

# Trusted digital infrastructure, built for Al



# Your partner in connectivity

We are building the largest intercity terrestrial network in Australia. Intercity Fibre Network is now called the Aura Network.

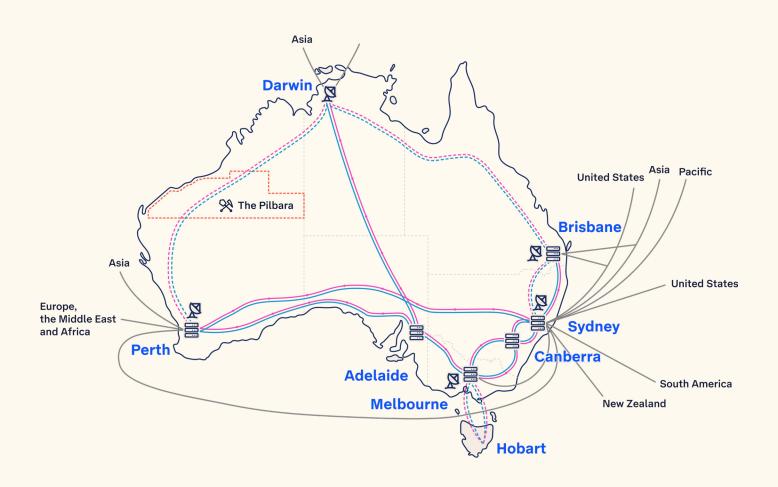


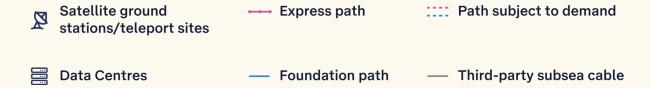
Telstra InfraCo is a leading digital infrastructure provider, offering a diverse range of telecommunications infrastructure products in Australia. From geographically redundant fibre to duct access, data centres to satellite ground stations, Telstra InfraCo gives you the scale, resilience, and performance to deliver more for your customers. It's why we're trusted to deliver and manage critical infrastructure — tailored to meet the unique needs of global hyperscalers, government, large enterprises, telco carriers and other retail service providers, and more.

We are committed to partnering with customers to accelerate business opportunities. Our extensive infrastructure includes over 250,000 kilometres of fibre network in Australia, which is further extended with our Aura Network, and access to the largest wholly-owned subsea cable network in Asia Pacific. Our network supports connectivity with over 150 third-party data centres globally, including seven data centres in Australia, and connects 121 nbn® Points of Interconnect (POI). With this end-to-end infrastructure, we can connect your sites and systems across Australia and to the world.



# Connecting possibilities





Disclaimer: This map is an approximate illustration. We will optimise the project rollout by adjusting, and phasing routes and kilometres deployed.



# Engineer tomorrow with us

### Are you ready to elevate your digital infrastructure and drive your business forward?

The Aura Network is a critical piece of Telstra's \$1.6 billion strategic investment to meet the connectivity demand for the next generation and forms a part of Telstra InfraCo's significant infrastructure.

The Aura Network features a dual-cable architecture that provides an **express**, long-distance path between capital cities and a **foundation** path, creating an opportunity to deliver a high-capacity and low-loss optical fibre connection to regional and remote areas via on and off ramp infrastructure along the network.

Our product suite gives you the scale, resilience, and performance to deliver more for your customers. Whether you're interconnecting data centres, extending reach between Points of Presence (POPs), or enabling cloud access, our resilient network and high-capacity solutions are designed to enable your digital infrastructure to scale. Ideal if you're building networks, managing critical workloads, or supporting hybrid environments, with the control, flexibility, and expert technical backing you need to grow.

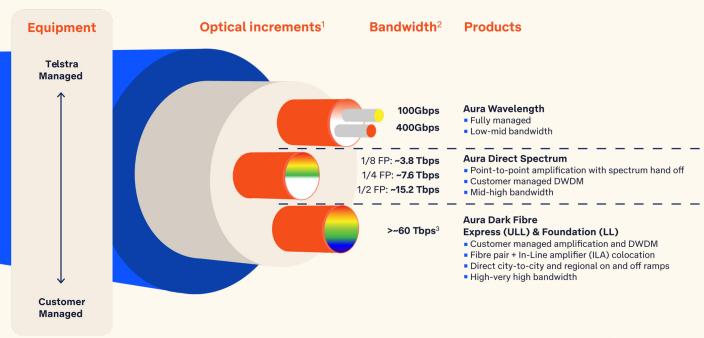
With decades of expertise in operating and maintaining telecommunication sites, data centres, and networks, we offer extensive experience, innovative solutions, and diverse access routes, all of which come together to make it easy for you to connect your business to the world. Designed with cable diversity and built-in redundancies, our global network helps support continuity even during unexpected events.





