

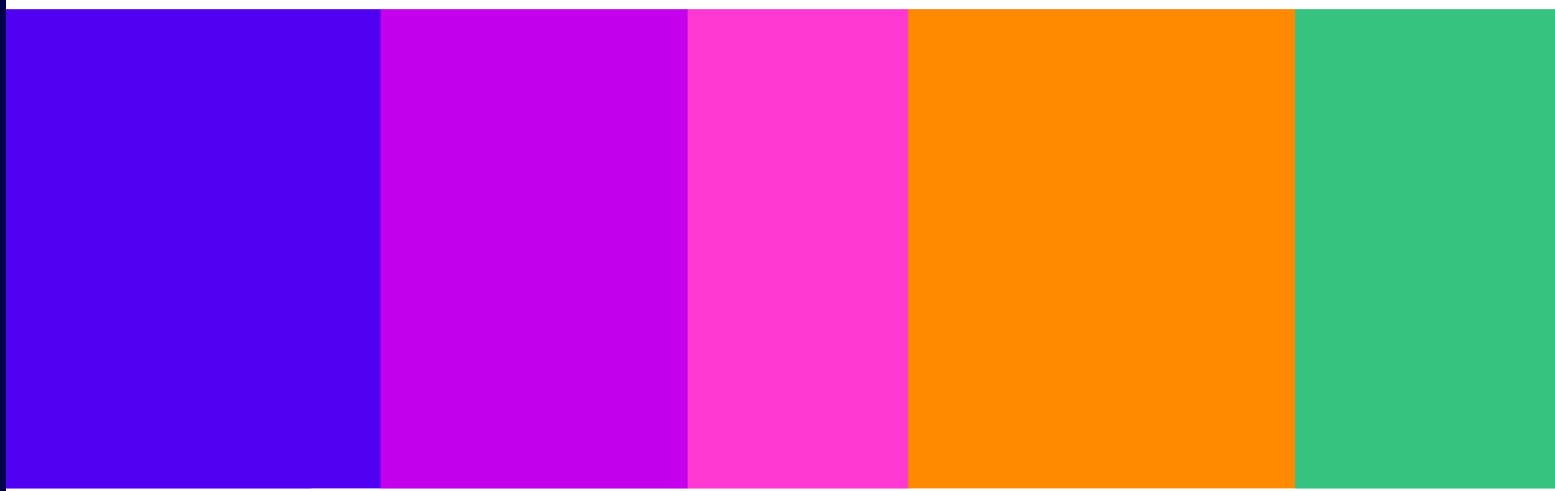
Expanding access to the 6 GHz band for commercial mobile and Wi-Fi services

Authorising Wi-Fi in 6425–7125 MHz and prioritising mobile in 6585–7125 MHz

Statement

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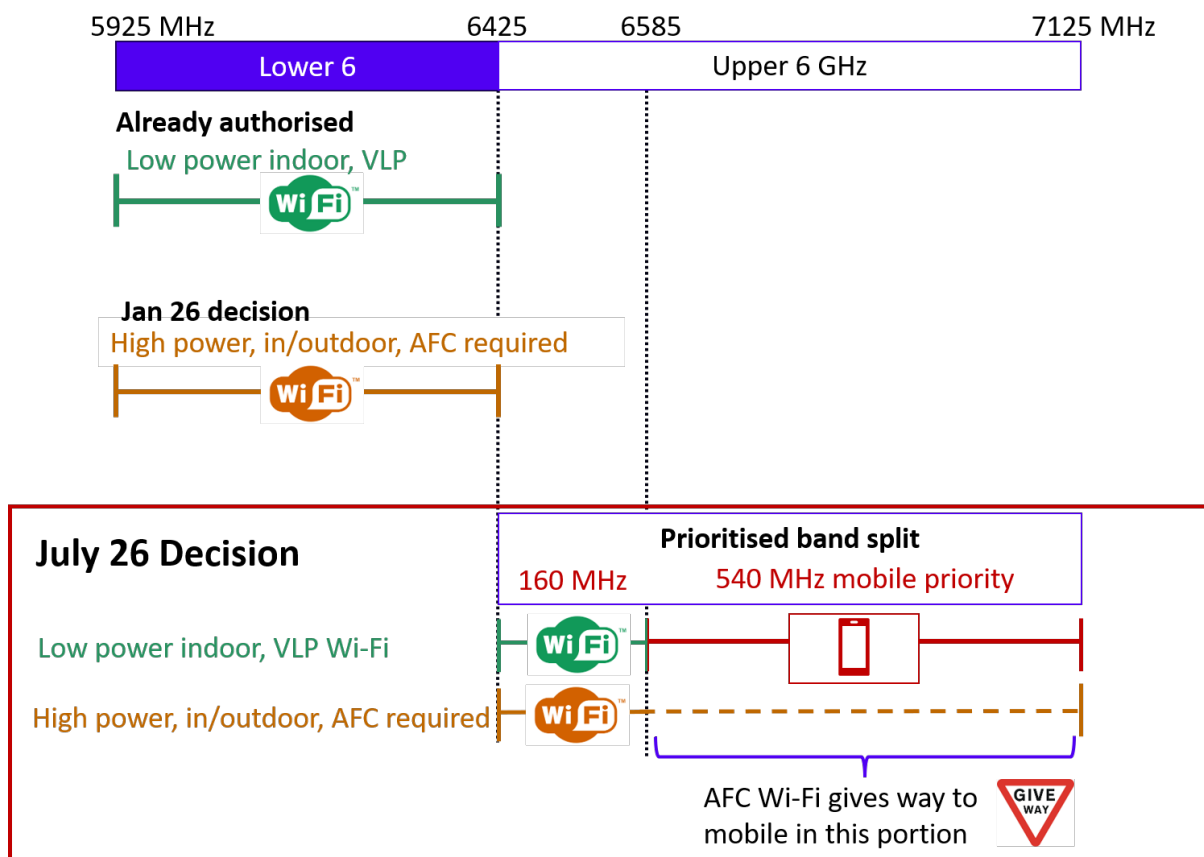
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1. Overview

- 1.1 A wide range of stakeholders have identified the Upper 6 GHz band (6425–7125 MHz) as important for meeting growing demand for wireless connectivity. The Wi-Fi¹ sector is seeking access to additional spectrum to support increasing traffic and new applications, while the mobile industry is focussed on future capacity needs and the development of 6G services.
- 1.2 In January 2026, we [consulted](#) on proposals to improve access to the 6 GHz band for both Wi-Fi and mobile. Our objective was to support innovation, deliver improved connectivity for consumers and businesses, and enable efficient use of spectrum in the face of uncertain future demand.
- 1.3 This statement sets out our decisions. Having considered stakeholder responses and further analysis, we have decided to proceed with our proposals to enable Wi-Fi use of the Upper 6 GHz band through a prioritised spectrum sharing framework. This approach allows earlier use of the band by Wi-Fi while preserving the ability of mobile network operators (MNOs) to introduce mobile services in the future. Figure 1.1 below shows these decisions, in the context of earlier decisions, and the text box provides more detail.

Figure 1.1: Decisions in this document in context



Source: Ofcom

¹ We use Wi-Fi throughout this document as a generic term than encompasses a range of Wireless Access System / Radio Local Area Network (WAS/RLAN) technologies.

What we have decided – in brief

We will implement a prioritised spectrum sharing framework in the Upper 6 GHz band comprising:

- a Wi-Fi priority portion in the lower 160 MHz of the band (6425–6585 MHz); and
- a mobile priority portion in the upper 540 MHz of the band (6585–7125 MHz).

Within this framework:

- We are making the Wi-Fi priority portion of the band available on the same licence exempt basis as the Lower 6 GHz band. This includes low power indoor use and very low power use such as mobile hot spots or AR glasses. Outdoor and higher power use is also permitted, but only where devices operate under the control of an Automated Frequency Coordination (AFC) system.²
- We are also allowing licence exempt Wi-Fi access to the mobile priority portion – but only for those devices under the control of an AFC system. This will enable Wi-Fi use of the full 6 GHz band while ensuring that such use can be managed as mobile deployment occurs.

1.4 Our decisions are intended to balance competing demands for spectrum by:

- improving the capability and capacity of Wi-Fi networks without constraining future mobile deployments, supporting economic growth in the UK and giving incentives to invest for both industry sectors;
- enabling near-term benefits from Wi-Fi, where equipment is already available, and providing certainty to Wi-Fi of continued access to the bottom 160 MHz of the band as the “Wi-Fi priority” portion of the band; and
- ensuring that spectrum remains available for future mobile services as demand develops, providing certainty to MNOs that the top 540 MHz will be available as the “mobile priority” portion of the band.

1.5 We expect this framework to:

- increase capacity for Wi-Fi where it is most needed, including enterprise Wi-Fi, high density housing and large public venues;
- improve broadband availability in some rural areas;³
- enable new low power device use cases; and
- facilitate consumer benefit, growth and innovation across a range of environments, while ensuring sufficient spectrum remains available for mobile deployment where it is most needed.

Next steps

1.6 We have published a [notice](#) of our intention to make the necessary regulations to enable the decisions to authorise Low Power Indoor (LPI) Wi-Fi on a licence exempt basis in the bottom 160 MHz of the Upper 6 GHz band alongside this document. We previously

² AFC is a database-driven method for managing spectrum, which automatically determines a list of available frequencies and associated maximum power levels for use by a Wi-Fi device at a given location, while ensuring protection for existing users. We are publishing a statement outlining the conditions for our AFC framework in a [separate statement](#) alongside this document.

³ Wireless Internet Service Providers (WISPs) will be able to use 6 GHz to provide a substitute to fixed broadband, including in rural areas.

consulted on the AFC regulations and have now published [a statement](#) setting out our decisions on how to implement the AFC database framework, and the necessary regulations related to AFC-controlled Wi-Fi throughout the 6 GHz band.

- 1.7 Our April 2026 [consultation](#) on the definition of high density areas, and our approach to incumbent users' coexistence with mobile, closed on 6 July and we expect to publish responses on our website soon. We plan to publish a final statement outlining our decisions on those topics in autumn 2026.
- 1.8 We have taken account of ongoing international developments, including work in Europe, recognising the importance of harmonisation for device ecosystems. We will continue to engage in ongoing work in CEPT to ensure our approach aligns with that taken in Europe as far as possible.

The overview section in this document is a simplified high-level summary only. The decisions we have taken and our reasoning are set out in the full document.

2. Context

Background

- 2.1 The Upper 6 GHz band (6425–7125 MHz) has drawn the interest of industry due to its potential to support the future growth of data traffic and drive innovative applications for consumers and enterprise. Some stakeholders see a strong case for Wi-Fi use, especially for improving enterprise networks; coverage of large venues; complementing the expansion of fibre-to-the-home; and enabling innovative use cases such as Augmented Reality (AR) glasses. Others consider that Upper 6 GHz is essential for the future of the mobile industry, to increase capacity, especially in urban areas with high traffic demand, and to enable future 6G use cases.
- 2.2 Ofcom is of the view that **shared use of Upper 6 GHz spectrum** between mobile and Wi-Fi will bring the **greatest overall benefit to citizens and consumers**. We consider that a shared framework would combine the benefits offered by both industries, optimising use and allowing for evolution in predicted future demand, even at a localised level.
- 2.3 As we set out in our [February 2025 consultation](#), sharing mechanisms are essential to manage areas where both mobile and Wi-Fi would use the spectrum intensely, especially in dense urban areas. Our [January 2026 statement and further consultation](#) set out how we envision that sharing the Upper 6 GHz band between the two services would work, and is the basis for the decisions we are now making. This includes our decision to make use of Automated Frequency Coordination as a mechanism to support sharing, while our separate [AFC framework statement](#), also published today, sets out our decisions on the detailed implementation of AFC in the UK, covering the whole 6 GHz band.
- 2.4 We also set out in the January 2026 publication our decision that any mobile award for the Upper 6 GHz band will be subnational. This is because the physical characteristics of the band make it well suited to being used in areas where high volumes of data traffic are concentrated in a relatively small geographic footprint, which is predominantly urban areas.
- 2.5 In our subsequent [April 2026 consultation](#), we set out our proposed high density areas and our proposals to ensure that mobile operators will be able to deploy in those areas without significant constraint from incumbent users. We aim to publish a statement on our final decision on these topics in autumn 2026.

Legal and regulatory context

- 2.6 Ofcom has a wide range of statutory powers and duties which govern the way we carry out our spectrum functions. These are primarily set out in the Communications Act 2003 and the Wireless Telegraphy Act 2006. Of particular relevance to the decisions and proposals set out in this document, powers conferred upon Ofcom by the Wireless Telegraphy Act 2006 allow us to exempt certain devices from the requirement to operate only under licence, and to register providers of AFC services to provide those services in the United Kingdom.⁴ Further details about the legal framework relevant to the decisions and proposals set out in this document can be found at Annex A2.

