



Dark fibre services guide

How enterprises and government organisations can provide fast, secure access to their data networks — now and in the future

VOCUS

The huge data growth challenge

Global data creation is projected to nearly triple between 2020 and 2025, [surpassing 180 zettabytes¹](#). Enterprises, government organisations, and content providers are leading this growth, needing to deliver services with unprecedented speed, security, and reliability.

Organisations face rising demands for video conferencing, secure collaboration tools, and digital services essential for managing remote workforces and public services. This shift reflects a broader change in how governments and businesses interact with citizens and employees in a connected world.

Managing increasing data needs requires fast, secure, and seamless connectivity to support complex operations and [hybrid work environments²](#). The focus has shifted from merely deploying bandwidth to core data centres to ensuring reliable access to data anywhere, demanding resilient, low-latency networks critical for government and enterprise operations.

These advancements drive economic growth, bridge digital divides, and empower underserved communities, fostering an inclusive digital environment that benefits both public and private sectors.



Meeting demand for dark fibre

Vocus has been at the vanguard of the data growth challenge as we have helped our customers navigate through the maze of connectivity and other technology issues and solutions. We are experts in dark fibre, the ideal solution to help organisations meet these challenges and provide the backhaul capacity needed to support ever more data-dense services. The industry agrees, with global demand for dark fibre [expected to grow at 11 per cent⁴](#) annually for the rest of this decade.

But with a variety of dark fibre providers to choose from, what makes one better than another?

In our view, that comes down to four criteria.

Your dark fibre provider should offer:

- » Flexible, customised design and connectivity that can meet even the most complex requirements
- » Fixed, accurate pricing before you order, and no bill shock after deployment
- » An outstanding fibre build team that's willing to do what others will not — and that delivers fibre on spec and on time
- » Fibre where you need it, when you need it, including thousands of geographically diverse routes that enable highly redundant networks.

As one of Australia's largest independent dark fibre providers, Vocus delivers on these criteria.



Why Vocus?



Flexible, customised design

We can provide fully tailored solutions that can meet even the most complex requirements.



Fibre delivery experts

Since 2007 our fibre build team has earned a reputation for excellence. We design and build connectivity on time and within your budget.



Accurate predictable pricing

We guarantee fixed, accurate pricing before you order – no hidden service fees, or bill shock after deployment.



Fibre where you need it

Our dark fibre connects 120+ datacentres and 5900+ buildings. With a network distance of 14,600km we can offer thousands of diverse dark fibre routes across Australia.



Continued investment

We are awarded for our continued investment in fibre connectivity Australia-wide, multiplying our capacity by a factor of 20 in major areas.



Personalised Service

You are assigned a dedicated fibre expert who will manage your account with high touch service.



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Flexible, customised design

Our years of success — with thousands of customers — help us provide the flexibility to ensure that your dark fibre service will meet your needs now and into the future.

Dark fibre offers virtually unlimited bandwidth, offering exclusive use of secure, point-to-point services that link edge to cloud, edge to core, and edge to edge.

