



# **NBN Co - Introduction to NBN Co and the national broadband roll-out**

## **Mid-West Science Summit**

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Community Relations & Stakeholder Management

NBN Co

November 2010

# NBN in a nutshell



## Who we are:

- Government Business Enterprise (GBE) – like Australia Post
- Staffed by professional telecommunications industry experts

## NBN Co Board



NBN Co Board members (l-r) Siobhan McKenna, Terrence Francis, Clem Doherty, Diane Smith-Gander, Harrison Young, Gene Tilbrook, Mike Quigley, Peter Hay and Doug Campbell.



- What we do
  - Connecting broadband to Australian premises
- How we are doing it
  - 93% Fibre to the premises (FTTP)
  - 4% Fixed wireless
  - 3% Satellite



A high-speed network for all Australians offering wholesale uniform national pricing

## Building the company



### People



### Facilities

- Offices in
- Melbourne
- Sydney
- Canberra
- Hobart



### HR Processes

- Recruitment
- Payroll
- Training
- OH&S
- Development

### IT/Enterprise Resource Planning

- **Phase 1** July – financial management / procurement
  - **Phase 2** Sept – planning, forecasting, budgeting
  - **Phase 3** Oct – construction program management
- Scoping Stage 2**

## Ubiquity and Standardisation

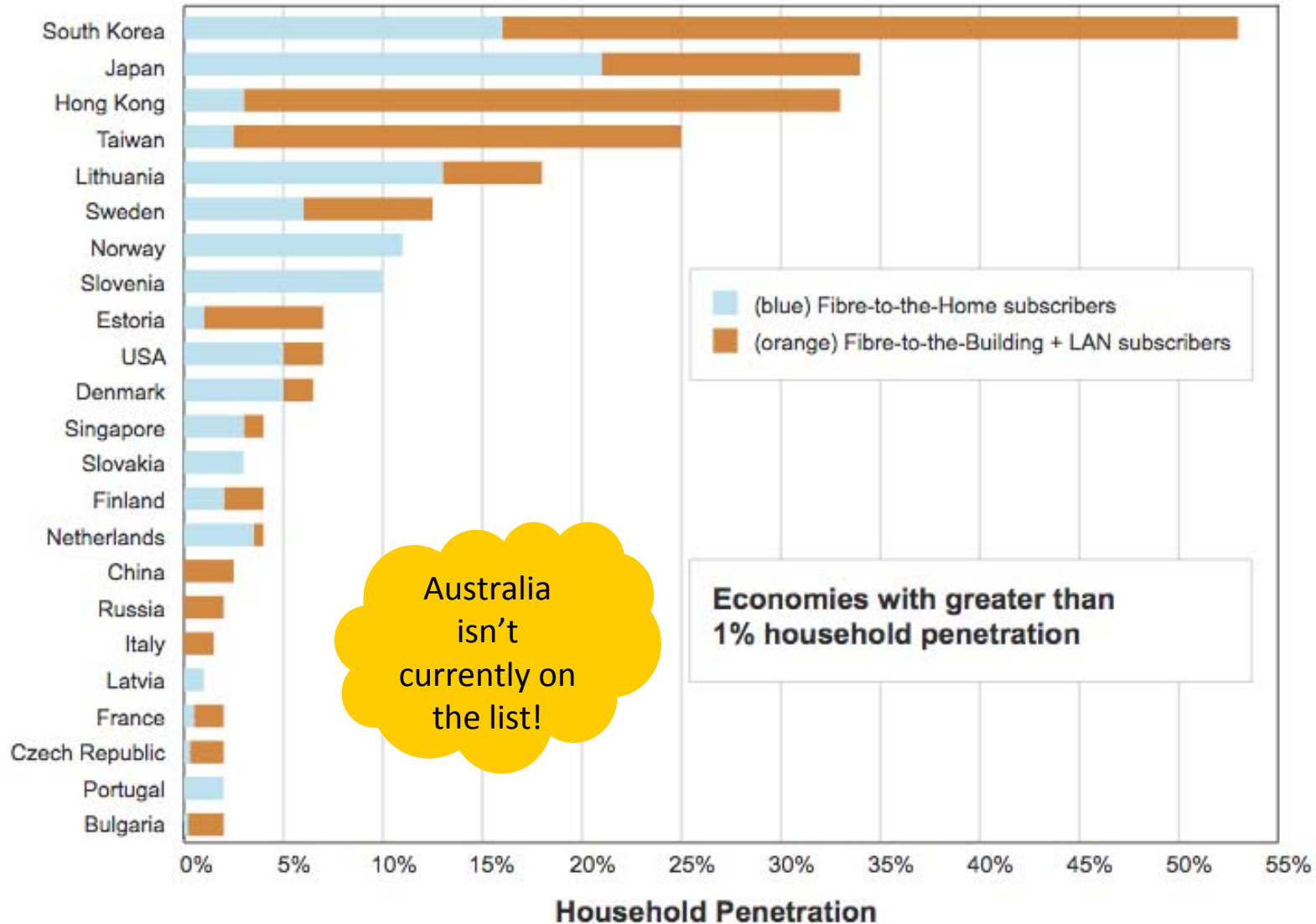


- Service Providers will be able to reach any customers in a region, using any of the three technology platforms
  - From the same Point of Interconnect
  - From the same network interface (NNI)
  - Using the same processes
  - At the same price for same/similar product
- Ubiquity with standard products/processes is critical for public applications such as eHealth and eEducation
- Wholesale only open access network

