

(UNIVERSAL) SERVICE over the NBN

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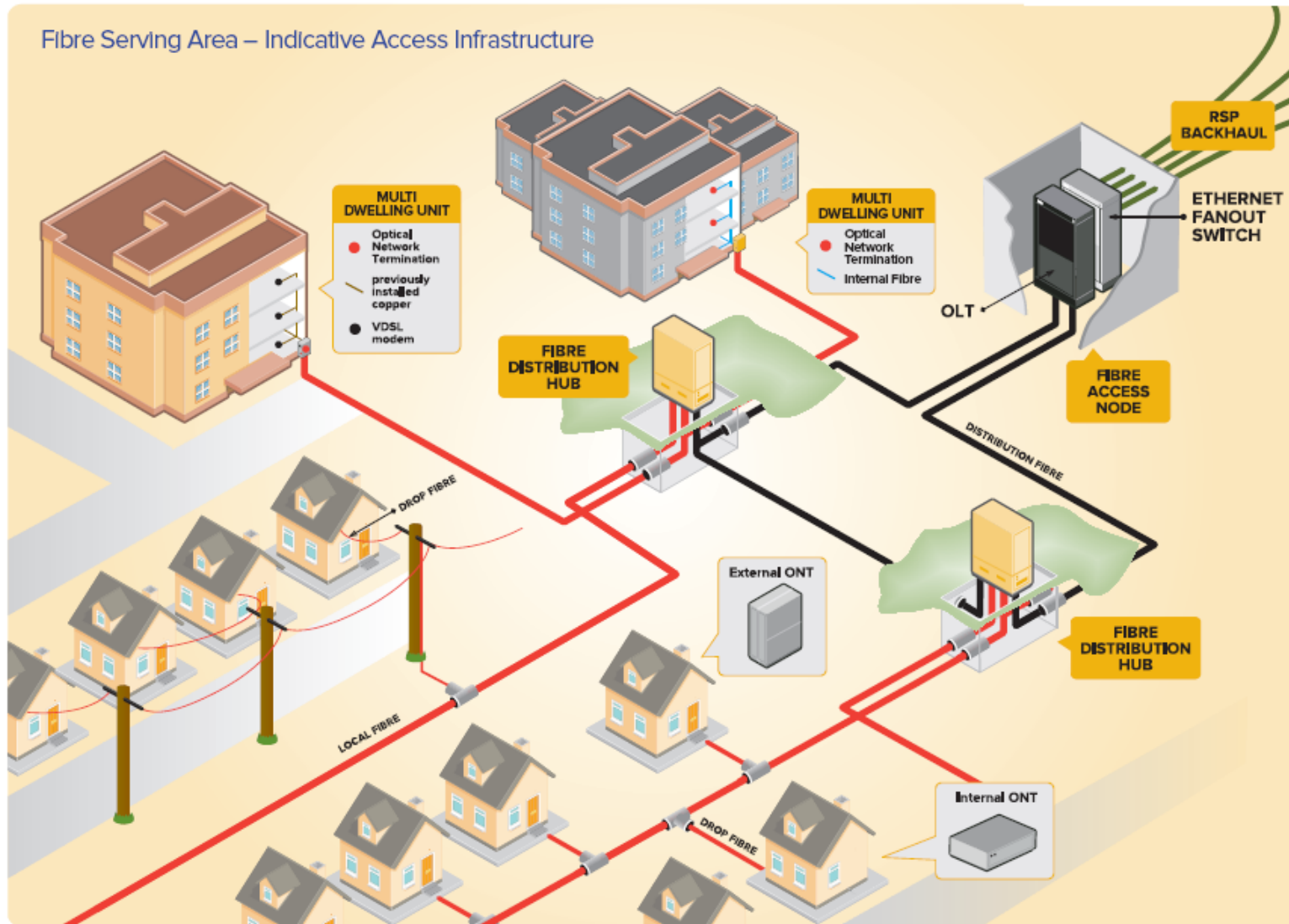
In ten years time, the NBN will cover Australia