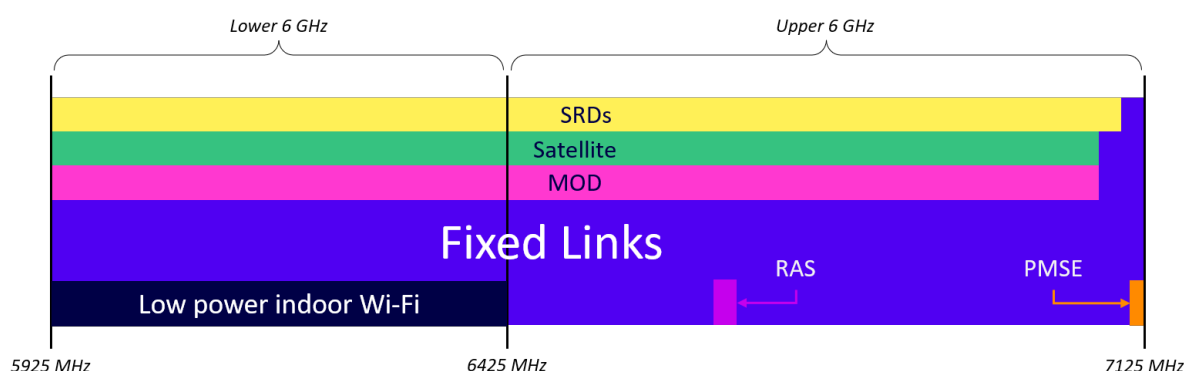
⁴ Sections 8(3) and 53A Wireless Telegraphy Act 2006

- 2.7 As a matter of policy, Ofcom is committed to carrying out and publishing impact assessments in relation to the great majority of our policy decisions, although the form of that assessment will depend on the particular nature of the proposal. Our [impact assessment guidance](#) sets out our general approach to how we assess and present the impact of our proposed decisions. We also have several statutory obligations under the Communications Act 2003, the Equality Act 2010, and the Welsh Language Standards to carry out assessment of the likely impact of our proposals. Further details about our statutory obligations in respect of impact assessments are set out in the legal framework at Annex A1, and our impact assessments are in Annex A2.

Current use of the band

- 2.8 The 6 GHz band is currently used by a range of different services, as shown in Figure 2.1 below. The principal licensed users are fixed links and the fixed satellite service (FSS), and the band is also used by licence exempt short-range devices (SRDs), the Ministry of Defence (MOD), programme making and special events (PMSE) video equipment, Earth exploration satellites and the radio astronomy service (RAS).

Figure 2.1: 6 GHz band plan



Source: Ofcom

Fixed links

- 2.9 There are around 500 fixed point-to-point links in Upper 6 GHz band, used by around 30 licensees covering the telecoms, financial services, oil and gas, utilities, and transport sectors, as well as public sector services. The Lower 6 GHz band has around 350 links, used by 20 or so licensees (many of whom are also present in Upper 6 GHz.) These fixed links are present across much of the UK but are most concentrated in London and the southeast of England, owing to heavy use in this area by financial services.

PMSE

- 2.10 The Upper 6 GHz band overlaps with the PMSE allocation in the 7 GHz band between 7110–7125 MHz. This spectrum is used mainly for wireless video links, including cordless camera links and portable video link applications.⁵ Some events have exceptional demand for

⁵ A cordless camera link is a type of handheld camera with integrated or clip-on transmitter, power pack and antenna for carrying broadcast-quality video together with sound signals over short ranges (line-of-sight). A portable video link is a small transmitter for deployment over greater ranges, typically up to 2 km.

spectrum (e.g., the Formula 1 British Grand Prix at Silverstone), whereby additional spectrum is often “borrowed” from other parts of the Upper 6 GHz band.

Radio Astronomy

- 2.11 The frequency band 6650.0–6675.2 MHz is used by radio astronomy for methanol spectral line measurements. In the UK these measurements use the six e-MERLIN sites, which are primarily outside residential areas, in locations where interference from other radio spectrum use is less likely.⁶

Satellite

- 2.12 The 6 GHz band is used by the fixed satellite service (FSS) in the Earth-to-space direction, and there are a small number of transmitting earth stations in the band in the UK. The band 6700–7075 MHz is also allocated for feeder links for non-geostationary satellite systems of the mobile satellite service in the space-to-Earth direction. There are only a limited number of receiving earth stations operating across Europe, and none operating in the UK (nor do we have any plans to introduce them).

Short-range devices

- 2.13 The 6 GHz band is used for Tank Level Probing Radar (TLPR) systems, which are used to measure the level of liquids in industrial tanks and vats. TLPR sensors are usually installed in metallic or reinforced concrete tanks.⁷ The band is also used by some ultra-wideband (UWB) devices like iPhones and Air Tags, which have 6 GHz UWB chips for “spatial awareness”. These are authorised on a non-interference, non-protection basis and they operate at extremely low power over a very wide frequency range.

Earth Exploration Satellite Service

- 2.14 The band is used mainly for sea surface temperature measurements which are important for weather and climate change prediction models.

MOD use

- 2.15 The Ministry of Defence uses spectrum across the 6 GHz band, but generally at select, isolated locations.

International context

- 2.16 The European Commission (EC) is expected to harmonise technical conditions for both mobile use and Wi-Fi use of the Upper 6 GHz band, including spectrum sharing mechanisms, with the aim of creating an ecosystem of devices across the EU. The European Conference of Postal and Telecommunications Administrations (CEPT) will also introduce voluntary harmonisation measures that will supplement the EC measures for elements where EU Member States need the option for national decisions on whether or how to permit additional uses, but still within a harmonised framework.

⁶ Specifically, the Cambridge, Darnhall, Defford, Jodrell Bank, Knockin and Pickmere radio astronomy observatories.

⁷ This provides typical shielding of 10–25 dB.

- 2.17 The Radio Spectrum Policy Group (RSPG) influences the direction and content of future policy proposals from the EC that drive harmonisation. CEPT, through Project Team 1 of the Electronic Communications Committee (ECC PT1) and Project Team 61 of the Working Group on Frequency Management (FM61), is conducting the studies and drafting the reports that will form the technical basis for the harmonisation measures, and the UK has been active in driving much of this technical work.
- 2.18 For the UK, the outcome of this European work is highly relevant. Consumer equipment such as mobile phones, laptops and tablets, as well as Wi-Fi access points, will be designed based on harmonised technical conditions. It is therefore in our interest that these conditions are also suitable for devices to operate effectively within our frequency arrangements.
- 2.19 Since our January 2026 statement and further consultation, CEPT Working Group on Spectrum Engineering (WGSE) has approved the report from Project Team 45 of the Working Group on Spectrum Engineering (SE45) on the potential use of higher power outdoor Wi-Fi (i.e., up to 4W) in the Lower 6 GHz band, and this was published in May as [ECC Report 377](#). ECC PT1's report covering coexistence between mobile and existing spectrum uses in the Upper 6 GHz band, as well as coexistence with adjacent band systems including Wi-Fi below 6425 MHz, was also published in March as [ECC Report 375](#).
- 2.20 We noted in our January document the three CEPT Reports that would be produced in response to the mandate from the EC on the potential shared use of the Upper 6 GHz band by mobile and Wi-Fi. On these Reports:
- **Report A** on mobile and Wi-Fi coexistence with existing uses in the Upper 6 GHz band was published at the end of June as [CEPT Report 92](#).
 - **Draft Report B** on the technical feasibility of shared use of mobile and Wi-Fi in the Upper 6 GHz band is currently under ECC public consultation as [Draft CEPT Report 94](#) until 24 July. This has been aligned with the RSPG recommendation of a prioritised band split, where the use of the first 160 MHz is to be decided later and in the meantime 6585–7125 MHz is prioritised for mobile. The report concludes that use of database control is the preferred mechanism to enable Wi-Fi to access this mobile priority spectrum, although it is acknowledged that some countries will want to adopt an individual licensing approach for Wi-Fi installations, and that further work is being done outside the mandate to examine cross-technology signalling mechanisms. We note that this fully aligns with our approach to the mobile priority portion of the band.
 - ECC PT1 has started work on **Report C**, which will define the harmonised technical conditions for mobile use of 6585–7125 MHz. This will be supported by an ECC Report for detailed technical analysis. The target date for publication of Report C is July 2027. The same harmonised technical conditions for mobile will also be included in an ECC Decision by November 2028.
- 2.21 The ECC meeting in March issued new work items to cover the elements needed to address the RSPG recommendations:
- In 6425–6585 MHz, where RSPG sees two possible outcomes after WRC-27, two ECC Reports will be produced, covering Wi-Fi priority (to be done by FM61) and mobile priority (to be done by ECC PT1), due March 2028.
 - For Wi-Fi in 6585–7125 MHz, FM61 will produce an ECC Recommendation covering use of dynamic spectrum access coordination (database) and cross-technology signalling to enable non-prioritised Wi-Fi use of this band, due July 2028.

- In 7125–7250 MHz, which could be identified for mobile by WRC-27, ECC PT1 will produce an ECC Report, due March 2028, on potential use of the band for mobile. Once this is completed, ECC indicated that consideration should be given to the possible non-prioritised use by Wi-Fi.
- 2.22 FM61 is also working on implementation of databases for “higher power” (up to 4W EIRP) Wi-Fi in the Lower 6 GHz band, and intends to incorporate regulatory conditions in an ECC Recommendation, with a target for publication in June 2027.

3. Our decision on a prioritised band split

- 3.1 This section sets out our proposals from the January 2026 consultation and outlines how we took into account consultation responses to arrive at the decisions in this statement. Non-confidential consultation responses are published [on the Ofcom website](#).

Decision to proceed with a prioritised band split

- 3.2 We proposed a prioritised band split in the Upper 6 GHz band, with 160 MHz (6425–6585 MHz) prioritised for Wi-Fi and 540 MHz (6585–7125 MHz) prioritised for future mobile use. We proposed not to wait for a European decision on the band; this is expected in late 2027 or 2028, and it could align with the UK split, or have a smaller Wi-Fi band.
- 3.3 After taking into account the consultation responses, as outlined below, we have decided to proceed with our proposals.

Stakeholder views against

- 3.4 A number of mobile operators, industry associations and vendors suggested in their consultation responses that Ofcom should defer decisions on the Upper 6 GHz band until there is clarity from European and international processes, in particular WRC-27 and subsequent CEPT work. Broadly there were three types of argument, as below:

There is a need for 200 MHz per mobile operator

- 3.5 Several respondents in the mobile industry, including BT, the GSMA, VodafoneThree, Huawei and VMO2, stated that each mobile operator will need 200 MHz to deliver the best network quality, especially for 6G deployment. VodafoneThree presented estimates of reduced Total Cost of Ownership for operators using 200 MHz compared to 100 MHz, and quoted trials showing a throughput gain of 1.7 to 1.8 times with the same power consumption (again in a comparison of 200 MHz and 100 MHz).
- 3.6 Many of the same respondents also suggested that the Upper 6 GHz band will be very important for 6G in Europe and the UK. They referenced standards currently in development which may include 200 MHz as a possible carrier size for 6G.
- 3.7 Some stakeholders including Huawei, Qualcomm, Virgin Media O2 and Vodafone said that the entire Upper 6 GHz band should be reserved for high power mobile, citing its importance for wide area 6G.

Risks of proceeding ahead of Europe

- 3.8 Mobile operators, vendors and industry bodies, including BT, Ericsson, the GSMA, Huawei, Nokia, Qualcomm, VMO2 and VodafoneThree, raised potential risks with divergence from Europe. They said that this would impact 6G deployment, lead to reduced economies of scale, higher equipment costs and weaker long-term network quality compared to Europe. [VodafoneThree](#) stated that the “surest way” to avoid divergence is to defer a final decision until the outcome of WRC-27 is clear. Respondents also suggested that any early prioritisation of Wi-Fi creates uncertainty for future mobile deployment.

- 3.9 VodafoneThree said that access point manufacturers would not develop or certify⁸ devices for the UK market ahead of a European decision, negating any benefits of proceeding early.
- 3.10 VMO2 also stated that if there is no alignment between the UK and Europe, there could be some interference between Wi-Fi in the UK (in the 160 MHz Wi-Fi priority portion of the band), and mobile in neighbouring countries.

No short-term need for Wi-Fi spectrum

- 3.11 Several respondents from the mobile industry (Ericsson, Huawei, the GSMA, Qualcomm, VMO2 and VodafoneThree) suggested that there was no clear evidence of short-term Wi-Fi spectrum scarcity, pointing to limited adoption of the Lower 6 GHz band and scope to improve Wi-Fi performance through technology upgrades, or fibre-to-the-room rather than additional spectrum. However, many other stakeholders disagreed with this view, as set out below.

