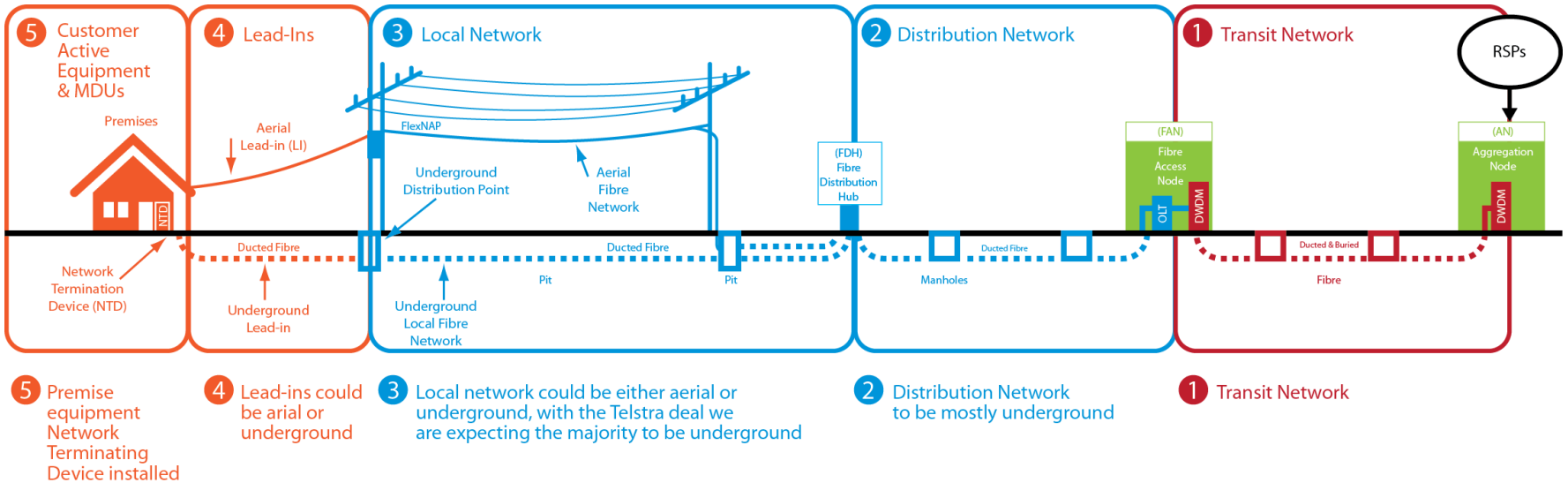
Geraldton surrounds
WESTERN AUSTRALIA



Interim Satellite Service

First Release Wireless

Planning and Design of Transit Network



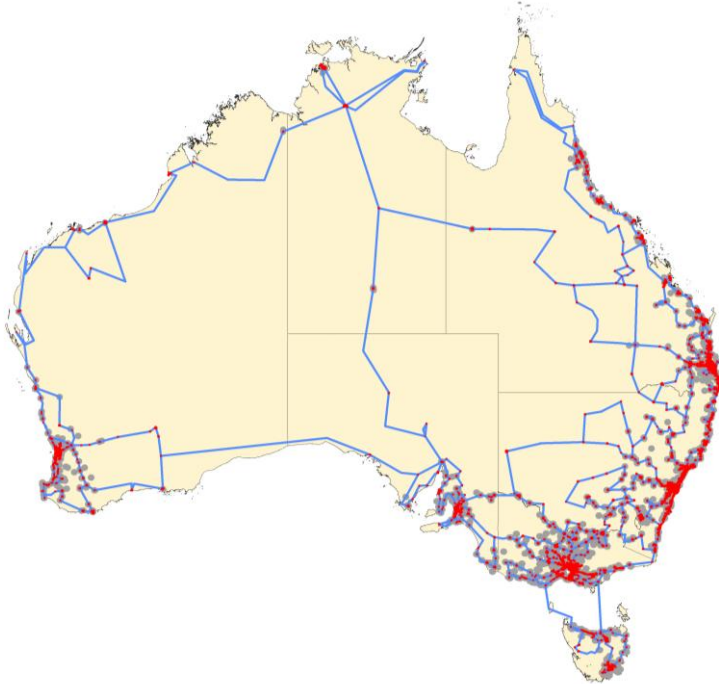
Points of Interconnect:

