

How 5G will change the **sport experience**



Mobile^{UK}



Why should we care about 5G?

5G will benefit our economy and society.

It will be better at doing the things that 4G does already, but significantly it will offer faster and more reliable mobile internet.

It will also do things that 4G cannot. It has the potential to change the ways in which we learn, how we communicate and how we do our jobs through the simultaneous and seamless connection of our digital devices.

But because it is often described using technical jargon, many people are unaware of how 5G will enhance their life.

This pamphlet explains the benefits of 5G using examples and language that anyone can understand.

It is one of many pamphlets that look at the impact of 5G. The topics included in these pamphlets are:

- **How 5G will help healthcare**
- **How 5G will increase rural opportunities**
- **How 5G will support the emergency services**
- **How 5G will help councils**
- **How 5G will improve the home and the workplace**
- **How 5G will help the environment**
- **How 5G will advance the manufacturing industry**
- **How 5G will improve the creative industries**
- **How 5G can meet the climate change challenge**



75%
of people believe only 5G tracking will improve player performance.²

76%
of the sporting industry will use 5G as a platform for innovation,
74%
believe it will underpin efforts to meet rising fan expectations.¹

How 5G will change the sport experience

5G will transform the way we view and interact with sports events. Here are two ways the excitement of sports games and events will be elevated to a whole new league:

- **Capable of creating a front row seat experience from your own home.**
5G-enabled technology puts sports viewing on another level. Faster speeds and lower latency (lag or buffering) will enrich the broadcast experience. Imagine being able to watch the game alongside your friends from different locations enjoying instant close-up replays, interactions with players and an enhanced, creative viewing experience.
- **It's not just going to change the way we watch at home.** Attending games and events will bring a whole host of new experiences for fans. Augmented reality visuals alongside real-world viewing will give fans in stadiums an up-close view of the game and an immersive experience like never before. The technology 5G enables will also offer sports industry partners the means to deliver personalised content, information and products to fans that enhances the offering available, and the experience of sport viewing.

¹ The transformative impact 5G will have on the sport sector | [The Telegraph](#)

² 5G, The Sports Industry and COVID-19 | [ptidigitalgroup.com](#)

5G networks are being gradually rolled out across the UK. When you will have access to 5G connectivity will depend on where you live, your network provider and whether you have 5G-enabled devices.

If you have further questions about 5G, some of the most common questions have been answered on the final page



Uses of 5G in the sports industry

5G remote production of the Wembley Cup

The final of the EE Wembley Cup in 2018 was the world's first live event to be broadcast over 5G using remote production. The partnership of BT Group's EE and BT Sport aired the whole event over 5G in Wembley Stadium to London's ExCeL Exhibition Centre. The broadcast was then produced remotely by the BT Sport production crew at BT Sport's base in Stratford, East London. EE is the lead partner of Wembley Stadium and has ambitions to make the iconic sporting landmark the world's most connected stadium.³



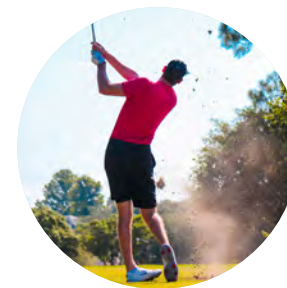
Spectator experience transformed in rugby at the Ricoh stadium

Vodafone and Rugby Union team Wasps have transformed the spectator experience at the Coventry-based Ricoh Stadium. With 360° viewing, fans can stream a variety of content to enrich the game play. From multi angle play, behind the scenes viewpoints and in play statistics, short of being on the pitch, the fans are closer to the action than ever before. The creation of special #5Gamechanger seats offer these immersive experiences.⁴



Reducing the use of fibre optic cables in live broadcasts

Fox Sports, Intel, Ericsson and AT&T piloted a 5G test in 2018 during its televised coverage from the U.S. Open at Shinnecock Hills, N.Y. Instead of using fibre optic cable to move between holes the broadcast team successfully used 5G wireless technology to send 4K video footage to its production truck.



As 4K becomes the industry broadcast standard and ultimately up to 8K, higher frame rates require increased bandwidth during live filming so that footage can be transferred from camera to outside broadcast vehicles and onto production control desks. 5G allows this live transfer of footage data without compromising quality.⁵

5G at the Pyeong Chang Winter Olympics

In 2018 the Winter Olympics in Pyeong Chang featured a range of 5G enabled technologies. Partners Samsung, Intel and Korea Telecom (KT) recorded and broadcast the action in virtual reality, enabling the judges to check for records and replay. The technology provided the ability to deliver a real-time virtual reality broadcast of the action, so the audience could view it interactively as it happened. A bobsleigh was fitted with a 360° camera which filmed and broadcast live action from the driver's point of view. The footage provided an even more satisfying experience for viewers watching the action at home than those at the event.⁶



³ EE Continues 5G Leadership with First Live 5G Broadcast in Partnership with BT Sport | [ee.co.uk](https://www.ee.co.uk)

⁴ Vodafone 5G network brings fans closer to the action at Ricoh Arena | [vodafone.co.uk](https://www.vodafone.co.uk)

⁵ Intel 5G Technology at the US Open - It's a Hole-in-One | [intel.com](https://www.intel.com)

⁶ 5G Applications showcased at PyeongChang Winter Olympics | [Counterpoint](https://www.counterpoint.com)

The statistics



74 per cent of sports leaders believe 5G will help meet rising fan expectations.⁷



76 per cent of sports leaders plan to use 5G as a platform for innovation.⁸



53 per cent of global consumers watch sports regularly, of these, 45% of people who watch sports watch it more than any other content.⁹



30 percent of sports leaders believe 5G will have an impact on player performance.¹⁰

⁷ Next generation 5G will change sport forever | [wired.co.uk](https://www.wired.co.uk)

⁸ 5G set to revolutionise the sports industry | [vodafone.co.uk](https://www.vodafone.co.uk)

⁹ Sports video trends report 2019 | [graybo.co.uk](https://www.graybo.co.uk)

¹⁰ 10 ways 5G will change sports in 2020 | [5gradar.com](https://www.5gradar.com)

Frequently Asked Questions

1. How do I get access to 5G?

Firstly, you need a 5G signal in your area (just as you need a 4G signal to get 4G now). Secondly, you need a device that can receive 5G signal - some 5G-enabled smartphones are available now, with more coming onto the market.

2. Does 5G pose a danger to your health?

5G uses radio waves - as does 4G, 3G etc. - which have been found safe in numerous studies when used within guidelines. Public health organisations around the world support this conclusion.

3. Does 5G mean more masts and antennae?

Some new infrastructure will be needed to connect more remote communities to the 5G network. But existing masts will be adapted for 5G wherever possible. If new sites are needed, relevant planning rules will apply to them being built.

4. Is 5G bad for wildlife?

No. Despite many false claims, wildlife has not been found to be negatively affected by 5G.

5. Will 5G offer an alternative to broadband?

4G and 5G can both provide mobile home broadband connections. However, while 5G will offer potentially near gigabit capable speeds in the future, currently UK 5G mobile networks don't provide the same capacity or offer speeds as fast as 'full fibre' for home broadband.

Source: Mobile UK - www.mobileuk.org

5G CHECK THE FACTS

mobileuk.org

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