

# Dark Fibre

Future-proof your network

---

## Fibre specifications

The Aurora Telecom fibre network is predominantly G.652.D fibre, with other types available in certain locations. For attenuation, chromatic dispersion and polarization mode dispersion (CD/PMD), specific details are provided below.

### Primary fibre type and performance

#### Fibre Type: G.652.D (low loss)

- Attenuation:
  - at 1310nm: <0.32 dB/km
  - at 1550nm: <0.18 dB/km
  - at 1625nm: <0.20 dB/km
- Chromatic dispersion:
  - at 1550nm: <=18 ps/(nm.km)
  - at 1625nm: <=22 ps/(nm.km)
- Fibre polarization mode dispersion:
  - <0.1 ps/√km (ps/per sq. root km)

Other, bespoke, cable solutions have been completed for projects where alternative fibres have been used such as Corning® Leaf® (G.655), G654.E (TXF), G.652.D and G.657.A1 (Ultra).

---

## Service level agreement

- Reputation for consistent uptime and quality performance with low latency
- Fault logging via Aurora Telecom Emergency Maintenance contact number 1800 427 399
- For emergency faults;
  - Initial response, post phone call, is within 60 minutes
  - On-site within two hours
- Aurora Telecom has a service restoration target of 8 hours

---

## The network and diversity

- Aurora Telecom has over 1,600 km of high-quality dark fibre; see map overleaf for route details
- Aurora Telecom's network offers a unique diverse routing that is geographically diverse to competitor networks
- It is ideal as a primary route or a diverse route from a customer's current path
- Co-location facilities with DC battery backup and on-site diesel backup generators

---

## Network resilience

- A combination of optical network monitoring system (ONMS) monitoring of backhaul routes, strict supervision and access controls and the location of certain segments of our fibre network adjacent to the gas network ensure the resilience of our network.
- Due to the strict procedures in place for access and working in the vicinity of a high-pressure gas pipeline, Aurora Telecom's network benefits from a greater level of resilience due to frequent aerial, foot patrols and inspections
- As the network is underground, this minimises the impact of extreme weather events that commonly impact other fibre networks

---

## 24/7 monitoring

- Aurora Telecom use an ONMS for active monitoring of the fibre network with built in alarms and processes to alert and manage any event
- Building management system (BMS) monitoring of all co-locations to immediately alert on all Priority 1 and Priority 2 events
- Full 24/7 NOC monitoring is also in place for 24/7 communication and investigation with field teams ready to mobilise if required

