MATs consist of geographically dispersed school sites where users have independent connections to each site and access to a range of applications (i.e. both local and in the cloud) that require a consistent quality of service in order to connect to resources and share them across the different sites.

As each of these sites requires substantial bandwidth, traditional WANs simply cannot keep up with expanding cloud-based performance needs across an extended education infrastructure. Furthermore, MATs are currently facing challenges regarding the price and flexibility of traditional WANs. Some of the specific WAN issues that all MATs must contend with include:

- High total cost of ownership (TCO)
- Lengthy provisioning cycles
- Performance degradation with the growth of cloud traffic
- Inadequate redundancy and resiliency
- Lack of application-aware connectivity
- Secure connectivity considering the ever increasing safeguarding and GDPR requirements

To better manage WAN investments, the adoption of SD-WAN offers improved performance, agility, and operational flexibility plus significant cost savings. SD-WAN is a technology that applies to wide area connectivity that connects organisations together, such as MPLS, Internet and 4G/5G external connections. SD-WAN virtualises these connections into a single managed interface.

Benefits gained using Fortinet’s Secure SD-WAN:

- **Single Platform**
  - Multiple connections from a single device

- **Centralised Management**
  - “Single pane of glass” visibility across locations

- **Improved Security & Reliability**
  - Secure tunnels & encryption over public networks

- **Control & Agility**
  - Zero touch provisioning and application control

- **Reduced Wan Costs**
  - Consolidation to a single platform
The benefits of deploying Fortinet SD-WAN are extensive and include:

- Removal of expensive and complex proprietary hardware – consolidation to a single platform
- Management of multiple connections from a single device (i.e. Internet, Fibre, 4G and 5G) - simplify and consolidate
- Improved reliability for users – automatic failover of connectivity with a seamless user experience
- Improved security – create secure tunnels and encryption over public networks to share MAT resources with other schools within the MAT.

However, not all SD-WAN solutions are created equal.

Fortinet makes it easy to deploy and manage the right security in all the right places with our Secure SD-WAN solution. The solution links network and security paths across the world through the Internet, 4G/5G or private WAN links, making it a truly borderless infrastructure for each MAT. It provides application visibility for encrypted traffic and smart load balancing which helps to reduce WAN costs without impacting the SLA for business applications. With Fortinet's Secure SD-WAN solution, a MAT is free to securely adopt digital business models and manage the growing volume of data and increasing numbers of endpoint and IoT devices.

The advantages of deploying Fortinet’s Secure SD-WAN solution are:

- High-performance, proven security and SD-WAN networking in one device
- Prioritise VOIP data and reduce business critical applications and network downtime
- Centralised management with visibility across the network and unified policy management across all school/campus locations within a single pane of glass
- Simplified deployments with zero-touch provisioning
- Superior visibility and control for applications, users and devices with granular policy enforcement capabilities
- Reduced WAN costs
- Increased network agility and flexibility with connectivity optimisation.

With Fortinet’s Secure SD-Wan solution, a MAT can benefit from a simpler, more agile, more secure service that is flexible enough to cater to a school's needs within the trust while better serving the overall inner workings of the MAT environment and safeguarding critical school data and resources.