

# International Wave

High Speed Optical Transport to key European Datacentres

Open Access Networks

## **Overview**

Bandwidth demand continues to grow across the globe. With advances in technology driving flexibility and affordability, wavelength services are now a key part of networks, facilitating the delivery of big data, ultra-high-definition video, Internet of Things applications and the expanding universe of cloud-based applications.

Enet's International Wave delivers low cost, secure, high-speed, transparent connectivity between selected Dublin and European datacentres with guaranteed bandwidth. Dedicated capacity is assured along a defined, fixed route. Automated pricing is available from Dublin to FLAP (Frankfurt, London, Amsterdam and Paris), Marseilles and Milan datacentres.

International Wave is ideal for carriers, wholesalers and enterprises.

# **Technical Description**

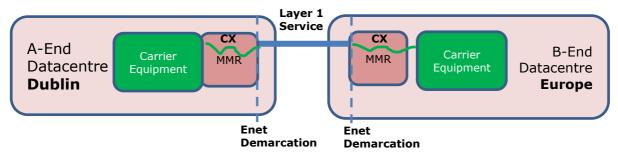
International Wave enables a high bandwidth, Layer 1, point-to-point circuit between selected datacentres. Layer 1 is the lowest level of technical complexity for telecommunications services, avoiding switching, routing and decision-making of data across the network.

It makes very efficient use of bandwidth with low contention and fewer network elements.

Service is provided as:

- 10Gbps or 100Gbps circuit capacities with Optical or Ethernet handoff
- Guaranteed bandwidth: No sharing, with a distinct optical channel
- High Quality: Dedicated, uncontended capacity, guaranteeing line rate speed, with minimal packet loss, latency or other degraded performance
- Predictable Low Latency: with minimal jitter along a specific route

# Solution



Standard service handoff is LanPhy. Service will be handed off to the Carrier between the nominated datacentres as an optical termination at both the A-End and B-Ends' Meet Me Rooms (MMR).

The Carrier should arrange with datacentre management for the requisite MMR Cross Connects (CX) to their co-located equipment.

# **Diversity/Protection**

The standard Solution is configured as an unprotected standalone wavelength. If protection or diversity is required, clients have the option to purchase:

- Protected Service with dual paths and a Single handoff
- **Diverse Service** with two primary circuits with diverse routing and dual handover where the Carrier manages failover configuration

Both solutions are subject to network design and availability.

#### **SLAs**

This is a proactively managed service.

- Enet NOC will make reasonable efforts to inform the Carrier of any general systems outage that may affect Service
- The Service availability target is based on route distance
- One-way latency of less than **16.5ms** for FLAP, Milan, Marseilles (others on request)
- Mean Time-to-Repair is dependent on whether the fault is fibre based or not

#### **Carrier Benefits**

- Uncontended, flexible and large capacity connection between data centers
- No congestion
- Full protocol transparency with no MTU size limitations
- Less network equipment and network complexity with lower operational costs
- Port-to-port security and privacy for critical data
- Point-to-point, end-to-end dedicated bandwidth
- Increased reliability using Protected or Diverse physical access options

### **Responsibilities**

Enet is responsible for

- provisioning the wavelength(s) between the service demarcation points
- Making reasonable efforts to advise the customer within 45 minutes of fault discovery

The Carrier is responsible for

- Arranging MMR cross connections directly with the datacentre(s)
- the operation and maintenance of the services
- owning the relationship with the end-user and point of contact for any enquiries
- Raising trouble tickets with the Enet NOC for suspected fault conditions
- Management of failover on circuits with diversity

## Summary

Product Features	Description
Bandwidths	10Gbps, 100Gbps
Wavelength at Handoff Port	1310 nm, 1550nm
Protection/Diversity	<i>Default</i> is Unprotected with no network or client protection
	Optional Protected or Diverse connections
Availability	Max of 99.5% for unprotected single wavelength (<1000km)
TTR target	System Fault: 8 clock hours
	Terrestrial Fibre Repair: 26 clock hours
	Submarine Fibre Repair: 11 calendar days
NOC Support	24 x 7 x 365
Delivery Lead time	22 working days, subject to capacity *
Supported Protocols/Standards	Lan Phy (Ethernet) as standard
	Wan Phy
	ОТU

\*Expedited delivery is available on a chargeable basis.

# **Further Information**

Should you require any further features, please contact Enet and we'll be happy to discuss your requirements, please contact your Enet Account Manager or Enet at:

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