- Where RSPs connect to the NBN
- 121 Pols determined with ACCC
- Same Pols for Fibre, Wireless and Satellite

Transit:

- High capacity fibre links using Dense Wavelength Division Multiplexing
- Up to 96 wavelengths each capable of carrying 100Gbps (~10Tbps)
- Shared by Fibre, Wireless and Satellite access networks
- Build to be completed by end of 2014

Transit Network Planning



Current Status

- Completed initial 12 week planning work with Telstra
- Sites for Release 1 of infrastructure determined
- Delivery dates for initial sites confirmed
- Work on all Release 1 sites to commence over next 12 months
- Planning for Release 2 commenced

Transit Release 1 numbers

- Fibre Access Nodes : 125
- Aggregation Nodes : 29
- Dark Fibre Links : 149
- Dark Fibre Length : 5,254km

Site details to be announced as part of rollout plan

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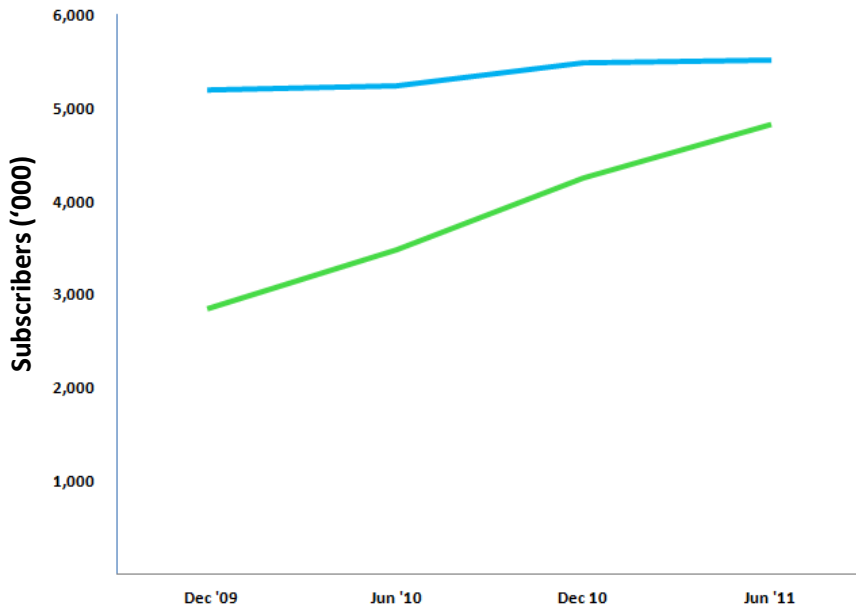
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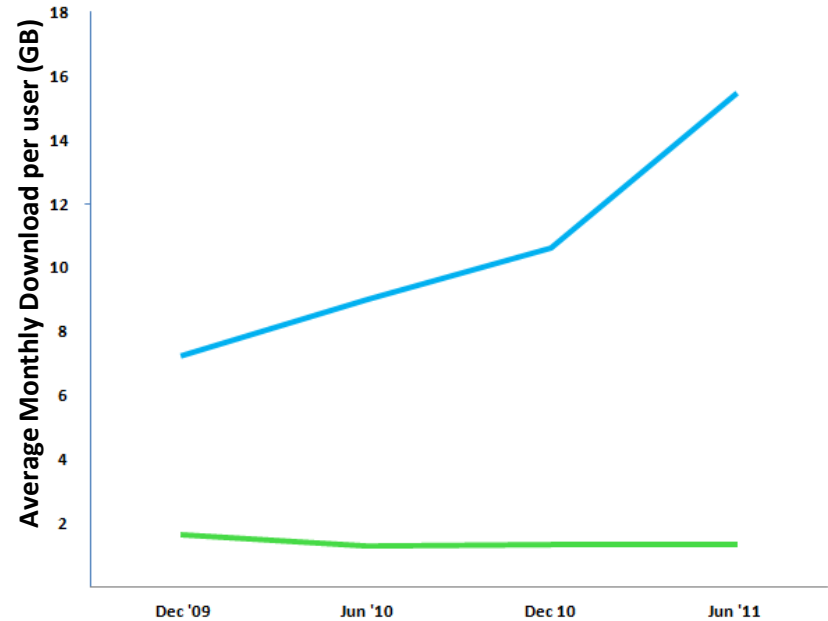
Product Roadmap

