



North

Yorkshire County Council

Internet in Schools

The Government perspective from the National Education Network

The National Education Network (NEN) has issued standards for Broadband in Schools, the advice is designed to ensure that schools consider all the facts and that their supplier meet the standards and that an adequate solution is put in place. Over the years it has become very apparent that Schools have a different usage patterns, but they still require a very high level of reliability and performance. Loss of internet will disrupt teaching and administration throughout the school.

The NYnet service offered by North Yorkshire County Council and School ICT has been built with the following in mind to ensure we offer Schools the best service possible as close to these standards as we can.

The following are the important factors that Schools need to take into consideration:

- Connectivity and Capacity
- Reliability
- Safety & Security
- Value for Money and Sustainability
- Supplier Reputation and signing the Contract

Connectivity and Capacity

Schools need to consider the amount of bandwidth available. Bandwidth is normally measured in megabits per second (Mbps). Guidelines issued state that 100 Mbps would meet the needs of an average secondary school, and 10 Mbps would meet the needs of an average primary school.

Schools must consider “uncontended” connections. Meaning; that the school does not share the connection with other customers. They should also look for “symmetrical” where download speeds and upload speeds are the same. School tend compare their packages with “Home” packages offered, and “Home packages” cannot offer either of these options.

School must also avoid signing up for a connection with a data limit – this will result in extra costs.

Schools **ICT**

Schools are likely to find that their connection needs will increase over the period of the contract, a quote of 30% per annum has been mentioned – as internet services are continually becoming more “data heavy” as new technologies come along.

The recommendation is to make sure your supplier is able to offer a “future-proof” package for your school, with an easy upgrade path, and pricing points. NYCC have built the network to ensure that it can grow with Schools as they use more data heavy technologies.

Reliability

This is described as “uptime”. Ideally you need a guarantee of 99%, which should equate to no more than 9 hours downtime per year. It is also recommended that Schools look at credit regime if suppliers are unable to meet these “uptimes”. NYCC have ensured the a SLA is in place to ensure that the uptimes are met against the various products and that credit regimes are in place.

Safety & Security

Security is essential, not only for pupils, but school data and services. Ensure that the system you choose has adequate monitoring, filtering, firewalls, anti-virus, and authentication and network security systems. Also ensure you can manage the access to online content – emails, social media etc.

The filtering system that a school chooses should adhere to recognised national standards, such as the Internet Watch Foundation list and PAS74. The school needs to find a balance between safeguarding pupils from harmful contact and being able to access websites and materials they need to give the best possible learning experience. The Smoothwall offering from NYCC ensures that all these standards are met, and updated on a regular basis.

Schools also need to check that backup systems and remote access systems are also secure. NYCC has ensured that all the security check are built in, and that updates to systems are done on a regular basis.

Value for Money and Sustainability

Schools need to compare broadband services on a like for like basis, ensuring they check the total cost of the entire contract period. Collaborative purchasing agreements with local authorities, and regional consortia could bring down the costs. NYCC have purchased on behalf of Schools to ensure all the above is delivered to best value.

Ensure that schools are clear on additional services from suppliers, including standards and specifications of service provided; ensure you know how much additional services will cost. Remember best value for money, but always bear in mind that this does not mean lowest purchase cost.

Supplier Reputation and signing the Contract

Restoration of your connection in the event of failure is also important. Look at the SLA carefully and ensure response is around 4 hours.

There are many broadband suppliers, and government's advice is to make sure you go with a provider that knows the education market and has a proven track record in education services. Make sure they understand broadband in Schools. The supplier needs to respond to e-learning developments, pupil requirements and e-safety.

Ensure the supplier offers clear terms of service, and is able to resolve issues and faults quickly. Suppliers who work with industry standard frameworks, such as ITIL and FITS.

Make sure you read the small print, ask about any additional charges. If your contract involves more than one supplier, check who is responsible for which part of the service, and ensure you know who to contact, and you fully understand who is responsible for which part. NYCC is one contract and one supplier, we will deal with all the variants and suppliers involved for the School.

Broadband options from Schools ICT

If you don't have the time or don't want the hassle of negotiating direct with a wide number of suppliers Schools ICT can help. We have done all the hard work for you and through partnerships we are able to offer a number of broadband options to schools:

- **ADSL** basic access to the intranet over a phone line for schools where super-fast broadband is on its way
- **Schools ISP, Schools ISP *light*** highly resilient internet connection offering guaranteed uncontended bandwidth speed, which can flex to fully meet requirements. This service also includes additional components, including internet filtering via the Smoothwall UTM device.
- **Direct 10, 100 & 200** guaranteed uncontended bandwidth speed for both upload and download with speeds of 10mps, 100mps or 200mps
- **Smoothwall.** The Universal Threat Management (UTM) filtering box is designed to provide a complete security solution in a single product, giving you complete protection and visibility in one place.

If you would like help to pick the right broadband option please contact the Schools ICT Helpdesk on 01609 536086 (option 1).

November 2014