Killearn Broadband Group

Frequently Asked Questions

What is Next Generation Broadband (NGB)?

NGB is defined in a number of ways, but put simply, is a broadband service that delivers a maximum download speed of 24Mbps or greater. You may also hear it called Next Generation Access (NGA), Fibre broadband or Superfast Broadband. The Scottish Government's digital ambition is to deliver speeds of above 40Mbps to 95% of premises by 2017, and to increase speeds to the remainder, providing broadband, albeit at slow speeds, to some premises for the first time.

What benefits will NGB bring to homes and businesses?

- Faster, more reliable connections;
- Ability to do more sophisticated activities faster, or even start to do them for the first time;
- Greater ability to share your connection around the home or business between users;
- Faster uploading of files eg drawings, art, video material, e-books, etc;
- For businesses there could be a significant impact by allowing work to be done more flexibly and efficiently eg reduced time spent waiting for an internet operation to complete;
- See the Usage Questionnaire to assess what you do, what you might like to do and how to assess your needs.

Will I be able to get it and, if so, when?

- You may already have noticed an improvement as our exchange has recently been upgraded from ADSLMax (upto 8Mbps) to ADSL2+ (upto 24Mbps), the basic improvement anticipated from the programme;
- See Postcode map to determine whether your premises are connected via a cabinet (E1 or E3), or via an EO (Exchange Only) line;
- For NGB, your premises have to be within about 1.2km (0.75 miles) of the fibre cabinet equipment to get super-fast speeds (ie faster than ADSL2+). For an estimate of your distance, speak to our technical advisors;
- E1 and E3 cabinets have been updated and are scheduled to 'go live' before the end of 2015;
- EO lines require a new cabinet to be installed and are scheduled to 'go live' during the 1st six months of 2016;
- The <u>Digital Scotland website</u> <u>Where and When</u> gives details of whether, and when, an individual property or phone-line will get NGB and also how it is connected to the local exchange.

How much will it cost?

- Comparative figures are available on-line from sites such as uSwitch and also Ofcom accredited sites such as: <u>www.broadbandchoices.co.uk</u>, <u>www.simplifydigital.co.uk</u>, <u>www.cable.co.uk</u>, or <u>www.broadband.co.uk</u>;
- Please refer to our chart for some example deals, taken from a variety of ISPs, correct at 14 Oct 2015;
- Whether you think the faster speeds are value-for-money will be a very individual decision.

What speeds can I expect?

- The speed is very dependent on line length and line quality. Speak to our technical advisors for an estimate of how far your premises are from the fibre equipment;
- The actual line length therefore depends on the cabinet location and your location, but also on the precise Openreach cable routing (which seems very unclear at present for individual premises);
- The speed is also dependent on the quality of your connection, both to the premises (eg joints in the cabling), and potentially within the premises (depending on where you site your router), as all these can make your line length appear longer to the exchange equipment;
- Finally, especially if you use a wireless connection, your own equipment may also have an influence.

See our self-help leaflet for some suggestions.

Are there any downsides related to switching to NGB?

- A new box needs to be fitted in your premises to match the new service (VDSL2). See the video running beside our helpdesk that is also available online. BT provides this as part of their switch-over & installation service;
- A new location for your router may be required to connect to the fibre connection box;
- Powerline adapters may be needed to get from the re-positioned router to a remote, non-wireless, computer;
- Additionally, a new router may be needed that may, or may not, be supplied by your ISP. This will require the wireless key to be changed on all your wireless devices, or alternatively within the router.

How can I maximise the speed I am getting now?

- There are a variety of straight-forward DIY checks and changes that are possible, or can be done with the help of someone technically-minded ;
- Some additional options are more complex and will require a discussion with your ISP;
- In a business context, several further options are worth investigating that require professional advice and a detailed discussion of your actual needs and circumstances;
- Please see our separate self-help leaflet.

What can I do if I won't be able to get NGB?

- Maybe you can get more from your existing connection (see self-help leaflet);
- Other technologies are available talk to our technical advisors: some personal solutions are available; some options require national infrastructure support, others would require a coordinated local action group:

Independent solutions (using existing infrastructure to get a personal solution)

 Mobile telephony (2G/3G/4G). All these make use of the mobile telephony infrastructure but only require you to have a mobile SIM that is data-enabled. Depending on the coverage from the chosen network, you can get speeds equivalent to landline ADSL broadband. It is also a solution that you can take with you and use elsewhere in the UK where a local Wi-Fi connection is not available;

Independent solutions (continued)

2) Satellite: These are particularly suited to very remote areas where even mobile coverage is poor, but has its own issues. Factors such as Contention as more subscribers use the service; Latency (or lack of responsiveness); Reliability due to atmospheric conditions; Data Capping perhaps; and even GeoIP constraints where, due to the ground station being outside the UK, services such as BBC iPlayer will not operate.