### Aura Network Products

The backbone of tomorrow's connectivity.



<sup>&</sup>lt;sup>1</sup>Based upon a single fibre pair with 32 optical channels.

ULL: Ultra Low Loss LL: Low Loss DWDM: Dense Wavelength-Division Multiplexing

### The Aura Network has two fibre paths and diverse routes built for enhanced connectivity and performance.

#### Express path (pink cable)

An ultra-low loss fibre (Corning SMF-28 ULL with Advanced Bend) provides reliable, high bandwidth between capital cities and international submarine cable landing stations. This network will deliver greater performance and capacity, high-datarate services, and has a flexible design for future connectivity to non-capital city data centres and data centre hubs.

#### Foundation path (blue cable)

A low-loss fibre (Prysmian BBA2-LL) will enable upgrade of the existing network with technically improved fibre, cable, and architecture. This facilitates additional capacity between capital cities, to enhance performance and improve connectivity to regional Australia to support the anticipated growth in bandwidth.

<sup>&</sup>lt;sup>2</sup> Bandwidth is based on desktop simulations. Actual bandwidth will vary due to factors such as customer equipment and route.

<sup>&</sup>lt;sup>3</sup> Our desktop simulation for the Sydney to Melbourne ULL Express link has set a new benchmark for fibre capacity over long-distance networks at over 83 Tbps per fibre pair (May 2024).

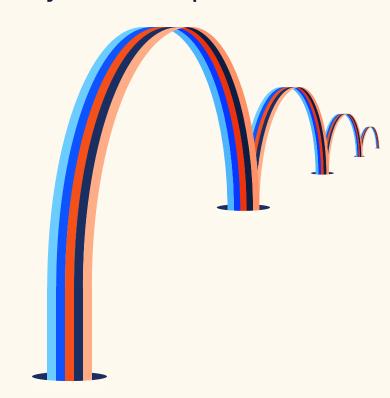


### High bandwidth connectivity to keep your critical data moving and your operations running smoothly across multiple locations.

New generation of business and consumer applications are driving complex and diverse demand on bandwidths.

**Aura Wavelength** caters to the increasing need for high-capacity, low-latency, point-to-point connectivity using advanced optical fibre technology, with optional proactive monitoring for a reliable performance and a highly robust data transport solution.

Based on Dense Wavelength-Division Multiplexing (DWDM) technology, this solution can provide you with additional bandwidth efficiently as needed, to connect you to National Broadband Network (nbn®) Points of Interconnect (POI) both in metro and regional areas.





**Scalable bandwidth**<sup>2</sup> options of 1 Gbps, 10 Gbps, 100 Gbps, and 400 Gbps<sup>5</sup>.

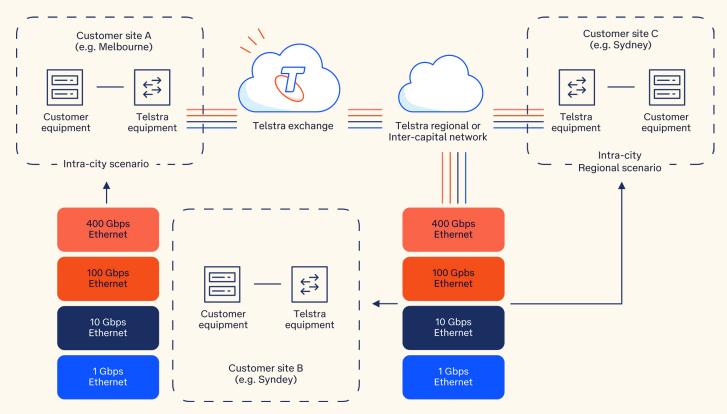


Resiliency options
Protected and Core
Restoration are
available on the existing
fibre network. These
resiliency options are
under construction on
the Aura Network.



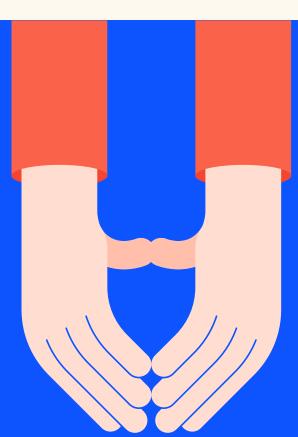
**Diversity** between most capital cities, when using existing fibre and Aura networks.