The telephony service covers Australia now

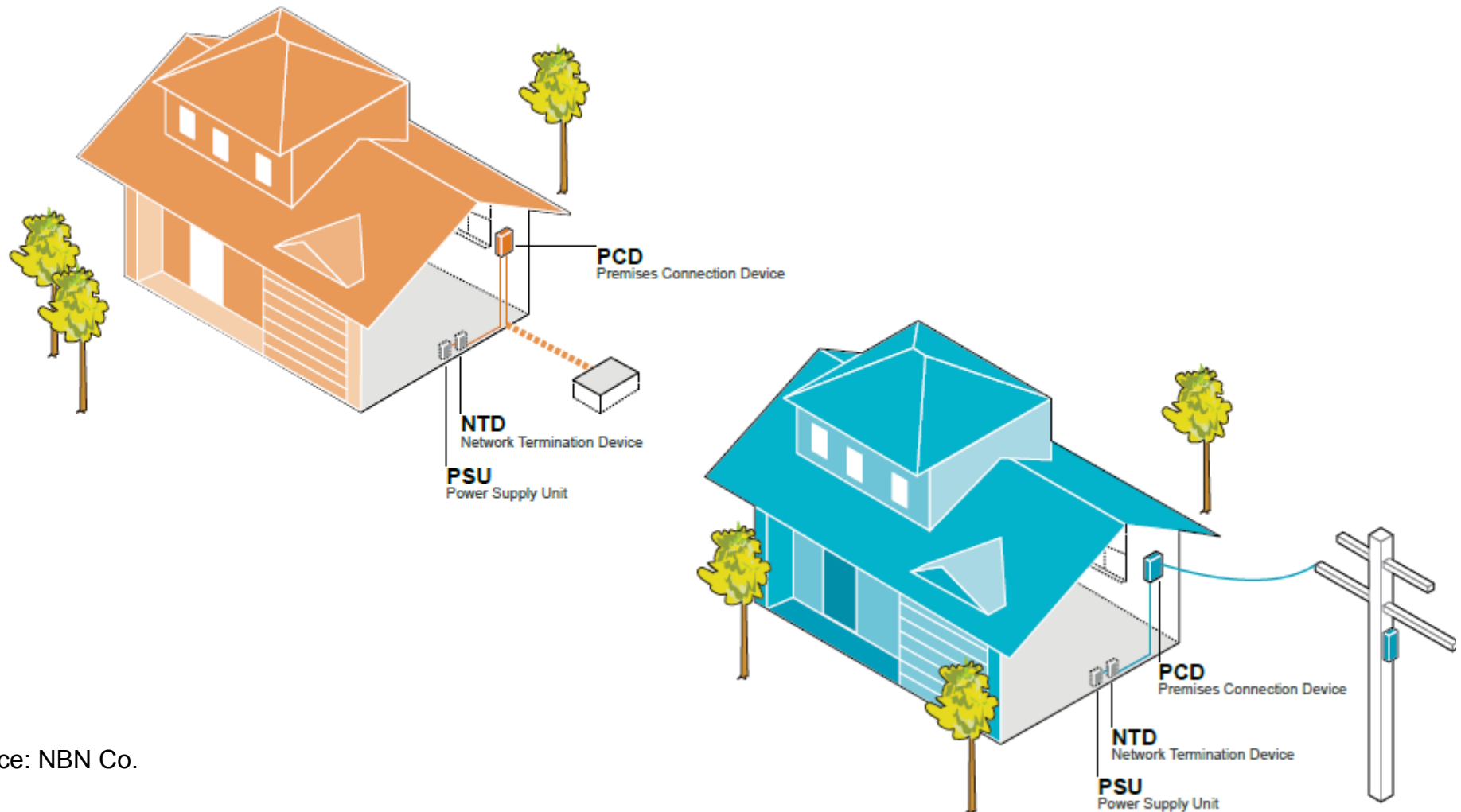
**Most current policy and regulation is based on the
Standard Telephone Service**

**The transition from the PSTN to the NBN will be one
of the major areas of policy.**

Fibre Serving Area



Source: NBN Co.



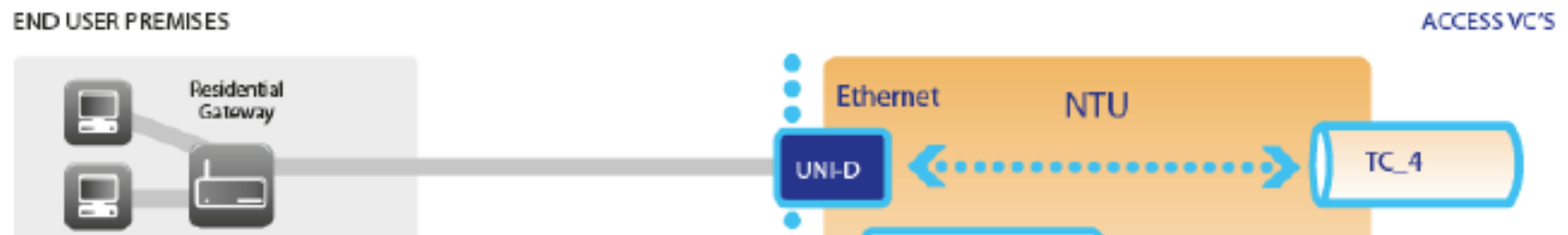
Source: NBN Co.

NBN Policy Gaps CPRF 2011

Network Termination Device (NTD)

NBN Co will provide a NTD equipped with User to Network Interface (UNI) ports through which an Access Seeker can deliver services. The standard NTD is likely to have:-

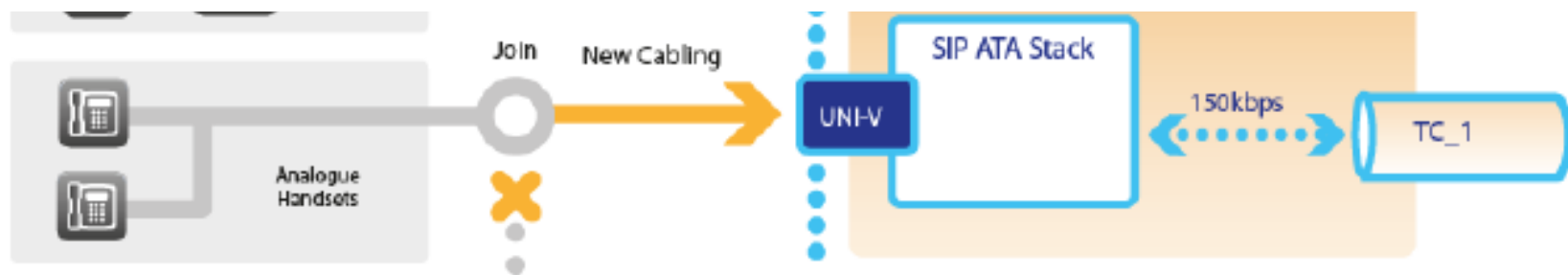
- Four independent Ethernet ports, initially probably metallic (but also possibly optical)**