**As important as the speed and throughput improvements**

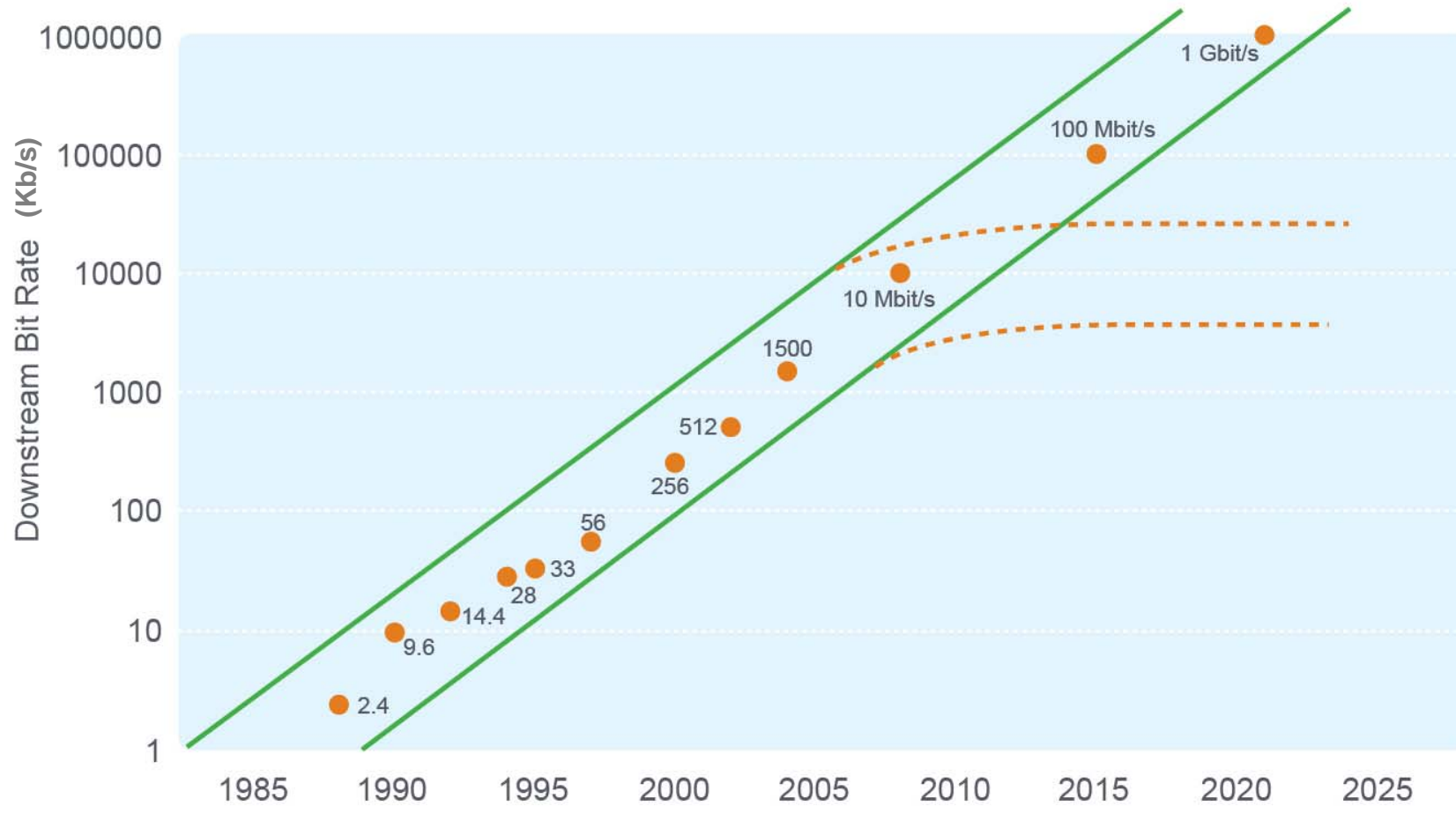
# Fibre penetration in key economies

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



Source: FTTH Council, 2010  
<http://ftthcouncil.com/en/newsroom/2010/02/26/g-20-need-to-speed-up-on-fiber-to-the-home>

# Fixed Bandwidth Demand



# First Release Site Construction Update



## Emphasis on Safety

### Armidale

Civil works now fully resourced. Aerial work design being approved by Country Energy. Make ready work to commence shortly

### Townsville

Civil work has commenced. Aerial work will commence in line with completion of planning instrument

### Willunga

Full underground build with boring and civil work well advanced with work commenced building conduit to the property

