



## Dedicated Internet Access (DIA)

*Reliable, scalable high capacity wholesale internet access transport*

### Definition

**Dedicated Internet Access (DIA)** is a business grade product providing a private, dedicated connection to the Internet solely for your business. DIA avoids having to share internet access with other users or suffer network congestion from increased traffic. It provides a guaranteed and reliable upstream and downstream bandwidth at all times to ensure a high-quality file transfer, video conferencing and VoIP experience.

DIA high-capacity internet access transport is available in a variety of bandwidths up to 1Gbps with speeds higher than 1Gb available on request. This service is suitable for corporate enterprises seeking to establish a high performance, reliable connection to the Internet.

DIA is delivered nationally via our local fibre or licensed microwave access networks. DIA circuits are routed via our national transport network to our core ISP sites, where they are handed off to Internet Exchanges and Tier 1 IP Transit carriers in Dublin.



There are two main Product Types providing dedicated Internet access:

**DIA (Default):** An Enet managed NTU at the end-user premises provides Enet visibility of the traffic at the port.

**DIA - Managed CPE:** Provides additional facilities such as *traffic shaping and managed failover* where an access protection solution is used.

### Service Description

The DIA product is delivered to the customer through an Ethernet transport layer and handed over via an Ethernet NTU.

The main features are:

- DIA is delivered using the key Access Media/last mile types of **Fibre and Wireless**
- A wide range of **Symmetrical bandwidths** (Fibre and Wireless) ranging from 10Mbps to 1Gbps

This document is for illustrative purposes only, detailed specifications will be agreed at the time of purchase.

- **No bandwidth sharing** on customer links, user dedicated
- **Unlimited access, no usage limit** (Fixed monthly rental is charged for the service).
- **Static IP addresses available as standard** (Provider assigned ([by Enet] or Provider independent)
- Both Aggregation node and backhaul are fully redundant; Access failover options in the last mile are also available. The **DIA - Managed CPE** solution is recommended with this option.
- Static or BGP routing options available

**Note:** The RSP will be assigned a **/30** static subnet as standard (*which provides one (1) usable customer IP address and three (3) Enet network addresses*). Greater subnets are available such as **/29, /28** etc.

Available terminations include:

Bandwidth	Presentation at the customer premises
N x 2Mb, N x 10Mb, N x 100Mb	Electrical termination – RJ45
N x 1Gbe	Electrical / optical termination – RJ45 or LC/PC
10 Gbe	Optical termination – LC/PC

## Service Delivery

DIA is provided over our Fibre or Licensed Microwave access (last mile) network delivered from the end customer site and through our National or Regional ISP Core over the architecture shown in Figure 1

Feature	Details	DIA (Default)	Optional
<b>Product Type</b>	<b>DIA:</b> over Fibre or Wireless	Y	
	<b>DIA Managed CPE:</b> over Fibre or Wireless	N	Y
<b>Solution Type</b>	Link IP, Static IP or Dynamic BGP (see Product Document for details)	Y	
<b>Access Media</b>	Fibre or Wireless	Y	
	Copper VDSL FTTC	N	Y*
<b>Bandwidth</b>	10Mb to 1Gb (dependent on Access Media)	Y	
<b>Guaranteed Throughput?</b>	Fibre / Wireless	Y	
	Copper VDSL FTTC (Rate Adaptive)	N	Y
<b>Layer 2</b>	<b>DIA:</b> NTU device installed by Enet (Fibre and Wireless) Single Power AC (Default): Additional charges may apply for DC or Dual power	Y	
<b>Customer site CPE</b>	<b>DIA Managed CPE:</b> CPE/routers come fully installed and configured	N	Y
<b>Default IP Address Blocks</b>	- IPv4 and IPv6 addresses available	Y	
	- <b>/30</b> default (one Carrier/customer usable) for IPv4: greater also available	Y	
	- <b>/127</b> for IPv6 (PA) or <b>/56</b> if operator subnet		
<b>Routing Options</b>	Static or Dynamic BGP	Y	
<b>Max MTU Size</b>	1500 Bytes	Y	
<b>Handoff (Fibre and Wireless)</b>	Default fibre handoff at Customer premises is a 1000BaseT port on NTU Options for optical 1000BaseSX, LX & 10GBase-LR (fibre) are available	Y	

\*This is an asymmetrical bandwidth service delivered as FTTC in the last mile but with its own dedicated backhaul to the IP transit providers.

## Enet Responsibilities

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Enet is responsible for:

- provisioning the Internet Service from the customer site to the ISP Core Network
- operating and maintaining both the network and the connection to the Internet Service
- acquiring the public wayleave for civil elements of the service
- assigning the requested bandwidth and IP addresses

## Carrier Responsibilities

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The Carrier is responsible for:

- allocating adequate rack space for installation of fibre patch panel and Enet NTU/Managed Router
- provisioning a clean, protected power supply for the NTU
- shaping the traffic in line with the purchased traffic profile
- supporting the product past the demarcation point (port) on the Enet NTU/Managed Router

## Glossary

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- IP                    Internet Protocol
- MTU                Maximum Transmission Unit
- NTU                Network Terminating Unit
- PA                  Provider Assigned

## Further Information

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### **Quotations**

A quotation for service can be submitted via an email to the [quoterequests@Enet.ie](mailto:quoterequests@Enet.ie)

### **Ordering and Provisioning**

Orders should be emailed to the Enet Sales Support Team at [salesupportteam@Enet.ie](mailto:salesupportteam@Enet.ie). The Sales team will provide Service eligibility checks for the service. Note that excess charges may apply.

### **Further information**

Contact your Enet Account Manager or contact us at:

Telephone: + 353 (0)61 274000

Webpage: [www.Enet.ie](http://www.Enet.ie)