# SPITFIRE RE-IMAGINES WAN CONNECTIVITY AND BUSINESS READINESS FOR OCCUPATIONAL HEALTH RISK LEADER

# INSTITUTE OF OCCUPATIONAL MEDICINE

The Institute of Occupational Medicine (IOM) is at the forefront of scientific research focused on understanding and mitigating a range of occupational and environmental health risks. Operating from 7 UK locations, IOM provides a range of training, research and environmental monitoring services throughout the UK and around the world. IOM's IT team has the remit to not only provide and support corporate IT infrastructure to enable their team, but also to deliver technical solutions that support their field services and environmental monitoring solutions.

### Challenge:

IOM recognised that, in order to remain at the forefront of their industry, business operations were pointing them towards a more agile operation, yet the regulatory requirements of their customers continued to drive enhanced security requirements.

At the same time IOM's customers were recognising the benefits of how continuous real time monitoring would significantly enhance routine workplace audits. This presented IOM with a huge opportunity to expand its environmental monitoring services.





IOM's existing MPLS based wide area network, however, was not aligned to the organisation's strategic goals.

- High capacity Ethernet connectivity was not appropriate at all sites as many were scaled down as hybrid working was adopted.
- Centralisation of business applications was restricted by the hosting capabilities of the current supplier.
- Firewalls were an expensive capital expenditure and had high maintenance costs and low support levels. Additional features and upgrades had to be purchased separately.
- The use of VPNs to manage remote access had a high IT management overhead.
- VPN connectivity for remote monitoring devices limited remote access capability and restricted ability to take new services to market.

"Our aim was to reassess our Wide Area Connectivity with an aim of right-sizing connectivity, reviewing security management, simplifying IT management and providing a network that would underpin our business for years to come. Spitfire's simple yet powerful One Network solution did it all."

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# Solution:

Spitfire's landmark Spitfire One Network solution, enabled it to design a new, tailored MPLS network to meet IOM's strategic goals, optimising their network architecture and reducing costs.

Key adjustments included right-sizing connections across all sites, employing a mix of dedicated fibre, FTTP/FTTC Ethernet, and broadband, leveraging Spitfire's access to multiple wholesale providers for optimal cost and connectivity.

The introduction of Spitfire's Firewall as a Service (FWaaS), based on Fortigate technology, eliminated CAPEX for IOM and provided direct administration access, enhancing network security and management efficiency. IOM's need for direct-access public data centre hosting was fulfilled by selecting Equinix LD8, offering control over hosted systems and on-net MPLS access via a simple fibre cross connect.

Additionally, Spitfire Mobile Data SIMs ensured secure 4G/5G connections for IOM's monitoring gateways, bypassing the public internet for enhanced data security and management simplicity.

The integration with Microsoft Azure via CloudConnect and Spitfire SIP trunks for Teams telephony further streamlined and secured IOM's network infrastructure, completing a comprehensive solution that enhanced connectivity, security, and operational efficiency, while also catering to future needs by transitioning telephony to Teams with QoS-enabled PSTN connectivity.

#### **Results:**

The aims of the project had been to boost IT efficiency, support new operational needs, and advance product capabilities without exceeding the current budget.

Achieving a notable 40% cost reduction, Spitfire optimised network connectivity and transitioned IOM to a CAPEX-free firewall model, simplifying budget management.

Spitfire's solution enhanced network management and visibility, with customised firewall settings and comprehensive monitoring.



This made network adjustments and usage insights straightforward for IOM, receiving praise for its clear, tailored design.

Key to IOM's product innovation, Spitfire's Mobile IoT SIMs provided secure, direct connections for remote sensor gateways, simplifying deployment and management. This feature was crucial for expanding IOM's order capabilities in cost-sensitive scenarios.

Furthermore, Spitfire's network solution met stringent data security demands from IOM's public and government clientele by keeping data within a private network and utilising two-factor authentication for remote access, simplifying compliance and securing client contracts.

*"I would have no hesitation in recommending Spitfire to anyone embarking on any level of fixed line, mobile or cloud connectivity project."* 



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