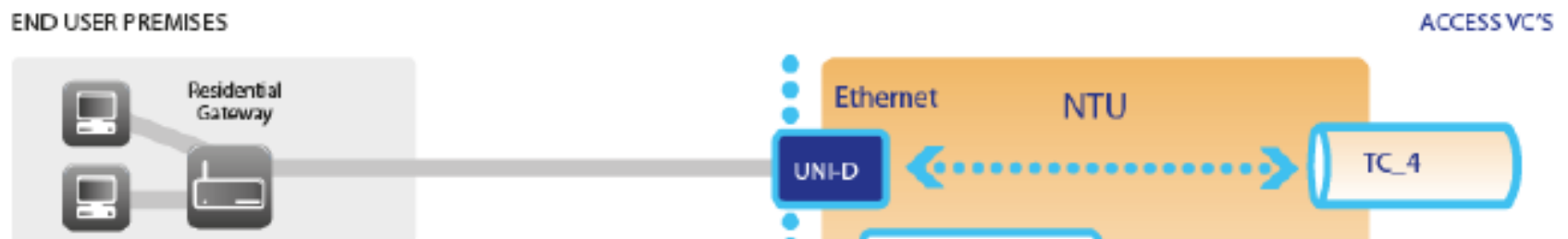


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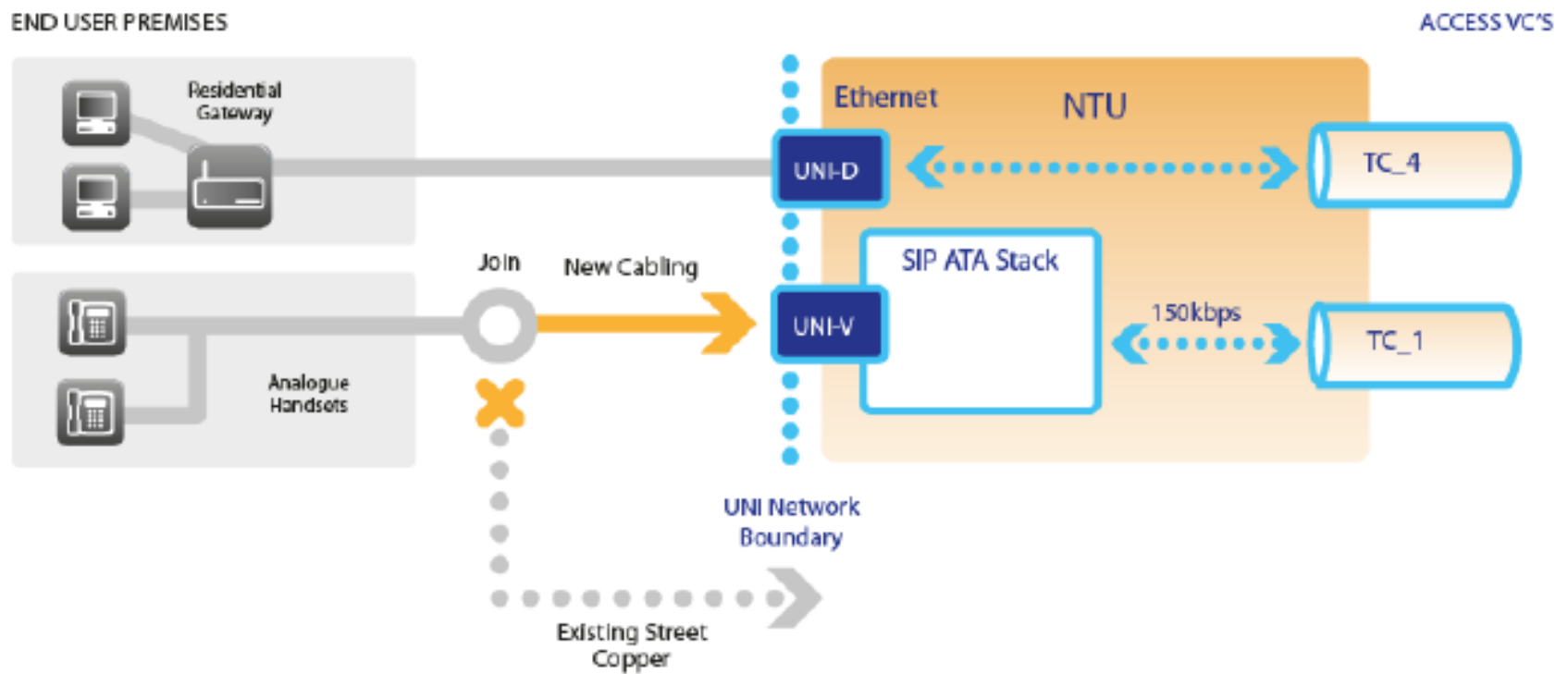
The standard NTD will also have:-

- An independent Analogue Telephony port; using the SIP protocol for media signalling and able to be interfaced with an existing Access Seeker SIP ‘Softswitch’ infrastructure.

