

Introduction

The Italian Internet Providers Association (AIIP) is the first and historic association of Italian Internet operators. For thirty years, it has been dedicated to promoting an open, competitive, and innovative telecommunications market, and representing the interests of medium and small operators with strong local roots.

Founded in 1995 by the pioneers of the Italian Internet, AIIP now comprises over 60 companies, serving more than 250,000 business clients and 1 million residential clients, with a total revenue exceeding €1.2 billion. These companies offer a wide range of Internet services across Italy, including ultrabroadband fibre optic and wireless connectivity, as well as data centre and cloud services. AIIP members were the first to introduce Internet services to the Italian public and, later, to deploy true fibre optic connections, replacing outdated copper connections, particularly in peripheral areas. They continue to lead in developing industrial, artisanal, and tourist districts, as well as scattered residential areas.

AIIP is a founding member of MIX, Italy's most important Internet exchange point (IXP), handling peak traffic of 3 Terabits per second. AIIP is also a founding member of EuroISPA, a Brussels-based association that advocates for the interests of 3,300 operators. Finally, AIIP is a member of ECTA, the European Competitive Telecommunications Association, which represents over 100 leading telecommunications operators and digital solution providers.

For AIIP members, whether they are Internet access providers or other specialized service providers, Wi-Fi is a crucial technology. However, the current restrictions – in Italy and Europe – on the use of the entire 6 GHz band in Europe, and the resulting limitations on frequencies and channels available for Wi-Fi 6e and higher devices, are creating an increasingly severe bottleneck as data traffic volumes grow. This bottleneck prevents users from effectively utilizing access speeds above 1 Gbps through their WLANs, and impacts the numerous services that transit through them, significantly affecting the perceived quality of Internet access service.

AIIP welcomes OFCOM's proposals for mobile/Wi-Fi sharing in the upper 6 GHz band. Wi-Fi and 5G, like most major communication services, are based on global technologies and a global market of devices. Thus, we believe that our experience and responses may be relevant to OFCOM, despite originating from a different, yet close, country like Italy. AIIP sees itself as having a vested interest in the ongoing procedure, viewing OFCOM's proposal as a reasonable and positive regulatory model that we hope Italy and the European Union will follow and emulate. On 21 February 2025, AIIP issued a press release¹, which was covered by the specialised press, to explicitly commend OFCOM's initiative and advocate for alignment by the relevant Italian authorities.

¹ <https://www.aiip.it/aiip-la-proposta-di-ofcom-uk-per-un-wi-fi-piu-potente-e-affidabile-grazie-alla-banda-alta-dei-6-ghz-sia-un-modello-anche-per-litalia-e-leuropa/>

Question 1: What interest do you have in deploying outdoor or standard power Wi-Fi or other licence-exempt RLANs in the Lower 6 GHz band? Please provide details of the types of expected deployments.

AIIP welcomes the opportunity to provide input on the topic of standard power Wi-Fi and strongly supports its adoption as a fundamental enabler for next-generation connectivity, both indoors and outdoors.

Standard Power Wi-Fi (up to 4 Watts), already under adoption in countries such as the United States and Canada, is essential for the effective deployment of high-capacity wireless networks in complex and large-scale environments. In our view, this technology offers clear and substantial benefits across multiple use cases.

Indoor deployments stand to benefit significantly. Higher transmission power enables more efficient coverage of large spaces—such as logistics centers, university campuses, and transport hubs—allowing for more flexible placement of access points and reducing the total number of devices required. This not only optimizes network performance and reliability, particularly in high client-density scenarios, but also helps contain infrastructure and maintenance costs.

Outdoor applications are equally compelling. In locations where power supply or wired connectivity is limited or unavailable, Standard Power Wi-Fi provides the necessary range and performance to ensure effective coverage. Without ceiling constraints, higher power allows for strategic placement of access points, compensating for irregular positioning. This is particularly relevant for large open areas such as stadiums, ports, public campuses, and urban Wi-Fi networks.

From an enterprise and public service perspective, Standard Power Wi-Fi in the 6 GHz band represents a natural extension for organizations already relying on 2.4 and 5 GHz Wi-Fi. It enhances overall network capacity and performance while offering a dependable alternative to mobile networks, especially in public-facing environments. Furthermore, widespread user familiarity with Wi-Fi supports smoother and faster adoption, reducing the need for end-user education or costly transition efforts.

Question 2: Are you interested in providing or developing AFC databases for use in the Lower 6 GHz band in the UK?

Question 3: Do you have any views on the operational considerations of setting up and running AFC databases?

To achieve a harmonized and replicable regulatory model for the use of Wi-Fi in the upper 6 GHz band, as advocated by AIIP, we emphasize the importance of international consistency. In this context, we recommend aligning with countries that currently authorize Automated Frequency Coordination (AFC) systems, particularly Canada and the United States.