Broadband usage demand is not slowing

Fixed vs Mobile Subscribers ('000s)



Fixed vs Mobile Download Usage (GB)



Fixed

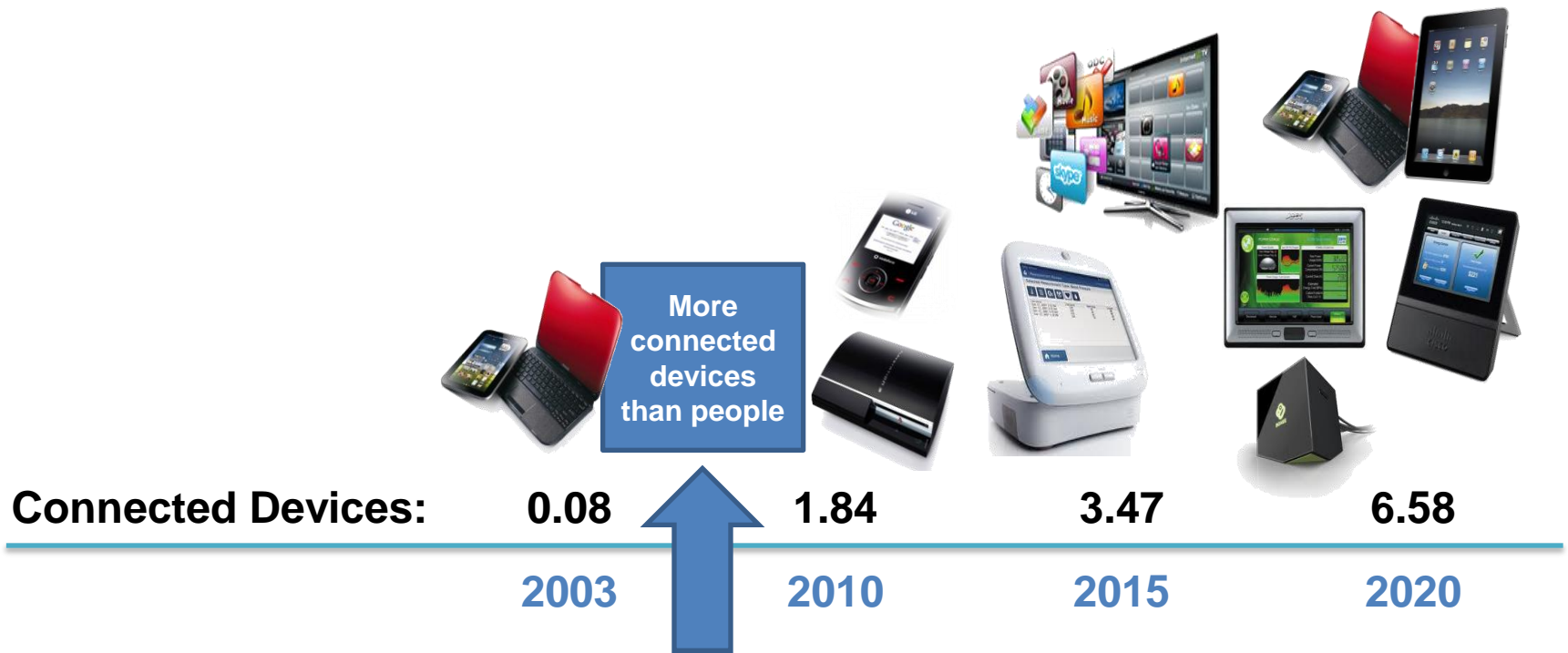
Mobile



Source: ABS, June 2011

We continue to be a more connected society: The Internet of Things

World Population:	6.3 Billion	6.8 Billion	7.2 Billion	7.6 Billion
Connected Device:	500 Million	12.5 Billion	25 Billion	50 Billion