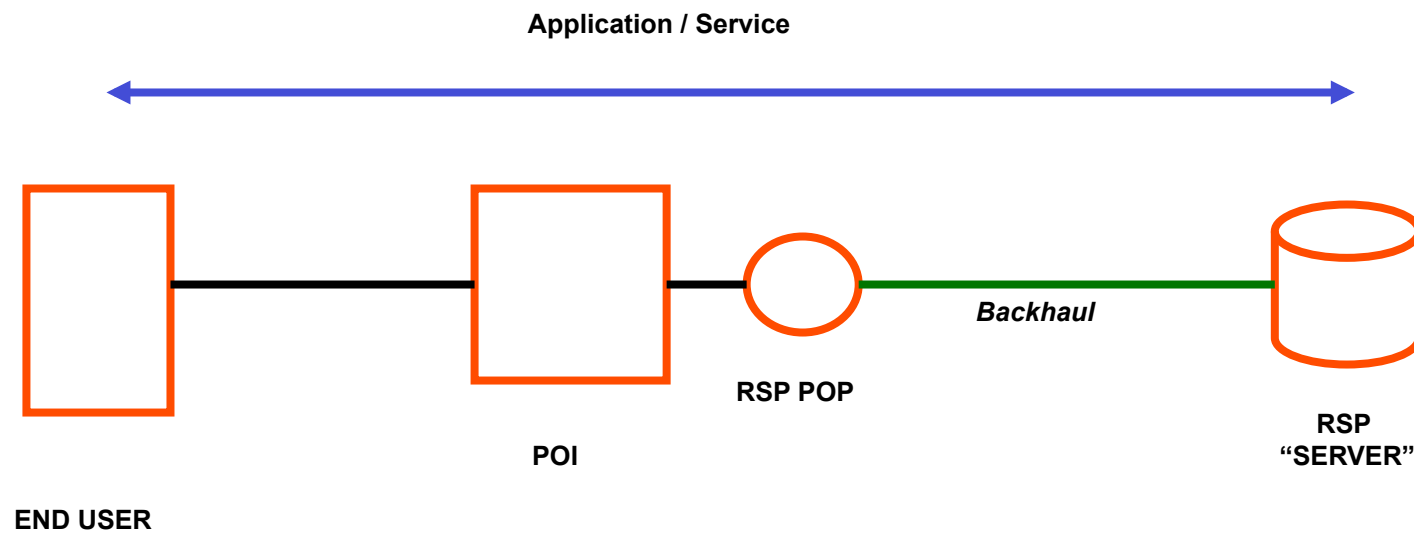




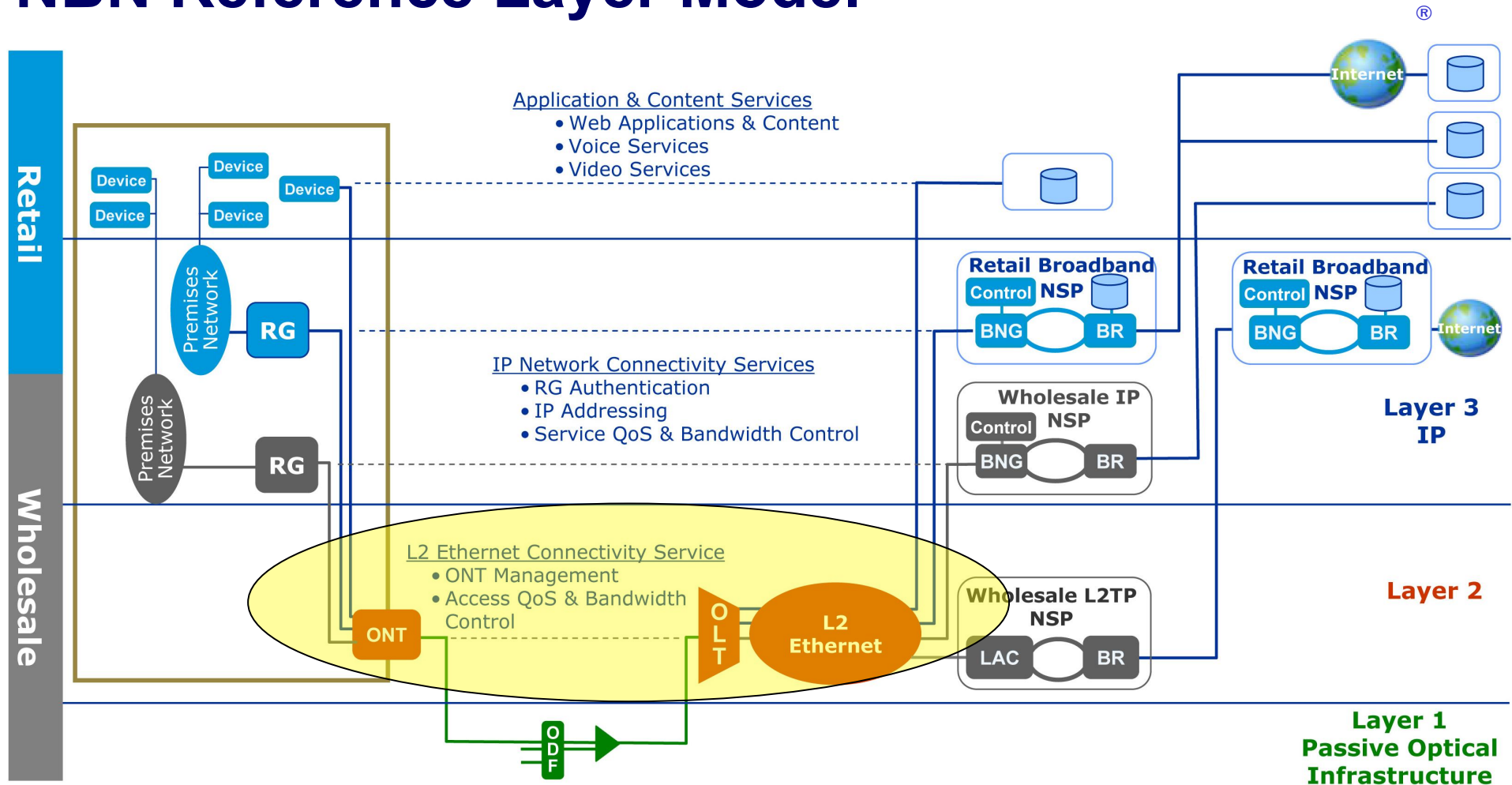
Source: NBN Co.



