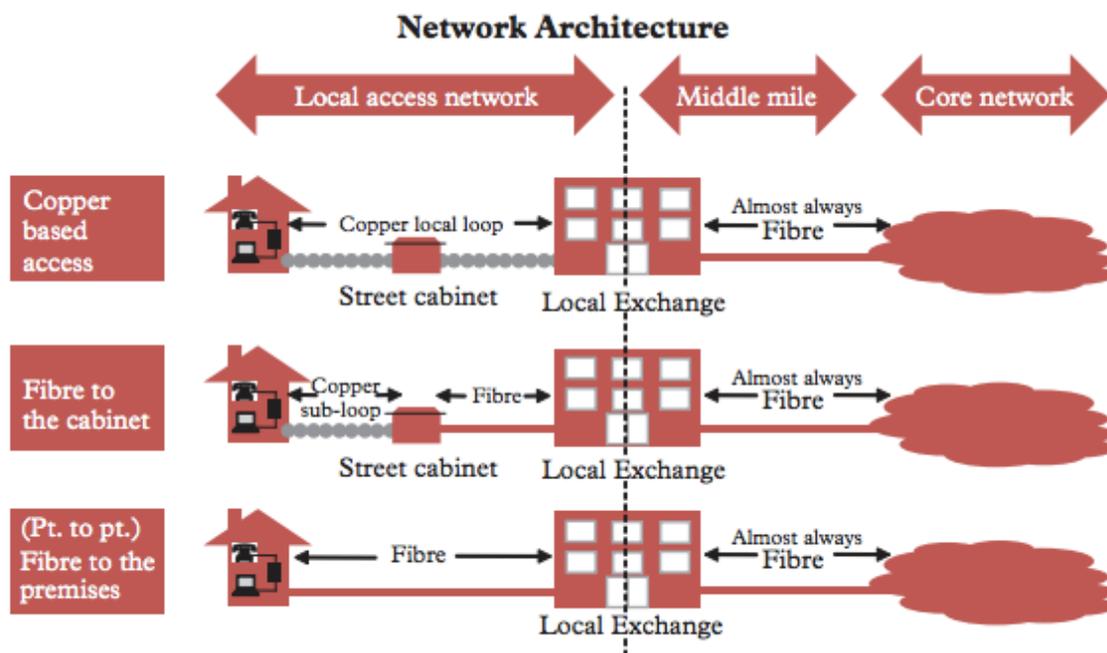


# Fibre Broadband: What is FTTC aka Fibre to the Cabinet and what does it mean?

FTTC stands for Fibre to the Cabinet. It's one of two ways in which next-gen fibre optic broadband is being delivered to homes and businesses in the UK. FTTC in a nutshell is much easier and cheaper to deliver en masse than its counterpart, [FTTP or Fibre to the Premises](#) (sometimes called FTTH or Fibre to the Home).

FTTC uses existing broadband infrastructure - exchanges, street cabinets and copper wire - to deliver broadband to homes and properties whereas with FTTP the entire connection is made up of fibre optic lines.

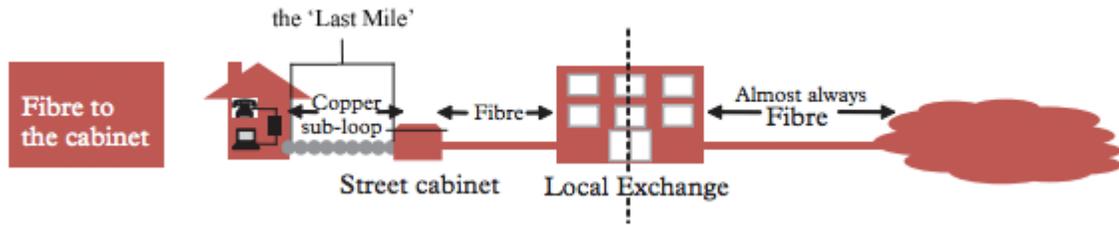
In this diagram below, obtained from the recent [House of Lords Select Committee Inquiry on Communications](#) report, you can see at a glance the basic differences between traditional copper DSL broadband, FTTC broadband and FTTP broadband.



## What is the Last Mile?

With FTTC, a fibre optic connection runs all the way from the core network (backhaul) through to the local exchange after which it runs to a street cabinet. From here, several connections split off from one cabinet into multiple homes, hence fibre 'to the Cabinet'.

The last leg of the connection is referred to as the 'Last Mile.' Though not always strictly a mile long, this length of copper wire is the last connection from the cabinet to your house and, like traditional ADSL broadband, the distance between the cabinet and the premises will determine your ultimate speed. The greater the distance, the slower your download and upload speeds will be.



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A page on BT’s site titled ‘Understanding your broadband speed’ explains: “the final stage of the broadband journey is from the cabinet to your home. While this distance isn’t as critical to your broadband speed as the overall distance from the telephone exchange to your home, it still has an effect on your speed.”

This description of broadband speeds was written to help customers understand broadband speeds over ADSL/copper broadband but the same ‘length of distance/speed’ rule of thumb applies to FTTC broadband.

What’s more, If your home is too far from your nearest cabinet then chances are you won’t even see a difference. At 1.6 kilometers (1 mile) from the cabinet, FTTC broadband delivers the same speeds as regular broadband - around 10Mbps.



The diagram on the following page shows that VDSL2 broadband (the type of FTTC broadband BT uses) is capable of delivering its current top download speed of 80Mbps if you’re some 2,000 feet from the cabinet.

Even if you’re located in this 2,000 foot radius, the time of day you’re online can also affect your speed and the more users that are online at the same time as you, the slower your speed will be.

Top speeds available from BT’s FTTC fibre broadband current peak at 80Mbps - roughly ten times higher than the national average. Its unlikely that everyone will get this, but FTTC is something of stopgap solution for BT, long-term.

Map showing distance from cabinet 6 ( cabinet 5 distances are similar)



Kms to feet:  
 0.5 1640  
 1.0 3300  
 1.5 4920  
 2.0 6600  
 2.5 8200  
 3.0 9900