Source: Ten in Ten. Ten Technology Trends that will change the world in Ten Years, Cisco – July 2011

New Digital Inhabitants



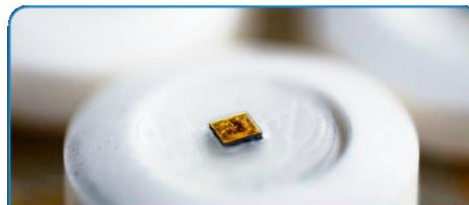
The rise of the connected **Television**



Cow transmits
200 MB per year



Asthma inhaler
cross-referenced
with environmental /
weather data



Proteus chip transmits
data from your stomach

Source: Ten in Ten. Ten Technology Trends that will change the world in Ten Years, Cisco – July 2011

More and More Data in the Cloud

- By 2020, one-third of all data will live in or pass through the cloud
- Global cloud services revenue will jump by 20% per year
- IT spending on innovation and cloud computing could top \$1 trillion by 2014

Source: Lew Tucker, Cloud CTO, Cisco, 2011; EMC, 2010; IDC, 2010

Health: Telestroke System

Stroke is the second leading cause of mortality

11,000 deaths annually

Early intravenous thrombolysis treatment (rt-PA) within four and a half hours has revolutionised acute stroke treatment in the past 15 years.

If you can access a stroke specialist

The telestroke system using real-time videoconferencing to provide specialist stroke advice to rural clinicians inexperienced in acute stroke care.