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NBN Reference Layer Model



Communications Alliance - NBN Reference Architecture - Release 1 - Jan 2010

The Telstra / NBN Co Agreement

The two parties have agreed subject to ACCC approval (but now approved by shareholders), that:-

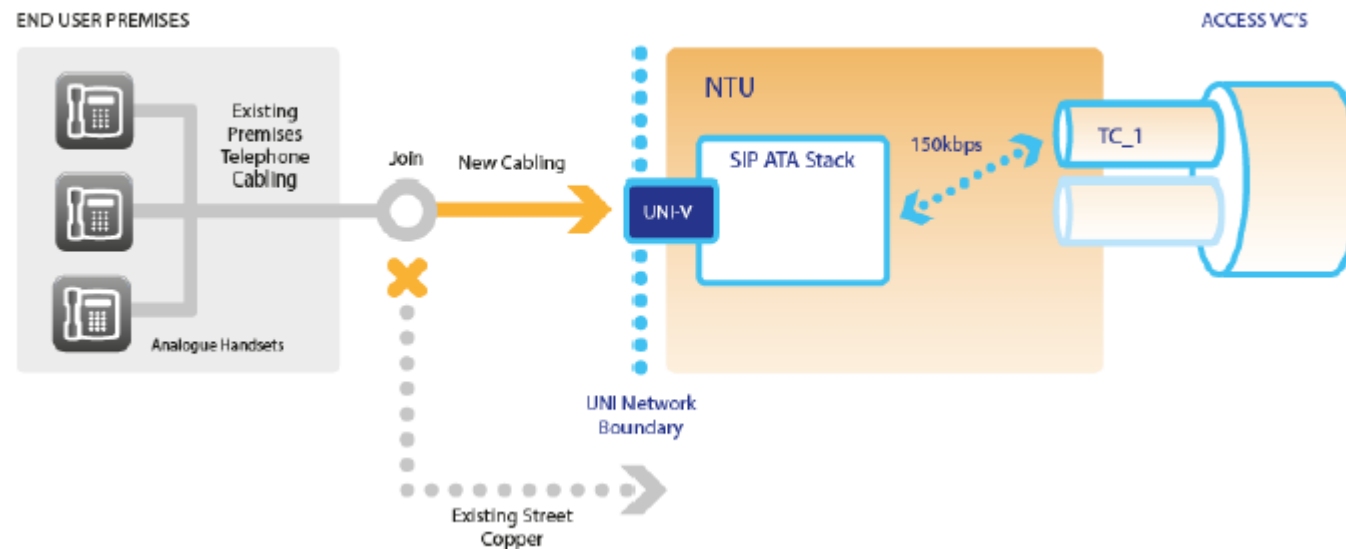
- The NBN Co will be able to use Telstra's existing ducts and pipes under a 30 year lease arrangement, and use other Telstra infrastructure (e.g. exchanges);**
- Telstra will migrate both its telephony customers and its broadband customers to the NBN Co facilities, and de-commission both the copper network and the cable broadband network.**

Implications

- **This agreement makes the NBN fibre implementation a transition from the current Telstra copper CAN to the NBN Co optical fibre CAN –an “NGN”.**
- **It means that, in future, people will have to use the NBN optical fibre if they want a fixed telephone service, or rely on mobile telephone service where available. (As copper will not be available, techniques such as ADSL cannot be used for broadband)**

