# PRODUCT RIDER — WAVE SERVICES

Optical wavelength transport, 10G / 100G / 400G · Ver.1 · Effective 2026-10-18

This Rider applies to the Wave Services stated on the Order Form and is part of the CSA. Capitalized terms not defined here have the meaning given in the Terms. In a conflict, the order of priority in Section 1.1 of the Terms applies. This Rider does not repeat the Terms; delivery, acceptance, charges, liability, Access Provider and Facility Operator provisions are in the Terms.

## 1. THE SERVICE

**1.1** A **Wave** is a point-to-point optical wavelength between two locations stated on the Order Form, delivered at a fixed rate with no contention from other customers on that wavelength. A Wave is a **transport** service: FiberFed carries the client signal transparently and does not route, inspect, or otherwise process it.

**1.2** The Order Form states, for each Wave: the A and Z locations, the rate (**10G, 100G or 400G**), the client interface and optics at each end, whether the Wave is **Protected** or **Unprotected**, the Service Tier, the Initial Term and the charges.

**1.3 Client interface.** FiberFed delivers at the client interface stated on the Order Form. Unless the Order Form states otherwise, optics on the FiberFed side are provided by FiberFed as FiberFed-owned CPE, and optics and patch cabling on Customer's side are Customer's responsibility. Customer is responsible for the compatibility of its equipment with the stated interface.

**1.4 Frame size.** A Wave carries the client signal transparently at the stated rate, so the frame size is set by Customer's equipment up to the optical rate. Where FiberFed states a maximum frame size for a Wave, it is **measured end to end and stated on the Order Form** for that Wave.

**1.5 Transparency and framing.** The Service carries the client signal at the stated rate. Framing, forward error correction and any encryption applied by Customer's equipment are Customer's responsibility. FiberFed does not decrypt, terminate or monitor the payload.

## 2. PROTECTED AND UNPROTECTED WAVES

**2.1 Unprotected.** An Unprotected Wave follows a single optical path. A fibre cut, an optical failure or maintenance on that path interrupts the Service until it is repaired. **An Unprotected Wave may be sold only at the Business Fiber tier.**

**2.2 Protected.** A Protected Wave is delivered in one of two ways, as stated on the Order Form:

- **(A) Access Provider protected wavelength** — protection is provided within the Access Provider's optical network.
- **(B) Two diverse wavelengths switched by FiberFed-managed equipment** — the client interface is **Ethernet**, and the **target switching time is 100 milliseconds**, unless the Order Form states a different figure.

In both cases, protection switching is **not instantaneous**; **a brief interruption on switching is expected and is not Network Unavailability**. A target switching time is an objective under Section 2.1A of the SLA and does not by itself give rise to a Service Credit. FiberFed's protection mechanisms are engineered to switch well inside that figure in normal conditions. **Network Unavailability for a Protected Wave occurs only when both paths are unavailable at the same time**, in the same way as Section 4.3 of the SLA.

**2.3 Diversity is a matter of fact, not of label.** Where a Wave is sold as Protected, FiberFed will state the two paths on the design record. Where the two paths share a conduit, an entrance facility or a structure for any part of their length, FiberFed will say so before the Order Form is signed, and the Wave may not be sold at the Enterprise Fiber Diverse tier.

## 3. SERVICE LEVELS

**3.1** Availability, Service Credits, the chronic-outage right and how unavailability is measured are in the **SLA**, at the Service Tier stated on the Order Form.

**3.2 Latency.** The latency of a Wave is a function of the optical route. Any latency figure FiberFed provides is **informational and measured on the route in service at the time**, and is **not a commitment**, unless the Order Form expressly states a committed latency and the charge for it. **A route change, including one made to restore service or to complete maintenance, may change latency**, and a change in latency is not a failure of the Service unless a committed figure is stated on the Order Form.

**3.3 Optical maintenance.** Optical maintenance is disruptive more often than packet maintenance. Scheduled Maintenance on a Wave is governed by Section 8 of the SLA, and FiberFed will pass through the maintenance notice it receives from any Access Provider. Where an Access Provider gives FiberFed less notice than the SLA requires FiberFed to give Customer, FiberFed will notify Customer as soon as it is able.

**3.4 Emergency reroute.** Where FiberFed reroutes an Unprotected Wave at Customer's request to restore service, the charge in the Professional Services and Dispatch Rate Card applies, and Section 3.2 applies to the resulting latency.

## 4. CUSTOMER'S OBLIGATIONS

Customer will: provide compatible equipment and optics on its side of the demarcation point; provide space, power, environment and access under Section 4.5 of the Terms; keep the client interface within the optical tolerances FiberFed states; and not connect equipment that injects optical power outside those tolerances. **Damage to FiberFed Facilities caused by out-of-tolerance optical power, or by any equipment Customer connects, is Customer-Caused Damage** under Section 4.9 of the Terms.

## 5. WHAT IS NOT INCLUDED

A Wave does not include: routing, switching, IP addressing or internet access; monitoring of the payload; encryption; protocol conversion; regeneration for a client signal outside the stated rate; or any service level for an interface or equipment Customer provides. Dedicated Internet Access, where ordered with a Wave, is governed by the **DIA Rider**.