### Minnamurra/Kiama

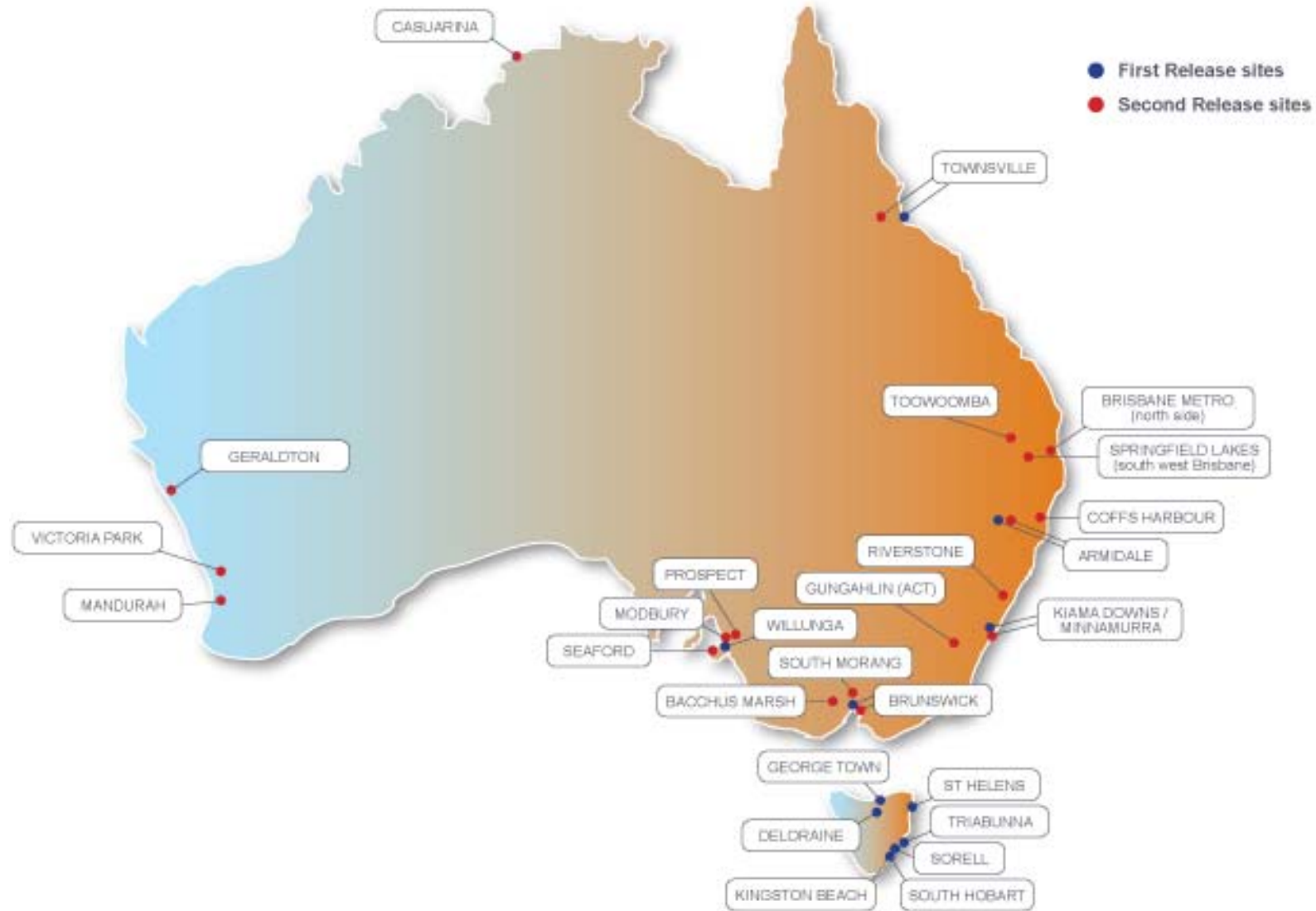
Steady progress on civil work with Aerial works to commence shortly

### Brunswick

Full underground construction. Majority of construction build will use existing Telstra duct network with new pipe laid in areas of high congestion



# First and Second Release Sites National





## Full-Scale Construction Statistics

- Roll-out over approximately 8 years
- 10 million + points of connection
- Some 4,000 points of connection per day
- Direct construction workforce of 15,000 to 20,000 FTEs at the peak of construction
- First release sites on the mainland have been awarded and work commenced
- Construction will be rolled-out, simultaneously, in metropolitan, regional, and rural areas
- It will be Australia's first national wholesale-only, open access broadband network
- Network will provide speeds of up to 1 Gigabyte per second to 93% of Australian premises through our GPON design and 12 megabits per second to the remaining 7% of premises, through a satellite/wireless solution