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Question 4: Do you have any views on how we should manage the approval process for AFC databases and, in particular, whether we should rely on parts of the FCC process rather than requiring the whole process to be re-run in the UK?

Question 5: Please provide any other comments on our proposals for extending access to standard power Wi-Fi and outdoor use, including the overall approach, any details on technical parameters and the running of the AFC databases in this band.

AIIP supports Ofcom's proposals for extending access to standard power Wi-Fi and outdoor use, emphasizing the importance of enabling standard power both indoors and outdoors for comprehensive deployment. We advocate for the inclusion of composite devices that can operate in both indoor low power and standard power modes, adhering to indoor AP requirements such as being mains powered, not weatherproof, labelled for indoor use, and potentially using connectorised antennas. Additionally, the AFC system should account for Building Entry Loss (BEL) when determining channel availability, with indoor location data and accuracy shared with the AFC to assess potential interference. Ofcom should establish a benchmark BEL for AFC operators to use in interference calculations. Looking ahead, we urge Ofcom to consider extending standard power and AFC access to the upper 6 GHz band, including areas outside radio astronomy protection zones, to enable broader Wi-Fi availability.

Question 6: Do you have any comments on our proposal to use a “phased” approach, or on the alternative to wait for European harmonisation?

AIIP strongly supports Ofcom's proposal to enable licence-exempt access to the full 6 GHz band for Wi-Fi by the end of 2025. We urge Ofcom to adhere to the proposed timeline, while acknowledging that potential future consultations may influence long-term access to the upper 6 GHz band. Immediate and full-band access is essential to meet rapidly growing connectivity demands, particularly in enterprise and high-density environments, where the currently available 480 MHz in the lower 6 GHz band is insufficient.

AIIP foresees a strong uptake of full-band Wi-Fi devices in the UK, aligned with trends observed in North American markets. As an Italian Association, whose Members are at the forefront of deploying cutting-edge broadband technologies such as 50G-PON², we emphasise that full 6 GHz access is critical. Without it, the risk of Wi-Fi becoming a bottleneck at the last-metre would jeopardise the performance of ultra-high-speed networks. Full-band Wi-Fi is essential to unlock the full potential of next-generation connectivity and to ensure that fibre network investments deliver their maximum benefit to end users.

The urgency is underscored by the fact that multi-generational Wi-Fi 6E and Wi-Fi 7 devices are already widely deployed across the Windows, Android, and Apple ecosystems. Opening the full 6 GHz band helps future-proof these deployments and maximises the value of new broadband infrastructure.

Managing Spectrum Changes: Practical Realities

The Association also wishes to highlight the operational realities around spectrum management. Once Wi-Fi access points are deployed, particularly by ISPs and enterprises, they are typically under the direct control of end users or IT teams—making hardware reconfiguration or deactivation challenging after the fact. However, with appropriate advance notice, these stakeholders can prepare mitigation

² <https://tg24.sky.it/tecnologia/now/2025/03/13/mynet-lancia-per-prima-al-mondo-il-50g-pon>;

strategies, such as pushing firmware updates or scheduling changes during routine network maintenance cycles.

Client devices follow the lead of access point broadcasts, so the core responsibility for spectrum compliance lies with the AP configuration. Allowing client devices to operate across the full 6 GHz band—under the control of access points—minimises regulatory burden, simplifies certification, and accelerates the availability of globally aligned Wi-Fi products in the UK market.

A “Simple Option” to Provide Industry Certainty

To support long-term planning and investment, AIIP suggests that Ofcom offer a “simple option” to provide regulatory certainty from the outset. This would allow manufacturers to confidently design devices supporting a defined, licence-exempt subset of channels in the upper 6 GHz band. These channels would be guaranteed for Wi-Fi use regardless of future spectrum changes, thus ensuring continuity and avoiding costly re-engineering or recalls.

Final Recommendations

In order to fully realise the benefits of Wi-Fi 6E and Wi-Fi 7 technologies, AIIP recommends that Ofcom:

- **Allocate a minimum of 400 MHz** within the upper 6 GHz band for licence-exempt use by the end of 2025, adopting regulatory conditions harmonised with those currently applied to the 5925–6425 MHz band;
- **Refrain from imposing prescriptive technical implementation measures** regarding potential future spectrum adjustments. Instead, Ofcom should:
 - Provide clear and timely communication of any regulatory changes;
 - Enable ISPs, enterprises, and system integrators to implement necessary adaptations independently, based on their operational capabilities;
 - Facilitate multiple compliance pathways, including the proposed “simple option,” to ensure scalable, reliable, and flexible deployment of Wi-Fi networks across the UK.

