

# Industry Workforce Development Program

A great network takes a great workforce



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## About nbn

The **nbn**<sup>TM</sup> network will bridge the digital divide, helping to create a more inclusive Australia. It will transform the nation and enable Australia to become a more connected, competitive, and innovative.

To make this a reality, **nbn** was established in 2009 to design, build and operate Australia's new high-speed broadband network for all Australians.

Nowhere else in the world has an undertaking with such a level of complexity and scale like the **nbn**<sup>TM</sup> network been attempted. It's a big job, especially for those installing and maintaining the network, but it's also a great opportunity for those wanting to join the telecommunication industry.

### Making the vision a reality

To help make goals a reality, **nbn** has partnered with several established industry organisations – Delivery Partners – to design, build, operate and maintain the **nbn**<sup>TM</sup> network.

Our Delivery Partners need a skilled and capable workforce, including everyone from experienced telecommunications workers through to new industry entrants, to fill the high skill shortage occupations.

So whether you're returning to the field, transferring from related industries or just getting started, this program may have opportunities for you.



nbn is wholly-owned by the  
commonwealth of Australia



Our goal is to activate  
8 MILLION homes  
and business by 2020

## Working on leading edge technology

The nbn™ network is made up of world-class technologies designed to lift the broadband capability across Australia. nbn is committed to the development of new network technologies and we are continuously testing innovative ways to meet Australia's changing connectivity needs.

One example is G-FAST™, a new copper acceleration technology that delivers speeds up to 1Gbps over existing twisted-pair copper of around 100 metres and up to 400Mbps over 300 metres of copper.

This investment into research and innovative trends allows the nbn™ network workforce to work hand in hand with new technologies and continue to gain new skills throughout their careers. These diverse skills will become invaluable in the future careers of the nbn™ workforce.



# The nbn™ network legacy

The nbn™ network legacy will be far richer than just nodes and cables.

Each worker is contributing to the success of Australia.

As an nbn™ network worker, you will be the Australians working in neighbourhoods.

You will be providing people with life-changing access to fast broadband.

You will be unlocking tomorrow's entrepreneurs. You will be building the critical infrastructure for the next economic boom.

Each and every worker can be proud to be an important part of Australia's history and the nbn™ network legacy.



20,000 + workers on the network



140,000 km fibre transit network



5M+ network termination devices



7,000+ active nodes



1,300+ Fixed Wireless towers



Hundreds of work fronts open each day



Two purpose built satellites



10 ground stations



Series of fibre rings

# The nbn™ Multi Technology Mix (MTM)

Our plan is to take advantage of existing network infrastructure, and upgrade it using multiple and innovative technologies.

nbn™'s Industry Workforce Development Program focuses on assisting Delivery Partners with rolling out the nbn™ Fixed Line connections.

All types of nbn™ network



**FTTB**  
Fibre to the Building

An nbn™ Fibre to the building (FTTB) connection is generally used when we are connecting an apartment block or similar types of buildings to the nbn™ network. In this scenario we run a fibre optic line to the building communications room - we then use the existing technology in the building to connect to each apartment.

The fibre node in the building communications room is likely to take the form of a secure cabinet. Each cabinet will allow the nbn™ network signal to travel over the optic fibre, to the existing network technology present in the building.

connections utilising a physical line running to the premises (FTTP, FTTN, FTTB, FTTC, HFC) are considered nbn™ Fixed Line connections. The difference between each type of connection comes down to how we use existing network technology in connecting the nearest available fibre node to a specific premises. Here's a breakdown of each fixed line connection:



**FTTC**  
Fibre to the Curb

An nbn™ Fibre to the curb (FTTC), also known as Fibre to the Distribution Point (FTTdp), delivers fibre all the way to the telecom pit outside a premises where the fibre then connects with a small Distribution Point Unit (DPU) that then uses the existing copper line to deliver fast broadband to the premises over a (usually) relatively short distance.

While fibre connects into one side of a DPU (which typically services four premises), the other side of the device is connected to the existing copper-line covering the last length of the journey to the premises.



## FTTN Fibre to the Node

An **nbn™** Fibre to the node (FTTN) connection is utilised in circumstances where the existing copper network will be used to make the final part of the **nbn™** network connection, from a nearby FTTN cabinet or micro-node to the premises.

