

# Dark Fibre

## Your Network. Tailored to Your Unique Needs.

EXA Infrastructure operates one of Europe's largest infrastructure footprints. With over 155,000 km of fibre network, including the most modern optical fibre, we can support our customer's ever-increasing demands for growth. Working with EXA Infrastructure is straightforward. We recognise that purchasing infrastructure is a strategic investment and we strive to make the experience as effortless as possible. We pride ourselves on offering commercial, contractual, and operational flexibility to our customers.

### Why EXA Infrastructure Dark Fibre?

Excellent service offering

- Long haul
- Metro
- DC interconnect build
- Bespoke

#### Benefits for the Client

- Unique footprint with dense metropolitan fibre footprints, multiple intercity routes, and pan-continental subsea connectivity.
- Optimum fibre performance using Raman technology with G.652.D and Corning LEAF G.655 in the backbone and metro G.652 optical fibre, supporting in excess of 50Tbit/s per fibre pair. EXA Infrastructure is currently installing latest low and ultra-low attenuation fibreoptics further improving network performance.
- 24/7 Fibre Management using network wide remote monitoring EXA Infrastructure's 24/7 NOC and local field teams execute fast repairs, providing a higher availability to our customers
- Private network build to design, build and operate duct and cable infrastructure. EXA Infrastructure welcomes bespoke customer requirements offering unique possibilities for site or network connections

#### Key Features

##### Long-Haul Fibre

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

- Attenuation: <0.20 dB/Km

- Chromatic dispersion @1550nm:  $\leq 18$  ps/(nm.km)
- Fibre polarization mode dispersion: <0.1 ps/ $\sqrt{\text{km}}$

Fibre Type: Corning® LEAF® (G.655)

- Attenuation at 1550nm: <0.25 dB/Km
- Attenuation at 1625nm: <0.27 dB/Km
- Chromatic dispersion @1550nm: 2.0 - 6.0 ps/(nm.km)
- Chromatic dispersion @1625nm: 4.5 - 11.2 ps/(nm.km)
- Fibre polarization mode dispersion: <0.50 ps/ $\sqrt{\text{km}}$

##### Metro Fibre

- Fibre Type: G.652 (mixed supplier)
- Attenuation at 1310nm: <0.35 dB/Km
- Attenuation at 1550nm: <0.25 dB/Km
- Chromatic dispersion @ 1550nm: <18 ps/(nm.km)
- Fibre polarization mode dispersion: <0.50 ps/ $\sqrt{\text{km}}$

#### Who do we serve?

EXA Infrastructure supports customers in these sectors

- Hyperscale Compute and Social Media backbones
- International service provider backbones
- Subsea backhaul
- FTTH and FTTH
- Datacentres
- Education and research networks
- Defence
- Space tracking stations