



DARK FIBER.

Protected - Redundant - Fail-safe.



With **more than 25 years of experience** in marketing fibre-optic capacities, we are a reliable and high-performing partner when it comes to setting up tailor-made data networks. All in all,

WINGAS currently holds a constant portfolio of

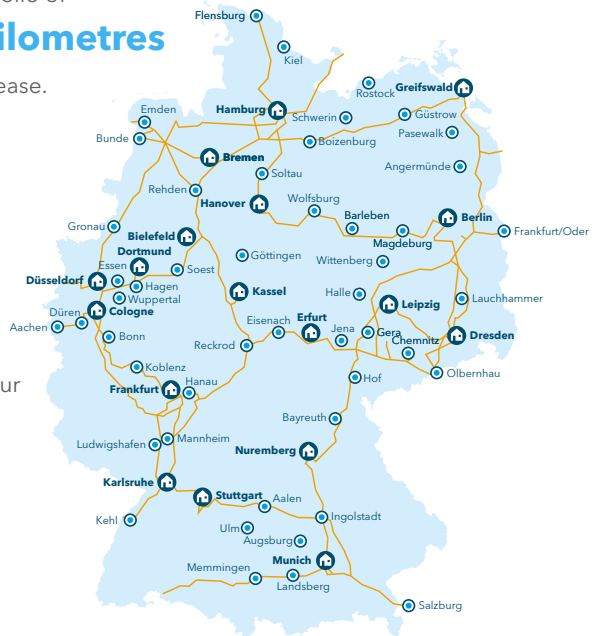
approximately 8,000 kilometres

of fibre-optic network infrastructure for lease.

In addition to the leasing of capacities of our main product, **dark fibres** ("Dark Fiber"), WINGAS also offers

broadband connections. This wavelength runs between defined end points and is excellently suited for the development of rural regions in the route corridor of our **network infrastructure.**

Likewise we offer rack spaces for lease in our telecommunications containers.



Our offer

- Fibre-optic backbone network with numerous options of network interconnection and coupling to other network operators and point-of-presence or

PoP locations

- Use of leased rack spaces along the fibre-optic backbone network for local PoP locations, operation of repeater locations or development of mobile communications networks
- Underground **fibre-optic infrastructure** – mainly laid within the safety zone along a gas pipelines or other transmission lines
- Provision of dark fibres between agreed end points via notification of provisioning (Ready for Service) which includes a measurement report
- Service Level Agreement with assured availability of **99.50%**
- Actual availability of up to **99.98%** due to the laying within the safety zone of gas pipelines
- Monitoring, service and maintenance are carried out by a nationwide operating team and regular aerial survey of our network infrastructure
- Consistent monitoring of the complete network and **24/7 reachability** of our Customer Service Center (CSC)
- Technical support provided by the experts from our WINGAS Optical Fiber Team when it comes to planning, implementation and maintenance

Dark Fiber parameters

- Single-mode fibre cable according to ITU Standard (G.652, G.655)
- Cable containing **48 to 144 fibres** (multiple)
- Maximum fibre attenuation in the cable (w/o connectors and splices): 0.35 dB/km at 1,310 nm; 0.21 dB/km at 1,550 nm; 0.24 dB/km at 1,625 nm
- Chromatic dispersion of the **fibre G.652** (w/o connectors and splices): 18 ps/km*nm at 1,550 nm; 22 ps/km*nm at 1,625 nm
- 100% **underground fibre-optic cable** pulled in conduit
- Repair time per fibre route section **< 8 hours**; maximum repair time per fibre route section including civil engineering work < 24 hours
- Connector: E2000/APC plug – all other plug types possible
- **GIS-based route documentation**, database-controlled fibre management
- Member of BIL eG information system for pipeline enquiries

We would be pleased to send detailed maps of route sections to you on request.

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