The fibre node is likely to take the form of a street cabinet. Each street cabinet will allow the **nbn™** network signal to travel over optic fibre from the exchange to the cabinet, and connect with the existing copper network to reach the premises.



## HFC Hybrid Fibre Coaxial

An **nbn™** Hybrid Fibre Coaxial (HFC) connection is used in circumstances where the existing 'pay TV' or cable network can be used to make the final part of the **nbn™** network connection. In this circumstance a HFC line will be run from the nearest available fibre node, to the premises. Hybrid fibre coaxial (HFC) connections require an **nbn™** network device to be installed at the point where the HFC line enters the home. This device requires power to operate, and can only be installed by an approved **nbn™** Installer or service provider.



## FTTP Fibre to the Premises

An **nbn™** Fibre to the premises connection (FTTP) is used in circumstances where an optic fibre line will be run from the nearest available fibre node, to the premises. FTTP also requires an **nbn™** network device to be installed inside the home.

This device requires power to operate and can only be installed by an approved **nbn™** Installer or service provider.



FTTB



FTTC



FTTN



HFC



FTTP

## **nbn™** network technologies

**nbn** will continue to upgrade the **nbn™** network to meet the needs of Australians as more technologies are invented in the communications sector, and introduced throughout the **nbn™** network rollout. This will assist **nbn**'s aim to provide high speed broadband across the country.

# Industry Workforce Development Program

**nbn™** approved Delivery Partners need a skilled and capable workforce to help connect 8 million homes and businesses by 2020. That's why **nbn** established the Industry Workforce Development Program which aims to develop and support a sustainable, multi-technology skilled workforce to help build, operate and maintain the **nbn™** network.

The Industry Workforce Development Program assists to:

1. Source and connect individuals with Delivery Partners and their subcontractors
2. Build a skilled workforce through nationally recognised training and accreditation
3. Accredite workers to ensure that they understand and comply with health, safety and environment and technical skill obligations



## Connecting workers to the industry leading organisations

We're connecting interested individuals with our Delivery Partners and their subcontractors through an Expression of Interest registration.

The Expression of Interest path creates a worker profile highlighting preferred working locations, applicable experience and relevant qualifications. After an individual submits an Expression of Interest via the **nbn™** website, a referral process connects prospective workers who match the job and location description requirements to the **nbn™** approved Delivery Partner, or their subcontractor.

All recruitment and screening is undertaken by the **nbn™** approved Delivery Partner or their subcontractor with no assistance from **nbn**.

Expressions of Interest are open year round, and are available to Australian or New Zealand citizens or Australian permanent residents.

If you're interested in, or know someone who is interested in, completing an Expression of Interest, please visit our website at [nbn.com.au/workforce](https://nbn.com.au/workforce).

Please note: An Expression of Interest is not a job application.



## How to become an nbn™ network worker



### 1 Register an Expression of Interest

Connecting candidates with our Delivery Partners and their subcontractors when positions on the nbn™ network become available

1



### 2 Delivery Partner requests candidates to review

Delivery Partners can request for candidates to be referred to them for recruitment at any time throughout the year

2



### 3 nbn refers candidates to a Delivery Partner

An email is sent to candidates advising that their information has been referred to a Delivery Partner

3



### 4 Delivery Partner starts recruitment process

The Delivery Partner will contact the referred candidates and may further refer to their subcontractors

4



### 5 Delivery Partner or their subcontractor hires candidate

If hired, the candidate will become a trusted subcontractor personnel of nbn

5



### 6 Candidate commences training for the role

Dependent on the position, level of skills and previous training held

6



### 7 Candidate gains accreditation

Once accredited, the candidate can commence working on the nbn™ network rollout

7

## nbn™ accreditation

Accreditation assists **nbn** to verify that workers have the right skills and competencies to carry out work on the **nbn™** network. Any person employed by an **nbn™** approved Delivery Partner, or their subcontractor, to work on the **nbn™** network is required to complete two mandatory **nbn** online modules before commencing work.

The two **nbn™** mandatory online modules are:

- **nbn**: Health, Safety and Environment (HSE) Awareness-important requirements relevant for work on the **nbn™** network
- **nbn**: Your Role in Connecting Australia-an overview of **nbn** as an organisation and how to represent the **nbn™** brand

A worker must also fulfil an accreditation requirement for any technical activity deemed critical for the **nbn™** network. Technical skill accreditations can be gained through one of two pathways:

- Completion of a formal nationally recognised training program: for workers inexperienced in specific technical skill(s).