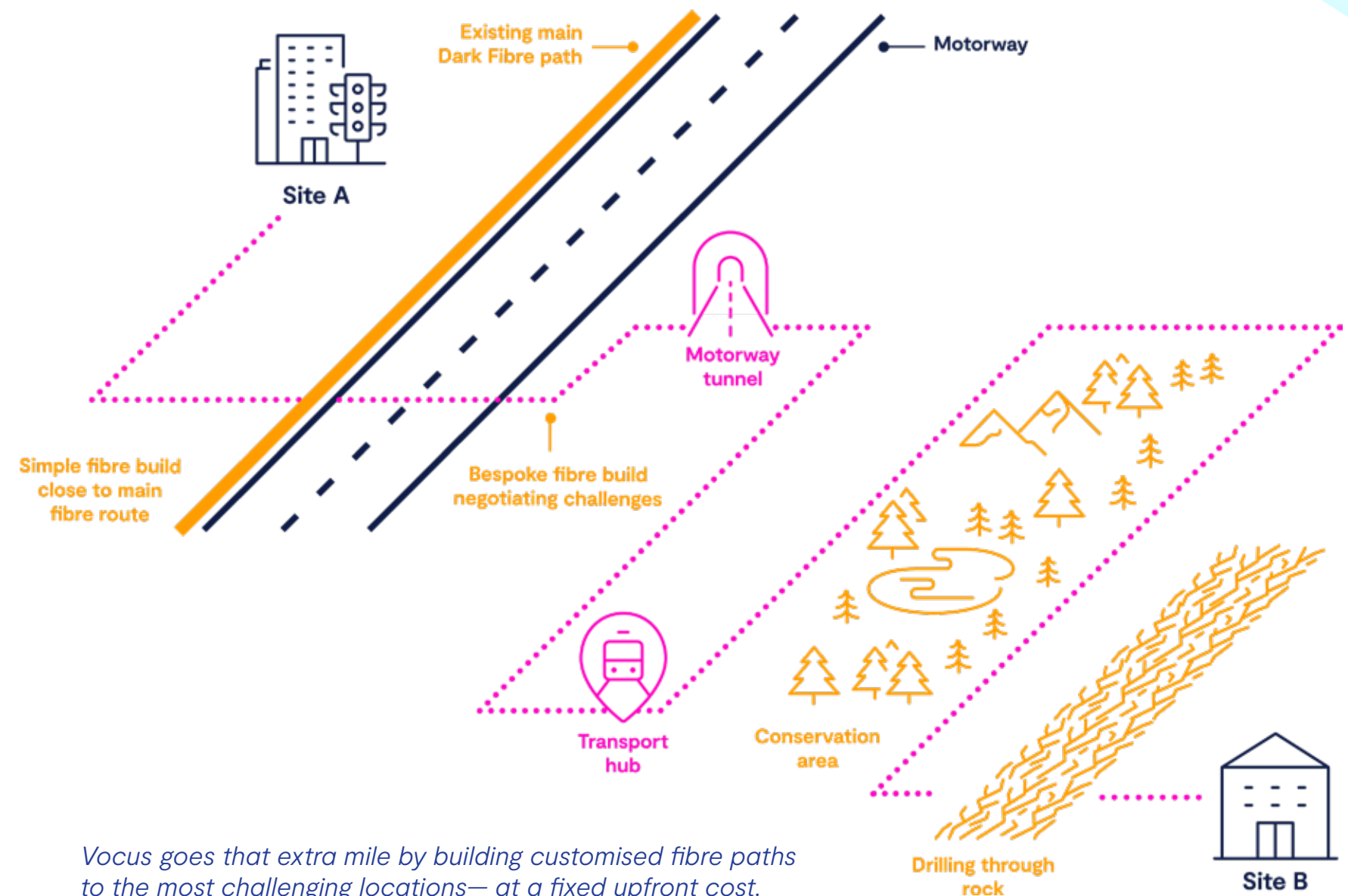
If you need to integrate connectivity to new locations, we're happy to work with you to design and deploy new dark fibre to suit your unique requirements.

We have helped customers with prescriptive minor requests, such as moving fibre to the other side of a roundabout, or providing physical redundancy to a data centre using two separate fibre paths provisioned at an exact distance from each other. And we have helped them with significant infrastructure investments, such as suggesting one or several routes to reach a major data centre on the other side of Sydney Harbour.

You won't get that level of flexibility from other large providers, whose networks tend to follow specific routes and push customers to accommodate existing routing.

Whether you want the shortest path, the one that ensures the lowest latency, or a second path to increase the redundancy of an existing service, we will work with you to find the best options.

Don't worry if your requirements change as your project progresses. It happens to everybody — and we will happily work with you to ensure you continue to have the best connectivity for your needs. That includes not only developing customised paths, but doing so with extremely accurate cost estimations that reflect your need for flexibility.



Vocus goes that extra mile by building customised fibre paths to the most challenging locations— at a fixed upfront cost.

Fibre delivery experts

Having the best and most flexible dark fibre technology is one thing, but the real value of Vocus lies in the people we employ to help you leverage that technology to solve your business challenges.

