



Joint Response from Amazon, Apple, Broadcom, Cisco, Hewlett Packard, Intel and Meta

Question	Your response
Question 1: Do you have any comments on Ofcom's proposed Work Plan for 2026/27?	Confidential? – N

The above-signed companies, representing an important cross-section of the world’s leading silicon vendors, system manufacturers, and application providers, welcome the opportunity to comment on Ofcom’s proposed Plan of Work 2026/27 (the Plan).

Summary

We commend Ofcom for its recognition of spectrum’s important role in “unlocking innovation and growth in the UK...[and] for businesses across the economy.” We further applaud Ofcom for its commitment to “managing the increasing demand for spectrum from a growing range of technologies,” including those, like Wi-Fi, that rely on access to licence-exempt spectrum.

Given the importance of spectrum to ongoing innovation and to the communications needs of consumers and business alike, our comments focus on recommendations that we believe will enhance the Plan and assist Ofcom in realizing its objectives for wireless broadband connectivity. These recommendations, described in greater detail below, include:

- 1) Amend “Promoting seamless, reliable mobile connectivity” to include promoting seamless handover of connections between public mobile networks, private 5G networks, and Wi-Fi networks (e.g. PassPoint, OpenRoaming, emergency calling, first responder access, etc.) with the goal of enabling more cost effective and environmentally sustainable high-throughput indoor connectivity.
- 2) Establish a more detailed roadmap for 6 GHz Automated Frequency Control (AFC) deployments, including milestones and/or timelines.
- 3) Initiate a public consultation on the introduction of mobile services in the 6 GHz band, including coexistence models and interaction with Wi-Fi and AFC.

- 4) Clarify how the UK's approach to the 6 GHz band will form the basis for a position on Agenda Item 1.7 GHz at WRC-27, how the UK 6 GHz policy will impact device ecosystems, and how it will align with or diverge from approaches in the E.U. and United States.
- 5) Establish targeted sandboxes / trials in the 6 GHz band to foster innovation and drive wireless in various economic sectors.
- 6) Identify opportunities for use of the 6 GHz band to improve connectivity in areas where the market may not deliver (e.g., rural, indoors, etc.).
- 7) Consider how the operation of enterprise Wi-Fi networks requiring predictable and reliable access to the full 6 GHz band could be maintained if mobile were introduced in parts of the Upper 6 GHz band.

We look forward to working with Ofcom on its priorities and projects as described in the Plan and encourage Ofcom to consider these recommendations we describe herein.

Recommendations

- 1) *Amend "Promoting seamless, reliable mobile connectivity" to include promoting seamless handover of connections between public mobile networks, private 5G networks, and Wi-Fi networks (e.g. PassPoint, OpenRoaming, emergency calling, first responder access, etc.) with the goal of enabling more cost effective and environmentally sustainable high-throughput indoor connectivity.*

In the Plan, Ofcom indicates that its focus is on promoting access to gigabit-capable fixed telecoms connections, improvements in mobile connectivity, and investment in high-quality networks and services which are available when they are needed. We fully support these goals. However, we encourage Ofcom to consider that high-quality, reliable connectivity indoors is a critical component of these three objectives. About 90% of Internet traffic travels via fixed lines and is relayed to end users via Wi-Fi. This trend is expected to continue for the rest of this decade and beyond 2030. The general public and professional users expect high-quality Wi-Fi connections at home, in the office, in the factory, at public events, in hotels, at restaurants, and beyond. While we fully acknowledge that mobile networks are essential for outdoor, mobile connectivity, it is Wi-Fi that makes high-quality indoor (and local) connectivity possible on both mobile and fixed devices for both consumer and enterprise applications.

