



## Managed Wavelength

Fully transparent, dedicated capacity with flexible handoff options.

Open Access Networks

### Overview

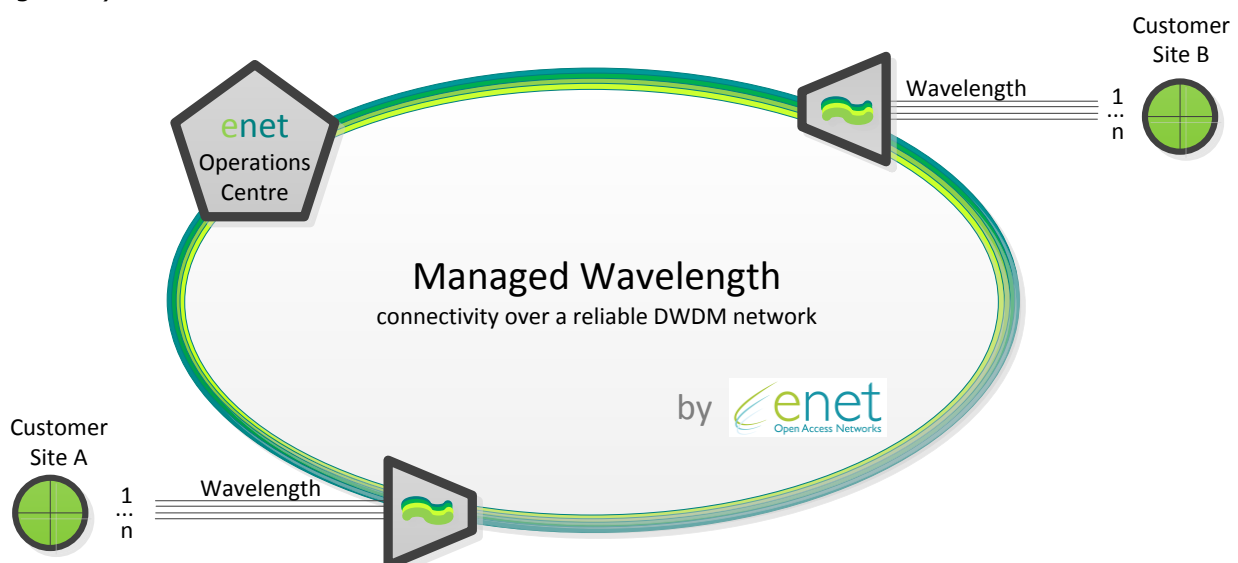
enet's Managed Wavelength products provide carriers and end-customers with the security and dependability of a private network without the operational complexity.

The Managed Wavelength products offer carriers the possibility of connecting data centres and important core sites with flexible data highways. Carriers relying on these products can plan their network with the convenience of having a large amount of capacity under their full control, with a choice of standard handoff interfaces.

End-customers, whose end-to-end service is built upon a Managed Wavelength product, can rest assured that their business-critical data is transported through a dedicated, secure and high-availability connection, port to port. These customers' operations can rely on a dependable network built through a consultative process that offers the option to them to define the route of their wavelengths.

### Technical Description

enet's Managed Wavelength product offers a dedicated, flexible and high capacity connections either between end-customer sites or for carriers' backhaul networks. The wavelength is built across enet's state-of-the-art DWDM network and where required extensions are built to connect customer sites (see also Figure 1).



**Figure 1: Managed Wavelength products provide dedicated, high-capacity and secure connectivity between national customer sites.**

10G wavelengths are currently offered as a standard product. 100G wavelengths can be delivered on a case-by-case basis.

The service is handed off on software configurable XFP interfaces, for SMF fibre, with the following standard options:

- 10GbE LAN – 10GBASE-LR, for Ethernet traffic
- 10GbE WAN – 10GBASE-LW, for STM64/OC-192 traffic
- OTN (OTU2) – for OTN traffic

In the event of a fault on the core network the laser on the customer interfaces will shut down as a results of fault signalling propagation.

<b>Managed Wavelength</b> <i>Product Features</i>	<b>Description</b>
<b>Capacities supported</b>	10Gbps as standard; 100Gbps on request.
<b>Client Interface Options</b>	XFP I-64.1/10GBE BASE-LX configured as either <ul style="list-style-type: none"> <li>• 10GbE LAN – IEEE 802.3 ae</li> <li>• 10GbE WAN – IEEE 802.3 ae</li> <li>• OTN (OTU2) – G.709</li> </ul>
<b>Mean Launch Power</b>	-1 to -6dBm
<b>Receiver Sensitivity</b>	-1 to -11dBm
<b>Wavelength</b>	1310 nm
<b>Protection</b>	Unprotected wavelengths; Two unprotected wavelengths can be used by the carrier in tandem.
<b>Availability</b>	99%
<b>MTTR target</b>	8 hours
<b>NOC Support</b>	24 x 7 x 365
<b>Lead time</b>	15 work days on DWDM-enabled sites

**Table 1: Managed Wavelength product features**

The demarcation point is on ODF ports in the customer site. Optionally a demarcation NTU can be installed (beneficial where multiple wavelength services are delivered or expected in the future). In datacentres the demarcation point is on a port in the meet-me-room. On these demarcation ports the service is handed off on industry-standard 10GbE LAN PHY, 10GbE WAN PHY or OTN interfaces. The 1310nm wavelength is used on the handoff ports.

The Managed Wavelength product is configured as a standalone wavelength. However, if protection is required, two individual wavelengths can be used in tandem as worker and protection paths and switched over by the customer in case of a failure.

This wavelength service is offered with high-quality service level guarantees. Managed Wavelength products are delivered in less than 15 work days between Core DWDM-enabled sites. Enet also has an outstanding track record with delivering on a tight timeframe even where civils and/or equipment installations are required.

The Managed Wavelength product is constantly monitored by enet's 24 x 7 x 365 NOC and faults are repaired within an average target 8 hours.

Should you require any further features, please contact enet and we'll be happy to discuss your requirements.

## Carrier Benefits

enet's Managed Wavelength products enable the following benefits to carriers:

- Unconstrained, flexible and large capacity connection to datacentres and major core sites
- Full protocol transparency
- No MTU size limitations
- No congestion
- Tight control over service latency
- Proactive monitoring that reduces network management costs
- Less network equipment, reduced network complexity and hence lower operational costs

## End-Customer Benefits

enet's Managed Wavelength products enable the following benefits to end-customers:

- Fast, high-availability and low-latency service
- Port-to-port security and privacy for critical data
- Point-to-point dedicated bandwidth
- Reliability and survivability
- Customer designed paths and diverse routing that enable a highly reliable and dependable service

## enet Responsibilities

enet is responsible for

- Building the service to the demarcation points
- supplying, installing, maintaining and operating the optional NTU and connecting it to its network;
- provisioning the wavelength between the service demarcation points;
- the operation and maintenance of the Managed Wavelength service;
- acquiring the public wayleave for civil elements of the service;

## Carrier Responsibilities

The customer is responsible for

- the operation and maintenance of the services purchased by the end customer;
- own the relationship with the end customer;
- act as the point of contact for any end-customer enquiries.
- allocating adequate rack space for installation of fibre patch panel and enet NTU where required;
- provisioning a clean protected power supply for the NTU (UPS etc) if required.

## Further Information

For solutions to all your wholesale needs, contact your enet Account Manager or contact us at:

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