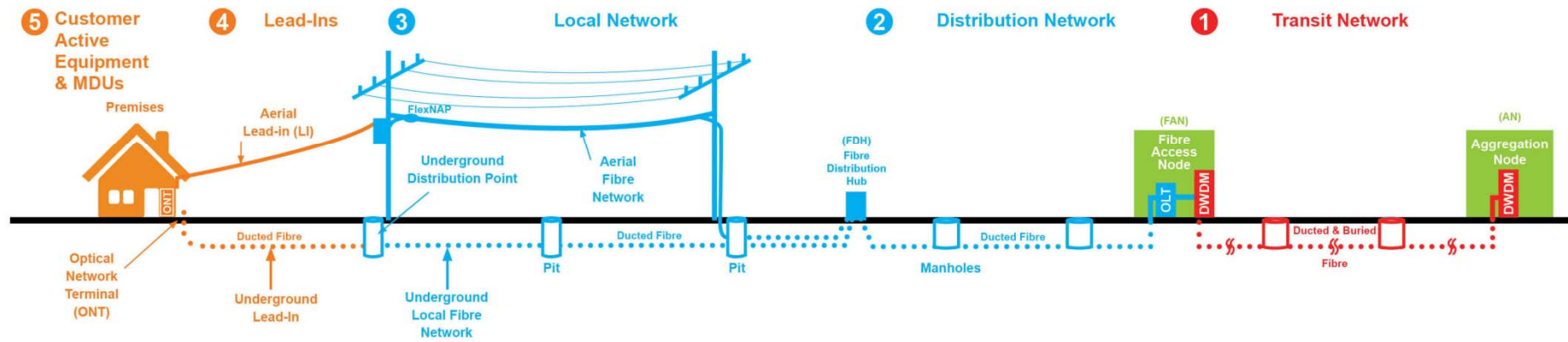
### NBN is different

- The NBN roll-out will involve multiple projects of a like nature over a substantial period of time
- There is significant scope to leverage learnings and drive improvements as we go
- We have a unique opportunity to evolve / define construction delivery characteristics