#### Unlock scalable, secure, and reliable connectivity.

- Target Service Level Agreements (SLA) up to 99.7% for Unprotected on the Aura Network and up to 99.95% for protected topology (on the existing network)6
- Support latency-sensitive applications with optimised transmission speeds.
- Help protect sensitive data with secure and resilient connectivity.
- Fully managed by Telstra to help you focus on managing your business, without the need to overcommit to infrastructure and complex reconfigurations.



<sup>&</sup>lt;sup>2</sup> Bandwidth is based on desktop simulations. Actual bandwidth will vary due to factors such as customer equipment and route. <sup>5</sup> 400Gbps services are available on the eastern seaboard (Melbourne, Sydney, Canberra, Brisbane, and Adelaide). They are available in an unprotected service

<sup>&</sup>lt;sup>©</sup>Target availability is based on a rolling 12-month period. Telstra makes no guarantee or representation about the actual availability. Service availability target (SLA) is based on customer faults lodged and verified by Telstra InfraCo.



## aura direct spectrum

Customise and scale spectrum capacity, choose your own compatible equipment<sup>4</sup>, and take control of your network with high-speed, future-ready connectivity.

Aura Direct Spectrum empowers you to secure a specific spectrum range, with an eighth, a quarter, and a half-fibre-pair option, allowing scalable bandwidth from approximately 3.8 Tbps (one-eighth fibre) to 15.2 Tbps (half fibre)<sup>2</sup> (based on desktop simulations). Actual bandwidth will vary due to factors such as customer equipment and route.

We offer you control with the choice to Bring Your Own (BYO) compatible equipment<sup>4</sup> and self-manage corresponding lit capacity. Ideal for network carriers and hyperscalers seeking high bandwidth backhaul, and if you wish to maintain control over your terminating equipment without the need to deploy amplification equipment.





Flexibility to secure
additional spectrum
capacity with diverse
unprotected paths
currently in construction.

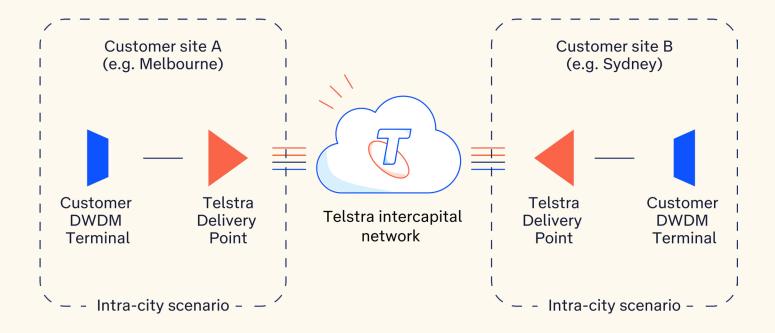


Bring Your Own (BYO) compatible equipment<sup>4</sup> to customise your network setup, reducing vendor lock-in.



Integrate with existing infrastructure, ready for next-gen technologies with dedicated spectrum, adaptable configurations, and spectrum privacy.





### Custom spectrum to meet your growing data demands.

- Increase operational flexibility, tailor your configurations, and avoid vendor lock-in as you BYO compatible equipment<sup>4</sup>, and control equipment upgrades.
- Stay agile with rapid capacity scaling and expand network capacity as data demands grow.
- Enjoy dedicated spectrum slice for secure point-to-point transmission with diverse unprotected paths planned, using Telstra optical equipment.
- Expand your networks' capacity without the need for you to build your own fibre, accelerating time to market.

<sup>&</sup>lt;sup>2</sup> Bandwidth is based on desktop simulations. Actual bandwidth will vary due to factors such as customer equipment and route.

<sup>&</sup>lt;sup>4</sup> BYO equipment requires evaluation by Telstra InfraCo before deployment.



### Maximum control and flexibility, backed by expert support for your connectivity needs.

Aura Dark Fibre is the highest capacity, full customer-managed option from the Aura Network product suite, providing you with a dedicated part of the Aura Network to transmit data at over 60 Tbps<sup>2,3</sup> between capital cities (based on desktop simulations), with the option for regional on and off ramps. Actual bandwidth will vary due to factors such as customer equipment and route.

Our dark fibre service puts you in control – from providing the compatible equipment to architecting your network and configuring the transmission technology, protocols, and features, with equipment maintenance managed by you.





