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Europe's Approach to the Upper 6 GHz Band

An overview of developments in the European Union (EU) and the UK

MARCH 2026

Introduction

While Canada, Saudi Arabia, South Korea, the US and other countries have made the entire 6 GHz band available for use by Wi-Fi, European governments are looking at how to share the upper portion of this spectrum (6425-7125 MHz) between Wi-Fi and mobile networks[1].

This document outlines:

1. Steps being taken by the European Conference of Postal and Telecommunications Administrations (CEPT) to develop technical conditions for shared use of the upper 6 GHz band;
2. Efforts by the EU's Radio Spectrum Policy Group (RSPG) to develop an efficient and effective means to share;
3. Approach being taken by UK regulator Ofcom to enable Wi-Fi to access the upper 6 GHz while allowing for future mobile use in a framework compatible with that being considered by the EU.

1. CEPT is developing the technical conditions for shared use

The European Commission (EC) mandate[2] issued in December of 2024 directed CEPT to assess the feasibility of shared use of the upper 6 GHz band, as well as coexistence scenarios with incumbent spectrum users. When there is at least one feasible sharing option that also protects incumbents and adjacent users, the mandate requires harmonised technical conditions to be developed for implementation. If the studies show that sharing the full upper 6 GHz band between WAS/RLAN and MFCN is not feasible, the mandate requires the development of harmonised technical conditions for alternative approaches for the use of the upper 6 GHz band by one or both systems without prior constraints or order of preference. The mandate requested a final report by July of 2027 with interim tasks due periodically.

1 In European regulatory discussions, Wi-Fi networks are referred to as Wireless Access Systems/Radio Local Area Networks (WAS/RLAN) while mobile networks are referred to as International Mobile Telecommunications or Mobile/Fixed Communications Networks (IMT or MFCN).

2 https://ec.europa.eu/newsroom/dae/redirection/document/111010

To deliver on the EC mandate, CEPT is undertaking three key tasks:

Task 1 – Studying coexistence with incumbents

- Drawing on technical studies, ECC Report 364 concluded that WAS/RLAN can coexist with incumbent services.
- Drawing on technical studies, ECC Report 375 outlined the technical conditions under which MFCN could coexist with incumbents.
- The two reports are the basis for CEPT Report A (in the CEPT Documentation Database, this report is called CEPT Report 92). The initial draft will be subject to a public consultation in March 2026 and finalised in May 2026.

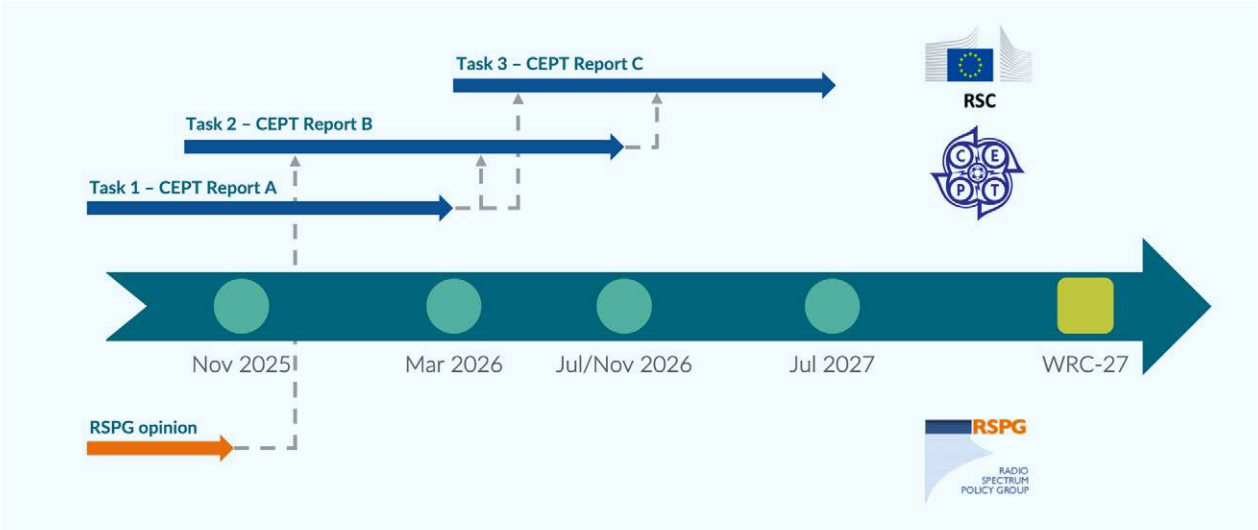
Task 2 – Studying shared use of the upper 6 GHz band by MFCN and WAS/RLAN

- ECC Report 365 assessed the technical feasibility of shared use of Wi-Fi and MFCN in the upper 6 GHz band.
- The development of CEPT Report B on the feasibility of shared use of the upper 6 GHz band MFCN/RLAN is ongoing and the draft will be finalised in May 2026 before going to public consultation.