# Physical Infrastructure Representation

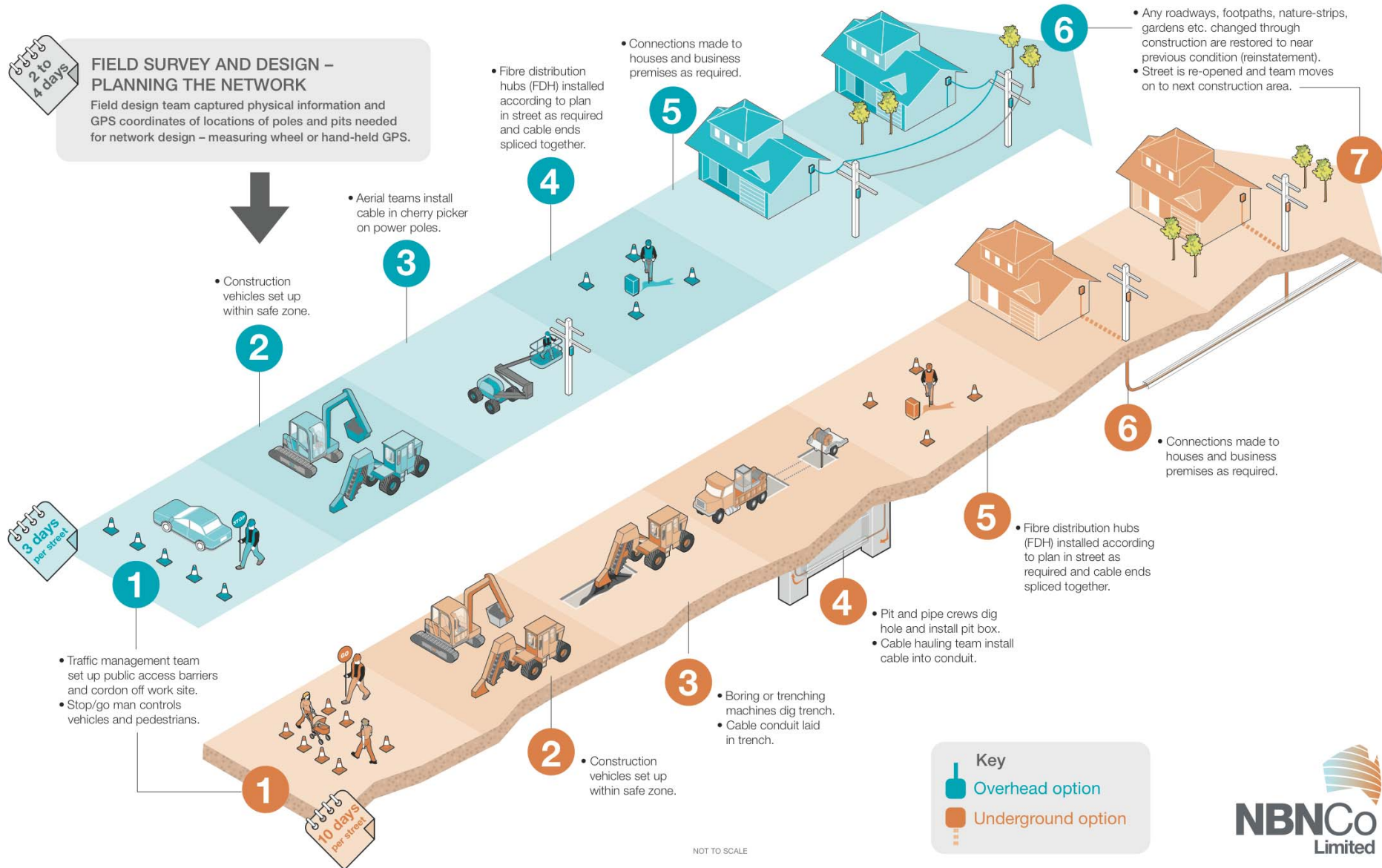


NBNCo Level 1 Projects Schematic



# How will the network be constructed?

## CONSTRUCTION STREET PLAN AND BUILD SIMPLE PROCESS



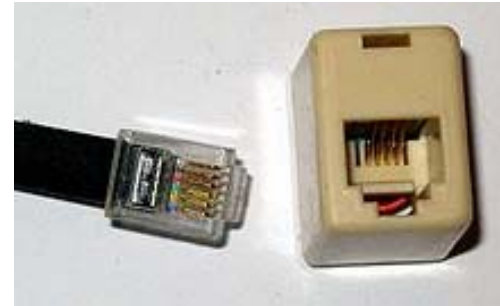
# Open Challenges



## 1. ONT location



## 2. End-user wiring



## 3. MDUs



## 4. Service levels

Class	Description	Standard Lead Time (Working Days)		
		Urban	Major Rural	Minor Rural
1	No drop or ONT	X	Y	Z
2	Drop but no ONT	X	Y	Z
3	ONT in situ	A	A	A

## Wider social and economic benefits



### **Health and welfare:**

Remote patient care, diagnostics and assessment, real-time data transfer, shared online medical records

### **Aging population:**

In-home monitoring, tailored embedded technologies to assist elderly, e-scripts, high definition communications to family

### **Education:**

'school of the air' and online learning, Computer Based Training

### **Work-life Balance:**

stay-at-home mums, home office, Flexible work environment

### **Small Business:**

*Improved service capability (ordering and fulfillment), parity with larger firms, increased competitiveness*

*"Broadband has been a key factor in globalisation, enabling knowledge and information to be shared rapidly and at low cost .... Increasing public availability of information has enabled more effective competition and price convergence for traded goods and services."*

*UK Broadband Advisory Group – Pipe Dreams?*



**NBNCo**  
**Limited**

# Community engagement is crucial



## NBN FIRST RELEASE SITES

→ NBN Co Limited is rolling out the high-speed broadband fibre-to-the-premise (FTTP) network to five "first release" sites on mainland Australia as part of live trials of its network design and construction methods. The first-release sites represent the diversity of situations NBN Co will encounter across Australia in the volume rollout, so sites have been selected that allow us to test different construction techniques.

Download the Press Release

PDF, 206KB



### About the First Release

The first release sites provide the opportunity to test and document design and construction in a range of situations.

More on First Release



### First Release Areas

Five first release sites have been selected. See maps of the areas here.