Stakeholder views in favour

- 3.12 A number of respondents supported moving ahead now with a prioritised split, rather than waiting for further European harmonisation. These respondents included Federated Wireless, Tarana Wireless, and a multi-company group comprising Amazon, Apple, Broadcom, Cisco, HPE, Intel and Meta (several in this group also provided an additional individual response in favour). They said that Wi-Fi equipment capable of operating across the whole 6 GHz band is already available, with traffic in the band also growing, and that delaying access would leave valuable spectrum unused for several years. Apple stated that proceeding now would enable earlier delivery of consumer and enterprise benefits from Wi-Fi, while retaining flexibility to accommodate future mobile use.

Demand for Wi-Fi spectrum

- 3.13 A number of respondents said that there is clear and growing demand for additional Wi-Fi spectrum, particularly in dense enterprise, campus and public-venue environments. Stakeholders including the multi-company group, Wi-Fi Alliance and the Wireless Broadband Alliance (WBA) explained that Wi-Fi networks increasingly support business-critical and latency-sensitive applications in hospitals, factories, warehouses, education campuses, transport hubs and large public venues. In these environments, respondents including Cisco stated that performance is constrained by contention, interference and the ability to reuse channels, with some citing demand for eight or more 80 MHz channels; or alternatively for four 160 MHz channels. AIP, Cisco and HPE also said that the number of devices that support 6 GHz is rapidly increasing. [HPE](#) presented figures showing that in early 2025, cumulative shipments of Wi-Fi devices incorporating Wi-Fi 6e surpassed 2.1 billion, and that Wi-Fi 7 adoption was accelerating three times faster than previous generations of Wi-Fi technology (Wi-Fi 6e and 7 support the 6 GHz band).
- 3.14 Making spectrum available for Wi-Fi as well as other Wireless Access Systems and Radio Local Access Network (WAS/RLAN) uses could also provide access to fast broadband to consumers in rural areas and other areas that are hard to reach by fibre, according to some

⁸ It also challenged whether access point providers would realistically go to the expense of securing UKCA approvals prior to European harmonisation, when this would either be a permanently UK-specific solution (in the event that Europe ultimately decided to allocate the 160MHz for mobile), or would necessitate a repeat CE conformance exercise (in the event that Europe adopted Wi-Fi in this spectrum under the harmonised technical conditions to be developed by CEPT).

respondents. AIIP, Cambium Networks and Tarana Wireless said there is demand from fixed wireless access (FWA) and outdoor licence exempt use cases. Cisco also stated that Upper 6 GHz can provide backhaul for rural broadband. Tarana Wireless commented that FWA use of this spectrum could be used to provide access to fast broadband to consumers in rural areas which are hard to reach by fibre.

Amount of spectrum for Wi-Fi

- 3.15 Stakeholders in favour of more spectrum for Wi-Fi (including the AIIP, Cambium Networks, Cisco, the Dynamic Spectrum Alliance (DSA), Federated Wireless, HPE, Meta, the multi-company response, the WBA and the Wi-Fi Alliance) broadly supported allocating at least 160 MHz of contiguous spectrum in the Upper 6 GHz band to Wi-Fi, while many (in particular Cisco, the DSA, HPE, Meta and the multi-company response) also said that more than 160 MHz would be desirable in the longer term. These stakeholders stated that 160 MHz enables meaningful deployment of 80 MHz and 160 MHz channels, supports reuse in dense environments, and provides a sufficiently clean block to underpin investment in next-generation Wi-Fi networks. Some respondents, including Meta and HPE, explicitly stated that while they would prefer 320 MHz or access to a larger portion of the band, they nonetheless supported Ofcom's proposed 160 MHz split as a pragmatic and proportionate starting point that delivers immediate benefits while avoiding delay. HPE said that the proposed 160 MHz Wi-Fi priority designation gives enterprises the confidence to invest in long-term infrastructure upgrades.

Protecting the Wi-Fi priority portion from future adjacent mobile deployments.

- 3.16 The multi-company response expressed some concern with the risk of future deployments in the mobile priority portion of the band causing out-of-band emissions into the Wi-Fi priority portion of the band. These stakeholders requested that Ofcom confirm that it will not adopt technical conditions applicable to any future applications (such as mobile) that would unduly restrict Wi-Fi operations in 5925–6585 MHz. The DSA and HPE also suggested that Wi-Fi itself should be treated as a protected service within the Wi-Fi priority part of the band. They said that out-of-band emissions from mobile services in the Upper 6 GHz band should not cause harmful interference to Wi-Fi operating in the 5925–6585 MHz band.

Stakeholder views – current users

- 3.17 A number of existing users of the band said that Ofcom should take additional steps to protect their use before proceeding with the proposals. These stakeholders were the Joint Radio Company (JRC), a joint response from the Met Office, ECMWF and ESA, and two confidential respondents ([X]).
- 3.18 JRC and [X] expressed concern over the limited availability of alternative bands that current fixed link users might move to in place of the Upper 6 GHz band, as well as the likely costs that vacating the band would entail. JRC additionally noted that many of its Upper 6 GHz fixed links were installed within the last three years, to replace those that were previously revoked in the 1.4 GHz band. JRC was concerned that the lack of like-for-like replacement spectrum meant that potential replacement frequency bands could require more than a single hop. This would increase the latency over the path above the acceptable delay to provide adequate network protection, echoing similar concerns raised by [X]. For these reasons they asked Ofcom to provide protection to critical national infrastructure (CNI) fixed links when considering how to enable mobile use of the band.

- 3.19 The Met Office, ECMWF, and ESA were concerned with the risk of interference to their operations in the band by opening it up to commercial mobile and higher power outdoor Wi-Fi services. They stated that Ofcom should wait until there is greater certainty regarding the future of sea surface temperature (SST) measurements before introducing mobile and Wi-Fi into the Upper 6 GHz band, as WRC-27 will consider two new frequency bands for EESS (passive) measurements. The Met Office, ECMWF, and ESA thought this would augment existing SST measurements capacity and mitigate against interference from the proposed new users in the Upper 6 GHz band; they were concerned that an earlier decision may cause a prolonged period of degraded SST data and affect the UK's weather forecasting ability. [3<] reiterated its concerns over how interference scenarios would be addressed under the proposed band split, asking that any interference caused by Wi-Fi deployments to any existing users be dealt with quickly through an array of possible countermeasures.

Our assessment and decision

- 3.20 Having considered stakeholder responses carefully, we have decided to proceed with our proposal as set out at consultation. The reasoning for our decision is set out below.

Why we are proceeding ahead of European harmonisation

- 3.21 We have carefully considered arguments from some respondents that Ofcom should defer any decision on authorising Wi-Fi in the Upper 6 GHz band until European and international processes are complete, in particular CEPT work and the outcomes of WRC-27, to manage risks of divergence to Europe. Similarly, we note VodafoneThree's comment that there is a risk that manufacturers of Wi-Fi access points would not certify devices for the UK market if not harmonised with Europe in the Wi-Fi priority band. However, we do not consider that waiting would lead to the best outcomes for consumers and citizens in the UK. Some of the largest device manufacturers, and companies including Amazon, Apple, Broadcom, Intel and Meta, responded to our consultation agreeing with our proposed approach to make the band available for Wi-Fi in the UK as soon as possible, providing a range of realistic use cases in their responses. Two significant suppliers of access points (Cisco and HPE) made it very clear they would supply equipment to the UK market. Releasing Upper 6 GHz now can help both busy areas in cities and rural areas, where respondents want access to improve rural broadband (via Fixed Wireless Access). We also agree that there are risks in waiting, creating uncertainty that discourages investment in high-density Wi-Fi deployments.
- 3.22 We acknowledge the point from VMO2 that misalignment between the UK and neighbouring European administrations could create a risk of cross-border interference between UK Wi-Fi deployments and mobile systems operating in the 160 MHz Wi-Fi priority band. However, we consider the risk from Low Power Indoor (LPI) Wi-Fi which is not under AFC control to be negligible, given its limited propagation. Higher power and outdoor Wi-Fi would be subject to AFC control. In the unlikely event that cross-border interference is reported, the conditions of AFC service provider authorisation would enable us to require AFC systems to exclude specific channels or geographic areas.
- 3.23 We also note that European harmonisation outcomes for the Upper 6 GHz band are not yet settled, and that waiting would therefore not guarantee clarity or certainty within a defined timeframe. In addition, our early release of the band may help to inform the European process, by providing a practical example of how this prioritised band approach can be implemented in practice. On balance, we believe that the significant benefits from making the spectrum available now outweigh the risks of divergence from Europe.

Why we are confirming a 160/540 MHz split

- 3.24 The RSPG [Opinion on the long-term vision for the Upper 6 GHz band](#) provides a clear indication that the frequency range 6585–7125 MHz is expected to be harmonised for full-power mobile use in Europe. Many respondents, including both mobile and Wi-Fi stakeholders,⁹ said it was important for the UK to align or partially align with Europe in order to support economies of scale, equipment availability and investment certainty. Having regard to these considerations, we consider it appropriate to designate 6585–7125 MHz as the mobile priority portion of the band. We consider that this provides a large, contiguous block of spectrum that is suitable for a wide range of future mobile applications and anticipated traffic growth, while remaining consistent with the emerging European framework.
- 3.25 At the same time, we consider that any split which reduces the Wi-Fi priority portion below 160 MHz would risk materially reducing the overall benefits of the Upper 6 GHz band for the UK. A number of respondents, including Cambium Networks, Cisco and Meta suggested that an additional 160 MHz represents the minimum contiguous block needed to unlock the benefits of next-generation Wi-Fi, including support for 80 MHz, 160 MHz and 320 MHz channels. Respondents said that there was demand in enterprise, campus and venue deployments for multiple wide channels to support high device densities, low latency and predictable performance.
- 3.26 In particular, we note that allocating 160 MHz for Wi-Fi is likely to provide a step-change in the capacity of Wi-Fi networks. For example, it will allow for:
- a) 80 MHz rather than 40 MHz channels in an eight-channel reuse pattern such as those in Multiple Dwelling Units (MDUs) and offices.
 - b) 40 MHz rather than 20 MHz in a 14 to 16-channel reuse pattern in dense locations such as stadiums, shopping malls, train stations, etc.¹⁰
 - c) Four 160 MHz channels allowing high-throughput bursts, improving battery life of Very Low Power (VLP) devices. Such channels are also useful in some residential settings where Gigabit broadband is available¹¹ and are also starting to be used in enterprise “high-throughput zones” like conference rooms and engineering labs.
- 3.27 On the other hand, while this 160 MHz block would also be able to provide additional capacity to mobile, the increase in capacity would be proportional to the increase in spectrum. We would therefore not expect a step-change in mobile network performance from a total of 700 MHz (i.e., if the whole Upper 6 GHz band were made available for mobile), compared to the 540 MHz that we are already designating as mobile priority. We note that this 540 MHz block would represent an increase of around 47% in the total amount of mobile spectrum in low and mid-frequency bands in the UK.¹² An additional 160 MHz on top of this would represent an increase of just under 10%.

⁹ BT, Cisco, Ericsson, the GSMA, Huawei, Nokia, Qualcomm, VMO2, VodafoneThree and the WBA.

¹⁰ This will enable applications such as real-time streaming, multi-angle replays and AR overlays. It will also support in-venue operations like point-of-sale, access control, security and monitoring.

¹¹ They enable very high throughput applications, e.g., 4K/8K video streaming and gaming as well as bandwidth-intensive applications like AR/VR.

¹² Based on a total of 1,156.9 MHz at present. Includes all mobile spectrum in bands from 700 MHz to 3.4–3.8 GHz, including the 25 MHz of 1.4 GHz spectrum that we have recently decided to award (see [Statement](#)) and excluding unpaired 2.1 GHz.