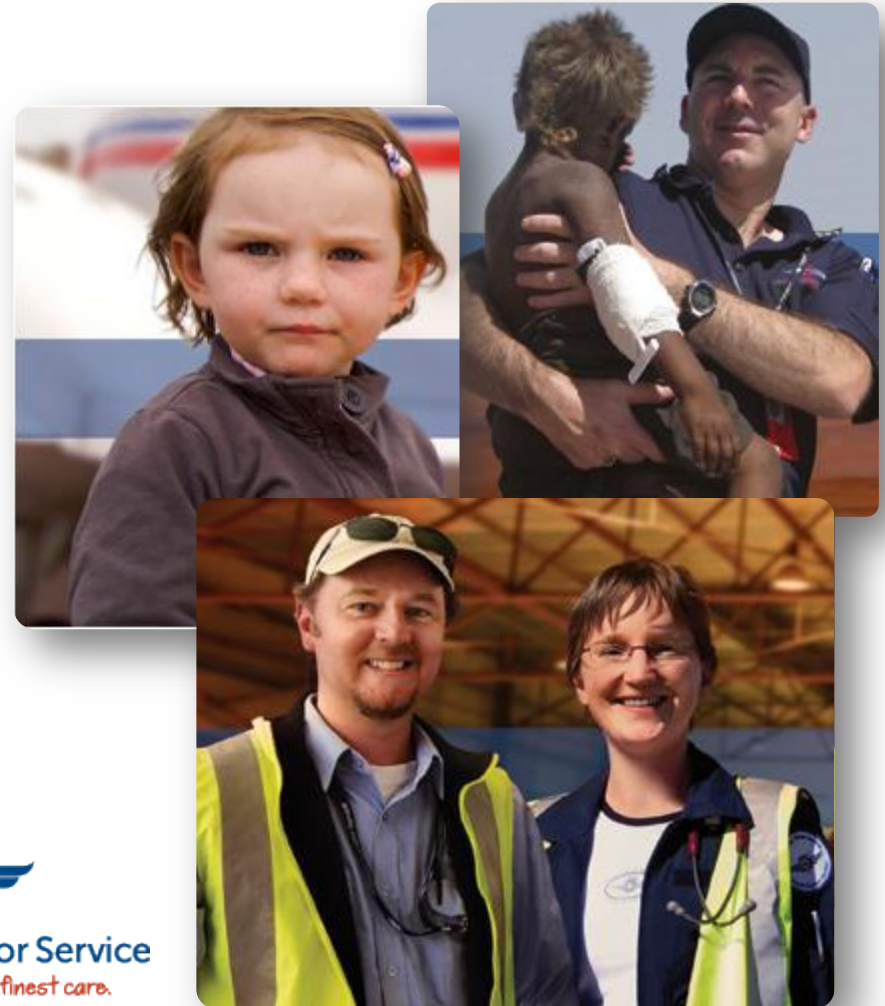


Health: Royal Flying Doctor Service

“We have a vision to continue providing telehealth to our isolated patients into the future but would like to modernise our approach to this...”

“...We would like to offer consultations not only by telephone but by taking advantage of video-conferencing opportunities as well as the improved capabilities for data transmission of clinical information.”

Dr Michael Hill, Senior Medical Officer
Joint Parliamentary Committee, National Broadband Network



