

Satellite Ground Stations Infrastructure Services

Your complete solution for building satellite infrastructure



Satellite communications are poised to transform global connectivity with mega constellations in multiple orbits.

Whether you are a global space pioneer or a domestic satellite player, Australia is the ideal location for satellite ground stations in the Asia Pacific region, with its vast open land areas and minimal obstructions to the skies.

Telstra InfraCo works with you to identify suitable sites with licensed spectrum, station construction and fibre backbone deployment, data centre connection, testing and activation before handover. Choose how much of the infrastructure you want to manage, or use our services and support to help keep your sites operating smoothly. Realise your satellite ambitions through our experience of satellite connectivity projects, infrastructure design and construction and access to our fibre network across Australia.

Key solution features



Site acquisition and construction

We'll work with you based on your spectrum allocation. Sites can include greenfield sites or spaces on our large number of fixed network sites. We'll construct the sites to meet agreed specifications.



Comprehensive connectivity options

Choose from lit or dark fibre low latency connectivity from the ground station to your data centres. Our vast fibre network means you can deploy faster with less construction.



Colocation at the core and the edge

Localise your colocation with Telstra InfraCo or third party data centres and our fixed network sites throughout Australia.

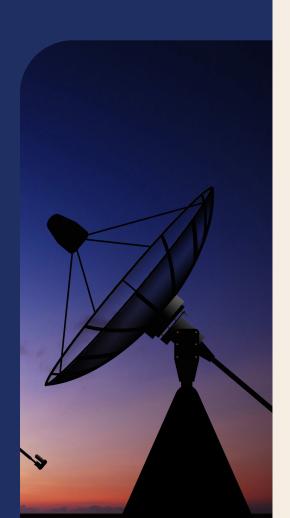


Service levels to suit your needs

We have service level options to fit into how you want to manage your infrastructure. If you want to manage all active equipment on your network, we will provide field support to help ensure service continuity.



We offer everything you need to build your infrastructure your way, from equipment rooms and data centres to fibre and internet connectivity. Connect your ground station with access to assets including a network of over 250,000 kilometres of fibre, links to 133 third-party and Telstra owned Australian data centres, and has access to 400,000 kilometres of sub-sea cables.



Why partner with us on your satellite project



Field teams around Australia

We support your business with our comprehensive operations team throughout Australia.



Experience owning and operating satellite ground stations

Telstra operates satellite ground stations across Australia including Oxford Falls in NSW, Gnangara and Merredin in WA and Bendigo in VIC, and we have built hundreds of additional custom ground stations in remote locations. These provide diverse international and domestic services to enterprises and Australian government departments.



Complex program management

We provide the capabilities, resources and experience to deliver large scale telecommunications projects. Our complex program management team helps cover requirements across safety and the environment, program and contract management, master scheduling, quality management and field supervision, as well as offering dedicated nationwide support.



Intercity rollout

We are building a new high capacity, ultra-low latency intercity network. New dual terrestrial fibre paths will boost intercapital and regional capacity to support the anticipated growth in bandwidth over the next 25+ years.

Our new intercity fibre will increase existing capacity and enable business on the world-stage with high-speed, ultra-low latency connectivity with target transmission rates up to 650 Gbps — six times the common rate of 100 Gbps today.



Decades of infrastructure expertise

Our decades of experience in infrastructure design, construction, customisation, protection and project management tells us what works on the ground.



Colocation sites throughout Australia

We have thousands of fixed network sites across Australia and we are opening up key sites for customers to use at the edge with their choice of network provider.

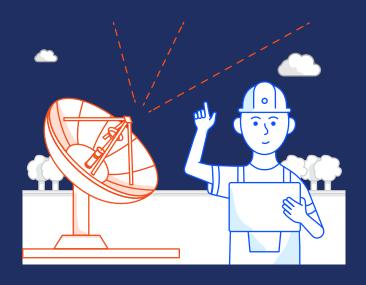
Technical overview

Connectivity

- Low latency network connectivity access e.g. <5 milliseconds one way
- Option for fibre connectivity between customer point of presence and landing station. Includes wavelength services, cross-connects and an option for colocation of equipment in Telstra InfraCo sites and/or 3rd party data centres
- Diverse paths available

Site management

- Security fully fenced perimeter, secure / controlled access, option for surveillance camera monitoring, outdoor lighting
- On-site hut within the ground station area or exchange access for equipment racks – accommodates network and data processing equipment
- High power resiliency. 99.99% availability (UPS and/or back-up generators), HVAC / temperature & humidity controlled, minimum 2N redundancy
- Expand your footprint over time with additional antennas
- Ongoing preventative and reactive maintenance support, site maintenance (managed service), option of dedicated field service representative, reporting
- We offer a variety of service level assurances, including for outages and response times
- Fire detection and suppression



Site acquisition, preparation and construction

- We offer a large number of existing fixed network sites with fibre connectivity across Australia
- We can procure or lease greenfield sites on your behalf
- We deliver level, cleared area into space
- We undertake all environmental assessments, site surveys, council permits, geo-tech surveys, Aboriginal and Torres Strait Islanders' heritage investigations and building applications
- Foundations for satellite antennas (concrete slab)

Our digital infrastructure footprint