High-performance fibre connectivity on express network between capital cities, with Dark Fibre and In-Line Amplifier (ILA) Colocation for backhaul solutions.



**Express transmission speeds** per fibre pair.



Flexible endpoints to help connect to thirdparty data centres, customer facilities, or Telstra InfraCo sites with no managed electrical or transmission devices.



#### **In-Line Amplification Colocation**

Our In-Line Amplification (ILA) Colocation product offers a licensed, powered rack in secure Telstra InfraCo facilities strategically located along each Aura Dark Fibre path to enable customers to install and manage their own amplification equipment.

Various rack configurations with different dimensions and power allocations are available in conjunction with the Dark Fibre offering. Each licensed rack is equipped with secure e-lock access and integrated alarming systems, for operational security and reliability.

#### Create your own fibre network, using ours.

- Enjoy control as you manage your own network architecture and network capacity.
- Customise your configurations for speed requirements, as you BYO compatible equipment<sup>4</sup>
- Secure dedicated fibre pairs only used by you enabling tighter security, with the ability to scale bandwidth for future needs.
- Prioritise resiliency with point-to-point fibre offering lower latency, combined with Service Level Agreements (SLA) of up to 99.95% target (excluding scheduled maintenance).6



<sup>&</sup>lt;sup>2</sup> Bandwidth is based on desktop simulations. Actual bandwidth will vary due to factors such as customer equipment and route)
<sup>3</sup> Our desktop simulation for the Sydney to Melbourne ULL Express link has set a new benchmark for fibre capacity over long-distance networks at over 83 Tbps per fibre pair (May 2024).

<sup>&</sup>lt;sup>4</sup> BYO equipment requires evaluation by Telstra InfraCo before deployment.

Target availability is based on a rolling 12-month period. Telstra makes no guarantee or representation about the actual availability. Service availability target (SLA) is based on customer faults lodged and verified by Telstra InfraCo.



Feature	Aura Wavelength	Aura Direct Spectrum	Aura Dark Fibre
Connectivity	Connects PoPs through low to mid-capacity, using Telstra-managed point-to-point connectivity, with advanced optical technology	Connects PoPs through mid to high-capacity optical spectrum, supporting customer-managed bandwidth needs	Connects PoPs through high to very high-capacity fibre, including housing customers equipment at ILA Colocation sites
Bandwidth <sup>2</sup>	Low to mid bandwidth 1 Gbps, 10Gbps, 100Gbps and 400 Gbps <sup>5</sup>	Mid to high bandwidth allowing scalable bandwidth from approximately 3.8 Tbps (one-eighth fibre pair) to 15.2 Tbps (half-fibre pair)	
Service availability target <sup>5,6</sup>	99.7% (Unprotected) 99.95% (Protected - in construction)	99.7% (Unprotected)	99.95% (Unprotected)
Coverage <sup>7</sup>	Metro / Inter-Capital / Regional / nbn® POIs. Sydney to Canberra Aura Network coastal route is available. Canberra to Melbourne and Melbourne to Sydney coastal route planned for second half CY 2025	Metro / Regional / nbn® POIs. Sydney to Canberra Aura Network coastal route is available. Canberra to Melbourne and Melbourne to Sydney coastal route planned for second half of CY 2025	Metro / Regional / nbn® POIs. Sydney to Canberra Aura Network coastal route is available. Canberra to Melbourne and Melbourne to Sydney coastal route planned for second half of CY 2025
Network resilience	Unprotected available, Protected and Core Restoration in construction	Diverse Unprotected paths in construction	Diverse Unprotected paths in construction
Interfaces supported	400 GBase-LR4/FR4 100 GBase-LR4 1000 Base-SX 850nm MMOF 1000 Base-LX 1310nm SMOF 10 Gbps E LR/LW 1310nm SMOF 10 Gbps ER/EW 1550nm SMOF	DWDM Line Interface	Most DWDM equipment providers



Feature	Aura Wavelength	Aura Direct Spectrum	Aura Dark Fibre
Capacity upgrades	Rapid capacity scaling with no new fibre installations	Upgrade your equipment to take advantage of new technologies within their existing spectrum slice. Ability to purchase additional spectrum slice as needed	Upgrade your equipment as required and take advantage of the next technology leap
Operational control	Managed service with excellent service assurance terms	Bring your own compatible equipment (BYO) <sup>4</sup> and control your equipment and network setup	Managed by customer. Remote services available on request
Proactive monitoring	24/7 fault repair (if needed) by dedicated teams at our Global Operations Centre	24/7 fault repair (if needed) by dedicated teams at our Global Operations Centre	24/7 fault repair (if needed) by dedicated teams at our Global Operations Centre
Topology	Point-to-Point	Point-to-Point	Point-to-Point
Access technology	Fibre (DWDM)	Fibre (DWDM)	Fibre
Rackspace requirements <sup>8</sup>	Customer equipment dependent	Customer equipment dependent	Customer equipment dependent

<sup>&</sup>lt;sup>2</sup> Bandwidth is based on desktop simulations. Actual bandwidth will vary due to factors such as customer equipment and route.