Task 3 – Developing harmonised conditions

- The work on the development of a harmonised frequency arrangement and the least restrictive harmonised technical conditions for the scenario identified in the previous tasks has not begun yet.

The graphic below shows the timeline for the CEPT process.



2. RSPG considers EU approach to the upper 6 GHz band

The EU asked the RSPG to provide an opinion with policy recommendations on the best use of the upper 6 GHz band to achieve the EU's digital connectivity objectives.

Some 50 organisations responded to the RSPG consultation requesting input on the best use of the upper 6 GHz band. Those responses revealed strong cross-sector support, including from technology companies, fibre operators, academia, retailers and incumbent users of the band, for licence-exempt access to the upper 6 GHz band. Many respondents highlighted a clear need for wide contiguous channels for Wi-Fi 7 and most respondents (29 of the 50) backed the allocation of at least 320 MHz of the upper 6 GHz band for WAS/RLAN.

In its final opinion, issued in November 2025, the RSPG recommended a prioritised band split, in which the spectrum is divided into two parts. In each part, one application has priority, but the other application can also use that spectrum, as long as it does not cause interference to the primary application. Despite the strong support for prioritising at least 320 MHz for WAS/RLAN, the RSPG proposed the prioritised use of the 6585-7125 MHz band for MFCN. However, the RSPG also recommended that CEPT investigate non-prioritised WAS/RLAN usage within this full power MFCN segment, ensuring that such operation does not cause harmful interference to MFCN.

The RSPG intends to wait for the outcome of WRC-27 before deciding on the future of the remaining 160 MHz (6425-6585 MHz). If WRC-27 identifies the 7125-7250 MHz band (the spectrum sitting immediately above the upper 6 GHz band) for IMT (MFCN), the RSPG believes there is a strong case for designating the 6425-6585 MHz band for prioritised WAS/RLAN use. Conversely, if WRC-27 does not identify the 7125-7250 MHz band for IMT, the RSPG believes there is a strong case for designating the 6425-6585 MHz band for prioritised MFCN use.

Within this overall framework, the RSPG seeks to ensure that EU Member states have the flexibility to maintain existing fixed service usage, while supporting additional mobile applications (MFCN and WAS/RLAN) as needed. It also recommends that Member States should have the flexibility not to award spectrum where no demand arises for MFCN in the band and also to determine whether non-prioritised WAS/RLAN usage is allowed.

Finally, RSPG suggested that CEPT should, within the scope of the EC Mandate (Task 1 and Task 2), study the technical conditions to make sure that MFCN use in the upper 6 GHz band does not impact the continued operation of WAS/RLAN in the lower 6 GHz band (5945-6425 MHz).

Once CEPT has refined and recommended harmonised technical conditions, the EU will then decide on a harmonised approach, which national administrations can use to define their policies.

3. The UK plans to harness the upper 6 GHz for Wi-Fi

UK regulator Ofcom is taking a more pragmatic approach to innovating and harnessing the 6 GHz band and has more scope to do so, while still remaining aligned with the fundamental view of the EU that the spectrum should be employed by both technologies on a shared basis.

In January 2026, Ofcom presented its plans for the entire 6 GHz band. In the lower 6 GHz band, where licence-exempt use is already allowed for low power indoor (LPI) and very low power (VLP) indoor and outdoor usage, a new class of standard power (SP) licence-exempt devices (able to transmit at up to 4W outdoors) will be allowed to operate. Incumbent services such as FS (fixed services) and RAS (radio astronomy services) will be protected by the use of automated frequency coordination (AFC) systems that are already extensively used in markets such as the US and Canada.

For the upper 6 GHz band, Ofcom plans to adopt the same prioritised band split as that proposed by the RSPG, but with an important difference: the lower 160 MHz will be made available for use by WAS/RLAN as soon as possible, with the same conditions of the lower 6 GHz band (i.e. VLP, LPI and the newly-introduced SP). In the remaining 540 MHz, which will be prioritised for mobile use, WAS/RLAN devices must operate under the control of an authorised access point and are not permitted to initiate networks or connect directly to other client devices.