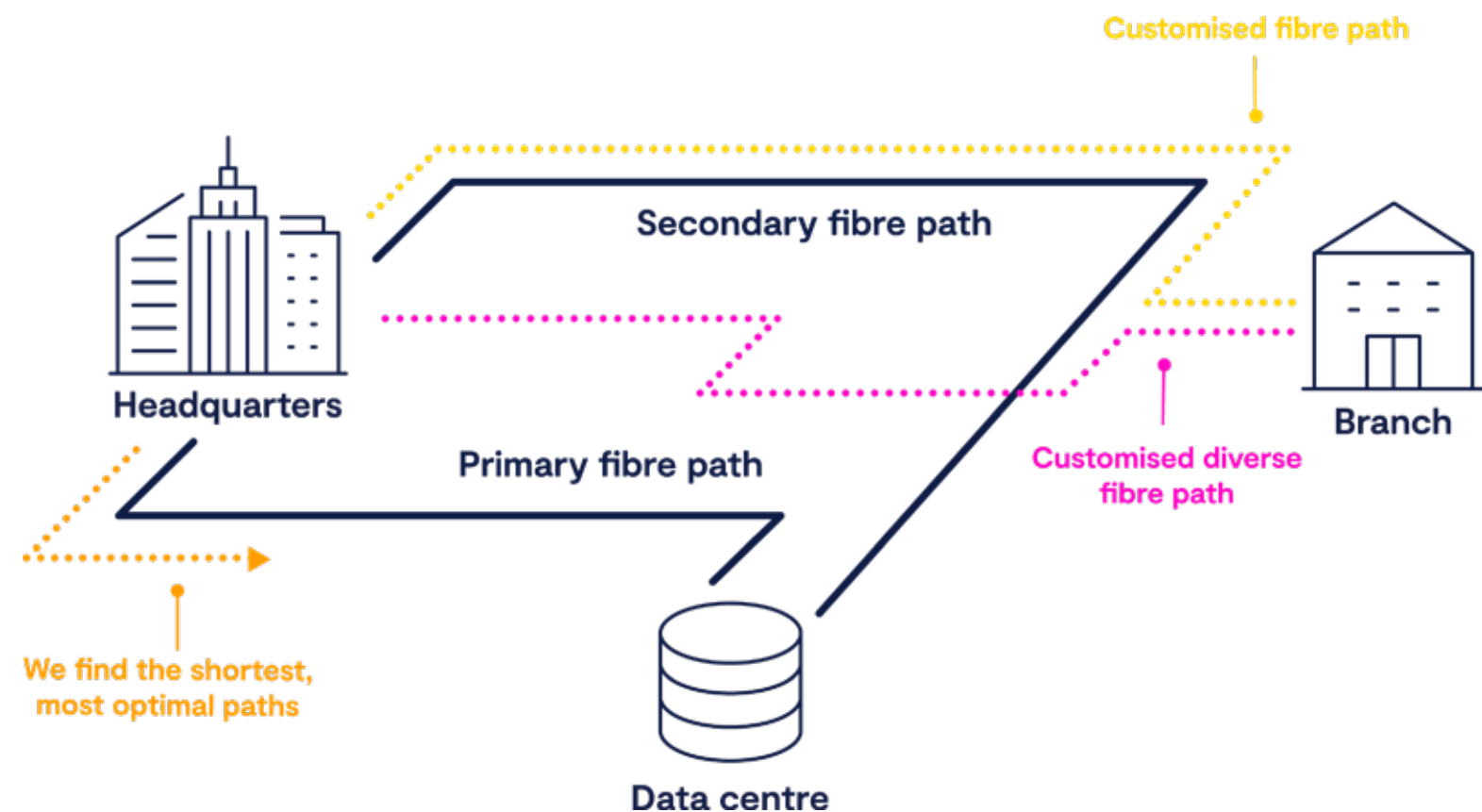
Vocus has been in the fibre market since 2007. And our years of successful implementations have earned our fibre build team a reputation for excellence — so much so that many of our new projects come from word-of-mouth referrals from satisfied customers.

As technical experts of the highest order, our team knows how to design effective solutions for the most complex situations. No matter where your points A and B are located, our team will find the shortest path and lowest latency way to connect them with dark fibre.

And we will do that whether it requires long fibre runs, boring through hardrock or under highways, circumventing transport hubs or specially protected areas, traversing bridges, underwater runs, or more.

With teams of state-based fibre experts available to bring their local knowledge to any project, we have a comprehensive understanding of local planning regulations; state development and environmental protection regulations; building, transport, and highway regulations.

By anticipating potential obstacles before they become big problems, our fibre build team's knowledge is one of our most valuable assets — and we are tapping this knowledge every day to help large businesses, hyperscalers and wholesale network service providers design robust, redundant networks offering full carrier diversity.