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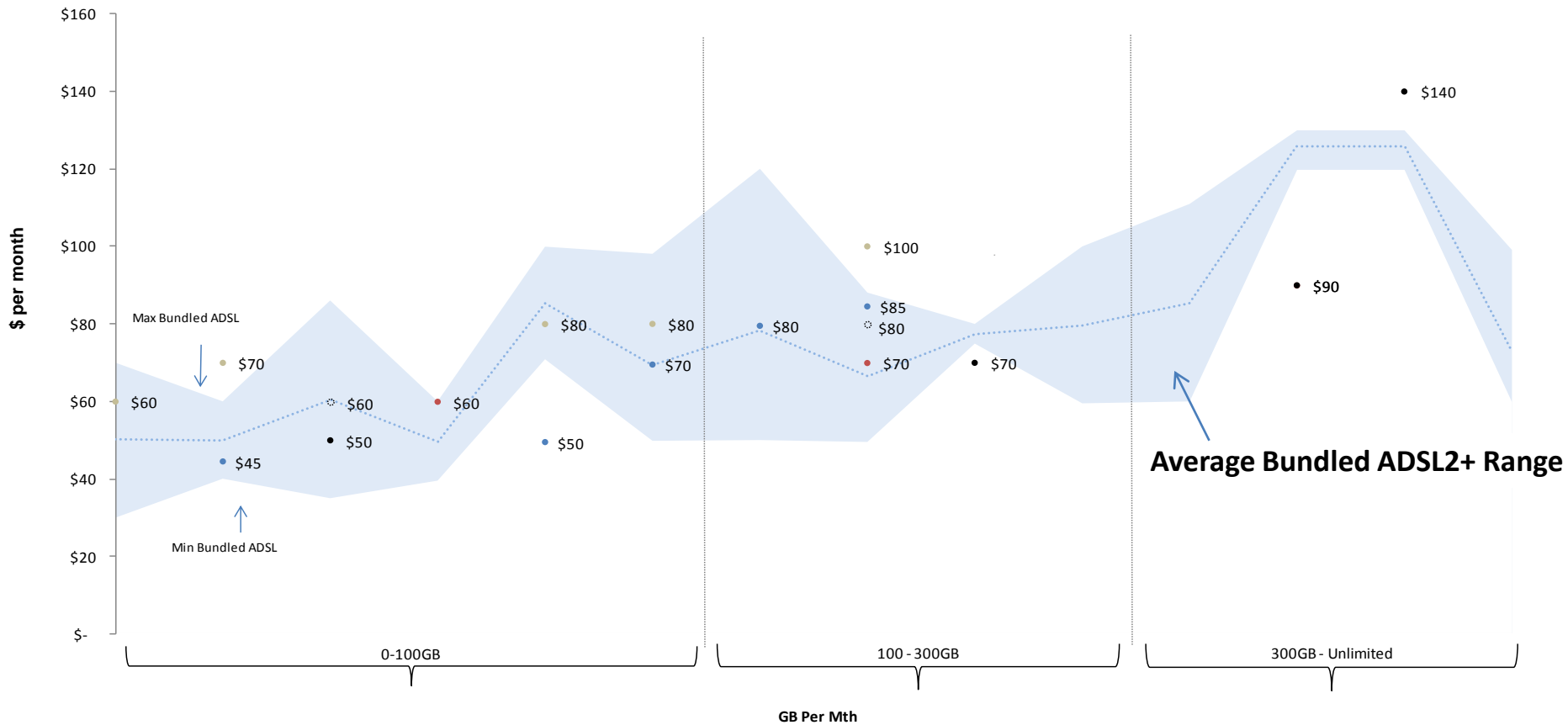
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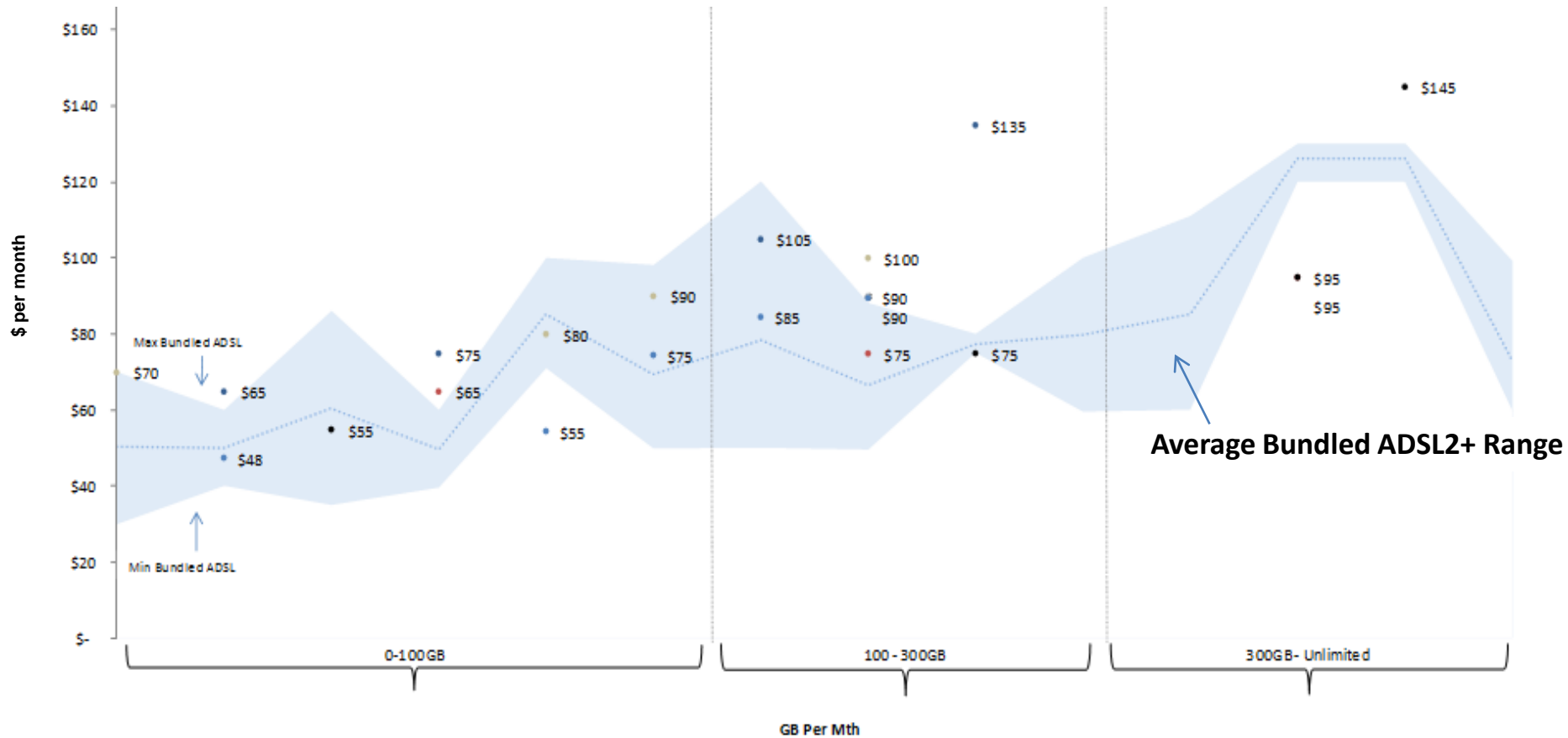
Comparative Bundled Pricing: NBN Retail 12/1 vs ADSL2+