- 3.28 As noted above, some respondents have said that 200 MHz of 6 GHz should be awarded per MNO given the likely carrier sizes for the band. While we acknowledge that there may be benefits in being able to deploy the full carrier sizes, we do not consider that 200 MHz is necessary or essential to deploy 6 GHz for mobile. Carrier sizes will be one of many factors that MNOs will take into account when considering how much spectrum to acquire in any future award.
- 3.29 These views echo the case made at the time of the 5G 3.4–3.8 GHz awards, namely that regulators should target allocations of 100 MHz per MNO given that this was the maximum carrier size.¹³ However, in some large markets where 100 MHz per operator was not achievable, no MNOs appear to have targeted this amount, suggesting that there was nothing essential about having at least 100 MHz. Since these awards, 5G networks have been successfully deployed in these countries.¹⁴
- 3.30 Furthermore, we have not seen any evidence of prospective 6G services or network capabilities that can only be delivered through the use of 200 MHz in this band.¹⁵
- 3.31 Although we do not consider access to 600 MHz of spectrum for mobile services to be essential, we consider it likely to be achievable. CEPT has stated it will consider support for mobile use in 7125–7250 MHz provided that coexistence with existing users is possible.¹⁶ European studies have not yet concluded, but our experience from similar coexistence studies in the 6 GHz band suggests that mobile use is more likely than not to be feasible. In that scenario, and taking account of the RSPG Opinion on upper 6 GHz, it is likely that Europe would harmonise 7125–7250 MHz for mobile services. We would then consider making at least part of the band available for mobile use, while also taking account of the needs of existing users, particularly PMSE applications such as wireless video cameras.
- 3.32 As part of our decision, we are identifying 540 MHz as the priority portion of the band for mobile. As discussed in detail in our [April 2026 consultation](#), this has a material impact on fixed links because of the difficulty in coexistence between fixed links and mobile in the same areas. We are currently considering the responses we received to that consultation. We acknowledge that some users flagged their concerns about future mobile use of the band, and any knock-on impacts on their existing use of the band, in response to the January consultation, and we will take these points into account as well as we prepare our autumn statement.
- 3.33 We acknowledge stakeholders' concerns about Wi-Fi's potential to interfere with their fixed links in Upper 6 GHz, specifically within the lower 160 MHz. We note that fixed links will not need to vacate that part of the band with the anticipated deployment of Wi-Fi. We also note that AFC is a flexible, proven technology for protecting incumbents from Wi-Fi. We consider our analysis, and the experience of deployed systems in the US and Canada,

¹³ See for example page 5 of GSMA's document [5G Spectrum: GSMA Public Policy Position](#), where it is argued that "For 5G, regulators should aim to assign at least 100 MHz per operator in the first 5G mid-bands – 100 MHz channels have become international best practice and are implemented in the majority of 5G-leading markets."

¹⁴ In the UK, after the 3.6–3.8 GHz award, one MNO had been allocated 140 MHz, one 90 MHz and two had been allocated 80 MHz. There was a similar outcome in other European countries. For example, 90 MHz, 90 MHz, 70 MHz and 50 MHz in Germany (see [results](#)); and 90 MHz, 80 MHz, 70 MHz and 70 MHz in France (see [results](#)).

¹⁵ It should be noted that the RSPG [Opinion on 6G spectrum roadmap](#) states that 6G can be implemented in all frequency bands already harmonised for mobile.

¹⁶ [ECC PT1\(26\)092 Annex 23](#)

demonstrates that incumbents, including fixed links, can be protected from higher power and outdoor Wi-Fi through an AFC system. Furthermore, our AFC framework will have robust measures for managing and resolving potential interference, including provisions to deny specific channels or geographic locations to Wi-Fi devices. We provide further information and protection criteria in our AFC Statement published alongside this document.

- 3.34 We recognise that the 6425–7075 MHz band is used for sea surface temperature (SST) measurements, which are important for weather forecasting and climate modelling. Any risk to SST measurements from Wi-Fi is likely to arise only from aggregate interference, in areas with high outdoor deployment densities. Deployment of outdoor and higher power Wi-Fi under AFC control is expected to be gradual and we anticipate that it would take a number of years for a high density of deployments to materialise. We consider that the greater long-term interference risk to EESS is likely to be from future mobile services, rather than Wi-Fi. As mobile services are not expected to be widely deployed until the 2030s, we are supporting international efforts to secure a harmonised allocation for SST measurements in an alternative band, including ongoing ITU work in preparation for WRC-27, in cooperation with other European administrations.
- 3.35 We note the suggestion from the Met Office, ECMWF and ESA to wait until after WRC-27 before making any decision on either mobile or Wi-Fi. However, as explained in paragraphs 3.21–3.23, these new uses can bring significant benefits to the UK and delays would postpone these and create uncertainty for the industry. On balance, we do not think it would be proportionate to wait given these benefits and that the risk of interference from Wi-Fi is unlikely to materialise in this period.
- 3.36 We note the suggestion from the DSA, HPE and the multi-company response that Wi-Fi should be treated as a protected service in the Wi-Fi priority part of the band and that out-of-band emissions from the mobile service should be set accordingly. [ECC Report 375](#) has considered adjacent channel coexistence between Wi-Fi and mobile and ECC PT1 has started work on Report C to define harmonised technical conditions for use of 6585–7125 MHz. We will continue to support this work to ensure that Wi-Fi can coexist with adjacent band mobile services, and will consider these concerns when we develop technical conditions for mobile deployments in a future consultation.
- 3.37 While we acknowledge that there is uncertainty in the demand for both Wi-Fi and mobile services, we consider that, on balance, proceeding with a split of 160 MHz prioritised for Wi-Fi and 540 MHz prioritised for mobile is most likely to maximise the benefits to the UK. We believe it will achieve this by providing a significant performance improvement to Wi-Fi networks; enabling meaningful near-term benefits from Wi-Fi use; ensuring Wi-Fi can use the 540 MHz on a non-priority basis; and opening the way for future mobile services, that are likely to benefit from harmonisation with Europe.

The Wi-Fi priority portion of the band will have the same conditions as Lower 6 GHz

- 3.38 We proposed that use of the Wi-Fi priority band (6425–6585 MHz) would have the same technical conditions as Lower 6 GHz, including enabling LPI and VLP Wi-Fi devices without the need for AFC control – the latter allows portable devices to connect to each other without a router, for example. We also proposed to extend the authorisation for devices controlled by AFC from only Lower 6 GHz to the full Upper 6 GHz (6425–7125) band, as set

out in the next subsection. After taking into account the consultation responses, we have decided to proceed with the proposals, as outlined below.

Stakeholder views

- 3.39 Supporters of additional spectrum for Wi-Fi agreed with this approach, including Apple, IEEE 802 LMSC, the Wi-Fi Alliance and a confidential respondent ([§]). These responses noted the advantages of regulatory consistency, maximising the value of current and next-generation Wi-Fi technology and supporting an array of industrial and outdoor use cases. The DSA, the multi-company response and one confidential stakeholder ([§]) further encouraged Ofcom to consider also authorising the use of VLP across the entirety of the Upper 6 GHz band as well.
- 3.40 Stakeholders representing existing users such as the JRC and the Met Office, ECMWF and ESA said that low power and very low power uses are unlikely to interfere with existing uses. However, they expressed some concerns about the risk of interference from higher power Wi-Fi, which we consider in paragraph 3.70.
- 3.41 Most of the responses that did not support this proposal (including Ericsson, the GSMA, VMO2 and VodafoneThree) objected to the allocation of this spectrum to Wi-Fi priority as a whole, rather than solely the use of the same technical conditions as Lower 6 GHz. Huawei suggested Ofcom should investigate tightening the Wi-Fi unwanted emission limits at the 6585 MHz boundary, or imposing a guard band below 6585 MHz where Wi-Fi must not operate, to mitigate the potential risk of interference to future mobile networks from Wi-Fi use below 6585 MHz. BT and VodafoneThree suggested that we should only allow AFC-controlled devices in 6425–6585 MHz, to keep our options open in case this portion of the band is later harmonised in Europe for mobile.
- 3.42 Meta stated that at least 4 x 160 MHz VLP channels across the whole 6 GHz band will be required to enable reliable and scalable communications. Meta provided studies concluding that the potential impact of VLP devices operating in the mobile priority portion of the band would be low. On the other hand, Huawei agreed with our proposal not to authorise VLP in the mobile priority portion of the band, as it said it would result in an unmanageable risk of interference to mobile networks.

Our assessment and decision

- 3.43 Our proposals aimed to ensure consistency across the band, reducing regulatory burden on the industry. Device manufacturers and other stakeholders strongly agreed with the proposal and there were no material specific objections. In addition, our coexistence analysis considered these proposed technical conditions from the point of view of the potential for interference from Wi-Fi to current users, and concluded that these proposed technical conditions adequately limit the risk of interference, in line with our duties and goals. We present the coexistence analysis later in this section.
- 3.44 We acknowledge the suggestion from BT and VodafoneThree that this portion could be made available only for AFC controlled devices initially. However, this option would deny some of the key benefits of proceeding now with a decision: it would create uncertainty for the Wi-Fi industry and deny access to access points that do not implement AFC (we expect these will be the majority of access points for years to come).
- 3.45 We also acknowledge the suggestion from the DSA, the multi-company response and a confidential respondent ([§]) that we should authorise VLP across the full band. This was

not part of our original proposals, because we did not consider we had a sufficiently robust view of potential coexistence between VLP and mobile services, as well as other incumbent users in the Upper 6 GHz band. There is now some emerging evidence to support VLP use in Upper 6 GHz, and this is under consideration in CEPT FM61. However, the relevant studies remain at an early stage. We will continue to monitor the work and may revisit this issue in the future if appropriate.

- 3.46 We acknowledge Huawei’s suggestion that we should investigate tighter restrictions on out-of-band emissions, or a guard band, to protect future mobile deployments. However, we do not consider it necessary to impose more stringent limits on Wi-Fi devices at this time. Existing technical requirements are intended to provide an appropriate level of protection for services operating in adjacent bands, and we are not aware of evidence that shows that emissions from compliant Wi-Fi equipment cause harmful interference. Current emission masks have been developed through international standards and regulatory processes and are designed to balance efficient spectrum use with the protection of neighbouring services. In the absence of evidence of a material interference risk, additional restrictions could reduce alignment with the existing Wi-Fi device ecosystem, increasing equipment costs and reducing the availability of compliant devices in the UK. We therefore consider that imposing more stringent technical requirements on Wi-Fi devices would be disproportionate to the expected benefits.
- 3.47 For the reasons set out above, having carefully considered stakeholders’ responses, we have decided to proceed with authorising the band 6425–6585 MHz for Wi-Fi under the same technical conditions as for Lower 6 GHz.

We will extend AFC authorisation to the full Upper 6 GHz band

- 3.48 We proposed higher power, indoor or outdoor Wi-Fi access to the full Upper 6 GHz band (6425–7125 MHz) for AFC-controlled devices. These would use the same technical conditions and framework as the AFC authorisation in the Lower 6 GHz, effectively authorising AFC use across the full 6 GHz band.
- 3.49 Once mobile deploys, we would use AFC to ensure that mobile has priority in the “mobile priority” portion of the band (6585–7125 MHz). We made it clear that Wi-Fi deployments likely to cause interference to nearby prioritised mobile deployments would have their power reduced or be denied access to the relevant channels locally as appropriate.
- 3.50 After considering the consultation responses, we have decided to proceed with the proposals, as outlined below.

Stakeholder views

- 3.51 Several technology companies, AFC operators and industry groups¹⁷ agreed with the proposals, stating the following:

¹⁷ The AIIP, Apple, Cambium Networks, Cisco, the DSA, Federated Wireless, HPE, IEEE 802 LMSC, JOINER NSF, the multi-company response, Tarana Wireless, UKWISPA, the WBA and the Wi-Fi Alliance, as well as [3&].

- AFC would allow higher-power Wi-Fi operation while protecting incumbents and future mobile use,¹⁸ thereby maximising spectrum efficiency.
 - With equipment ready to use straight away, extending AFC across the full band would enable timely deployment, support next generation Wi-Fi (e.g. Wi-Fi 6E/7), and deliver immediate benefits for connectivity.
 - AFC will facilitate coexistence with incumbents without requiring widespread clearance.
 - It will support innovation and investment certainty, provided there is regulatory clarity.
- 3.52 Cisco also supported the proposals but was concerned that some enterprises deploying early may be disappointed once mobile deploys, reducing AFC channel availability.¹⁹ It urged Ofcom to continue to make the framework as efficient as possible to mitigate this issue.
- 3.53 Existing users raised concerns regarding AFC system security, the protection of confidential deployment information, the accuracy of AFC calculations, and the potential for aggregate interference to incumbent services. The Met Office, ECMWF and ESA also raised concerns regarding protection of EESS (passive) services and SST measurements.
- 3.54 Some stakeholders in the mobile industry, including Ericsson, the GSMA, Huawei, Nokia, Qualcomm, VMO2 and VodafoneThree, said that AFC had not been tested as a way to protect mobile deployments. On the other hand, BT was comfortable with using AFC to do this, provided that mobile access was not unduly impeded where required, and Apple supported the use of AFC to balance earlier Wi-Fi and future mobile deployments. Ericsson and the GSMA added that the wider industry, including MNOs and equipment vendors, should be given the opportunity to design, test and validate any AFC implementation.
- 3.55 Cambium Networks, Tarana Wireless and UKWISPA asked for Ofcom to remove the requirement for the Listen-Before-Talk protocol²⁰ in order to facilitate deploying Fixed Wireless Access (FWA).