Vocus' fibre build team will recommend, design and provision customised paths to branches, data centres and other premises, including additional paths for redundancy

Fixed, accurate pricing

Every build is different, which means calculating the right price is an art in itself. Dark fibre runs often span kilometres across rugged landscapes, underwater, and through dense urban areas.

Despite this, we're so confident in our pricing that we guarantee to absorb the costs of any unforeseen issues that cause costs to blow out above our agreed pricing.

But we can afford to wear the occasional price blowout because our planning expertise allows us to accurately calculate delivery costs.

Our fibre build team has extensive local knowledge and can calculate the exact cost per meter for installing dark fibre in all areas around Australia.

No matter where you need to run dark fibre, chances are that we have been there and done that already.

*We guarantee fixed pricing before you order.
No hidden service charges or bill shock.*



Fibre where you need it

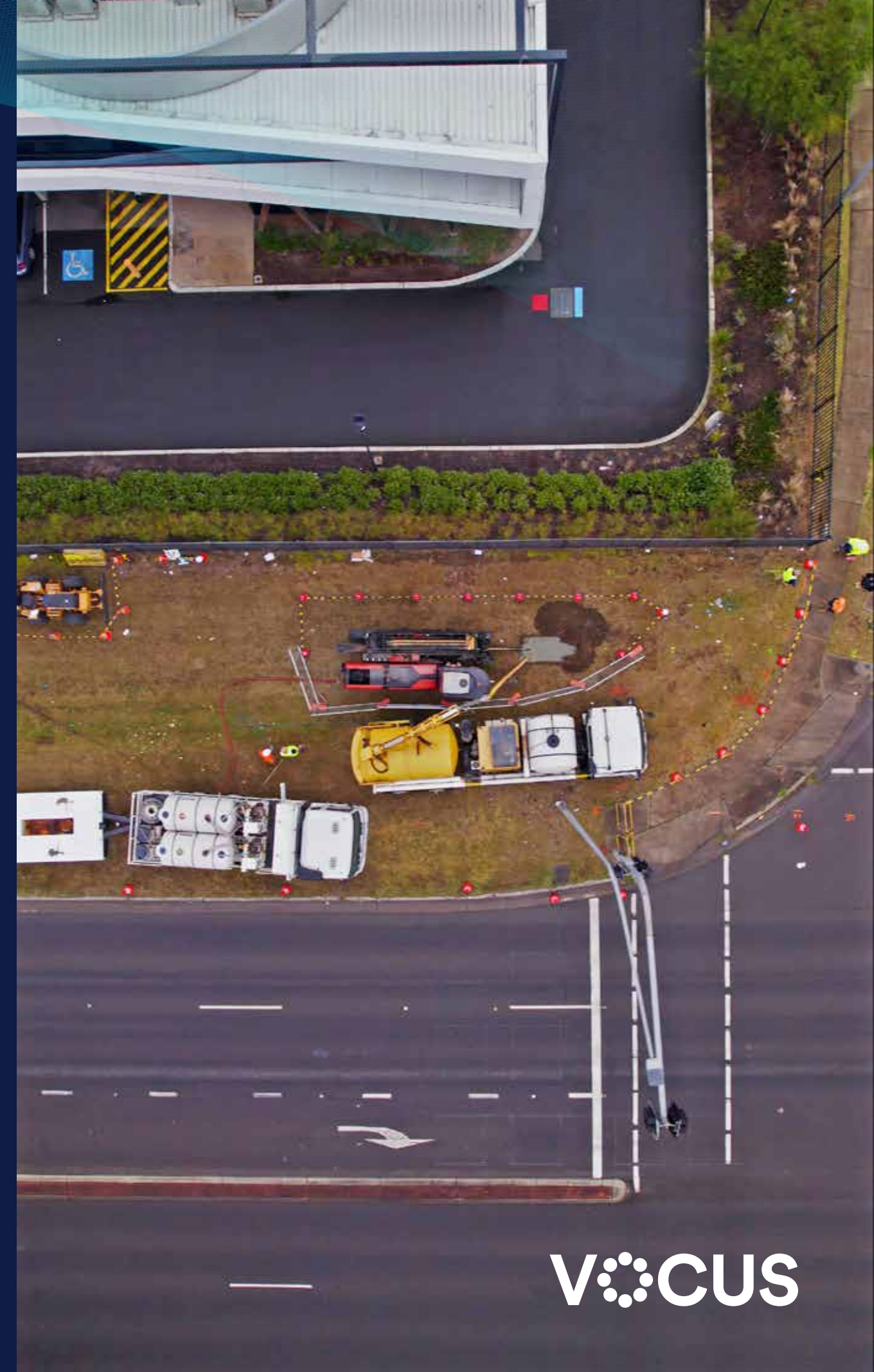
When it comes to meeting the demands of contemporary digital transformation, network flexibility is key. But how flexible can you be when your network provider gives you a menu of potential dark fibre routes and won't deviate from that list.

