

# WAVELENGTHS (DWDM)



## DELIVER TODAY AND SCALE FOR TOMORROW

Our global Wavelength services provide dedicated, high capacity transport designed to handle heavy-duty traffic across long-distances.

### CARRYING HEAVY DATA-LOADS

When your network is under more pressure to carry heavier data loads across long-distances, DWDM is the perfect technology. Multiple wavelengths of light (or colors) are used to send data over the same optical fiber to maximize infrastructure utilization.

### POINT-TO-POINT DEDICATED CONNECTIONS

Our Wavelength services support diverse applications such as video, voice, and storage across your global sites, with access to more capacity when needed. The simplicity of Wavelengths makes your network more versatile and efficient when deploying point-to-point dedicated connections between your sites and data centers.

### 100G WAVELENGTHS AND BEYOND

Telia Carrier was the first to commercially offer 100GE Wavelengths on both sides of the Atlantic and is now gradually rolling out 400GE.

Securing resilience and availability of your network largely depends on the criticality of your data. You can choose single links or a redundant ring network topology to build your network and connect key sites.

The highest level of availability comes with the dual link service option which provides two fully diverse routes between the same endpoints.

### CLIENT-SIDE MONITORING

Telia Carrier has just beta-released a new and innovative way of monitoring fiber patches between the Telia Carrier's network and customer equipment. This provides more value for the customer as it increases both network reliability and security. This feature is available as an additional service.

Note - The service only monitors passive dark fiber tails and it does not cover the monitoring of active 3rd party tails.

## BENEFITS IN BRIEF

### HIGH-CAPACITY

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

### VERSATILE

Supports diverse application traffic using multiple colors of light on the same fiber.

### MONITORING

The Network is monitored 24/7 by Telia Carrier NOC, in addition by using client-side monitoring (Beta). Telia Carrier's customers can extend monitoring to the dark fiber tails between customer equipment and Telia Carrier's network.

### FUTUREPROOF

Telia Carrier was first to offer 100GE Wavelengths and is now launching 400GE.

# DID YOU KNOW?

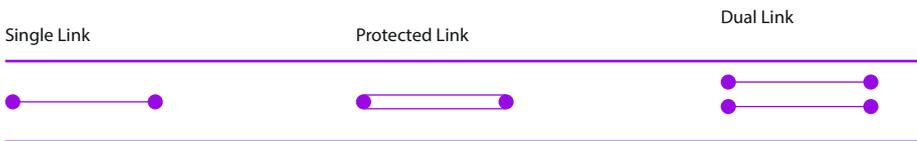
In 2017, Telia Carrier worked with Facebook to successfully trial their DWDM transponder on our fiber route between Stockholm and Hamburg.

# WAVELENGTHS (DWDM)



## TECHNICAL HIGHLIGHTS

### SERVICE OPTIONS



### INTERFACE AND CHARACTERISTICS

Interface	Capacity
Ethernet	1 GE, 10 GE, 100 GE, 400 GE
SDH	STM 16/OC 48, STM 64/OC 192
ODU	OTU 2, OTU 2e, OTU 4

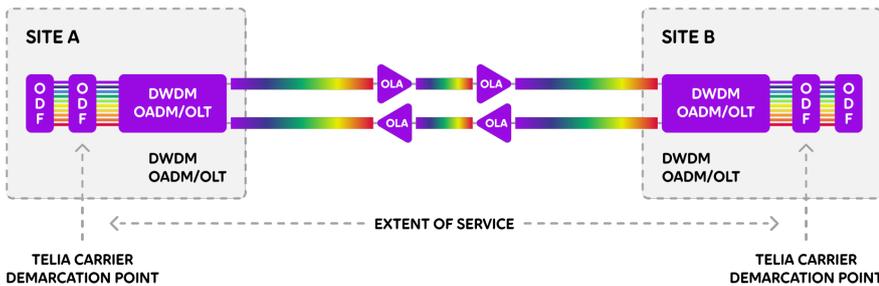


Figure 1: DWDM network components

Telia Carrier's network is engineered to provide diversity at the physical level – duct, cable, and fiber. State-of-the-art network architecture combined with strict design guidelines provides fully diverse, end-to-end routing between all Telia Carrier's PoPs.

## USE CASES

### DATA CENTER INTERCONNECTION

Data centers use high-quality DWDM optical solutions for transport between data centers supporting multiple large bandwidth services.

### HYPERSCALE CONNECTIVITY

Big data organizations use DWDM for efficient, large-scale deployments to transport data between key sites.

### LONG-HAUL NETWORKING

DWDM continues to be the technology of choice for wholesale service providers building long-haul optical networks to serve their markets.

Note: This document provides indicative service information and is not contractually or legally binding. Updated February 2021.