Implications

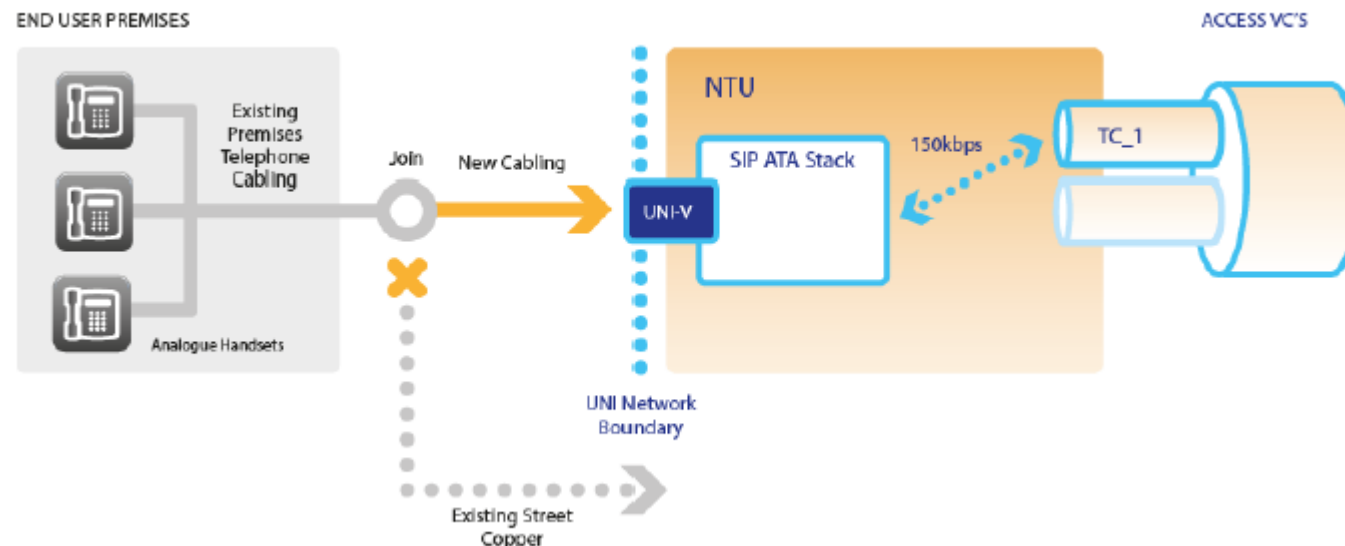
- It is likely that users will have their current household telephone wiring moved from Telstra's copper pair NTU to the Analogue Telephone Adaptor on the NBN Co's Optical NTD (ONTU).



Source: NBN Co.

Implications

- The provision of telephony service will be the responsibility of the Retail Service Provider, not the NBN Co (but will use the NBN Co's ATA.)
- Telstra's current role as the Universal Service Provider will cease when fibre is provided in lieu of copper.

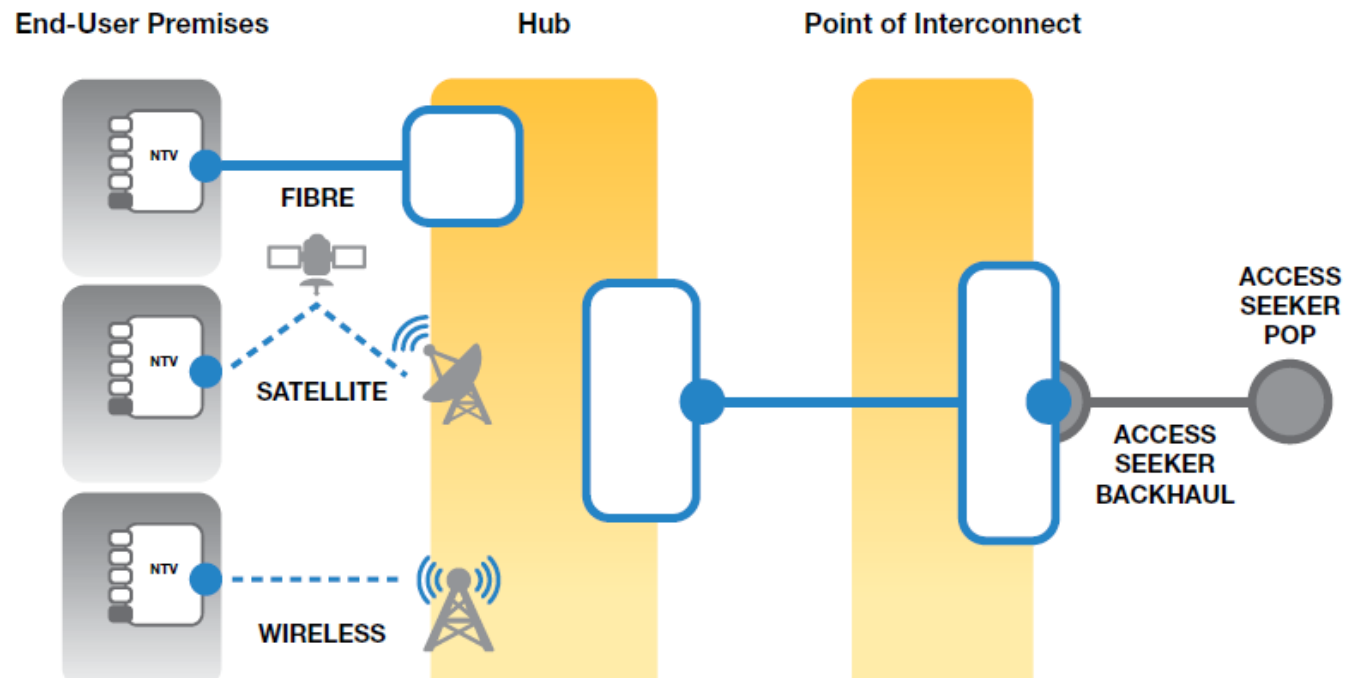


Source: NBN Co.