Our assessment and decision

- 3.56 We outlined earlier in this section our decision to proceed with a prioritised band split including the spectrum efficiency reasons. In addition, we conclude that AFC is an appropriate mechanism to implement the priority for mobile in a portion of the band, and to allow Wi-Fi access to higher power outdoor or indoor, due to its ability to protect other users, for the following reasons:
- a) AFC is a flexible, proven technology for protecting incumbents from Wi-Fi. We consider that this is also an appropriate approach to manage future coexistence between Wi-Fi and mobile. However, we recognise that some further adaptations or rules may need to be defined for the protection of mobile and will consult on these when mobile deployment criteria are clearer. As it stands today, AFC already includes the ability to

¹⁸ Federated Wireless, Tarana Wireless and a joint response from Amazon, Apple, Broadcom, Cisco, HPE, Intel and Meta, agreed that AFC should provide the flexibility to implement refinements to coexistence mechanisms between mobile and Wi-Fi.

¹⁹ Stakeholders, such as Cisco, commented that enterprise Wi-Fi customers (including those in public utilities, healthcare, entertainment, manufacturing, and education) require a high degree of predictability and confidence in their long-term operational viability to justify the significant investments to deploy wireless infrastructure.

²⁰ Listen Before Talk is a contention-based protocol (carrier sense multiple access with collision avoidance (CSMA/CA)) whereby a device first checks to see if a channel is clear of other users before transmitting.

restrict channels in large areas, and we could, if necessary, exclude whole high density areas as a fallback option.

- b) We are addressing concerns from existing users as part of the development of the AFC framework, including those raised in response to our January 2026 consultation. This includes our decisions on AFC security requirements (Section 4), AFC protection and interference management requirements, and coexistence with EESS passive services (Section 5).

- 3.57 We also note requests for use of equipment that does not implement “Listen Before Talk” for provision of FWA. We address this in our [AFC Statement](#), where we confirm we are introducing a more technology neutral approach for Standard Power access to the spectrum.
- 3.58 We welcome the interest from GSMA and Ericsson for participation from the mobile industry in the development of the AFC framework to accommodate future mobile services. We note the ongoing European work within CEPT PT1 and FM61, in which mobile network operators and vendors are already actively engaged. We are also participating in this work to help ensure that the UK AFC framework and any future European AFC frameworks remain as closely aligned as possible. We will continue to engage with stakeholders as this work progresses, welcome ongoing stakeholder feedback as AFC deployments begin, and will consult on proposals to protect mobile services through AFC in due course. If there is sufficient industry interest, we will also consider how we could support [JOINER NSF](#) and others with their AFC test environments.
- 3.59 For the reasons above, and having carefully considered stakeholders’ responses, we have decided to enable higher power and outdoor Wi-Fi use under the control of an AFC system across the full upper 6 GHz band, using the same technical conditions and framework we are using for AFC in Lower 6 GHz, as set out in the [AFC framework statement](#), published alongside this document.²¹ Annex A3 contains a table showing the Wi-Fi device classes which will be permitted in the UK on a licence exempt basis, and how these map onto the existing FCC device classes in the USA.

Coexistence with other existing users

- 3.60 In our January 2026 statement and further consultation, we confirmed our view that the risk of interference from LPI Wi-Fi in the 160 MHz Wi-Fi priority band is very low. We acknowledged the studies undertaken in CEPT project team SE45, now published as [ECC Report 377](#), on sharing between higher power and outdoor Wi-Fi and incumbents in the Lower 6 GHz band. We also set out our views on coexistence in the Upper 6 GHz band, taking into account the studies now published in [CEPT Report 92](#). We said that we did not expect our proposals for higher power and outdoor Wi-Fi under AFC control to give rise to coexistence issues with users, including fixed links, radio astronomy, PMSE, satellite services (including Earth exploration) and short-range devices.
- 3.61 We considered that these users would be protected from higher power and outdoor Wi-Fi through the implementation of our AFC framework. We referred to our Lower 6 GHz consultation document for further details on the proposed AFC framework, including the technical measures proposed to ensure the protection of incumbent services.

²¹ We are not aware of any LPI devices that currently operate under AFC control. However, this authorisation does not preclude such operation should devices become available in the future.

Stakeholder views

- 3.62 Stakeholders including AIP, Cisco, Federated Wireless, IEEE 802 LMSC, JOINER NSF, the multi-company response, Qualcomm, the WBA and a confidential respondent ([redacted]) supported our approach to protecting existing users in the 6 GHz band from higher power and outdoor Wi-Fi using an AFC system.
- 3.63 GSMA considered that coexistence with fixed links and FSS can be effectively managed by using filtering and geographical coordination, and that coordination zones could protect radio astronomy. However, it cautioned that any sharing approach enabling licence-exempt access in unused areas of the mobile priority band should be treated carefully. GSMA further recommended that Ofcom align its approach with CEPT timelines.
- 3.64 JRC and [redacted] noted that many fixed links in this band have been recently migrated from other bands (such as 1.4 GHz), and that further disruption would be costly and could undermine confidence in long-term access to spectrum.
- 3.65 Qualcomm acknowledged that the assumptions for LPI/VLP devices are broadly correct and similar to those in the Lower 6 GHz band. They also noted that AFC-controlled standard power devices can protect incumbent services.
- 3.66 The BBC welcomed the proposals for PMSE to have continued access to allocations and temporary channels in the Upper 6 GHz band and planned methods of protection from interim Wi-Fi use. They noted that Wi-Fi proposals only affect a small part of the 7 GHz PMSE band. However, they raised concerns over the apparent lack of sharing studies and assessment of PMSE protection once mobile devices become active in the 6585–7125 MHz block, especially alongside WRC-27 discussions of 7125–7250 MHz for mobile.
- 3.67 Two confidential stakeholders ([redacted]) raised similar concerns about our proposed approach and how it could impact mission critical fixed links in both the Wi-Fi priority and mobile priority portions of the band. They considered that there was a lack of clarity on how interference will be identified and resolved, potential costs and operational impacts of any requirement to clear or retune critical links, and security and vetting concerns around AFC database providers.
- 3.68 Several stakeholders (Cambium Networks, Federated Wireless, Huawei, JRC, Met Office, ECMWF and ESA, Qualcomm, Tarana Wireless, UKWISA and [redacted]) provided comments on the proposed AFC framework and its potential impact on coexistence with existing users in the band. We have addressed their comments in our separate [AFC Statement](#) published alongside this document.

Our assessment and decision

- 3.69 We acknowledge that the majority of respondents agreed with our proposed approach to ensuring coexistence in the band through use of an AFC system. We also note some confidential respondents' concerns over a lack of clarity on the mechanism to identify and resolve any potential interference that existing users may experience.
- 3.70 We consider our analysis demonstrates that incumbent users, including fixed links, radio astronomy and PMSE can be protected from higher power and outdoor Wi-Fi through an AFC system. Furthermore, our AFC framework will have robust measures for managing and resolving potential interference, including provisions to deny specific channels or geographic locations to Wi-Fi devices. We provide further information and protection criteria in our [AFC Statement](#).

- 3.71 At this stage we will allow PMSE continued use of 7110–7125 MHz, by requiring AFC systems to deny access to a 20 MHz Wi-Fi channel centred at 7115 MHz, as set out in paragraphs 5.61–5.62 in our AFC Statement. This will allow PMSE use of the band to continue for now, without any coexistence issues regarding Wi-Fi use of the band. However, as outlined earlier in this document, we have decided to make 6585–7125 MHz the “mobile priority” portion of the band. We have also separately consulted on removing PMSE access to 7110–7125 MHz in our [April 2026 consultation](#), as we considered that there is sufficient spectrum elsewhere.²² We are currently considering responses to that consultation. If we proceed with the proposals to remove PMSE access from 7110–7125 MHz, then there would be no requirement for AFC to restrict Wi-Fi use in that top 20 MHz channel in the longer term.
- 3.72 In our January consultation we also said we may use the AFC system to facilitate “borrowed” use of 6 GHz spectrum where there is exceptional temporary demand for spectrum for an event that cannot be met elsewhere. We confirm that we will proceed to implement this capability in the AFC system (including in the upper 20 MHz Wi-Fi channel). However, AFC systems only control Wi-Fi access to spectrum and so can only facilitate “borrowing” spectrum in channels and locations where mobile is not deployed.
- 3.73 Having considered and addressed the comments raised concerning AFC and protection of incumbents, we confirm our decision to enable higher power and outdoor Wi-Fi use across the 5925–7125 MHz band under the control of an AFC system.
- 3.74 We have addressed some coexistence issues with mobile in our [April 2026 consultation](#), which will be followed by a statement we intend to publish in the autumn. This will also address comments on any future migration of fixed links from the Upper 6 GHz band. We also intend to consult at a future date on the technical requirements necessary for AFC-controlled Wi-Fi to coexist with mobile, once all relevant technical conditions for mobile have been finalised.

²² We consider that there is sufficient bandwidth in the rest of the 7 GHz band to meet PMSE demand, except for very few major events; we are considering the supply of spectrum for these separately.

A1. Legal Framework

- A1.1 Ofcom's statutory powers and duties in relation to spectrum management are set out primarily in the Communications Act 2003 ("the 2003 Act") and the Wireless Telegraphy Act 2006 ("the WT Act").

Duties under the Communications Act 2003

- A1.2 Our principal duties under the 2003 Act, when carrying out our functions and exercising our powers, are to further the interests of citizens and consumers, where appropriate by promoting competition. In doing so, we are also required (among other things) to secure the optimal use of spectrum and the availability throughout the United Kingdom of a wide range of electronic communications services.
- A1.3 We must also have regard to: (i) the desirability of promoting competition in relevant markets; (ii) the desirability of encouraging investment and innovation in relevant markets; (iii) the desirability of ensuring the security and availability of public electronic communications networks and services; (iv) the different needs and interests, so far as the use of the electro-magnetic spectrum for wireless telegraphy is concerned, of all persons who may wish to make use of it; and (v) the different interests of persons in the different parts of the United Kingdom, of the different ethnic communities within the United Kingdom and of persons living in rural and in urban areas.
- A1.4 In performing our duties, we are required under section 3(3) of the 2003 Act to have regard in all cases to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, and any other principles appearing to Ofcom to represent the best regulatory practice.
- A1.5 In carrying out certain regulatory functions, including Ofcom's spectrum management functions, section 4 of the 2003 Act requires Ofcom to act in accordance with the following requirements: a) to promote competition in communications markets; b) to promote the interests of all members of the public in the United Kingdom; c) to act in a manner which, so far as practicable, is technology neutral; d) to encourage, to the extent Ofcom considers it appropriate, the provision of network access and service interoperability for the purpose set out in s.4(8); e) to encourage such compliance with certain international standards as is necessary for the purposes set out in s.4(9); and f) to promote connectivity and access to very high capacity networks by members of the public and businesses in the United Kingdom.

Growth duty

- A1.6 Section 108 of the Deregulation Act 2015 requires Ofcom to have regard to the desirability of promoting economic growth when exercising its regulatory functions. In order to consider the promotion of economic growth, Ofcom will exercise its regulatory functions in a way that ensures that: a) regulatory action is taken only when it is needed, and b) any action taken is proportionate.

- A1.7 The Government's statutory guidance²³ on this duty recognises drivers of economic growth to include innovation and competition.

