Managed SDH

Dedicated national fibre links with outstanding reliability and millisecond service restoral

Definition

Service is delivered nationally via a local fibre network, diversely routed (east and west) to the enet co-location facility and then transported nationally via national backhaul partners. High-bandwidth SDH transport is available in a variety of bandwidths.

Service Description

The required service is delivered to the consumer premises via a carrier-class Layer 2 switch (Network Terminating Unit). Available terminations include:

<table>
<thead>
<tr>
<th>Product</th>
<th>Bandwidth</th>
<th>Metro</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>2.048 Mb</td>
<td>Electrical termination, presented in the consumer premises</td>
</tr>
<tr>
<td>E3</td>
<td>34 Mb</td>
<td>Electrical termination, presented in the consumer premises</td>
</tr>
<tr>
<td>DS3</td>
<td>45Mb</td>
<td>Electrical termination, presented in the consumer premises</td>
</tr>
<tr>
<td>STM-1 to STM-64</td>
<td>155 Mb To 10Gbps</td>
<td>Optical termination, presented in the consumer premises</td>
</tr>
</tbody>
</table>

- Handoff of PDH services at customer premise is on G.703 port 75 Ohm BNC or 120 Ohm Rj45.
- Handoff of SDH services at customer premise is on electrical G.703 port 75 Ohm BNC or 120 Ohm Rj45 or Optical SDH port
- Default MTU set at 2000 bytes for EoSDH
- Aggregated handoff to Carrier nationally using SDH interconnect at rates between STM-1 or STM-16 using MSP 1+1. e.g. DEG PoP Dublin (see interconnect product description for further information)
- An STM-64 handoff can be supported on request.

This document is for illustrative purposes only, detailed specifications will be agreed at the time of purchase.
<table>
<thead>
<tr>
<th>Features</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLA</td>
<td>✓ 99.999% Target Network Availability</td>
</tr>
<tr>
<td>Flexibility</td>
<td>✓ Bandwidth upgrades available</td>
</tr>
<tr>
<td>Protection</td>
<td>✓ MSP 1+1</td>
</tr>
<tr>
<td>Customer Support</td>
<td>✓ 24x7x365 Network Operations Centre support</td>
</tr>
<tr>
<td>Power</td>
<td>✓ Default NTU supports single AC power supply. Various options available per request.</td>
</tr>
<tr>
<td>Protocols and Standards</td>
<td>✓ Support for ANSI and ITU-T standards</td>
</tr>
<tr>
<td>Termination</td>
<td>✓ Presentation on fibre patch panel is SC-UPC.</td>
</tr>
</tbody>
</table>

### Service Delivery

![Network Architecture Diagram](image)

**Figure 1: Network Architecture**

Fibre brought from the MAN to the end customer site and terminated on a fibre patch panel.

Circuit brought from the enet co-location nationally to the carrier interconnect point (e.g. DEG) and lit at minimum STM-4.

Interconnect setup with backhaul providers is MSP 1+1 prior to end customer delivery.

**enet Responsibilities**

enet is responsible for

- The operation and maintenance of the SDH service;
- Acquiring the public wayleave for civil elements of the service;
- The NTU, which is from a product suite of next generation SDH products. Further information on equipment specifications is available upon request.

The demarcation point for circuits is the port on patch panel and any cabling to customer equipment or interconnect is the responsibility of the customer.

If SDH/PDH circuits are to be delivered nationally then they will be presented on agreed TUG structure channels on the interconnect.

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Customer Responsibilities

The customer is responsible for;

- Allocating adequate rack space for installation of fibre patch panels and enet Ethernet terminating units;
- The provision of a clean protected power supply for the NTU (UPS etc);
- Shaping the traffic in line with the purchased traffic profile;
- Attenuating or amplifying light levels where necessary if interconnecting with enet equipment.

The demarcation point is the port on the front of the enet NTU or may be on a patch panel.

Customer Responsibilities

- NTU       Network Terminating Unit
- UPS       Universal Power Supply
- SDH       Synchronous Digital Hierarchy
- PDH       Plesiochronous Digital Hierarchy
- MTU       Maximum Transmission Unit
- MSP       Multiplexer Section Protection
- DEG       Data electronics Group PoP Dublin

Further Information

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

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Webpage: www.enet.ie

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