At Vocus, we are less about selling access to existing fibre than about deploying whatever fibre is necessary to meet the needs of our customers.

We already operate 14,600 kilometres of dark fibre, with over 5900 buildings and 120+ data centres connected around Australia enjoying fast, scalable, low-latency bandwidth that grows with their needs.

Our expansion to date has resulted in a fibre network with far more options for network diversity than our competitors. While other major providers offer hundreds of different pre-defined fibre paths on high-demand routes, Vocus offers thousands of existing routes to choose from — and we are adding more all the time.

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Case Study: Tesseract

Tesseract, a major Australian cybersecurity and managed IT services provider, plays a crucial role in ensuring the integrity and protection of its clients' data..

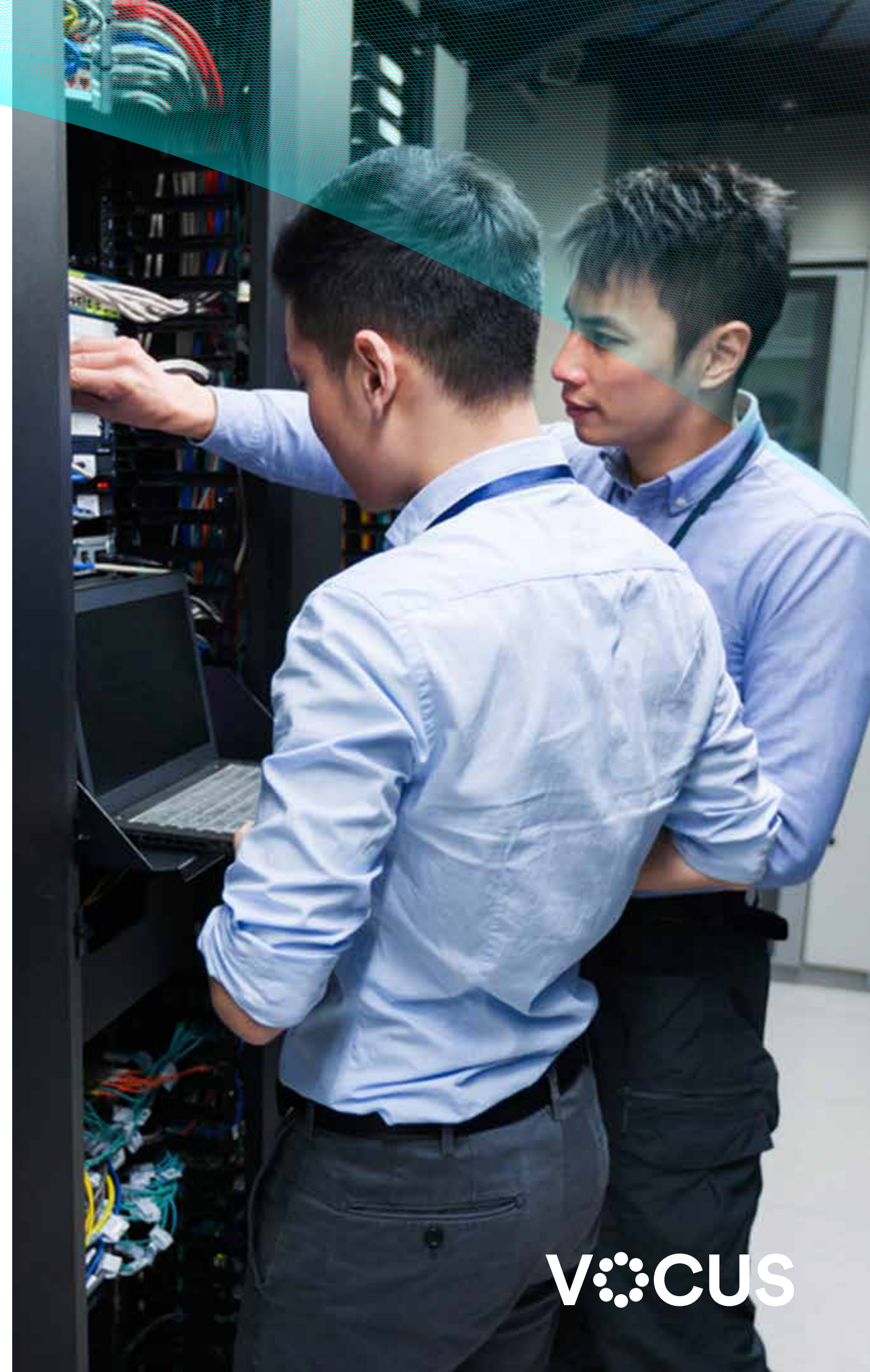
One of Tesseract's major customers, was faced with the closure of a third-party data centre. And needed to migrate all its data and workloads to a new data centre. They also had challenges with their WAN infrastructure.