- Completion of direct assessment: for workers with experience in the specific technical skill(s). Completed through an online knowledge assessment and a practical assessment.

## Training for nationally recognised qualifications

For workers needing to gain specific technical skills deemed critical for the **nbn™** network, they will have two training program options that may lead to nationally recognised telecommunications qualifications or competency outcomes.

The two training program options are:

- Up-skill program: available to new entrants to the telecommunications industry with the goal of completing a full qualification
- Cross-skill program: available to workers with existing experience in the telecommunications or a related industry, with the goal of furthering their skill set

In some circumstances, **nbn** fund the training costs for individuals who are employed by an **nbn™** approved Delivery Partner, or their subcontractor, with one of our **approved training providers**. It is possible for individuals to fund their own training costs prior to employment with an **nbn™** approved Delivery Partner or their subcontractor.

## Career development

We recognise the need for **nbn** to continue to build and develop the foundations of the network in the coming years. Beyond this phase, opportunities to operate and maintain our world class network will continue into the future.

The **nbn**<sup>™</sup> network is continuously adapting to the changing industry. As a key part of the Industry Workforce Development Program, an **nbn**<sup>™</sup> network worker will be at the forefront of the dynamic industry, and hold specialised skills to assist with new technologies. With key industry skills in hand, an **nbn**<sup>™</sup> network worker should be able to quickly cross-skill their knowledge to future technologies.

The skills obtained through training in the Industry Workforce Development Program will be nationally recognised, and the worker may have the ability to obtain a full qualification.



Meeting new people



Autonomy while still working in a team



Being at the leading edge of technology



New office every day



Progression in your career



Hands-on working style



Pride in the industry and skills



Problem solving and fault identification skills

## The employer for the nbn™ network workers

A worker is employed or engaged by the Delivery Partner, or their subcontractor, and is not employed or engaged by nbn. However, while working on the nbn™ network, a worker is a representative of nbn, and is therefore required to meet nbn HSE and brand requirements.

nbn does offer an online Expression of Interest registration which connects interested individuals to Delivery Partners or their subcontractors through a referral process. Remember, an Expression of Interest is not a job application.

All recruitment steps are completed by an nbn™ Delivery Partner, or their subcontractor.

nbn provides Expression of Interest profiles on request from the Delivery Partner or their subcontractor, and is not involved in any step of the recruitment process; including screening, interviewing, negotiating contracts and pay or setting job duties.



Since **nbn** has several Delivery Partners and subcontractors participating in the program, the actual roles and responsibilities they are seeking may differ to what may have been advised by **nbn**.

### Employment types

The specific terms and conditions of employment or engagement (such as pay, location of work and contracts) will depend on the positions available and is at the full discretion of the Delivery Partner or their subcontractor.

### Profile referral time

Once an Expression of Interest is submitted, a candidate will be eligible for any referral request that is submitted that matches their profile with the Delivery Partners requirements. Referral requests are open to Delivery Partners and their subcontractors all year, and **nbn** is unable to predict the times of submission or when an individual's profile will be referred.



## Importance of the workforce as ongoing **nbn™** brand representative

At any one time, on any one day, we have hundreds of work-fronts open around Australia, with more than 20,000 passionate, dedicated Australians working hard to turn fast broadband from an aspiration to a reality.

We have been entrusted to represent the people of Australia in rolling out the **nbn™** network. While working on the **nbn™** network and displaying the **nbn™** logo, it is important to represent **nbn** in the best and most positive way.

An **nbn™** network worker may work near, and sometimes on, culturally sensitive areas and sacred sites requiring a respectful engagement with Indigenous communities. This is a trust and social responsibility we take seriously.

As an **nbn™** network worker, the impact on the customer at the ground level can affect how the business runs and the success of the **nbn™** network. This is why, each and every **nbn™** network worker completes the **nbn™** Brand Awareness module prior to commencing work.



## High-skill shortage occupations

nbn has worked closely with Delivery Partners and their subcontractors to identify the high-skill shortage occupations within the industry needed to help build, operate and maintain the nbn™ network.

Positions are available for individuals with various levels of experience in the telecommunication or a related industry. Here is a snapshot of the possible different roles that are available on the nbn™ network.

