

# OPTICAL FIBER



## MANAGE BANDWIDTH WITH YOUR OWN GLOBAL OPTICAL FIBER

**Scale the growing demands for bandwidth with dark fiber. Our Optical Fiber services, delivered from our global IP backbone, will empower your organization to meet modern networking demands.**

### **BUILD YOUR FIBER OPTIC NETWORK WITHOUT DIG COSTS**

Digging trenches, laying cables, building amplifier sites, and operating a worldwide fiber network takes a lot of work – trust us, we’ve done it. But you don’t have to go to all that effort and expense. For large-scale global needs, our optical fiber solutions deliver all the benefits of owning your infrastructure at a fraction of the cost.

### **NO COMPLEX OPERATIONS AND MAINTENANCE**

We use our optical fiber backbone that spans thousands of kilometers across the world. We control, operate, and monitor all our routes to ensure cable

stretches and exact fiber routings are thoroughly checked, documented, and maintained. We apply a rigorous process to all fiber routes, including fast, in-field action for fiber repairs - to maintain high-fiber availability.

### **DARK FIBER READY TO BE LIT**

Before we handover, we thoroughly test the performance of the optical fiber using advanced measurement tools and power loss tests. We apply our extensive engineering expertise throughout the handover process. Once all checks are complete, you get direct operational control – with dark fiber ready for you to light up when needed.

## **BENEFITS IN BRIEF**

### **AVOID LARGE INVESTMENT COSTS**

Leverage our investments in optical fiber to significantly reduce your costs of building a fiber-optic network.

### **SIMPLIFIED OPERATIONS AND MAINTENANCE**

We deliver services using Telia Carrier’s global IP backbone, which means we manage all complex operations and maintenance work.

### **FULLY TESTED FIBER**

We use high-standards of engineering expertise and testing procedures to ensure your dark fiber is ready to run when you need it.

**DID YOU KNOW?**

In March 2019 Telia Carrier worked with Infinera to successfully complete an industry-first production network field trial demonstrating autonomous intelligent transponder (AIT) technology.

The live field trial demonstrated the ability of fiber optic transmission systems to autonomously adapt to changing network conditions in real time to support optimal service quality and performance while simplifying operations.

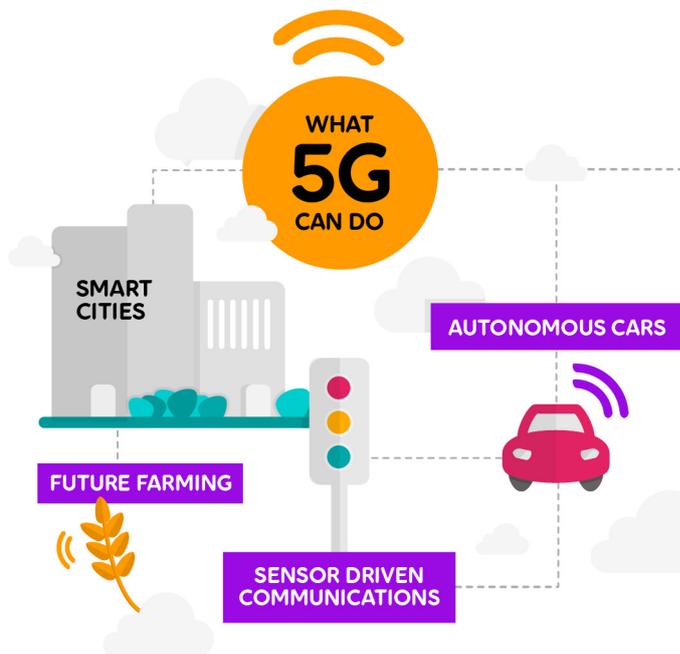
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## TECHNICAL HIGHLIGHTS

We are fully committed to high-quality standards to gain the best out of optical fiber technology. We use the latest testing technologies, with transparent delivery processes, and flexible contracts to make dark fiber a viable investment for you.

- Optical fiber in accordance with G.652 ITU-T
- Fiber routes available in Europe and Russia
- Full OTDR testing and documentation at the handover stage
- Short, medium or long-term (IRU) leases to provide you secure infrastructure between your key destinations
- Rack space in amplifier sites
- Performance, power loss, and attenuation tested to ensure operation within specification
- Indoor fiber tails with SC connectors at each site
- Handover point is the end of the fiber tail connected to the ODF
- Rack space in amplifier sites
- Option for customer-specified fiber tests for attenuation and dispersion



## USE CASES

### FUTUREPROOF NETWORK

Dark Fiber is ideal for scaling long-haul infrastructure for organizations planning for considerable bandwidth growth and needing more control of their fiber-optic network.

### HIGHLY SECURE NETWORK

Organizations with high security and regulatory requirements can build and scale their fiber-optic network as a dedicated and physically private infrastructure.

### NEW TECHNOLOGIES AND APPLICATIONS

The increasing applications of fiber optics in cloud computing, data storage, IoT, and 5G are the key driving factors for organizations to consider building their fiber-optic network and prepare for the uptake of new bandwidth-intensive use cases.

*Note: This document provides indicative service information and is not contractually or legally binding. Updated May 2020.*