NBN Coverage

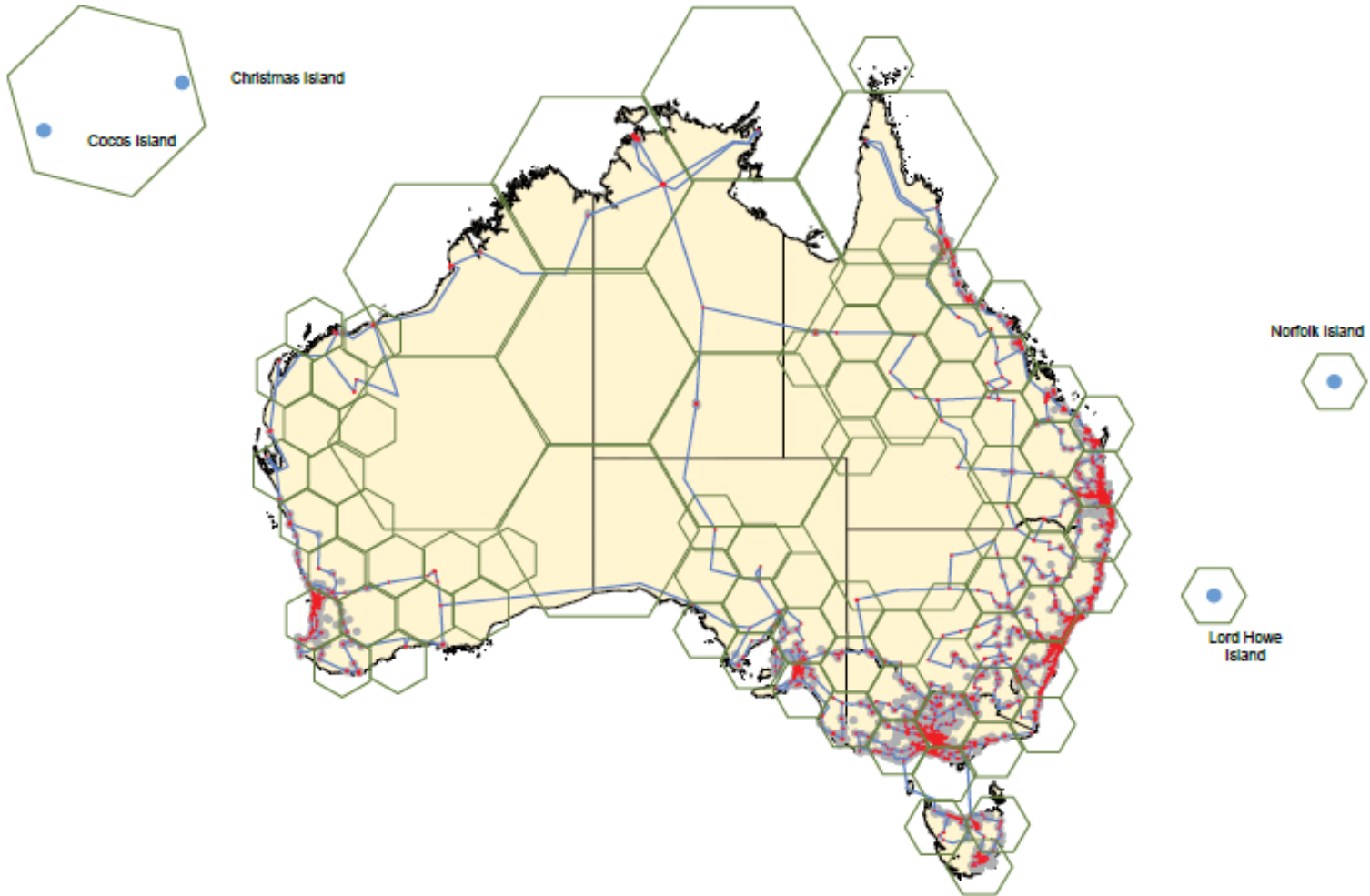
From the Implementation Study, national coverage

- Fibre to cover to 93%
- Fixed wireless and satellite from 94% to 97%
- Satellite only from 98%