### New entrants to the industry individuals

Workers starting out in telecommunications will typically begin working as Linesworkers in copper, fibre or HFC to support the network lines connecting homes and businesses, across Australia.

As a Linesworker, the job environment can change daily from working up in the air, or underground such as pit and pipe work installations, roping and cable hauling, installation of enclosures, conduits, and earthing systems, and rodding.

The job can be hands-on working on detailed and precise processes, as well as team focused.

Linesworkers will primarily work on basic cable installs, monitoring and replacements including lead-ins and terminations.

### Mid-level telecommunications experience individuals

Workers with a background or previous experience working in telecommunications with copper, fibre, or HFC technologies will typically be suited for jobs as a Cable Joiner, Fibre Splicer or Technician.

These positions, and others that are available, assist with installing the various technologies and may include more advanced tasks including testing, diagnosis and resolutions of faults.

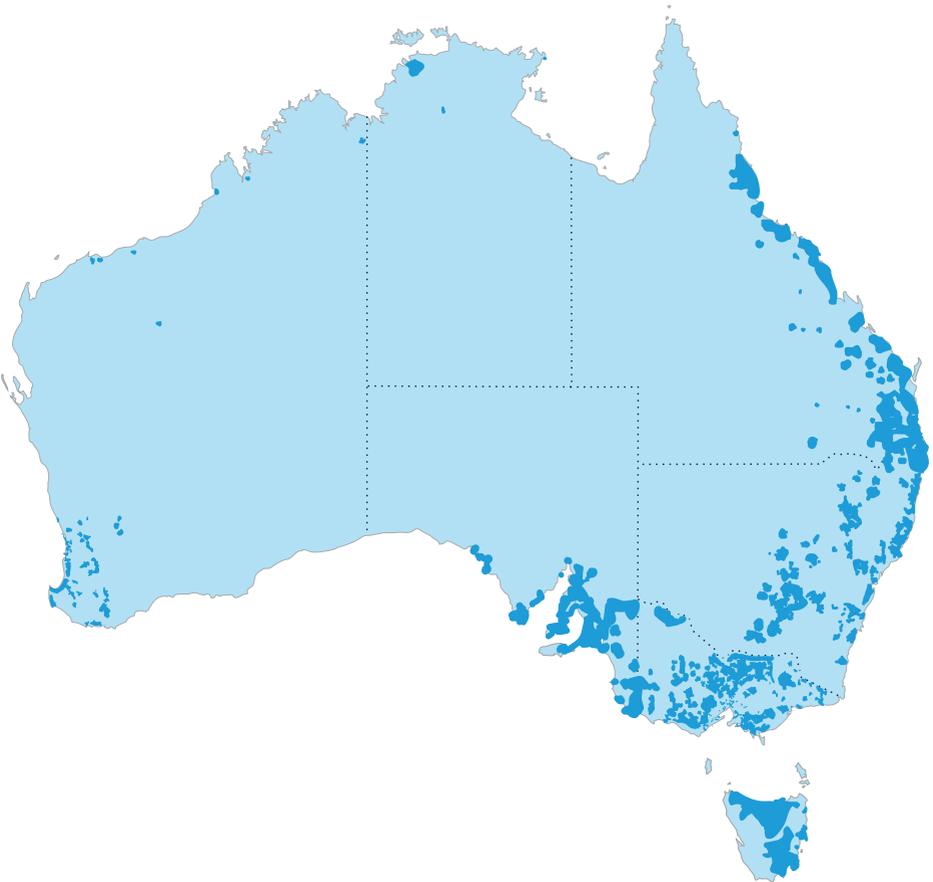
### Experienced telecommunications individuals

Experienced workers have previously worked in a technical role for a number of years and hold advanced skills to fix more complex faults. An experienced worker will also provide mentor support for technicians getting up to speed. Experienced telecommunications workers are crucial for the network build, operation and maintenance, as well as the invaluable mentoring for new entrants to the industry.

## Job locations

With a large part of nbn's rollout to date completed in regional areas, the focus is on recruiting workers to build the nbn™ network in metropolitan areas, with construction ramping up in the big cities in the coming years. nbn™ Fixed Line connections

are being installed along coastal and well-populated areas in Australia. Exact locations can differ between the different technologies, and Delivery Partners.





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The Industry Workforce Development Program Team  
P: 1800 364 626 | E: [industrycapability@nbnco.com.au](mailto:industrycapability@nbnco.com.au)