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### **What is Ethernet in the First Mile?**

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The 'First Mile' refers to the communication network that runs over the copper cabling from the customers premises to the 'last provider' owned node. This node might be in a street cabinet, equipment in the local telephone exchange or another point-of-presence held by the provider.

The EFM technology provides new specifications designed to allow the industry standard Ethernet protocol (as used in the local area network of most companies) to run long distances across standard telephone copper cables. The service typically allows symmetrical bandwidth of up to 35Mbps to be achieved by bonding multiple pairs of copper cables.

The bonding of copper pairs has the benefit of providing a highly resilient service. If a copper pair fails, the remaining pairs continue to delivery connectivity with no down time but at a reduced bandwidth. For example, assuming a service is being provided across four copper pairs. With the loss of one pair, 75% of the bandwidth is retained. Full service returns when the failed pair is restored.

The copper cables are dedicated to the transmission of digital data (they are not provisioned to carry analogue voice calls as is the case with regular broadband). This allows increased data throughput to be achieved.

### **Who is Ethernet in the First Mile for?**

Whilst regular broadband is a shared service which allows the available bandwidth to fluctuate by the actions of other users, EFM is a considerable step-up from regular broadband, providing dedicated and consistent bandwidth with a business grade Service Level Agreement. EFM can therefore be seen as an ideal technology for businesses that have outgrown their broadband service but cannot justify the cost of implementing a fibre based leased line

### **Benefits of our Metro Ethernet service includes:**

- Provides dedicated, reliable and uncontended (1:1) bandwidth
- EFM currently provides fast connectivity of up to 35Mbps  
(this is expected to increase beyond 50Mbps in the future)
- EFM provides symmetrical bandwidth (e.g. 30Mbps upload and 30Mbps download)
- Provides a lower cost alternative to a fibre based leased line
- Provides a high quality of service (QoS) backed by a Service Level Agreement (SLA)
- Has no data/bandwidth caps. Your business has full use of the agreed bandwidth

For a service quotation, please [contact us here](#) .