

PageOne Network Infrastructure

PageOne is the only UK paging operator to have wholly upgraded its messaging systems and removed obsolete Glenayre proprietary paging processors from its infrastructure. As well removing the risk associated with operating and supporting obsolete systems, PageOne's new IP server-based infrastructure offers resilience, scalability and a future-proof platform on which we have been able to enhance and develop new messaging services.

Paging network distribution is satellite-based providing for improved network synchronisation and reliability with separate two-way telemetry to all local transmitters, for alarm monitoring and control. PageOne operates two independent satellite up-links at London Docklands and Brechin, Scotland both served by independent fixed links.

PageOne's main network infrastructure and connectivity is housed in a 24 hour manned secure exchange-grade environment with back-up power provision. PSTN network connectivity is split across two network operators (BT and C&W) selected for service quality and physical diversity of routing.

External IP connectivity is provided through two independent ISP's via separately routed network links with security provided, by a fully clustered, carrier-grade firewall with Layer 5 content switches managing load distribution and session management. PageOne operates fully redundant clustered stateful inspection firewall appliances running the latest CheckPoint firewall operating system. This means that one firewall in the cluster can fail completely without loss of service to customers. Our web services are then further secured by authenticated reverse proxy servers. The proxy servers' encrypt the traffic at 128-bit Secure Socket Layer technology.

PageOne's managed SMS messaging gateway services are served by mobile network connectivity includes fixed link, IP and ISDN, together with a fall-back route via a third party. PageOne connects to the mobile network at MAR level, providing for greater diversity and message throughput than simply connecting to a local SMSC and ensures SMS messaging less affected by consumer traffic load which can load local SMSC's during a major incident.

PageOne's Call-Centre bureau service is based in Portsmouth using VoIP connectivity with PSTN back up, together with live overflow and back-up capability at the main PageOne office in Brentford.

Alternative DRS

PageOne have also incorporated alternative network infrastructure and connectivity into a separate facility, to offer greater levels of availability even in very adverse circumstances.

Independent Resilience

As an independent operator PageOne offer UK-wide messaging services wholly independent of any other mobile network. Approximately 80% of Vodafone paging transmitter sites are co-located with their mobile network transmitter sites, giving an increased risk of faults affecting both services. Many organisations are actively choosing to separate the provision of mobile phone and paging services, minimising business risk by ensuring diversity and resilience for their mobile communications.

Secure Messaging for the Business Community

PageOne have over 20 years experience in serving the NHS and emergency services with mission-critical messaging. PageOne exclusively serve the public sector and business communities ensuring that in the event of major incident or emergencies, PageOne services are protected from the surge of consumer-led traffic load that can affect public mobile networks.

Powered by Oventus

PageOne has developed its own network independent messaging architecture, known as Oventus, which powers PageOne's range of paging and SMS mobile messaging services. Oventus combines carrier-grade network infrastructure with powerful and flexible middleware services, allowing organisations to mobilise their business processes and applications.