Your business uninterrupted

Our Dedicated Ethernet
The future is exciting.
Ready?

vodafone business
Is your business ready for the next wave of innovation?

A marked increase in organisations adopting Cloud, network-based business applications such as remote video conferencing, Office 365 and SalesForce.com promises smarter, more collaborative and more affordable ways of working. This also brings with it greater demand for capacity and guaranteed performance.

Vodafone Dedicated Ethernet Services provides the fastest guaranteed route for your critical business data.

Vodafone Dedicated Ethernet Services is delivered on a network designed to meet your needs today, and equipped for the challenges tomorrow brings.

Vodafone Dedicated Ethernet Services allow organisations to extend LANs by building everything from a simple point-to-point link to a mesh of interconnected sites. You retain complete control of IP routing, and benefit from low-latency, high-speed connections between major sites and data centres. Ethernet access is a key part of the hybrid WAN connectivity needed by enterprises today, delivered in combination with SD-WAN, MPLS IP-VPN, and Cloud Connect solutions.

Vodafone Dedicated Ethernet Services leverages our ongoing investment into developing the most extensive global network.

- We already operate a Global MPLS network which reaches 75 countries directly and connects our national fixed MPLS and mobile networks in Vodafone markets
- We have deployed 1,200 high speed optical pops across multiple global locations and we continue to roll out more
- We operate global and deep national optical networks taking advantage of over 1M km of our own fibre assets
- We’re continually extending our network reach and building greater depth, connecting more of Vodafone’s national fixed and mobile networks in countries across the globe
- Our support services have been enhanced to be more harmonised, proactive and flexible wherever we operate
Dedicated Ethernet at a glance

Increase performance and safeguard your growing data with Dedicated Ethernet. A premium service that offers Optical and E-Line options delivered over Vodafone’s OTN (Optical Transmission Network) and Packet Optical Networks.

Dedicated Ethernet provides guaranteed connectivity even in case of network faults. It is typically delivered using standard Ethernet interfaces at 100Mbps, 1Gbps, 10Gbps or 100Gbps.

Dedicated Ethernet supports two different service types:

- Optical: supports high bandwidth transparent point-to-point connectivity
- E-Line: supports flexible point-to-point and point-to-multi-point (hub and spoke) connectivity
  - Ethernet Private Line
  - Ethernet Virtual Private Line

**Optical**

Point-to-point connectivity provided over Vodafone’s optical transmission network supporting ultra-low latency and very high bandwidth connectivity:

- Dedicated, high performance, uncontended bandwidth in multiples of 1Gbps, 10Gbps or 100Gbps
- Optical network links major cities in Europe, US and Asia
- Ultra-low latency
- Multiple protection paths with diverse routing available
- Uniquely constructed protection options which together provide the building blocks to design your own network
- Support for interfaces including Ethernet, SDH, OTN, Fibre Channel & FICON

**E-Line**

E-Line services are provided over our new packet optical infrastructure. The service maintains a deterministic route and the bandwidth is dedicated to the circuit provided:

- Granular bandwidth from 10Mbps to 1Gbps
  - From 10Mbps to 100Mbps in 5Mbps increments
  - From 100Mbps to 1Gbps in 50Mbps increments;
  - and from 1Gbps to 10Gbps in 500M increments
- Class of Service: Optional CoS; Default, Standard and Premium; Single or Multi-CoS services supported
- Support for guaranteed (Standard and Premium CoS) and best effort (Default CoS) traffic
- Multiple protection paths and ultra low latency
- VLAN tagging: Tagged and untagged traffic supported; 802.1q; Permitted numbering range 11 to 4094; up to 400 VLANs per NTE
- Supports MTU of up to 9000 bytes (Jumbo frames)
- Performance monitoring options – self-service online portal
- Link loss capability

Organisations are under increasing pressure to improve the performance of their network. This can be achieved with Dedicated Ethernet, a premium service with two options: Optical and E-Line. Both are delivered over Vodafone’s ultra-modern OTN (Optical Transmission Network) and Packet Optical networks.
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Different requirements call for different connectivity solutions.

- **E-VPN (MPLS)**: Up to 1Gbps at 100s of sites
- **Dedicated E-Line**: Up to 1Gbps at 100s of sites
- **Dedicated Ethernet – Optical**: 1, 10 and 100Gbps – point-to-point
- **Dedicated Ethernet – E-Line**: 100Mbps, 200M, 300M to 900M and 1Gbps. 1, 2, 3 to 10Gbps Granular Bandwidth Options

Up to 1Gbps at 100s of sites

HQ/Data centre

Regional HQ

Data Centre

Regional HQ

Regional HQ

HQ/Data centre

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Dedicated Ethernet: Deterministic, high bandwidth, high resilience connectivity

Dedicated Ethernet provides options for shortest-route transmission and bandwidths up to 100Gbps. Our E-line, packet optical variant also supports optional performance reporting, CoS (Class of Service), guaranteed and best effort traffic. Packet Optical provides granular but uncontended bandwidth options, coupled uniquely with route determinism and CoS, giving businesses guaranteed delivery and increased control over their data.