Regulatory framework under the Wireless Telegraphy Act 2006

- A1.8 In carrying out our spectrum functions we have a duty under section 3 of the WT Act to have regard in particular to: (i) the extent to which the spectrum is available for use, or further use, for wireless telegraphy; (ii) the demand for use of that spectrum for wireless telegraphy; and (iii) the demand that is likely to arise in future for such use.
- A1.9 We also have a duty to have regard to the desirability of promoting: (i) the efficient management and use of the spectrum for wireless telegraphy; (ii) the economic and other benefits that may arise from the use of wireless telegraphy; (iii) the development of innovative services; and (iv) competition in the provision of electronic communications services.
- A1.10 Under section 8(1) of the WT Act, it is unlawful to establish or use a wireless telegraphy station or install or use wireless telegraphy apparatus except under and in accordance with a wireless telegraphy licence granted under the WT Act.
- A1.11 Under sections 8(3)–8(3B) of the WT Act, Ofcom may make regulations exempting from the licensing requirements under section 8(1), the establishment, installation or use of wireless telegraphy stations or wireless telegraphy apparatus of such classes or description as may be specified in the regulations, either absolutely or subject to such terms, provisions and limitations as may be specified.
- A1.12 Under section 8(4) of the WT Act, we must make regulations to exempt equipment if its installation or use is not likely to:
- a) involve undue interference with wireless telegraphy;
 - b) have an adverse effect on technical quality of service;
 - c) lead to inefficient use of the part of the electromagnetic spectrum available for wireless telegraphy;
 - d) endanger safety of life;
 - e) prejudice the promotion of social, regional or territorial cohesion; or
 - f) prejudice the promotion of cultural and linguistic diversity and media pluralism.
- A1.13 In accordance with the requirements of section 8(3B) of the WT Act, the terms, provisions and limitations specified in the regulations must be:
- a) objectively justifiable in relation to the wireless telegraphy stations or wireless telegraphy apparatus to which they relate;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - c) proportionate to what they are intended to achieve; and
 - d) transparent in relation to what they are intended to achieve.
- A1.14 We make exemption regulations by means of a statutory instrument. Before making any such regulations, we are required by section 122(4) of the WT Act to give notice of our proposal to do so. Under section 122(5), such notice must state that we propose to make

²³ [Growth Duty Statutory Guidance](#)

the regulations in question, set out their general effects, specify an address from which a copy of the proposed regulations or order may be obtained, and specify a time period of at least one month during which any representations with respect to the proposal must be made to us.

Regulation of Automated Frequency Coordination Services under the Wireless Telegraphy Act 2006

- A1.15 Section 53A(1) of the WT Act allows Ofcom to register prospective providers of dynamic spectrum access services (AFC services). These are defined by section 53A(7) of the WT Act as "...a service that provides information about: (a) the availability for use by wireless telegraphy stations and wireless telegraphy apparatus of frequencies that fall within a frequency band specified in regulations made by Ofcom, and (b) the places in which, the power at which, the times when and any conditions subject to which such stations and apparatus may use such frequencies."
- A1.16 Section 53A(3) of the WT Act requires that Ofcom, from time to time, publish: (a) the criteria for determining applications by prospective providers to become registered under section 53A(1); and (b) information relating to the restrictions and conditions to which registration under this section may be subject.
- A1.17 Sections 53A(5) and (6) allow Ofcom to register providers for such period, and subject to such restrictions and conditions as Ofcom think fit and requires us to give notice of such restrictions and conditions in writing, to registered providers.
- A1.18 Section 53B of the WT Act allows Ofcom to revoke a provider's registration, or vary the restrictions and conditions of the registration by giving a notice to the provider stating the reason for the proposed revocation and variation, and specifying the period during which the provider has an opportunity to make representations about the proposal.
- A1.19 Section 53C of the WT Act requires Ofcom to establish and maintain a register of providers registered under section 53A and section 53D allows Ofcom to charge fees in connection with the registration of providers.
- A1.20 Sections 53E to 53M of the WT Act make provisions regarding enforcement, including allowing Ofcom to impose financial penalties for non-compliance with conditions and restrictions of registration.

Impact Assessments

- A1.21 Section 7 of the 2003 Act requires us to carry out and publish an assessment of the likely impact of implementing a proposal which would be likely to have a significant impact on businesses or the general public, or when there is a major change in Ofcom's activities. Impact assessments help us to understand the potential impact of our policy decisions before we made them. They also help us to explain the policy decisions we have decided to take and why we consider those decisions best fulfil our applicable duties and objectives in the least intrusive way.
- A1.22 As a matter of policy, Ofcom is committed to carrying out and publishing impact assessments in relation to the great majority of our policy decisions, although the form of that assessment will depend on the particular nature of the proposal. Our [impact](#)

[assessment guidance](#) sets out our general approach to how we assess and present the impact of our proposed decisions.

- A1.23 We also have statutory obligations which require us to consider the impact on specific groups of persons when formulating policy proposals. These are:
- a) our public sector equality duties under section 149 of the Equality Act 2010 (the “Equality Act”) and section 75 of the Northern Ireland Act 1998 (the “NI Act”) including potential impacts on the groups of persons identified in those sections as having protected characteristics;
 - b) potential impacts on the needs and interests of groups of persons identified in section 3(4) of the 2003 Act. This includes the needs of persons with disabilities, of the elderly and of those on low incomes; and
 - c) where the Welsh Language Standards are engaged, potential impacts on opportunities to use Welsh and treating Welsh no less favourably than English.
- A1.24 Annex A2 of this document contains our final assessment of the impact of our policy decisions for the purposes of section 7 of the 2003 Act. The impact assessment sets out our final assessment regarding the impact of our proposals on persons that share protected characteristics under the Equality Act and NI Act and other groups of persons. It also sets out our final assessment of the impacts of our proposals on the Welsh Language.

A2. Impact assessments

- A2.1 Annex A1 sets out the legal framework for our impact assessment. Below we discuss how our proposals may affect relevant current and future stakeholders, including citizens and consumers, in more detail. For each policy we consider the benefits, risks, and costs.
- A2.2 We note that in response to the question in our consultation regarding the impact assessment, most stakeholders broadly agreed with our assessment, including Apple, Cambium Networks, Federated Wireless, HPE, IEEE 802 LMSC, JOINER NSF, Meta, and Wi-Fi Alliance. However, we address specific comments relevant to the impact assessment below.^{24, 25, 26, 27}

Decision to adopt a prioritised band split with 160 MHz for Wi-Fi and 540 MHz for mobile

- A2.3 We have decided to adopt a prioritised band split, with 160 MHz prioritised for Wi-Fi and 540 MHz prioritised for mobile. As discussed in paragraph A2.29 below, in the Wi-Fi priority part of the band, we have decided on a licence exemption extending the same conditions as those in the Lower 6 GHz band. This approach should ensure the optimal use of spectrum, encouraging investment and innovation.
- A2.4 The benefit of a shared approach is that it can increase the number of channels available for enterprise Wi-Fi solutions and new VLP devices such as wearables, while still ensuring spectrum is available for mobile deployments to meet growth in traffic, especially in urban centres. As a result, consumers and businesses will benefit from improved Wi-Fi services and new applications, as well as improved mobile networks when the spectrum and equipment are made available.
- A2.5 In particular, allocating 160 MHz to Wi-Fi is likely to provide a step-change in the capacity for Wi-Fi networks. As noted in paragraph 3.26, it should allow for more 80 MHz, 160 MHz and 320 MHz channels, supporting high density deployments in enterprises, communal spaces and multiple dwelling units.

²⁴ The GSMA added that an area that deserves further consideration is Ofcom's proposal to award mobile licences in high density areas of the UK through a sub-national licensing arrangement. We are considering our proposed high density areas as part of our [April 2026 consultation](#).

²⁵ The JRC said that the impact assessment does not consider in full the economic impact of revoking fixed links that support the monitoring and control of critical national infrastructure. We are assessing the impact of our proposal to clear fixed links in the Upper 6 GHz in and around high density areas, as part of our [April 2026 consultation](#).

²⁶ Tarana Wireless, UKWISPA, and Cambium Networks suggested we should consider the benefits of not mandating CBP for AFC-controlled devices, as it will enable FWA deployment and in turn benefit consumers. We address this in [the AFC statement](#).

²⁷ NIE Networks indicated that we should consider the current and future requirements of the utilities sector, including the need for additional fixed links in the future. It said that we should consider whether the benefit to consumers of using Wi-Fi in this band is greater than the use of CNI fixed links. It noted its concerns around how interference will be managed between fixed links and Wi-Fi/mobile in high density areas, and the increasing number of fixed links band being surrendered for commercial use, as it indicated it would weaken operational telecoms resilience nationally. Relatedly, [3<]. We note that in the Wi-Fi priority portion of the band, fixed links will be protected from interference through AFC databases. Regarding the mobile priority portion of the band, we are considering the impact of our proposal to clear fixed links in and around high density areas, as part of our [April 2026 consultation](#).

- A2.6 In addition, our decisions should promote investment, by providing certainty regarding the amount of spectrum that will be available for both Wi-Fi and mobile priority.
- A2.7 Based on the responses we received, we have identified the following risks arising from our decision:
- Risk of an inefficient spectrum allocation
 - Risk of misalignment with Europe
 - Risk of out-of-band interference between mobile and Wi-Fi
- A2.8 We discuss each of these risks in turn.

Risk of an inefficient spectrum allocation

- A2.9 The exact demand for mobile and Wi-Fi spectrum in the band is uncertain. There is a general consensus that this band will be important for wireless connectivity in the future, but there are a range of views about whether the social value will be greater from Wi-Fi or mobile use.
- A2.10 As mentioned in 3.11 above, some stakeholders questioned the demand for additional Wi-Fi spectrum given limited adoption of 6 GHz thus far. Their view is therefore that a Wi-Fi priority in the lower 160 MHz allocation would provide lower social value than a mobile priority allocation.
- A2.11 As indicated in paragraphs 3.25 and 3.26, our view is that our approach is likely to provide a step-change in the capacity to meet Wi-Fi demand by allowing for channels that are twice the size that would be possible with only 500 MHz with typical re-use plans.^{28,29} We also expect that uptake of the Lower 6 GHz band will increase in the near-term, following [the AFC statement](#) and as AFC databases are deployed.
- A2.12 With respect to the impact on mobile, we consider that there is a low risk that allocating less than 600 MHz for mobile limits future deployment of 6G using the spectrum, or deployment of the spectrum at all, as some stakeholders suggested (see paragraphs 3.5–3.7). As we discussed in paragraphs 3.28–3.32, we do not consider that 200 MHz per MNO

²⁸ In response to the February 2025 consultation, HPE, Cisco, the multi-company response and techUK noted requirements ranging from eight to fourteen 80 MHz channels. In addition, in response to the January 2026 consultation, HPE reiterated that modern enterprise environments increasingly rely on 80 MHz channels to support high-throughput, low-latency applications. It said that fourteen or more channels are often needed in high density deployments. Meta noted that at least four 160 MHz VLP channels across the whole 6 GHz band will be required to enable reliable and scalable communications. Cambium indicated that the latest and future products in the 6 GHz band will primarily use the higher bandwidth channels of 160/320 MHz for higher throughput, over the smaller 20/40/80 MHz bandwidths. Cisco also noted that 160 MHz and 320 MHz channels are essential for the Wi-Fi 7 standard, and that ultra-wide channels are critical for delivering “gigabit-to-the-device” performance. It also noted that that, particularly in high-density environments, the additional spectrum significantly reduces co-channel interference, leading to lower latency and more reliable connectivity for remote work, education, and immersive entertainment.

²⁹ We note VodafoneThree’s comment that 5 GHz and Lower 6 GHz spectrum can already provide around 11 x 80 MHz channels. Relatedly, Huawei commented that combination of the 5 GHz and Lower 6 GHz bands and channel bandwidths of 80 and 160 MHz are sufficient for multi-access point Wi-Fi 6 deployments to deliver multi-Gigabit/s data rates even in the most challenging high-density environments. Ericsson also noted that gigabit-class performance can already be achieved using existing 5 GHz and lower 6 GHz spectrum, while wider channels enabled by additional mid-band allocation deliver diminishing user benefits and lower spectral efficiency. However, as we noted in the February 2025 consultation, the band is somewhat fragmented with different restrictions on different parts of the band to manage the interference environment with other users, which limits the size of available channels. In addition, outdoor access points are not allowed in parts of 5 GHz.

is necessary or essential to deploy 6 GHz for mobile or to deliver future 6G services. Furthermore, we are of the view that 200 MHz is likely to be achievable in any case, given CEPT has stated it will consider support for 7125–7250 MHz for mobile provided that coexistence with existing users is possible.

- A2.13 Conversely, there is a risk that forecast growth in mobile traffic will not materialise and, therefore, the 540 MHz we have identified for mobile priority would be underutilised. However, we are of the view that there should be sufficient demand for increased mobile capacity, especially in congested areas such as urban centres. As part of our [April 2026 consultation](#), we are considering the definition of high density areas where we expect to award the 540 MHz we have identified for mobile priority.
- A2.14 Furthermore, the flexibility of a sharing approach will help mitigate the risk associated with the uncertainty about the exact demand of the spectrum for mobile. If mobile does not deploy as extensively as anticipated, Wi-Fi might be able to continue to make use of the spectrum, via the AFC framework.
- A2.15 Overall, we consider that the risk of an inefficient allocation is low. We consider the risk that Wi-Fi does not deploy as extensively as anticipated in the 160 MHz to be low, particularly as there is demand for wider channels in reuse patterns that should make use of this spectrum, with the number and type of devices that support 6 GHz rapidly increasing. At the same time a significant amount of spectrum is being allocated for mobile priority, which should provide significant improvements in mobile networks, especially in congested areas where there should be demand for increased mobile capacity.