More on Areas

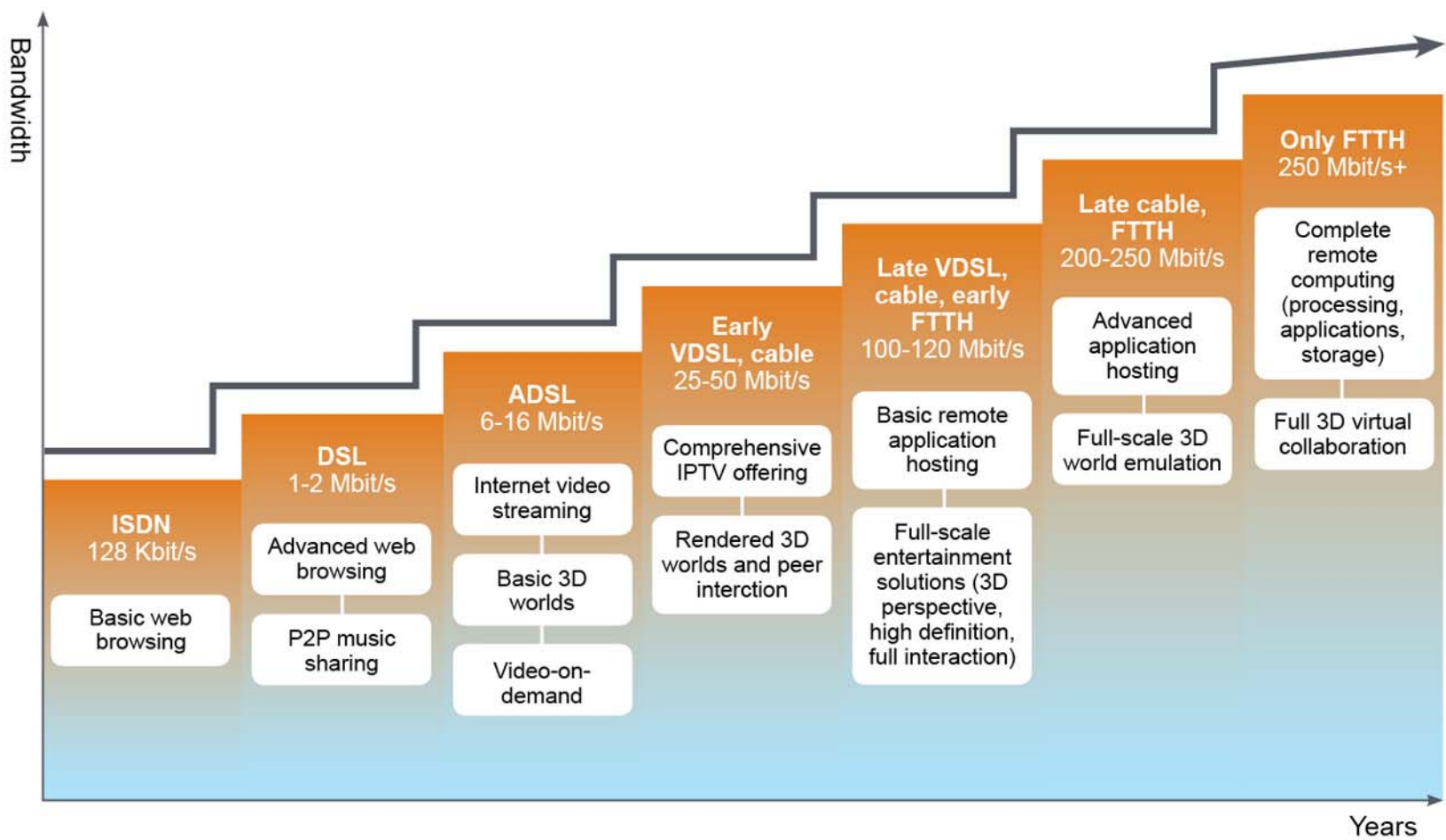


### FAQs

See the answers to some common questions about the first release.

More on FAQs

# Uses of bandwidth - future proofing



# 55 Ohio Street Armidale NSW 2350

## Professionals Armidale

[More listings from this agency](#)



Professionals



Property ID: 12042418

### **SCOPE TO ENHANCE**

Situated in a tree lined street this property offers 3 bedrooms plus study, lounge room with feature timber panelling, separate dining room and bathroom. The kitchen has an air of natural light which is enhanced by its crisp and compact white cupboards and cream benches, opening and opens onto its private terrace full of lush garden colours and peaceful outlook. Additionally this property offers double lock up garage plus workshop space, second toilet off terrace, block size approx 1470.6m<sup>2</sup> and comes with a great rental history with a long term tenant leasing at \$245 per week. **This home is included in the area for the National Broadband network first release fibre to the premises in Armidale.** With definite scope to enhance, why not explore and take the next step with this character home awaiting your arrival!