• = RSP NBN Retail Pricing

Source: RSP Retail Pricing, as at September 2011

Comparative Bundled Pricing: NBN Retail 25/5 vs ADSL2+



• = RSP NBN Retail Pricing

Source: RSP Retail Pricing, as at September 2011

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Product Roadmap

Product Roadmap Update

1. Product Release Roadmap:

- What have we done so far.
- What is coming next.

2. Access Seekers Opportunities & Changing Business Models.

3. Product Release 1: What consumers are already doing.

4. Future Product Releases: What businesses will shortly be doing.

The NBN Co Product Roadmap

Fibre Product Release Roadmap



RELEASE 1
Broadband & Telephony



RELEASE 2
Multicast & Facilities Access



RELEASE 3
Small Business Services

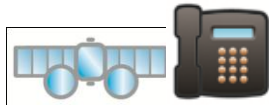


RELEASE 4
Medium Business Services

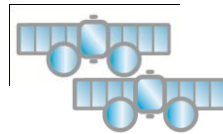


RELEASE 5
Enterprise Services

Satellite Product Release Roadmap



RELEASE 1
Broadband



RELEASE 2
Long Term Satellite

Wireless Product Release Roadmap



RELEASE 1
Broadband



RELEASE 2
Multicast & Enhancements

NBN Co Product Release 1: Access Seeker Innovation & Changing Business Models

Open Access & Level Playing Field

27 Access Seekers have signed the Fibre Access Agreement

12 successfully on-boarded, with 11 more scheduled

The product supports differentiation

Innovative bundling is already happening

12Mbps pricing from \$34.50

100Mbps pricing from \$49.50

The product is already driving competition

6 providers have released pricing 2 months after mainland launch

100 retail price plans

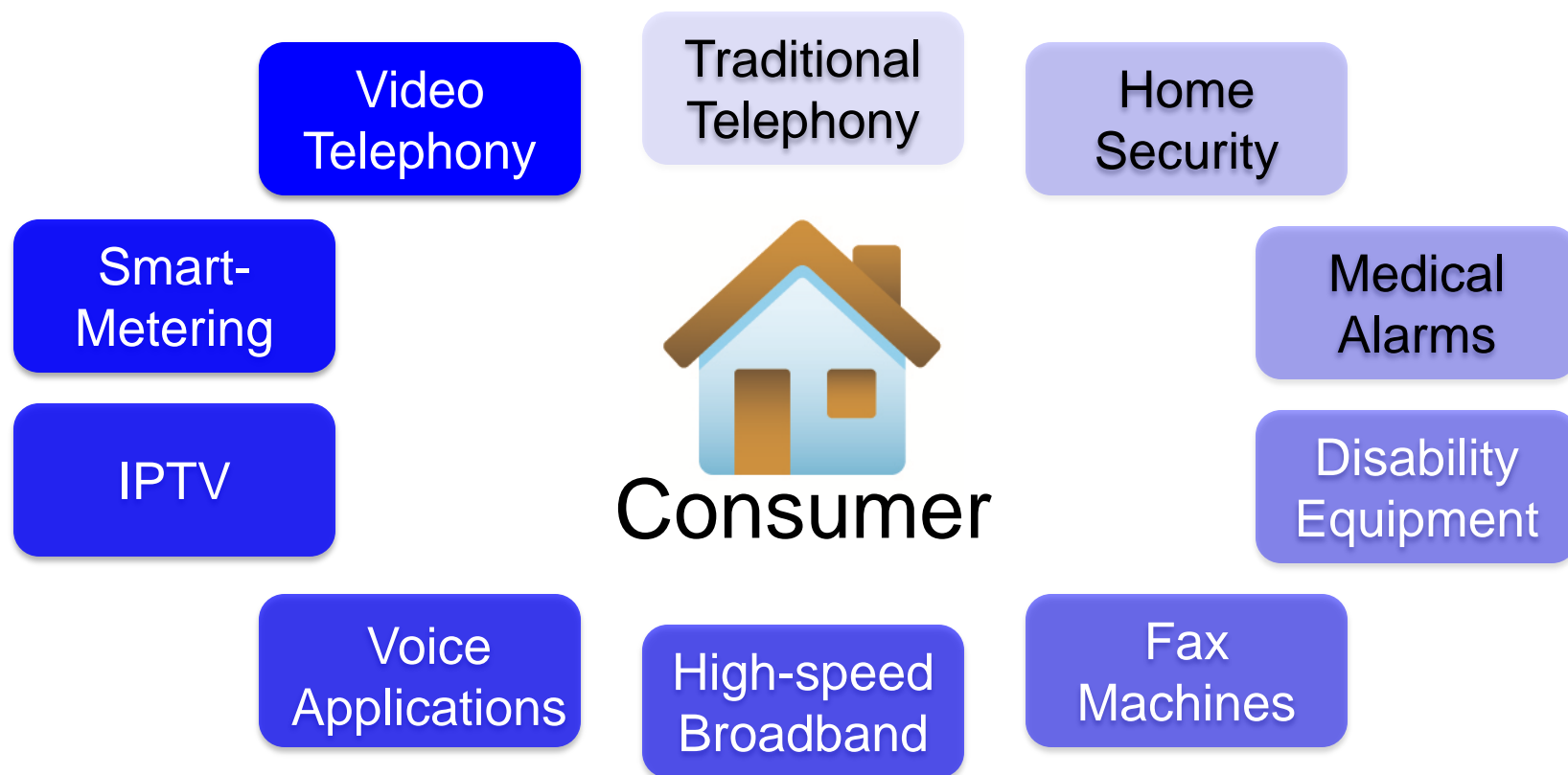
Satellite Providers expanding into Fibre

4 previous satellite-only providers onboarding for the fibre product

Product Release 1: Broadband & Telephony Product

NBN Co Product Release 1:

- High speed broadband
- Choice of ways to deliver telephony
- Ability to offer 'Standard Telephone Service' to assist migration
- Priority Assist connection & fault rectification targets



Product Release 1: Seeing Consumer Behaviour Changing

The way Australians are using the Internet is changing

Fibre users:

"I can work from home much more easily now"

"The speed just hits you in the face"



Satellite users:

"Much waving & blowing kisses from a 2 year old grandson" [Skype]

"Catch-up TV streams flawlessly"

The product is already changing behaviour



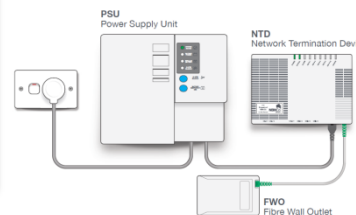
85% of people we spoke to said they are already doing more online than they did before.

We have seen more opportunities for home businesses: cloud computing, video conferencing, offsite hosting & on-line training.



"Since NBN came around we have started hosting services for our customers. Changes to the business are happening now."

There are opportunities to improve the design and appearance of our equipment – people want it to be a part of their home.



"I was unaware of the footprint it would leave in my living room."

Business Product

Business features in future NBN product releases:

- Enhanced SLAs
- Additional traffic classes
- Redundancy options
- Enhanced reporting

PABX

HD Video Conferencing

Fire Panels

Software as a Service

EFTPOS

Remote Backup

SOHO

Infrastructure Management

Business

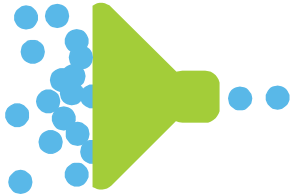
VOIP & Collaboration

Replace ISDN/BDSL

Product Consultation



NBN have now completed over 400 hours of product consultation with our customers & the industry.



We will shortly launch our 'Product Development Forum' online tool.



Industry can work with NBN Co to filter & prioritise initiatives.



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