To effectively promote seamless, reliable mobile connectivity, it will be essential to address challenges associated with mobile coverage inside buildings. High-quality connectivity indoors should ideally be supplied by indoor networks such as Wi-Fi. Outdoor-to-indoor solutions dissipate high levels of power to penetrate building walls, particularly for newer, more energy-efficient buildings. An indoor device connected to an outdoor network will use

considerably more energy, resulting in more frequent recharge cycles, increased battery wear, and additional electronic waste. Furthermore, outdoor mobile networks are designed to handle mainly downlink traffic (in a ratio of 9:1), so the uplink is generally a considerable limiting factor for those advanced applications which require performant uplink connectivity (e.g., enterprise users, home office workers, students, etc.). For various reasons, including device cost, the vast majority of networked wireless devices operating indoors do not support mobile connectivity. Improving cellular connectivity indoors would benefit predominantly users of smartphones, which all feature Wi-Fi connectivity by default.

We therefore encourage Ofcom to add to the Plan the development of solutions that support seamless handover of connections between public mobile networks, private 5G networks, and Wi-Fi networks (e.g. PassPoint, OpenRoaming, emergency calling, first responder access, etc.). Such solutions will enable more cost effective and environmentally sustainable high-throughput indoor connectivity.

2) Establish a more detailed roadmap for 6 GHz Automated Frequency Control (AFC) deployments, including milestones and/or timelines.

In the Plan, Ofcom notes its intent to progress work on AFC for higher-power outdoor Wi-Fi. We fully support this activity. However, we recommend that Ofcom provide additional details about these plans, such as milestones or timelines. Such a roadmap will provide investment certainty to manufacturers and service providers, promote coexistence with incumbent users, and facilitate the rapid introduction of higher-power 6 GHz Wi-Fi services. We further encourage Ofcom to consider high-power use under AFC management for indoor Wi-Fi operations, taking into consideration Building Entry Loss (BEL), which will support more efficient use of the 6 GHz band.

3) Initiate a public consultation on the introduction of mobile services in the 6 GHz band, including coexistence models and interaction with Wi-Fi and AFC.

The Plan indicates that Ofcom intends to improve access to the 6 GHz band for mobile networks. However, it does not clarify the intended authorisation approach or whether this would involve licensed access, shared frameworks, or licence-exempt use. We therefore recommend that Ofcom issue a public consultation on the policy options for mobile use in the 6 GHz band. This consultation could also solicit input on coexistence models, interaction with Wi-Fi and AFC, and secondary licence-exempt access. Such an approach will ensure that stakeholder input informs an approach appropriate for UK needs and supports efficient and competitive use of the band.

In addition, as part of a public consultation, Ofcom could explore opportunities for greater transparency on incumbent protection and coexistence in the 6 GHz band. To ensure confidence in shared access to the band, we recommend that Ofcom commit to publishing:

- Coexistence studies (if needed)
- Incumbent mapping
- Technical parameters (power limits, AFC constraints).

- 4) *Clarify how the UK's approach to the 6 GHz band will form the basis for a position on Agenda Item 1.7 GHz at WRC-27, how the UK 6 GHz policy will impact device ecosystems, and how it will align with or diverge from approaches in the E.U. and United States.*

In the Plan, Ofcom places strong emphasis on international engagement and WRC-27. Given global divergence on the 6 GHz band and the relationship that Europe has created between Agenda Item 1.7 and the future of the 6 GHz band, we request that Ofcom clarify the UK's preliminary position on WRC-27 Agenda Item 1.7 GHz. Additionally, we ask that Ofcom assess the impact of its 6 GHz policy on device ecosystems and how it will align with or diverge from approaches being taken in the E.U. and United States. By doing so, we believe uncertainty will be reduced and that early alignment with global manufacturing and technology roadmaps can be ensured.

- 5) *Establish targeted sandboxes / trials in the 6 GHz band to foster innovation and drive wireless in various economic sectors.*

In the Plan, Ofcom prioritises the enablement of wireless in the UK economy as part of a greater effort to promote economic growth. Recognizing that "ongoing digital innovation and technological change mean that communications services will continue to play an ever more central role in people's lives and in the economy," we recommend that Ofcom support testbeds for real-world use cases in the 6 GHz band. This could include regional or sectoral pilots (e.g., manufacturing, education, healthcare) in cooperation with vertical industries. Through such sandboxes / trials, Ofcom can accelerate wireless adoption in the UK economy and drive growth and innovation.

