

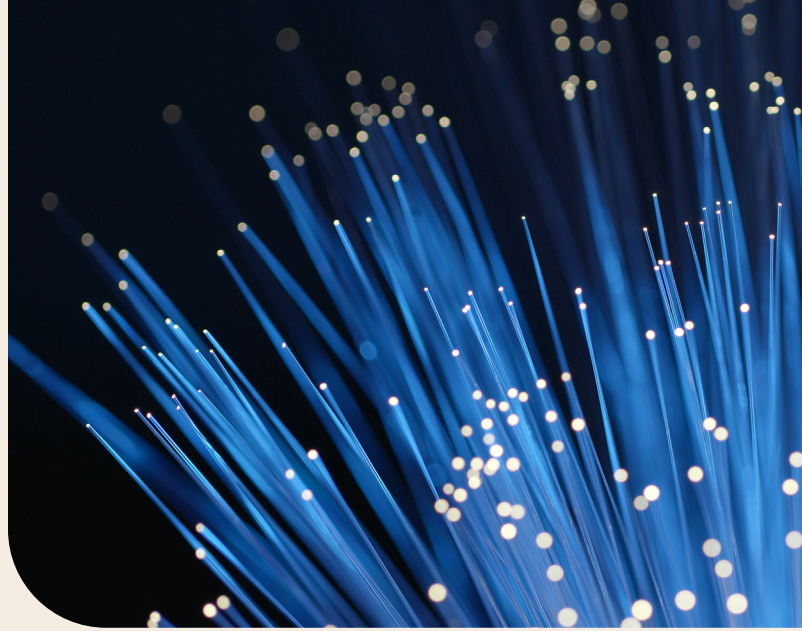
# Telstra InfraCo

## Intercity Dark Fibre network

Over the next five years to 2027, Telstra will be boosting its national fibre network, adding up to 20,000 km of new route sheath. The project is set to improve the reach and size of our existing extensive optical fibre network. The new fibre paths will boost capacity and speed to meet the needs of tomorrow's connectivity.

Building upon the existing fibre network and leveraging substantial sub-sea routes, the new fibre technology will enable ultrafast connectivity between capital cities as well as into regional and remote communities.

Using leading edge ultra-low loss technology, the hyper-connected network will support remote working and education, health services, high-definition entertainment consumption and online gaming and IoT use cases such as mining and agriculture.



### Express network

An ultra-low loss fibre (Corning SMF-28 ULL wAB) for the new Intercity fibre

### Foundation network

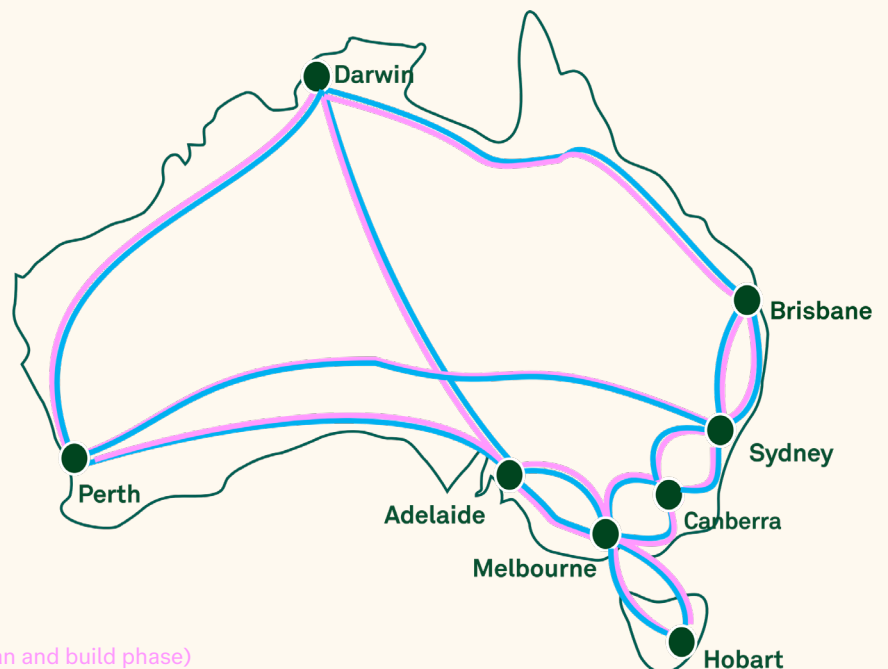
A low-loss fibre (Prysmian BBA2) for renewal/upgrade of the existing, original fibre

Telstra Cable



— Express network path (in plan and build phase)

— Foundation network path (in plan and build phase)



# Features & benefits



## Express network

Will enable direct high-data fibre connectivity between capital cities (with no breakouts).



