

➤ Ethernet Technical Data Sheet

National and Local Ethernet circuits are used to provide site-to-site connectivity or as access circuits when part of a wide area network or Internet Access solution.

Ethernet circuits provide locations with a greater bandwidth capability than other circuits; in comparison to all other access technologies the cost per Mb/s is relatively low.

All Ethernet circuits are accompanied by a premium service level agreement. These commercial and technical features make Ethernet access technologies suitable for Head Office and high bandwidth consuming locations, where increased bandwidth and service availability are the critical factors in choosing the circuit type.

Ethernet is a non-contended, symmetrical service enabling Quality of Service (QoS) techniques to be applied and supported.

Through our carrier relationships NetServices can provision National and Local Ethernet circuits across the UK. Ethernet circuits are delivered via fibre provided 10Mb/s, 100Mb/s or 1000Mb/s local access bearer circuits, with the upper limiting factor for the Committed Data Rate (CDR) being the bandwidth of the local access bearer circuit.

National Ethernet offers a greater choice of bandwidth options with a supported CDR from 2Mb/s to 1000Mb/s. National Ethernet offers the flexibility of incremental increases and the ability to perform on-site re-grades.

Local Ethernet circuits are only available at fixed bandwidth speeds of 10, 100 or 1000Mb/s, though traffic shaping can be applied and hence circuits can be capped at lower data rates than that of the bearer circuit, providing slight cost savings.

When used as part of a solution Ethernet circuits are delivered into the NetServices network via network access points at one of the three NetServices Super POPs in Manchester, Salford and London.

Service Elements

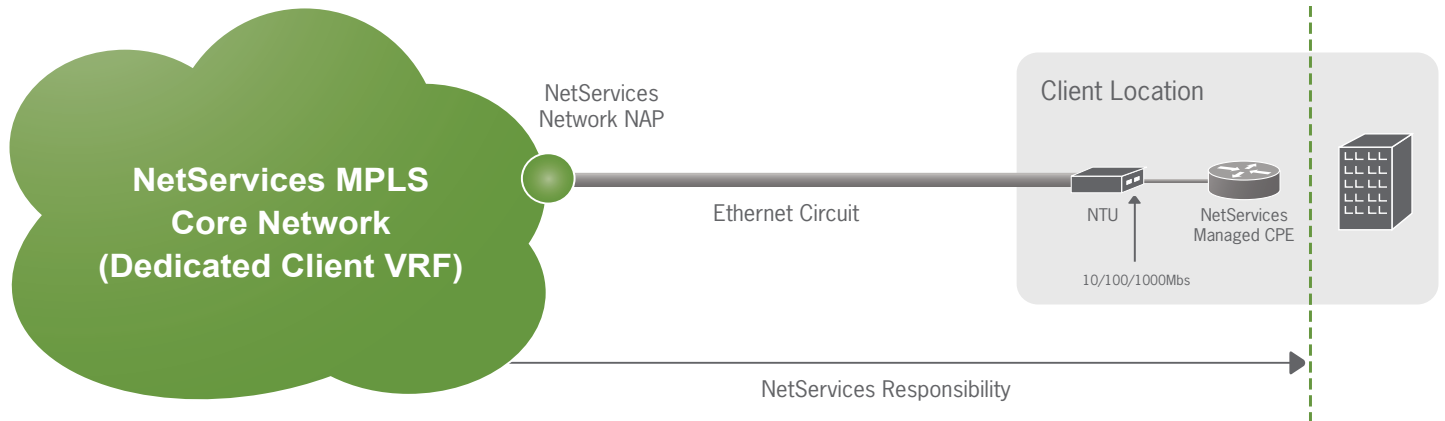
Presentation	10/100/1000Mb/s RJ45 Ethernet
Local Access Bearer Circuit	10/100/1000Mb/s Full Duplex
Committed Data Rate	10/100/1000Mb/s Full Duplex ¹ - Local Ethernet 2–1000Mb/s ² - National Ethernet
Local Access	BT SHDS or other third party supplier
Topology	Hub and Spoke, Point to Point
Backup Options	Leased Line, SDSL, ADSL, ISDN
Support	Core Hours or Extended Hours
National Ethernet SLA Summary	Service Fulfillment – 75 working days Fault Resolution – 6 hours Service Uptime 99.75%
Local Ethernet SLA Summary	Service Fulfillment – 65 working days Fault Resolution – 6 hours Service Uptime 99.85%

1. Traffic shaping can be applied and hence circuits can be capped at lower data rates than that of the bearer circuit.
2. These can be capped at increments of 2Mb/s and upwards.

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Ethernet in a Managed Service

Within a managed solution NetServices will typically provide a Cisco 2800 series or greater model router, sited at the client premises.



Ethernet in a Supported Service (Wires Only)

With a Supported Service the third-party supplier will install the local access circuit and a Network Terminating Unit (NTU). NetServices require the customer to provide a method of monitoring the circuit between our network and the customer premises. This needs to be a loopback interface using a NetServices designated IP address specifically configured for monitoring purposes. The point of demarcation for this service is illustrated in the diagram below.