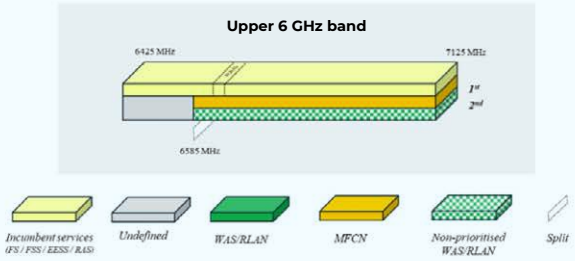
In an ongoing public consultation, Ofcom is proposing to enable WAS/RLAN access points managed by an AFC to operate in the “mobile priority” portion of the upper 6 GHz band. Ofcom is also consulting on its plans for a “sub-national licensing” approach for mobile services in the mobile priority portion of the band. This involves awarding mobile licences in “high density areas” (such as urban centres) while implementing localised licensing arrangements, such as first-come-first-served, in other areas. Ofcom anticipates mobile use of the band is likely to happen around 2030.

Why Ofcom’s approach is both efficient and pragmatic

Ofcom plans to take advantage of commercial AFC systems to ensure the upper 6 GHz band is used as efficiently as possible. As well as protecting incumbent services, Ofcom’s proposals include the necessary technical coexistence mechanisms to allow for future use of the upper 6 GHz band by mobile. At the same time, Ofcom’s proposals will allow SP Wi-Fi devices to access the entire 6 GHz band via an AFC. VLP and LPI Wi-Fi devices will also have access to the full band, but in the mobile-prioritised portion, they will need to be connected to an access point managed by an AFC.

While broadly aligned with the RSPG opinion, Ofcom’s approach means the UK can increase the spectrum available for Wi-Fi in the near future, rather than waiting for the outcome of WRC-27 – see diagram. Under the proposed timetable, Wi-Fi could have access to the upper 6 GHz band before the end of 2026.

RSPG opinion



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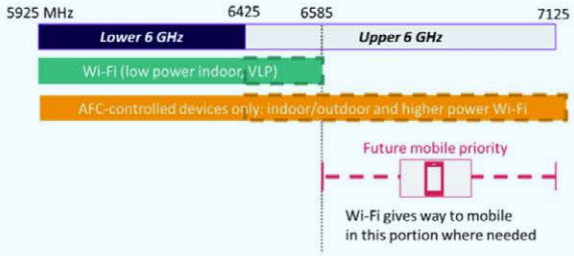

Conclusions

In the UK, Ofcom has identified a pragmatic and innovative way forward within the envelope envisioned by the RSPG Opinion. Ofcom's decision to seed the market with clients that can operate across the entire 6 GHz band is particularly forward-looking. At the same time, its plans to leverage the introduction of AFC for SP operation in the lower 6 GHz to enable carefully controlled Wi-Fi usage of the mobile-prioritised portion of the upper 6 GHz band will help meet enterprise demand for more licence-exempt spectrum, without hindering other future usage of the band. As a result, the UK should be able to benefit from more performant Wi-Fi in the near future, while still ultimately benefitting from the economies of scale and interoperability arising from alignment with the approach being taken elsewhere in Europe.

The need for protection of WAS/RLAN from high power IMT is recognised by both the RSPG and by Ofcom, which has said that the 160 MHz (6425-6585 MHz) that would be prioritised for WAS/RLAN will be subject to the same conditions as the lower 6 GHz.

CEPT is currently evaluating the feasibility of enabling SP WAS/RLAN (up to 4 W) in the lower 6 GHz band via database systems[3]. As suggested by Ofcom, this approach can also be used to enable Wi-Fi to operate in the mobile-prioritised portion of the upper 6 GHz band.

Several EU administrations have expressed interest in the UK approach and are closely following this process. This suggests a growing willingness to explore practical solutions in Europe following the RSPG Opinion. In particular, there is growing interest in the potential of databases to effectively manage the sharing of the upper 6 GHz band by Wi-Fi and IMT services.

3 Draft ECC Report 377 "Sharing and compatibility studies related to Wireless Access Systems including Radio Local Area Networks (WAS/RLAN) up to 4 W e.i.r.p. in the frequency band 5945-6425 MHz".