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## Telecom 2.0

*Communication networks are the lifeblood of the modern business. The technology that feeds and supports the flow of information is critical. However, the sheer volume of information that the modern enterprise needs to transport around its offices and people is growing at an alarming rate. These factors combine to drive one clear and pressing need businesses have to develop a continuity policy to ensure that they can maintain the flow of data to the teams that use it, or risk losing out to competitors who do. However, before investing heavily in a totally resilient solution, businesses need to consider the range of options available to them to maintain the continuity of services in times of difficulty. Only by working with a provider that combines Telecoms 2.0 attributes, such as a service-driven mindset and can do attitude, with next generation network capabilities, can organisations be guided through the solutions that best fit their need.*

Information Technology lies at the very heart of today's organisations and many companies are now so dependent on their networks that they take them for granted. In today's 24/7 digital economy, just imagine the business implications of critical data being lost, internet and email access being unavailable or your internal network going down.

The impact of the unexpected on your business, whether in the form of malicious damage such as hacking or some kind of natural disaster, can be devastating in the networked world. Take for example the 2007 flash floods across the UK. Following the wettest May to July on record, approximately 7,100 businesses were flooded and the resulting damage cost an estimated £3 billion<sup>1</sup>. However, this figure fails to take into account the cost of lost business during that period, when some companies were unable to operate a normal (if any) service, or the damage to reputation that the inability to communicate caused. No-one can predict the future, but by carefully planning in advance you can ensure that your business is in the best possible position, if and when disruption occurs. To meet resiliency requirements for coping with both unexpected events and increasing volumes of data, today's businesses require more than Next Generation Network capability alone. They need a combination of robust network capability and a next generation service mindset from their telecoms provider. When it comes to business resiliency, it's not simply a case of 'one size fits all'. Combnet Business closely collaborates with its customers and tailors its services to meet their needs.

The next generation of business resiliency is here:

Different industries have unique requirements for resilience. In the banking industry, for example, access to accurate, real-time buying and selling data is critical and business continuity and resiliency are considered so important that they are subject to specific regulations. However, for the majority of businesses, the rules and regulations are not so

strict, and yet the implications of a network collapse without sufficient backup systems can be equally severe. This is particularly true when you consider that, according to the report by London Chamber of Commerce and Industry, 80 per cent of small to medium sized businesses go out of business within 18 months of experiencing a major network problem and 90 per cent of businesses that lose data in a disaster are forced to shut within two years.

The indisputable fact is that all business premises, no matter what the organisation's size or industry, face the risk of disasters and they need to bring certainty to how they store and use their information. Firms need to be able to move their data around freely and ensure that it is 100 per cent backed up from every site, minimising the exposure to risk at any one site and making sure that the most important data is prioritised.

### **What types of network meet the requirement?**

Network capability and flexibility provide the technology platform for next generation telecoms providers to roll out a resilient service. As well as being able to withstand unexpected events, today's networks need to be able to cope with the ever increasing amounts of information being transported by today's businesses. Their needs have extended from just email and web browsing to encompass multimedia applications, image-driven, user-generated content and video. In order to cope with these burgeoning volumes of data and the swift pace of operational change, networks need to be both extremely resilient and scalable. Rapidly growing workforces require constant, uninterrupted access to business resources and only a Next Generation Network can provide the flexibility and resilience required.

Our Network was built specifically with the demands of the digital age in mind and, based on fiber-optic technology, it is highly resilient. The Next Generation Network is capable of delivering the next generation IP and Ethernet services required by today's fast-moving business and, as bandwidth can be increased quickly and painlessly in line with demand, scalability issues are overcome. In order to significantly reduce the volume of faults on their networks, today's Telco's also need to engage far earlier in proactive network management. By constantly monitoring its network, Combnets Business ensures that potential issues can be identified before they develop into problems. As a result, both the network's performance and the user's experience are significantly improved.

### **How can every eventuality be covered?**

Maintaining business continuity is not as simple as deploying two separate links to your business sites, there are a number of considerations that have to be taken into account. How far a customer wants to go in assuring resilience depends on the importance of their information assets and their budget, but there are four key business continuity measures that can be taken into consideration.

If information is your organisation's lifeblood you should not trust all of your services to just one network. Having an alternative access network in place ensures that critical applications continue to run even if one provider has a major outage. An alternative transmission path can also handle unexpected peaks in traffic and provide protection against denial of service attacks, which are designed to swamp networks with traffic and cause them to buckle.



The second business continuity measure is eliminating a single point of failure for the availability of voice and data services. Rather than relying on a single network provider to deliver connectivity between a site and the rest of the private network or the internet, businesses can run multiple links to their sites, guaranteeing up-time should one of the lines be inadvertently damaged and rendered unusable. In the event of network connectivity being destroyed over one connection, services can seamlessly divert to the backup connection, maintaining continuous data transfer availability.

One of the most basic disaster recovery tools that businesses should consider is spreading their risks across the network. By creating a mirrored system in which all information and applications are regularly and automatically backed up at different points on the network, businesses can ensure that information is protected in the event that one part of the network experiences an outage.

Multiple Ethernet connections into a Virtual Private Network (VPN) with any-to-any connectivity enable organisations to decentralise their IT across multiple sites and replicate their business-critical data. If a problem does occur, whether it is a natural disaster or simply a power failure, employees should be able to work from home and log onto their VPN remotely, safe in the knowledge that the network is secure and work can continue as usual, albeit off-site. This any-to-any connectivity overcomes the needs for backup circuits.

Finally, in the event of one of an organisation's main circuits going down, forcing all data to run over the other and increasing the risk of a network bottleneck, the prioritisation of critical data is essential.

With such an array of business continuity options available, organisations require a telco provider that's prepared to sit down and discuss the most appropriate solution for their unique needs, risks and budget. Combnet Business collaborates closely with all sizes of business, not just its largest customers with big communication budgets. Consultative and technologically-savvy local service teams, both at the presales and project management stages, work hand-in-glove with the customer to ensure they receive the most appropriate solutions for their business.

### **How can businesses design and provision truly resilient networks?**

True business resilience can only be attained when network capability is fused with a high level of consultative input at the stage of designing new network infrastructures. Until now, the legacy Telco practice has been to keep customers at arm's length from the services they use and act as merely a circuit provider, rather than responding to customers' requirements. The next generation of telecoms providers need to invest in their service delivery, and not solely their network, ensuring that their customers feel connected to their Telco teams as well as their network.

Combnet Business is committed to sitting down with organisations, listening to and understanding their individual requirements. This way it can help the customer implement measures appropriate to the risk associated with the type of traffic on its network, with a design that reflects the confines of the budget.

A customer-centric mindset and 'can do' attitude ensures that Combnet Business collaborates with its customers from the start, helping to plan, design, and implement their networks. But it doesn't stop there, many of the same teams remain all the way through integration and while the network is running. No one can predict the future, but by working with a telecoms provider that has a customer-centric mindset, you'll be better prepared for any eventuality.

For more about Combnet Business Solutions, please visit [www.combnet.net](http://www.combnet.net)