



## Buying IT

### 1. What Broadband?

There are many types and suppliers of broadband Internet (Internet Service Providers - ISPs), supplying the Internet in a range of packages and speeds.

Essentially the more you pay the faster the connection will be and there will be fewer limits in terms of bandwidth (downloads), email volume and addresses, downloads and storage use. Limits on bandwidth and emails can cause problems if you are a high traffic user of the Internet.

The provision falls into two main types, ADSL, which comes via the telephone system, and cable, which comes through a cable laid into your office by the provider. Each system requires slightly different hardware (router) to work but comes much at the same cost.

Make sure that your router uses a "Firewall". A Firewall protects your PC and/or network from outside intrusion from hackers and other automated invasive systems. You will need anti-virus and anti-spyware protection on each PC in addition to a Firewall in the router.

In addition to a Firewall we recommend that all ADSL systems use a dedicated telephone line. We advise people not to use the fax line for this or a line that goes through an exchange (this is not a problem with a cable connection), many older exchanges do not handle ADSL. If you do not have an existing line you will be "forced" to use BT (they need to install a new line) for at least one year before you can look for an alternative ISP.

Other ISPs include Tiscali, AOL, Phone Co-op – there are many more, simply use Google to see the full list. Seek evidence of the reliability of the connection and service before opting for an ISP. Many of the cheaper providers charge support and other benefits, e.g. technical support and/or downloads above a limit, at premium rates.

Contact you local cable operator if you have cable in your area (e.g. Virgin). Often this can be combined with telephony.

Beware comparing residential deals with commercial (charity) pricing. Some do offer charity discounts although this is not common. Typically ISP contracts run on an annual basis, but durations can be shorter depending on your needs.

An ISP is not the same as your web-page hosting company, although often both will provide e-mail addresses and storage capacity. If you have a website you will need to make arrangements for it to be hosted (see "What website"). You will not have the choice of your own email address (i.e. [admin@mycharity.org](mailto:admin@mycharity.org)) if you make use of the email as provided by your ISP, your e-mail address would have the ISP name within it e.g.

[admin.mycharity@btinternet.com](mailto:admin.mycharity@btinternet.com). To obtain your own name for emails as in the first case you need to buy the name (URL) separately.

## 2. Sharing the Internet

If you have more than one PC system that you wish to use the internet you will have to share the connection in some way (or buy two). Typically this requires the use of a Router which will create a Network that enables your PC systems to share an Internet connection. Additional costs for installation, hardware and cabling need to be considered in this case. There are many alternatives to this depending on the number of PCs that you wish to share the connection, what other services need to be shared and the type of connection you have – you may already have an existing network that requires configuring to share the connection.

If you share the connection remember that the speed is shared also, 10 people on a 2MB connection will impact on the speed an individual sees on his or her PC.

Laptop PCs may be able to make use of a wireless connection to share the Internet. Make sure that the correct equipment is purchased and that security measures are catered for at the installation stage. Not all buildings (structures and topology) and/or PCs are capable of providing a reliable wireless connection. We advise the use of a wired connection wherever possible to maximise speed and security. We also recommend that your building is surveyed for wireless before buying the equipment.

It is our experience that mixed operating systems, especially Vista, cause problems when trying to establish a wireless network.