- 6) *Identify opportunities for use of the 6 GHz band to improve connectivity in areas where the market may not deliver (e.g., rural, indoors, etc.).*

As mentioned above, we commend Ofcom for its recognition of the importance of licenceexempt access to the 6 GHz band. Unlocking the full potential of the 6 GHz band will improve spectrum efficiency, support next-generation Wi-Fi, and enable a wide range of highvalue emerging applications that depend on high throughput and low latency.

For example, enhanced access to the 6 GHz band will allow extended and augmented reality (XR/AR/VR) systems to operate wirelessly with fibre-like performance for immersive training, remote maintenance, virtual education and healthcare simulations, and collaborative industrial design; uses that require wide channels and sub-10 ms latency that current congested bands struggle to provide. It will also support the evolution of smart glasses and other wearable devices used in logistics, engineering, healthcare, and accessibility, where reliable low-power connectivity is critical for cloud and edge-rendered applications. Very low power devices such as industrial sensors, safety wearables, and next-generation IoT will benefit from reduced interference and greater efficiency, enabling more reliable factory automation, retail tracking, medical monitoring, and smart infrastructure.

Moreover, expanded 6 GHz access underpins Wi-Fi 6E/7 performance for high-density venues and enterprise environments, enabling improved connectivity and mobile offload

indoors, while AFC-enabled outdoor use creates opportunities for fixed wireless access and rural broadband, supporting gigabit-class last-mile connectivity.

In the Plan, Ofcom emphasises improving connectivity in areas where the market may not deliver. Enhanced licence-exempt access to 6 GHz could play a key enabling role through:

- Fixed Wireless Access via AFC
- Rural shared spectrum use
- Neutral-host deployments • Reliable indoor connectivity.

We therefore recommend that Ofcom include rural assessment and improved indoor connectivity within the 6 GHz workstream.

7) Consider how the operation of enterprise Wi-Fi networks requiring predictable and reliable access to the full 6 GHz band could be maintained if mobile were introduced in parts of the Upper 6 GHz band.

Certain enterprise Wi-Fi networks (e.g., in hospitals, factories, or educational facilities) may require reliable and predictable access to the entire 6 GHz band to fulfil their performance requirements. Ofcom's current plans foresee that if Wi-Fi systems were allowed to use the entire upper 6 GHz band (including the portion of the band that would be prioritised for mobile use), they would have to vacate that band or certain channels within that band if mobile were deployed. This would create uncertainty for the operators of enterprise Wi-Fi networks and potentially discourage investment. Given Ofcom's statutory duties regarding spectrum efficiency and its duty to ensure growth (which includes ensuring infrastructure investment and innovation are prioritized), we encourage Ofcom to consider how enterprise Wi-Fi networks that operate using non-prioritised parts of the upper 6 GHz band may continue to use those frequencies to fulfil their performance requirements. We acknowledge that a final decision about the future use of the Upper 6 GHz band in the UK remains to be taken; nevertheless we believe that Ofcom should consider this important aspect in its 2026-2027 Plan of Work.

Conclusion

We commend Ofcom for its commitment to ensuring that "spectrum remains an effective enabler for wireless communication for all people, businesses, and sectors" and to fostering innovation and economic growth by meeting the "growing demand for an increasing variety of services." As part of these efforts, we strongly welcome Ofcom's efforts to enhance access to the 6 GHz band. Improved access to 6 GHz will deliver substantial social and economic value, enabling the digital transformation of public services and industry while easing pressure on licensed spectrum. We trust that our recommendations on the Plan will assist Ofcom in achieving its goals for innovation, competition, and universal connectivity.