Tesseract designed a solution with a triangle of Vocus dark fibre linking three facilities: the company's head office, its own data centre, and the Vocus data centre it was migrating data to. A temporary Vocus dark fibre connection from the old data centre was also provisioned, to allow the data to be transferred at super high speed to the new data centre.

"By giving our client this speed and a redundant design, it meant they could have confidence they'd be able to access their files even if one of the links was unavailable. We were able to immediately go to 10Gbps, with the capacity to go much faster in the future simply by swapping over the network equipment at either end. It doesn't cost us any extra from Vocus if we do that."

Paul Cosgrove, Tesseract

"Vocus provides affordable pricing and flexible designs to enable us to provide solutions for our customers."



Investing now to build the network of the future

One of the three largest providers of Australian Internet traffic, we support mission-critical applications and core connectivity services between all mainland capital cities and regional centres — with extensive path redundancy to ensure the highest possible availability.

Our network portfolio includes full ownership of the 60Tbps Australia Singapore Cable — which we recently extended from Perth to Darwin in a \$100 million investment that created the Darwin-Jakarta-Singapore Cable (DJSC) system, which will support the Commonwealth government's strategy of positioning Darwin as a major gateway to Asia-Pacific markets.

As well as connecting Australia to the world, we have also invested significantly to build out a nationwide network with unrivalled capacity and connectivity in the places where it is needed the most — catering for the needs of hyperscalers as they continue to expand.

For example, we recently completed our 12th crossing of Sydney Harbour, linking the northern and southern parts of the city with a 720 fibre core submarine cable that provides a significant boost to our dark fibre capacity in Australia's largest telecommunications market.

We also recently upgraded our Melbourne to Adelaide cable route with 800Gbps technology — and committed to doubling this to 1.6Tbps in the future to stay ahead of petabyte-scale applications such as cloud infrastructure and generative AI, which will pressure data centre and network operators as it grows to produce 10% of all data globally within a few years.



Australia's fibre expert

Vocus has a legacy of success in providing fibre across the length and breadth of Australia.

Whether your business relies on providing bandwidth to businesses, government, or service providers, your forward planning is going to be irreversibly changed by the need to accommodate data volumes that continue to grow at record pace.