Data Centres

Today’s content is consumed on demand by users who expect easy access to video, retail and informational services whenever and wherever they are. In this web-scale world, networks play a crucial role in connecting data centres and enabling organisations to keep pace with growing capacity and performance demands.

High Frequency Trading

Stock market traders in the financial services industry are dependent on automated trading applications that can make thousands of trades every second. They need to access time-critical market information and action their trading decisions as fast as possible. Even millisecond delays could cost thousands or even millions of dollars. This means that access to high-capacity, low-latency network connections has a direct impact on trading success, and, consequently, on a financial institution’s reputation and survival.

Healthcare Services

Technology is a key element in modern healthcare and when a critically-ill patient arrives with an undiagnosed condition time is critical and so is access to the most appropriate specialist when required. But what if that specialist is in a different hospital? This requires reliable, high-speed connectivity and modern healthcare equipment makes great demands of the performance of communications links.

Media & Comms

With the rising number of broadcast and streaming media services the demand for video and audio content distribution continues to grow. Major broadcasters are now providing programming at ever higher resolutions with HDTV becoming the norm. This drives the need for ever increasing bandwidth combined with high reliability connections. Dedicated Ethernet provides the ideal solution for such applications.

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<tr>
<td>Dedicated Optical</td>
<td>1Gbps, 10Gbps, 100Gbps</td>
<td>Ethernet, Fibre Channel, FICON, SDH, DWDM</td>
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Choose the right connectivity for your critical business data.
...and what does this all mean for your business?

Benefit from a reliable and secure network
Ensure your critical sites are always connected with the performance and network quality you need, and the availability to optimise business-critical traffic.

Future proof and flex your network infrastructure
We make it easy to add or change sites, users and applications, and scale bandwidth access up as the business grows.

A seamless transition to UC, Hosting and Cloud
Vodafone Dedicated Ethernet services is part of the underlying, agile and fast network platform needed to meet new business demands. We integrate this network with our wider Cloud, UC and IoT portfolios for a single end-to-end solution from a trusted partner.

A service that supports all your needs
We provide Vodafone Ethernet Services with flexible end-to-end SLAs, extensive global and local support including self-service and proactive incident management.

Drive down costs
Vodafone Ethernet Services could help reduce network costs and complexity whilst increasing flexibility and control.

Access to cloud based, business critical applications is easier, more cost-effective, faster and fully secure.
Why Vodafone?

We’re making substantial ongoing investment in our Ethernet Services roadmap, service experience, Global Packet Optical and MPLS network infrastructure.

Currently, Vodafone offers:
- 1,200 Global Optical PoPs supporting up to 10Gbps and growing to expand and support 100Gbps
- Global network coverage, depth and direct reach to 75 countries
- Dedicated Internet Access (DIA), alongside EWL and E-VPN, allowing shared access bringing cost savings and better value
- A unique capability in the market where we can support L2 Ethernet services using deterministic traffic routing – ideal for mission critical applications
- A comprehensive service proposition, including performance reporting and end-to-end Ethernet testing
- Competitive value – our carrier class network gives Vodafone strong economies of scale and global coverage
- Hybrid WAN solutions. We provide a full range and choice of access types to right size the network
- A proven track record in delivering for leading companies
- A compelling future roadmap – moving to Software Defined Transport

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Why Vodafone?

Vodafone Dedicated Ethernet Services are delivered alongside IP-VPN, Internet and other Fixed Connectivity products together with Cloud Connect, as an end-to-end hybrid WAN solution.

We’re not standing still

We are continuously enhancing our network infrastructure to help you meet new business needs.

The most extensive network
We have greater reach and superior depth as a connectivity service provider for combined fixed, mobile and internet access globally, making the most of Vodafone national and partner networks in UK, Germany, Italy, Spain, India and other countries. Together, our Carrier Class network and operating model ensures we offer competitive value.

True agile, dynamic connectivity and choice
- Vodafone Ethernet Services offers ultra-high bandwidth with the lowest latency possible, to safeguard your critical communications. It also allows you to extend your WAN simply and cost-effectively
- You have a greater range of access methods for small and large sites
- Expanded range of additional and complementary products, including Global SIP and Global LAN

Market-leading service experience
- Proactive, harmonised and consistent experience globally, connecting sites over Vodafone national or partner networks
- Flexible service, for example:
  - Supported by global and regional service centres
  - SLA options to suit your requirements
Let’s talk about how your business networks are coping now, and what you’d like to see from a single offering and a simpler, more cost-effective network in the future. Then we’ll explain how Vodafone Dedicated Ethernet Services can achieve that for you.

To find out more, please contact your Vodafone Account Manager.