## Fast speeds

Express transmission between Australia's biggest cities with target speeds of up to 650 Gbps per channel which can equate to up to 50Tbps per fibre pair.



## Accessibility & resiliency

National ramp will enable break out approx. every 5km at every optical joint/building. Equating to ~4,000 ramp on & off points nationally without interfering with the network.



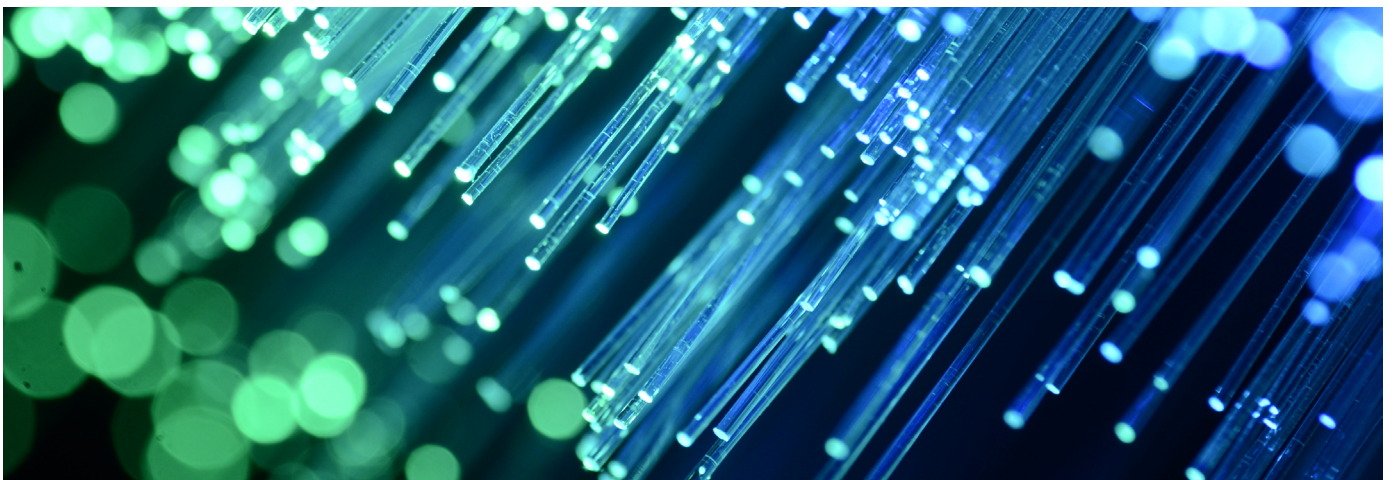
## Durability

Cable design is proven to withstand Australia's harsh environmental conditions and will reduce carbon footprint.



## Monitoring

Real-time optical fibre performance metrics that enable predictive action and rapid fault localisation.





## InfraCo Intercity technical sheet

Fibre Feature	Express (Ultra – Low Loss )	Foundation (Low Loss)
Optical Attenuation		
Maximum Fibre Loss @ 1550nm	0.16dB/km	0.18dB/km
Maximum Fibre Loss @ 1625nm	0.18dB/km	0.22dB/km
Optical loss per splice	0.05dB average 0.1dB maximum	0.05dB average 0.1dB maximum
Maximum Connector Loss	0.15dB per connector	0.15dB per connector
Bands	C (1550nm) L (1625nm)	Full Spectrum
Standards	G.654.C with macro-bend conforming to G.657.A1 G.650-2 Appendix IV	G.657.A2 G.652.D
Wavelength Capacity (based on Ciena 6500 WL5e-Melbourne –Sydney)	43 x 600G C-Band 42 x 600G L-Band	43 x 550G C-Band 42 x 550G L-Band
Cable Cut-off Wavelength cc	1520 nm	1260 nm
Typical Polarisation Mode Dispersion (PMD)	0.04 ps/ $\sqrt{\text{km}}$	0.1 ps/ $\sqrt{\text{km}}$
Diversity options:	2 fibres (1 pair) single path in a route- non diverse 4 fibres (2 pairs) using 2 geographical paths on a route - diverse (to be requested in the order confirmation)	