<sup>&</sup>lt;sup>3</sup> Our desktop simulation for the Sydney to Melbourne ULL Express link has set a new benchmark for fibre capacity over long-distance networks at over 83 Tbps per fibre pair (May 2024).

<sup>&</sup>lt;sup>4</sup> BYO equipment requires evaluation by Telstra InfraCo before deployment.

<sup>&</sup>lt;sup>5</sup> 400Gbps services are available on the eastern seaboard (Melbourne, Sydney, Canberra, Brisbane, and Adelaide). They are available in an unprotected service topology only.

<sup>&</sup>lt;sup>6</sup> Target availability for all three Aura Network products is based on a rolling 12-month period. Telstra makes no guarantee or representation about the actual availability. Service availability target (SLA) is based on customer faults lodged and verified by Telstra InfraCo.

<sup>&</sup>lt;sup>7</sup> Coverage is subject to feasibility study and approval.

<sup>&</sup>lt;sup>8</sup> Minimum rack space requirement is 300 mm (W), 600mm (D), 1007mm (H). Maximum rack space requirement is 600mm (W), 600mm (D), 2195mm (H). Customer equipment must support the ETS 30 119-2 standard for telecommunications equipment.



# Simplifying Complex Connections

Our customer portal (Telstra InfraCo Hub) caters to your digital journey. With built-in user management, you can easily assign role-based access—empowering teams to manage services, track progress, and stay in control. It's all about simplifying operations, enhancing visibility, and putting you in charge.

#### You can access these functions via our customer portal



#### **Assurance**

Service details, outages (service specific and major outages), and fault ticketing



#### **Billing**

Billing enquiries can be made through Telstra InfraCo Hub



#### **Order Updates**

Fibre products order status



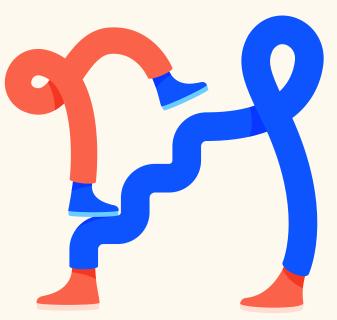
#### **Documents**

All approved users can access the Telstra InfraCo Hub



#### **Training**

Your Service Manager will arrange training for your teams. More information available at Telstra InfraCo Hub





# Engineer tomorrow with us



#### **Empowering future technologies**

Our Connected Future 30 Strategy will see us double down on connectivity, and radically innovate in the core of our business. We will do what we do best, and that is adapt and lead to shape the future of connectivity. We will push the boundaries on our network leadership, and make it simple to get the connectivity you need in a fast changing environment. The Aura Network will support Australia's future prosperity and digital growth by providing enormous new capacity to support the AI era.



#### Leverage our local expertise

We offer guidance and support from our own experience working with complex technical requirements and streamlining operations to help navigate these challenges. We partner with the best, so you receive the highest quality support and innovative solutions. We follow industry best practices and have the capability to manage complex business requirements. Telstra's 24/7 Global Operations Centre (GOC) provides capability for end-to-end network monitoring, maximising uptime, fault restoration, change management, and provides a great customer experience.



#### **Customer success together**

We have digital product capabilities to offer digital engagement and API offerings for how you interact with the Aura Network product suite. We have enabled digital handover and acceptance of services (for Aura Direct Spectrum and Aura Dark Fibre), online ticketing and the ability to track and manage your services via the Telstra InfraCo Hub or our APIs.



#### Big Data. Small Footprint.

We are targeting a reduction in absolute scope 1 and 2 emissions by 70% and absolute scope 3 emissions by 50% by 2030. Target set against 2019 Financial year baseline. For more information, visit **Telstra Sustainability**.



Partner with us and experience the benefits of a robust, resilient, and secure network designed to meet the demands of tomorrow.

# Let's engineer tomorrow together.

For more information, please contact your Telstra Account Team or visit our website.