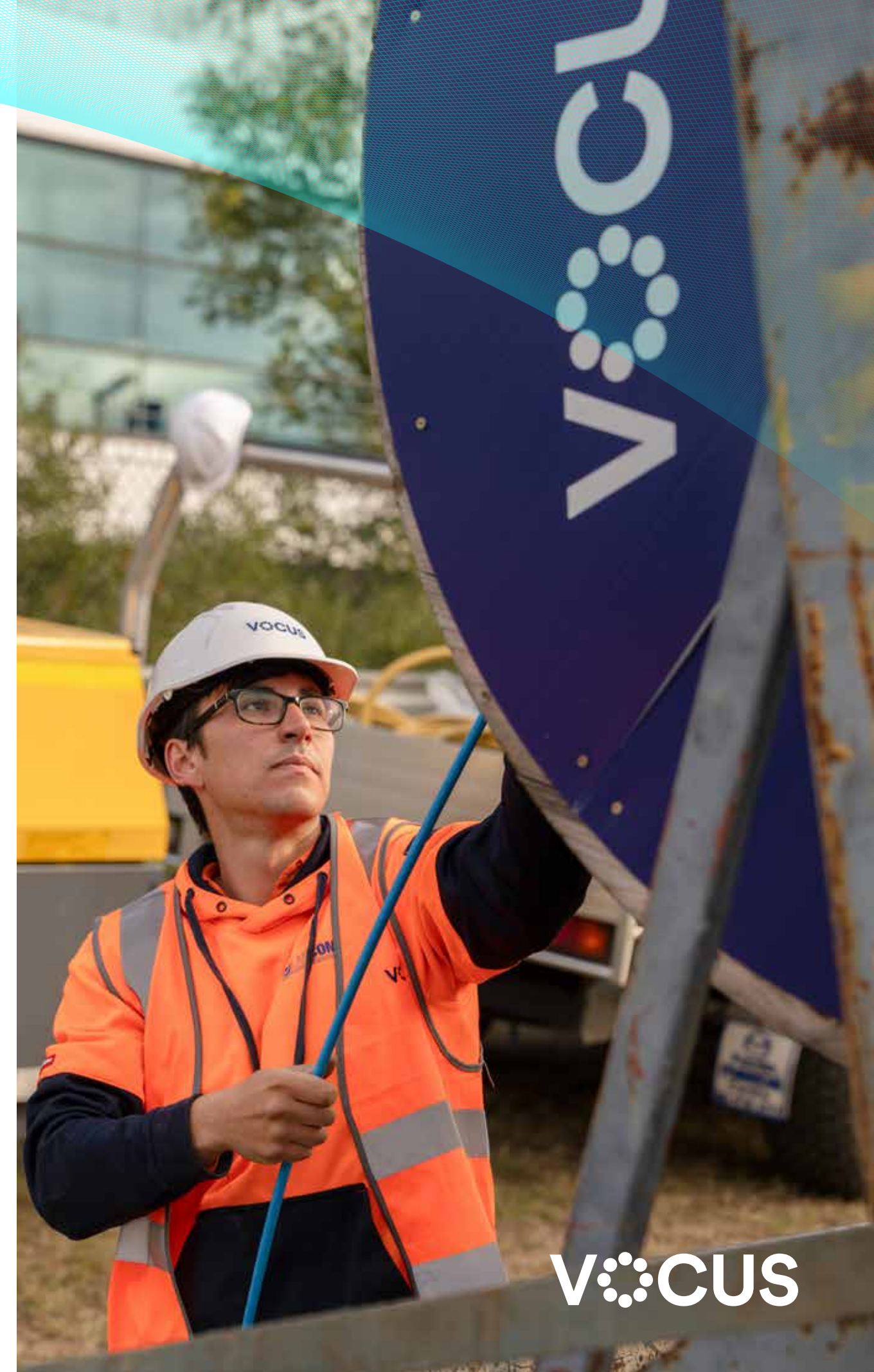
Time and again, Vocus has come through for our customers and partners — delivering robust, redundant dark fibre network solutions that provide enough bandwidth today, and far more spare capacity to accommodate the continuing growth in data demand.

By Australia's most flexible, industry-leading core network with the proven expertise of the Vocus fibre build team, we can deliver the redundant, reliable bandwidth you need, wherever you need it — ensuring that your customers remain ahead of the data curve as they pursue their digital transformation journey to wherever it takes them.

Our expansion to date has resulted in a fibre network with far more options for network diversity than our competitors. Whereas customers of one major provider can choose from around hundreds of different pre-defined fibre paths on high-demand routes, for example, we offer thousands of existing routes to choose from — and we are adding more all the time.

Want to learn more about how we can help you?

Contact your Vocus Account Manager,
[request a meeting](#), or call us on 1300 88 99 88



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About Vocus

We understand enterprises and government organisations want access to fast, secure network solutions and require premium personalised service. Vocus is a leading specialist fibre and solutions provider, and can assist you with complex fibre builds, network migrations and designs. With a world-class team of experts, we challenge convention and do things differently to make brilliant solutions simple.