Risk of misalignment with Europe

- A2.16 The prioritised spectrum sharing approach³⁰ that we have decided on is compatible with the approach set out in the RSPG Opinion. It ensures certainty about spectrum access for manufacturers and operators and enables equipment manufacturers to invest in new devices. While harmonisation across Europe would give additional certainty, our approach enables Wi-Fi use in a more timely way so that consumers and businesses in the UK can benefit from this use more quickly, and avoids inefficient use of the spectrum before European harmonisation.
- A2.17 However, as noted in paragraphs 3.8–3.10, several stakeholders commented that there is a risk of misalignment with Europe. If this misalignment were to materialise, they said that there would be negative impacts on 6G deployment, reduced economies of scale, higher equipment costs and weaker long-term network quality compared to Europe. One stakeholder raised that misalignment with Europe could lead to the potential risk of interference in both directions between mobile and Wi-Fi in neighbouring countries.³¹
- A2.18 We expect the risk that our decision may end up being different to what the European Commission eventually decides to be low. Furthermore, as noted above, CEPT has stated it will consider support for 7125–7250 MHz for mobile provided that coexistence with

³⁰ A prioritised band split also allows high power use by mobile base stations which, compared to an indoor/outdoor split, increases the usability of the spectrum by mobile and reduces the technical requirements on MNOs. We understand that the expectation is that high power 6 GHz mobile use will have similar characteristics to the 3.4-3.8 GHz band and, therefore, a prioritised band split would allow this spectrum to be deployed in existing macro sites in the same way.

³¹ [VMO2](#) noted in its consultation response that interference could occur in both directions between mobile and Wi-Fi implemented in neighbouring countries, causing issues across borders.

existing users is possible, which increases the probability of alignment with the European Commission's decision.

- A2.19 In a scenario where the European Commission takes a different approach (i.e., allocates an amount lower than 160 MHz to Wi-Fi), we recognise there may be some impacts to misalignment. As noted in paragraphs 3.8–3.9, stakeholders have raised that divergence would mean that, for example, device manufacturers would be unlikely to go through the expense of developing and getting product authorisations for a product aimed narrowly at the UK market.
- A2.20 However, we expect that if any such impacts were to arise, they would likely be limited. Firstly, we note that some devices already operate across the whole 6 GHz band. Secondly, we do not envisage the certification process being a barrier to early market adoption, as some stakeholders have expressed interest in early deployment.³² Thirdly, any UK-specific adjustments to the access points are likely to be related to software implementation,³³ rather than changes in the hardware, which should reduce the cost and complexity of implementing any such changes. Finally, the European Commission is considering non-prioritised Wi-Fi use in the mobile priority portion of the band, such that Wi-Fi use would be possible across the whole 6 GHz band. Given that the likely demand for mobile will be mostly in urban areas, we expect that Wi-Fi will be able to operate across the whole band over much of Europe. Therefore, any possible impact on the development of a device ecosystem is likely to be limited.
- A2.21 In the worst-case scenario we would expect that the ability of some Wi-Fi devices that also use mobile networks (e.g., smartphones) to use the 160 MHz may be limited.³⁴ However, in such a scenario, even these devices may benefit indirectly as devices that can use this spectrum can move their traffic to those frequencies, freeing up resources in other parts of the spectrum.
- A2.22 With regards to the risk of cross-border interference, in the event of misalignment with Europe, we expect that this would only be an issue across the border between the Republic of Ireland and Northern Ireland. Such risk would only arise in this scenario if there were mobile deployments using the same spectrum near the border on the Republic of Ireland's side and Wi-Fi deployments near the border of Northern Ireland's side. As mobile will likely use the band in areas with high-traffic density, we would expect that the probability of this risk materialising would be low given the few densely populated areas on either side of the border. Furthermore, in such a scenario there would still be spectrum availability in the Lower 6 GHz band for Wi-Fi, where it could operate without interference, therefore making any possible impact low.
- A2.23 As noted in paragraph 3.56, in the unlikely scenario that such interference was caused by higher power Wi-Fi deployments, the conditions of AFC service provider authorisation would enable us to require AFC systems to exclude specific channels or geographic areas.

³² In particular, as noted in paragraph 3.12, several stakeholders, including device manufacturers, were of the view that our approach would allow UK industry to begin leveraging the existing 6 GHz Wi-Fi ecosystem earlier to address immediate connectivity needs, as the European harmonisation process continues.

³³ This means that the access point will be capable of working in Europe, the UK, the USA, etc. Depending on where the access point is set up, it will limit what spectrum can actually use through software.

³⁴ In particular, we understand that this would be an issue only for devices that use both mobile and Wi-Fi networks (e.g., mobile phones, tablets with SIM cards, etc.) and where, in some cases, a filter between Wi-Fi and mobile needs to be in a fixed frequency. In this case it is possible that such devices will have a filter located in a position reflecting the wider European decision, thereby not being able to use the 160 MHz in the UK.

- A2.24 We therefore consider that the risk of eventually diverging from the European Union decision is low and, even if this were to happen, that any negative impact is likely to be limited.

Risk of out-of-band interference between mobile and Wi-Fi

- A2.25 As we noted in paragraph 3.16, some stakeholders raised concerns about potential out-of-band interference from other uses in adjacent channels. Some suggested that we impose OOB limits on mobile, to avoid the risk of mobile deployments in 6585–7125 MHz impacting Wi-Fi use in 5925–6585 MHz. Other stakeholders suggested tightening the Wi-Fi unwanted emission limits at the 6585 MHz boundary, or imposing a guard band below 6585 MHz where Wi-Fi must not operate, to mitigate the potential risk of interference to future mobile networks from Wi-Fi use below 6585 MHz.
- A2.26 We note these suggestions. As set out in paragraph 3.36, [ECC Report 375](#) has considered adjacent channel coexistence between Wi-Fi and mobile and ECC PT1 has started work on Report C to define harmonised technical conditions for use of 6585–7125 MHz. We will continue to support this work to ensure that Wi-Fi can coexist with adjacent band mobile services.

Conclusion

- A2.27 Overall, our view is that a prioritised band split approach is best suited to achieve our objective of ensuring the optimal use of the spectrum for the benefit of consumers and businesses in the UK. It will enable the use of both mobile and Wi-Fi in the Upper 6 GHz band, allowing flexibility for the demand for either service to evolve. It gives certainty to the priority use of the spectrum resources it can rely on, supporting investment, innovation, and economic growth. In addition, it allows for the opportunistic use for non-priority users in locations where the spectrum would otherwise remain unused.
- A2.28 Our judgement is that this proposal will likely align with the decision that will ultimately be made in Europe. Therefore, the benefits of making this spectrum available for Wi-Fi early, enabling the applications and innovation that it will bring, are greater than the expected impact of an unlikely misalignment with the rest of Europe.

Decision to authorise Wi-Fi in 6425–6585 MHz under the same technical conditions as the Lower 6 GHz band

- A2.29 We have decided to authorise Wi-Fi devices to operate in 6425–6585 MHz (the Wi-Fi priority portion of the band) under the same technical conditions as Lower 6 GHz. The benefit of this approach is that it will ensure regulatory consistency across these frequencies and the Lower 6 GHz band.
- A2.30 As noted in 3.39, several stakeholders agreed that applying the same technical conditions would minimise device and certification complexity and enable immediate use of existing 6 GHz devices, supporting earlier access to spectrum for UK consumers and businesses. We do not expect material additional costs for industry or existing users, as additional coexistence measures are not required.
- A2.31 The risks are low, given alignment with the Lower 6 GHz band, where the same existing uses already deploy. Very Low Power (VLP) and Low Power Indoor (LPI) Wi-Fi operate at power levels unlikely to interfere with existing users such as fixed links. This view was supported by various stakeholders, including existing users, as noted in 3.40.

- A2.32 Overall, our view is that this policy will lead to benefits to consumers and businesses in the UK whilst having limited risk of harmful interference.

Decision to enable AFC-controlled devices in the Upper 6 GHz

- A2.33 We have decided that AFC-controlled devices will be able to use higher power Wi-Fi in the Upper 6 GHz band, including outdoors and indoors, under the same technical conditions as those in the Lower 6 GHz band. This decision will enable early use of the mobile priority portion of the band, benefiting consumers and businesses in the UK by allowing for improved services and new applications earlier, while ensuring that future mobile priority use is protected.
- A2.34 In addition, in combination with the Lower 6 GHz spectrum, enabling higher power Wi-Fi use in Upper 6 GHz will allow for more and wider Wi-Fi channels, thereby increasing Wi-Fi capacity and enabling additional applications that need wide channels. While there is uncertainty on the exact demand for Wi-Fi in this part of the band, allowing this use will increase the chances of potential investment and innovation for new uses and applications.
- A2.35 We consider the incremental costs associated with the implementation and operation of AFC systems in the Upper 6 GHz to be low for AFC system providers, manufacturers of client devices, and Ofcom. This is because we have decided to apply the same detailed requirements for AFC systems in the Upper 6 GHz band as in the Lower 6 GHz band.³⁵ Extending AFC to encompass the whole band could entail incremental costs for the AFC system to account for additional existing users in the database, including additional fixed links as well as RAS and PMSE users. However, we expect the additional costs of updating and maintaining the database to be small.
- A2.36 Moreover, our decision to enable AFC-controlled devices in Upper 6 GHz now, before AFC systems have been rolled out in the UK, avoids the costs associated with making changes to the specifications after these systems have already been operational. Instead, we are designing the framework to allow for its use across the whole 6 GHz band from the outset.
- A2.37 We consider the risks of negative impacts of this decision on consumers and businesses that use the Upper 6 GHz band at present or in the future to be low. We consider that the relevant potential risks are the following, and discuss how they can be mitigated in turn below:
- a) Risk of harmful interference to existing services in the band.
 - b) Risk of harmful interference from Wi-Fi to mobile priority deployments
 - c) Risk of disruption to Wi-Fi services that have deployed once mobile starts being rolled out in the band
 - d) Risk of distorted investment incentives

Risk of harmful interference to existing services in the band

- A2.38 A potential risk of enabling higher power Wi-Fi use in the Upper 6 GHz is that it may cause harmful interference to existing services. The Upper 6 GHz band has broadly the same users and uses as the Lower 6 GHz band. As our decision is to have the same conditions for AFC as in the Lower 6 GHz band, we expect these existing uses to be protected in the same

³⁵ The [AFC framework statement](#) sets out the detailed requirements.

way. Many stakeholders agreed that applying the same technical conditions would allow coexistence.

- A2.39 The Upper 6 GHz band is also used by RAS and PMSE, and we have added protections in the AFC conditions to protect these uses, which we set out in [the AFC statement](#).³⁶
- A2.40 Some stakeholders commented on the technical conditions for AFC databases to ensure that existing uses are protected from the risk of interference from AFC-controlled devices operating at higher power. We address these comments in [the AFC statement](#).
- A2.41 Some stakeholders raised concerns about the risk of interference from higher power Wi-Fi under AFC and future mobile deployments in the Upper 6 GHz band to EESS, especially given the time it would take for any alternative bands agreed in WRC-27 to become operational.³⁷ We consider the risk of interference from higher power Wi-Fi in paragraphs 5.69–5.72 of the [AFC statement](#), and we are assessing the risk of interference from mobile following our [April 2026 consultation](#).

Risk of harmful interference from Wi-Fi to mobile priority deployments

- A2.42 We consider that the risk of harmful interference from Wi-Fi to future mobile services in the mobile priority portion of the band is likely to be low. Our proposal to use AFC systems in the Upper 6 GHz band will allow us to better manage the coexistence between both services and should help us mitigate this risk. We note that CEPT is still working on some more granular sensing-based mechanisms that enable additional sharing between mobile and Wi-Fi to be developed, but independently of the success and viability of these studies, AFC should provide an additional safeguard to protect mobile deployments.
- A2.43 As noted in paragraph 3.54 some stakeholders raised concerns about the risk of interference to mobile when it deploys, noting that AFC has been designed to manage coexistence between Wi-Fi and fixed links, whereas coexistence between Wi-Fi and mobile through AFC has not been tested. They explained that, as a result, allowing early access to Wi-Fi could risk “polluting” the band with unlicensed devices which may be difficult to remove, reducing the value of the spectrum for mobile use.

