



# Department for Education

Title:	<b>Broadband Internet Standards</b>
Published:	23 March 2022
Updated:	-

Find out what standards your school or college should meet on connection type, connection speed, resilience and safeguarding.

#	Standard	Page
1	Schools and colleges should use a full fibre connection for their broadband service	2
2	Schools and colleges should have a backup broadband connection to ensure resilience and maintain continuity of service	4
3	Schools and colleges should have appropriate IT security and safeguarding systems in place, under both child and data protection legislation	5





## Standard 1

### Schools and colleges should use a full fibre connection for their broadband service

#### The importance of meeting the standard

Full fibre services provide the capacity and speed needed for effective use of online learning tools.

Getting the fastest speed you can afford has a wide range of benefits including:

- enabling teachers to have the confidence to make full use of online resources as integral parts of teaching and learning
- saving money by using cloud-based solutions instead of on-site technical infrastructure, products or services – for example VOIP telephony

Full fibre services provide flexibility to future proof schools and colleges as demand for internet services increases.

#### How to meet the standard

You should ask your supplier or in-house support team to investigate the availability of full fibre broadband services and speeds.

Primary schools should have a minimum 100Mbps download speed and a minimum of 30Mbps upload speed.

Secondary schools, all-through schools and further education colleges should have a connection with the capacity to deliver 1Gbps download and upload speed.

#### Technical requirements to meet the standard

Broadband should be provided using a full fibre connection.

Full fibre connections are sometimes described as:

- a leased line
- fibre to the premises (FTTP)

Note: copper connections, while widely used in schools at present, do not meet this standard.

#### Dependencies to the standard

The speed of your internet services may vary depending on your:

- internal network cabling and switches





- internal network equipment such as routers and wireless access points

See our other standards on wireless networks, cabling and switches.

## **When to meet the standard**

You should be looking to implement this standard as soon as you can. This is usually at the end of any existing contract term or as soon as full fibre is available.

Ensure that any new contracts or contract extensions using other non-full fibre connection types provide the opportunity to change to fibre services as soon as possible when they become available.





## Standard 2

### **Schools and colleges should have a backup broadband connection to ensure resilience and maintain continuity of service**

#### **The importance of meeting the standard**

With increasing reliance on internet-based services, broadband internet is an essential service. You should ensure that appropriate measures are in place to mitigate against a single point of failure.

#### **How to meet the standard**

You should investigate which backup internet services are available and implement appropriate systems.

Your broadband provider will be able to advise on possible solutions and costs.

#### **Technical requirements to meet the standard**

This standard requires a combination of the following:

- multiple broadband connection services (of different service types)
- multiple routers and appropriate associated router programming to provide automatic failover to backup services as and when required
- redundant power options on core active network equipment

#### **When to meet the standard**

Resilient services should be implemented alongside, or as soon as possible after a new connection is installed.



## Standard 3

### Schools and colleges should have appropriate IT security and safeguarding systems in place, under both child and data protection legislation

#### The importance of meeting the standard

It's essential that children are safeguarded from potentially harmful and inappropriate online material. An effective whole school and college approach to online safety empowers a school or college to protect and educate students, and staff in their use of technology. It establishes ways to identify, intervene in, and escalate any concerns where appropriate.

#### How to meet the standard

You should talk to your supplier or in-house support team to ensure that you have a content filtering system in place which meets the requirements outlined in the [online safety section of keeping children safe in education, paragraphs 123-135](#).

You should also ensure that you have a firewall as part of your internet and network system. This could be an on premises' device directly protecting your network and directly managed by the school or college. It also might be an 'edge' service provided and managed by your supplier or in-house support team.

#### Technical requirements to meet the standard

More detailed information about online safety can be found at:

- [Keeping Children Safe in Education](#)
- [Safer internet centre](#)
- [UK Council for Internet Safety \(UKCIS\)](#)
- [Online safety self-review tool for schools](#)

#### When to meet the standard

You should already be meeting this standard as a part of the ongoing safeguarding requirements as set out in the statutory safeguarding guidance on [keeping children safe in education](#).

