

Broadband Overview

Broadband is essentially a Hi-speed data signal that enables an individual to connect to the internet using a computer or other wireless enabled device. The Broadband signal can be delivered over the Mobile telephone network (3G or 4G) or via the Fixed telephone network (Copper or Fibre optic cable). In remote locations where none of the above is available broadband is sometimes delivered via Satellite. Broadband speeds can vary depending on the technology used, the location of the user and the number of users at that time.

Technologies:

Mobile	Speeds are generally in the range up to 10Mb. Depending on the availability of 4G in the location and usage levels at the time higher speeds could be obtained.
Copper	Speeds are generally in the range of 2 Mb to 100Mb depending on the distance from the Telephone exchange or Broadband cabinet.
Fibre optic	Speeds are in the range of 150 Mb to 1000Mb and are not dependant on the distance from the Telephone exchange.
Satellite	Speeds are generally in the range of 20 Mb depending on the usage levels at the time.

Mobile:

Mobile broadband allows an individual to stay connected when on the go. It is most commonly accessed via a Mobile phone but can also be accessed using a Dongle, a MiFi device or a Mobile Router.

The speeds achieved will depend on the following:

- The type of device used.
- The availability of 4G or 3G in the location.
- The usage level at the particular time.
- The landscape between the user and the nearest Mobile Mast. (Transmitter)
(Hills, buildings or other obstructions will impact the Mobile signal)

Copper:

Broadband via copper utilises the existing copper Telephone line in the customer's premises. The speeds achieved are dependent on the distance the premises is from the telephone exchange. There are two versions of broadband delivered via copper, ADSL and VDSL.

ADSL:

This was the first generation of broadband and can deliver speeds of 2Mb up to 24 Mb.

VDSL: (e-fibre / FTTC)

This was the second generation of broadband and can deliver speeds of 10Mb up to 100 Mb.

Fibre: (FTTH)

Open eir are currently rolling out a Fibre optic network to 300, 000 premises across Rural Ireland. This involves installing a Fibre Optic cable in each premises which can deliver speeds of 150 Mb to 1,000 Mb.

To view the latest locations that can now access fibre, visit the [Rollout Map](#).

Satellite

Satellite broadband can be an effective solution in remote hard to reach rural areas. It requires the installation of a satellite dish at the premises which is usually done by a specialised satellite company. Satellite broadband offers speeds of up to 20Mbps, depending on the usage at that time.

NOTE: A wireless broadband solution (Mobile or Satellite) can be a good interim solution while waiting for FTTH to be available in that area.

Broadband v WIFI

A common misconception for customers is that Broadband and WIFI are the same. Broadband is the Data signal from the Exchange to the Modem in the customer's premises. WIFI is the wireless signal between the Modem and the device the customer is using eg. Tablet or Mobile phone etc.

The speed of the WIFI is governed by the Hand held device being used and the number and type of any obstructions between the user and the Modem. Ultimately the speed of the Internet connection is governed by the speed of the Broadband signal coming into the premises.

(See *WIFI document for more detail.*) [User Guides](#)

Data Limits

Most broadband data plans come with either limited or unlimited data. Limited data plans may incur extra charges per month if the Data allowance is exceeded. An unlimited data plan means that you will have no additional charges regardless of what you download (subject to Fair usage policy).

Data allowances can vary from service provider to service provider and also depending whether you are using a wireless or fixed line service.

Exceeding your data allowance can result in the following:

- Additional charges.
- Restriction of service for the remainder of the month.
- Suspension of service for the remainder of the month.

It is advisable to estimate your data usage and pick a data package which matches or exceeds your expected usage. You can use a third party [data calculator](#) to estimate your potential data use.

Fair usage policy:

All broadband suppliers have a Fair usage policy which indicates the total Data volume allowed per customer for a monthly period. Each customer should familiarise themselves with the Fair usage policy of their Broadband Supplier.

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