³⁶ As we explain in paragraphs 3.71 and 3.72, at this stage we will allow PMSE continued use of 7110–7125 MHz, by requiring AFC systems to deny access to a 20 MHz Wi-Fi channel centred at 7115 MHz, as set out in our [AFC Statement](#). We have also [separately consulted](#) on removing PMSE access to 7110–7125 MHz, as we considered that there is sufficient spectrum elsewhere. We are currently considering responses to that consultation, and, if we proceed with the proposals to remove PMSE access from 7110–7125 MHz, then there would be no requirement to restrict Wi-Fi use in that upper 20 MHz in the longer term. We also confirm that we will proceed to implement the capability for PMSE to “borrow” spectrum using the AFC system (including in the upper 20 MHz Wi-Fi channel) where there is exceptional temporary demand for spectrum for an event that cannot be met elsewhere. However, AFC systems only control Wi-Fi devices and so can only facilitate “borrowing” spectrum in channels and locations where mobile is not deployed.

³⁷ The Met Office, in collaboration with the European Centre for Medium-Range Weather Forecasts (ECMWF) and the European Space Agency (ESA), noted its concerns about the risk of interference from higher power Wi-Fi under AFC and future mobile deployments in the Upper 6 GHz band. It commented that our proposals appeared to assume that new bands will become available for SST measurements following WRC-27, but that these bands would not be operational for several years after WRC-27. It added that there is a risk that new SST measurement bands will not be secured at WRC-27, and that the lack of protections for SST measurements would create a multiyear vulnerability window during which UK forecasting capability could be degraded.

- A2.44 As noted above, we disagree as we consider that AFC will act as an effective fallback mechanism and that it will be able to clear Wi-Fi use in the areas where mobile is deployed, ensuring that mobile can deploy the spectrum unencumbered.

Risk of disruption to Wi-Fi services that have deployed once mobile starts being rolled out in the band

- A2.45 We recognise that our decision to enable early access to Wi-Fi use in the band, including in areas where mobile may be deployed and prioritised in the future, could risk disruption to Wi-Fi services in certain locations and channels as mobile is deployed, as noted in paragraph 3.49.
- A2.46 However, as set out in the consultation, we note that any Wi-Fi deployment in the mobile priority portion of the band (and in particular in high density areas) is on the understanding that it is a lower priority use to mobile and liable to be displaced by mobile rollout.
- A2.47 This risk is mitigated to an extent by the availability of other spectrum for Wi-Fi, including the Lower 6 GHz band and the bottom 160 MHz of the Upper 6 GHz band, where Wi-Fi users would have greater certainty of access. Furthermore, outside of high density areas, we expect there is more likely to be longer term availability for Wi-Fi use, such that the impact on Wi-Fi services should be low.

Risk of distorted investment incentives

- A2.48 The GSMA argued that early Wi-Fi access could create an imbalance in regulatory certainty as Wi-Fi would get access before the mobile framework is confirmed, potentially distorting investment incentives for mobile operators.
- A2.49 However, we do not believe that there is any such risk. Our decision sets out that mobile has priority use when and where it is deployed in the mobile priority part of the band. As such, its ability to deploy should be unaffected by any Wi-Fi rollout, therefore there should not be any negative effects on investment incentives.

Conclusion

- A2.50 Overall, our view is that enabling AFC-controlled devices in the Upper 6 GHz band will lead to the most efficient use of the spectrum. It allows early access to the band by Wi-Fi, while the AFC system will mitigate the risk of harmful interference to existing users and future mobile priority deployments. This can enable more intensive use of the spectrum, supporting localised investment and economic growth. We consider that the incremental cost and risks of extending AFC systems to Upper 6 GHz to be low.

Equality impact assessment

- A2.51 We have given careful consideration to whether our decision and proposals will have a particular impact on persons sharing protected characteristics (broadly including race, age, disability, sex, sexual orientation, gender reassignment, pregnancy and maternity, marriage and civil partnership and religion or belief in the UK and also dependents and political opinion in Northern Ireland), and in particular whether they may discriminate against such persons or impact on equality of opportunity or good relations. This assessment helps us

comply with our duties under the [Equality Act 2010](#) and the [Northern Ireland Act 1998](#).³⁸ We have also had regard to the matters in Section 3(4) of the Communications Act.³⁹

- A2.52 When thinking about equality we think more broadly than persons that share protected characteristics identified in equalities legislation and think about potential impacts on various groups of persons (see paragraph 4.7 of our [impact assessment guidance](#)).
- A2.53 In particular, Section 3(4) of the Communications Act also requires us to have regard to the needs and interests of specific groups of persons when performing our duties, as appear to us to be relevant in the circumstances. These include:
- a) the vulnerability of children and of others whose circumstances appear to us to put them in need of special protection.
 - b) the needs of persons with disabilities, older persons and persons on low incomes; and
 - c) the different interests of persons in the different parts of the UK, of the different ethnic communities within the UK and of persons living in rural and in urban areas.
- A2.54 We do not consider that our decisions will affect any specific groups of persons (including persons that share protected characteristics under the 2010 Act or the 1998 Act) differently to the general population.
- A2.55 Our decisions will authorise additional spectrum for Wi-Fi and mobile services, which will likely increase capacity and speed of both. We consider that use of Upper 6 GHz by these applications will predominantly be in high density areas, such as towns and cities, or where there is high demand for these applications. We have not identified any adverse impacts on specific groups of persons that are likely to be affected in a different way to the general population.
- A2.56 Ofcom can provide information in a [variety of formats](#) on request, e.g., accessible PDF, large print, easy read, audio recording or braille. If you let us know what information you require and in what format, we will consider the request and respond within 21 days.

Welsh language impact assessment

- A2.57 Ofcom is required to take Welsh language considerations into account when formulating, reviewing or revising policies which are relevant to Wales (including policies which are not targeted at Wales specifically but are of interest across the UK).⁴⁰
- A2.58 We do not consider our decisions have any impact on opportunities for persons to use the Welsh language or treat the Welsh language less favourably than the English language. We also do not think there are ways in which our decisions could be formulated so as to have, or increase, a positive impact, or not have adverse effects or decrease any adverse effects. This is because our decisions relate to spectrum access across the UK.
- A2.59 We note that Ofcom's current practice is to offer to produce spectrum licences in Welsh, and when requested does provide licences in Welsh, in accordance with its obligations set by the Welsh Language Commissioner. This will apply to any licences discussed in this document.

³⁸ [Section 75 of the Northern Ireland Act 1998](#)

³⁹ [Section 3\(4\) of the Communications Act 2003](#)

⁴⁰ See Standards 84–89 of Hysbysiad cydymffurfio (in Welsh) and compliance notice in English. Section 7 of the Welsh Language Commissioner's Good Practice Advice Document provides further advice and information.

A3. RLAN device classes

- A3.1 Given the decisions we have taken in section 3 above, we confirm that the following Wi-Fi device classes can be used in the UK on a licence exempt basis, and subject to compliance with the requirements set out in the relevant exemption regulations:

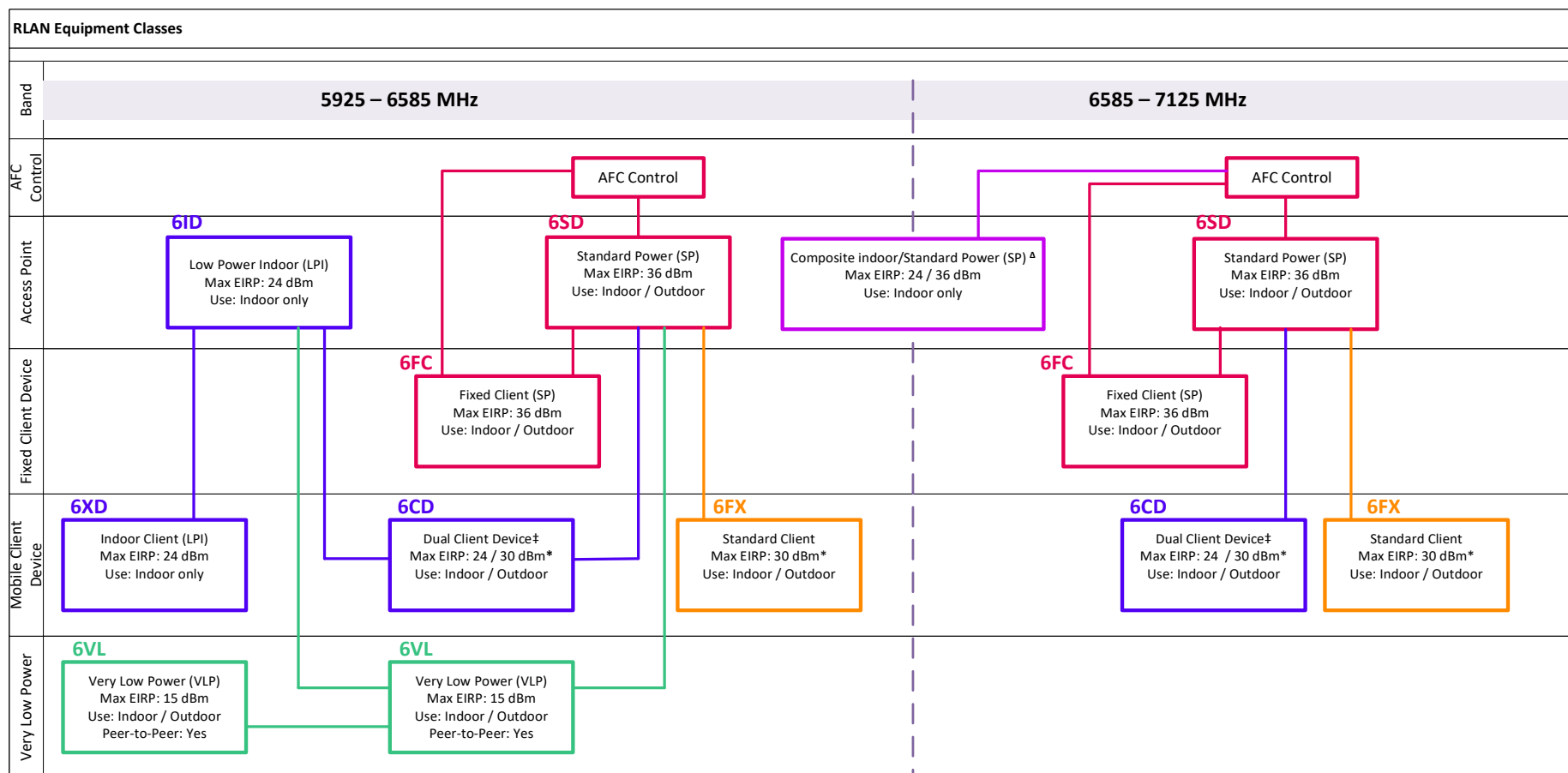
In the 5925–7125 MHz band

- a) Standard Power Access Points and fixed client devices, with maximum EIRP of 36 dBm. These devices must have a geolocation capability and only operate under the control of an AFC system. They can be used both indoors and outdoors. Fixed client devices can only communicate with a Standard Power Access Point.
- b) Standard client mobile devices, with maximum EIRP of 30 dBm. These devices do not need a geolocation capability, can only communicate with a Standard Power Access Point, and must limit their EIRP to at least 6 dB below the access point's EIRP. They can be used both indoors and outdoors but must not be capable of initiating a network.

In the 5925–6585 MHz band only

- c) Low Power Indoor (LPI) Access Points, with maximum EIRP of 24 dBm. No AFC control is required, and these devices can only be used indoors.
 - d) Indoor client mobile devices, with maximum EIRP of 24 dBm. These devices can only communicate with a LPI Access Point and can only be used indoors.
 - e) Very Low Power (VLP) client devices, with maximum EIRP of 15 dBm. These devices can communicate with an access point and can also form peer-to-peer networks with other VLP clients. They can be used both indoors and outdoors.
- A3.2 There are two further types of device that can operate in the 5925–7125 MHz band. However, there are restrictions depending on how they operate:
- f) Composite Low Power Indoor / Standard Power Access Points. These devices can operate as either a LPI Access Point or a Standard Power Access Point. If operating as a LPI Access Point they can only do so in the 5925–6585 MHz part of the band. If operating as a Standard Power Access Point, they can operate in the whole 5925–7125 MHz band but must be under the control of an AFC system.
 - g) Dual client mobile devices. These devices can connect to either a LPI Access Point under the same conditions as d), or to a Standard Power Access Point under the same conditions as b). Since LPI Access Points are not authorised in the mobile priority portion of the band, 6585–7125 MHz, dual client devices will only be able to connect to Standard Power Access Points above 6585 MHz.
- A3.3 Figure A3.1 below shows how these device classes map onto the existing device ecosystem authorised by the FCC in the USA.

Figure A3.1: Mapping authorised device classes onto FCC authorisation



△ Composite indoor/standard power devices must be under AFC control in the band 6585 to 7125 MHz

‡ A dual client device can only connect to a standard power access point in the band 6585 to 7125 MHz

* Transmit power is limited to 6 dB below the standard power access point's transmit power authorised by the AFC and must not exceed a limit of 30 dBm EIRP

Source: Ofcom