

# 5G frequently asked questions

5G is more than just pure connectivity. It has the potential to unlock new experiences and increase productivity around all the things that matter most, so you can transform your business and live life without wasting a moment.

We've pulled together our most frequently asked questions on 5G...

## What is 5G?

5G is the next generation mobile network, which currently offers faster network speeds and, in the future, will connect more people and more things than ever before and pave the way for new and innovative use cases. 5G is broken down into key technologies or capabilities:

- Enhanced Mobile Broadband (eMMB)
- Ultra-Reliable Low Latency Communication
- Massive Machine Type Communications

## What is a Private Network and how is that different to 5G?

Private Networks, whether on 4G or 5G, sit outside our public networks. We work with businesses to develop a network on their premises or covering the area they work. It enables businesses to have their own, secure "mini network".

## What are the benefits of 5G today?

5G's journey is only just beginning and it will take around 3-5 years to realise its full potential. Today, users are benefiting from the first of the 5G capabilities meaning they're making the most of greater capacity and faster speeds on our network.

The 5G benefits for businesses in 2021 are coming to life through the development of 5G Private Networks, where we can test and develop more advanced use cases. Together with our customer partnerships, we have developed some ground-breaking products such as remote experts, virtual training and Computer Vision for Health & Safety monitoring and asset tracking.

[Explore our 5G use cases here](#) >

## What are the future benefits of 5G?

Having secured more low and high-band spectrum in 2021, we are expanding our 5G network coverage. Over the next 3-5 years, as we rollout the infrastructure, the 5G technology will continue to evolve as the standards are developed and use cases identified.

As that happens, it will unlock further benefits, including:

- **Ultra-low latency** – (the time between data being sent and received) paving the way for real-time applications like collaborative robotics.
- **Ultra-reliability** – meaning we can reserve sections of the 5G network for specific functions such as calls, text messages or the emergency services.
- **Much faster and more efficient** – 5G can connect 10 times as many devices as a 4G network can today, but at a lower power level, enabling everything from smart societies to wearable tech that enables preventative healthcare, to connected bins that know when they need to be emptied.

## How fast is 5G and is it more secure than 4G?

Our 5G network can be up to ten times faster than our 4G network.

However, many things can impact data speeds such as: the device you're using, the mast you're connected to, how many people are using the network in that area, or even how far away you are from the mast. Improved Latency will also help here too, making transactions feel responsive and faster.

Like 4G, 5G has carrier grade security built into it. However, 5G's inbuilt security will continually evolve over time to protect customers and businesses from future online threats.

## Is 5G a greener technology than 4G?

Our 5G network enables more devices to be connected, using less energy than it would if they were connected over our 4G network. In this way, it's our most energy-efficient network yet.

The application of 5G and connected technology, such as smart grids and autonomous vehicles, could see the UK save up to 269 mega tonnes of CO<sub>2</sub> by 2035, almost equivalent to England's total emissions in 2018 (280 mega tonnes).

## Will 5G affect my health?

Mobile networks are built to strict government guidelines in the UK, which we at O2 adhere to, that are informed by both the World Health Organisation & International Committee for Non Ionising Radiation Protection ICNIRP. You can find out more at: [www.o2.co.uk/5G](http://www.o2.co.uk/5G)

We also recommend visiting Mobile UK's #5GCheckTheFacts page here >

## Where is 5G available?

We now have 5G in parts of most major UK towns and cities, as well as lots of smaller towns and villages. To see whether 5G has arrived in your area visit our coverage checker.

As 5G opens the door to new opportunities, take a look at how you can take advantage with O2 Business:

Get the latest 5G devices >

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