Infrastructure solutions (requiring up-front collaboration between users and/or system providers)

- 1) Provision of extra cabinets closer to groups of premises eg "the Branziert" or Killearn Mill, and re-routing the landlines serving these premises to one of the additional cabinets. This is our preferred solution;
- Wireless or uwave link: some work using a "broadcast" model, eg service provided by companies such as Briskona or Scottish Broadband Telecom. This requires, we believe, a significant number of customers to be commercially viable;
- 3) An alternative uses a "mesh" model where the service "hops" from property to property to reach the furthest premises. LocustWorld offer a service like this which gives some other advantages:(a) it can be small scale, (b) is typically community-run, and (c) can offer redundancy due to the 'mesh'. As this can work with only 2 nodes (source and target), it can more easily be cost-effective. The only obvious downside is regarding who provides the support and administration of the service;
- FTTrN: this is a wireless solution to link an FTTC cabinet to the exchange rather than by landline fibre. It would be provided by Openreach, linking from a mini-cabinet to customer premises by landline as now;
- 5) Community-led project to lay our own fibre network and cabinets to supplement the BT solution being created currently.
- Where are these alternative technologies in use? Eg FTTrN in Wales, Briskona's wireless network across Clackmannanshire, LocustWorld's wireless network in Drymen and Dumfries, B4RN community network group in Yorkshire;
- For businesses, a Broadband Connection Scheme run by the UK Government offers small and medium-sized businesses grants of up to £3000 to improve their digital infrastructure. You may be eligible for this (see separate leaflet).

Where can I get more information?

- KCC website has a page dedicated to NGB to elaborate on many of these topics;
- KCC website also has a Links page to provide lots more information around NGB topics;
- Go to <u>www.killearncc.org.uk</u> and look at the KBG page from the links at the left;
- Speak to our technical advisors at the Broadband Open Day.

Disclaimer: Please note that all information offered by KBG is provided for indicative purposes only, in good faith, and customers should discuss their own personal situation with their ISP to establish their exact connection situation and therefore understand what they can reasonably expect to get, especially if they are close to one of our "speed boundaries". Professional advice should also be sought if you have any doubts about your own capabilities in these areas.

Fibre Broadband package examples 12 Oct 2015

ISP	Name	Advertised	Usage	Contract	1st Yr	Monthly	Line	Phone Package
		Speed			Cost	Cost	Rental	
BT	BT Infinity 1 with Weekend calls (£100 gift card)	Upto 38Mbps	40GB	12 months	£162	£10, then £18 after 12 months	From £16.19	Weekend Calls
ВТ	BT Infinity 1 with Weekend calls (£100 gift card)	Upto 38Mbps	Unlimited	12 months	£162	£10, then £25 after 12 months	From £16.19	Weekend Calls
ВТ	BT Infinity 2 Unlimited with Evening & Weekend calls (£100 gift card)	Upto 76Mbps	Unlimited	12 months	£337	£25, then £30 after 12 months	From £16.19	Evening & Weekend Calls
John Lewis	John Lewis Broadband Fibre with Talk Evenings & Weekend	Upto 38Mbps	100GB	12 months	£225	Free, then £25 after 3 months	£13.50	Evenings & Weekends
Plusnet	Plusnet Unlimited Fibre Broadband	Upto 38Mbps	Unlimited	18 months	£186	£7.50, then £22.49 after 6 months	From £15.49	Only pay for calls you use (or add Evenings & Weekends for £3/month
Plusnet	Plusnet Unlimited Fibre Extra Broadband with phone	Upto 76Mbps	Unlimited	18 months	£276	£17.50, then £27.49 after 6 months	From £15.49	Only pay for calls you use (or add Evenings & Weekends for £3/month
Sky	Sky Fibre Broadband	Upto 38Mbps	25GB	12 months	£7 (p&p)	Free, then £10 after 12 months	£17.40	Sky Talk Weekends
Sky	Sky Fibre Unlimited	Upto 38Mbps	Unlimited	12 months	£157 (incl p&p)	£10, then £20 after 12 months	£17.40	Sky Talk Weekends
SSE	SSE Superfast Fibre Broadband	Upto 38Mbps	Unlimited	18 months	£120	Free, then £20 after 6 months	£13.49	Talk Weekend
Zen	Zen Fibre 1	Upto 38Mbps	50GB	12 months	£271	£19.50	£16.99	Zen Home Talk (individual call payment)

NOTE: other ISPs and call packages are available, including faster, and slower (non-fibre), speeds. Note that some packages incur an installation charge.

Some ISP offer a package of services and, depending on whether you take advantage of these elements, may change the balance of these comparative examples.

These prices and other details were drawn from one of the comparison sites accredited by Ofcom and were correct at the date above. Several Ofcom accredited sites are available,

see page 1, as are other comparison websites.

No responsibility is taken for any errors contained in this summary. Please check the ISP'sown website, or contact them directly, for full and up-to-date information.