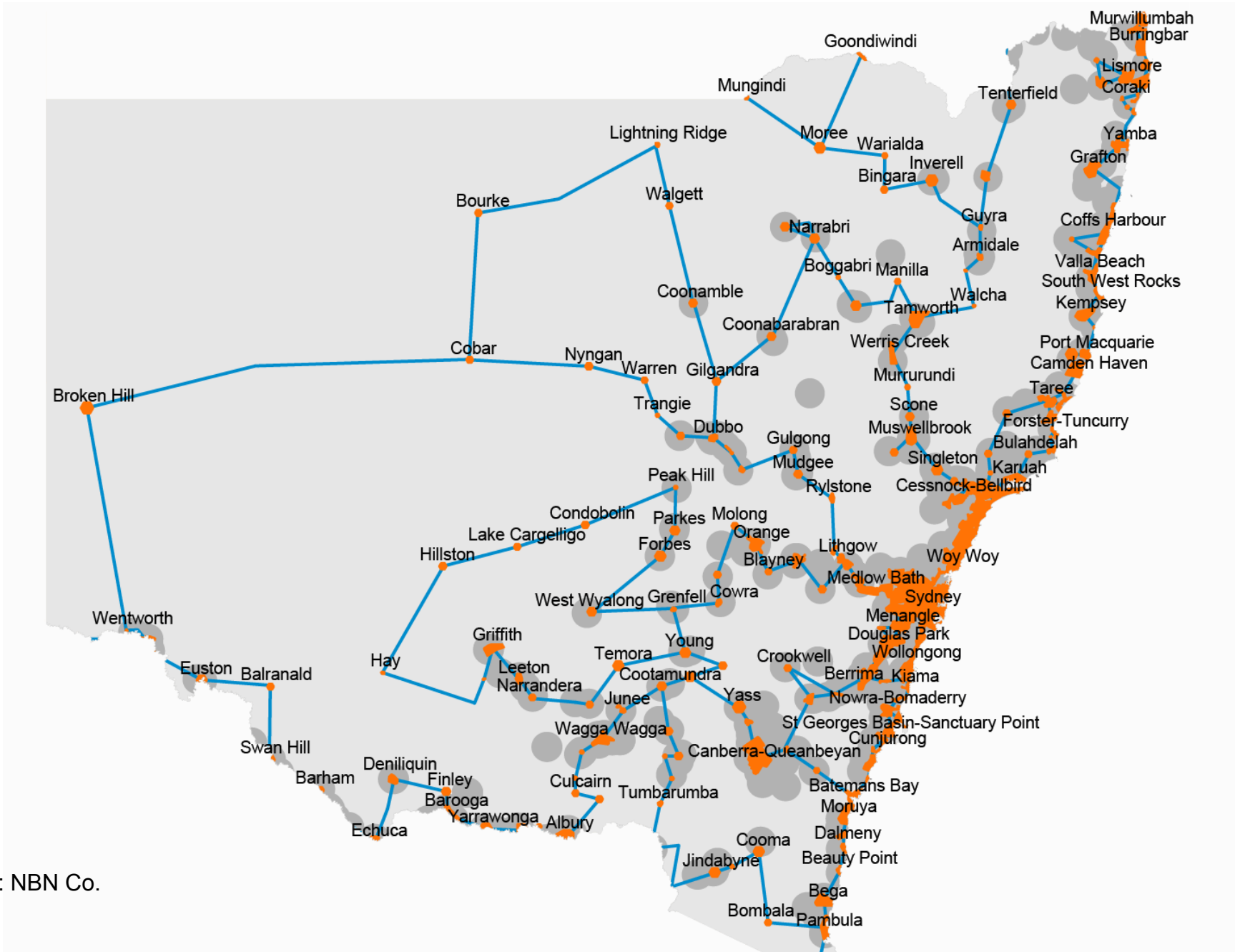


Source: NBN Co.

NBN Coverage



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Source: NBN Co.

The Government / Telstra Agreement

In parallel with the NBN agreement, the Government and Telstra have reached an agreement lasting 20 years, subject to future reviews.

- **Within NBN Co's fibre footprint**, Telstra will be the retailer of last resort to provide the standard telephone service over the NBN fibre network.
- **Outside of NBN Co's fibre footprint** Telstra has to operate and maintain its existing copper network and to provide voice services (or equivalent).

The TUSMA

The Government has just released legislation to establish a **Telecommunications Universal Service Management Agency (TUSMA)**. This agency will manage the Telstra USO agreements:-

- Delivery of the Standard Telephone Service USO;
 - Delivery of the Payphones USO;
 - Migration of voice-only customers;
 - Delivery of the Emergency Call Service.
- The TUSMA will also
 - Fund R & D to migrate public interest services from the copper network; and
 - Contract arrangements for the National Relay Service

Short Term Policy

The Government has issued Discussion Papers and now the draft TUSMA legislation looking at the management of the transition to the new arrangements, focussing almost entirely on the standard telephone service.

What and how the new arrangements will be implemented needs much work....

....but the issues for other services and applications (such as Internet access) seems to be missing.

Policy Issues - Initial NBN Implementation

- **For the “Standard Telephone Service”**
 - Management of the transition for individual users
 - Management of the transition for
 - The current USO provider, Telstra; and
 - Other telephony providers
 - “Near Telephony” services (e.g. VoIP)
 - Appropriate degree of regulation;
 - Numbering; and
 - Geographic Information (emergency, legal interception).
- **And for other services and applications?**

Policy Issues – Full NBN

What is the “socially important service” required to be available to all Australians?

- Nothing – let demand determine?
- IP Layer connectivity – who sets standards?
- Telephony – what happens to special services?
- Telephony + (including services such as video telephony)
- Defined bundle of services?

How will this universal service be agreed, how will it be delivered?