We believe that this strategy will support sustained technological innovation, enhance international regulatory alignment, and consolidate the United Kingdom’s position as a leader in next-generation broadband and wireless services. Moreover, it should serve as a reference model for the European Union, encouraging a harmonised and progressive approach to the development of Wi-Fi and broadband infrastructure across Europe.

Question 7: Do you have any comments on the above suggestion to manage any “legacy” Wi-Fi devices, or alternative suggestions?

Access points (APs) that will utilize the upper 6 GHz band are expected to be high-end for several years, meaning they will likely include features that enable ISPs or equipment vendors to make necessary adjustments. Consequently, it is highly unlikely that there will be many, if any, “legacy” devices. We therefore agree with Ofcom that the potential risks posed by “legacy” devices are low. However, if Ofcom deems it necessary to implement safeguards, these should be limited to APs that are not managed as part of a network (i.e., not for enterprise Wi-Fi networks or ISP-managed APs) and where firmware updates cannot be provided. In such cases, a cut-off date for operation on certain upper 6 GHz channels could be considered.

Question 8: Do you have a view on the amount of spectrum that should be prioritised for Wi-Fi under the prioritised spectrum split option? Please provide evidence for your view.

AIIP advocates for the allocation of as much spectrum as possible to Wi-Fi, as early as possible, and specifically by 2025.

While Ofcom has proposed a prioritisation range between 160 MHz and 400 MHz, we recommend that 400 MHz — under regulatory conditions aligned with those currently applied to the Lower 6 GHz band — be designated as a minimum acceptable outcome. Ideally, we believe that the entire upper 6 GHz band would be better utilised by licence-exempt technologies to meet the growing connectivity demands across sectors.

It is important to highlight that certain enterprise deployments — including but not limited to stadiums, hospitals, universities, and schools — would significantly benefit from, and in some cases require, access to the full 6 GHz band to deliver the necessary quality of service.

We therefore encourage Ofcom, as it considers the integration of mobile technologies into the band, to ensure that critical Wi-Fi use cases are fully recognised and incorporated into the final framework. Providing robust support for high-performance Wi-Fi deployments in these key environments is essential to ensuring that connectivity goals are met without compromise.

Question 9: Do you have any comments on our plan for a “phase 1” when Wi-Fi will be introduced?

As mentioned in our response to question 6, AIIP fully supports Ofcom’s vision to provide timely access to Upper 6 GHz band and we have a strong preference for Ofcom to enable Wi-Fi in 2025.

Question 10: One variation on “phase 1” would be to only authorise Wi-Fi in client devices to “seed” the market. Would you have any views on this, or suggestions for other variations?

AIIP supports Ofcom's Phase 1 proposal, particularly the immediate authorization of access points on an opportunistic basis. There is already significant market demand for full Wi-Fi operations in the Upper 6 GHz band, and operators are prepared to meet this demand with next-generation equipment and services. As a trade association from an EU country, and considering the rationale for our participation in this consultation (as outlined in the Introduction), we strongly emphasize the need for European standards alignment to facilitate harmonization at both the design and market levels. Therefore, we urge Ofcom to initiate updates at ETSI BRAN, including developing a new EN standard or revising EN 303 687 to support Upper 6 GHz Wi-Fi use.

Question 11: Do you have any comments on our plan for a “phase 2” when mobile will be introduced?

Once Ofcom reaches a Phase 2 decision—and if part of the Upper 6 GHz band is ultimately prioritised for mobile— Internet Providers will need a reasonable transition period to adapt Wi-Fi deployments to any new spectrum rules.

From our perspective as business association representing Internet Service Providers, the typical timeline between a regulatory decision, spectrum assignment, and full network rollout provides sufficient lead time to manage the transition without service disruption or rollout delays.

That said, AIIP strongly encourages Ofcom to revisit this issue during Phase 2 discussions. A refreshed assessment would help ensure the industry has clear, coordinated timelines to plan equipment updates, align deployments, and maintain service continuity for consumers and enterprises.

Question 12: Do you have a view on the amount of spectrum that should be prioritised for mobile under the prioritised spectrum split option? Please provide evidence for your view.

AIIP believes it's vital to base spectrum policy on current, reliable data—not outdated assumptions of perpetual mobile data growth. Ofcom's own recently published Telecommunications Market Data Update for Q4 2024³ shows that annual mobile traffic growth has fallen sharply to just 7%, and that includes Fixed Wireless Access (FWA). This strongly suggests that actual smartphone-driven mobile broadband traffic growth is at least flat, if not declining.

Against this backdrop, the arguments for dedicating additional mid-band spectrum, particularly in the Upper 6 GHz range, to mobile networks are increasingly unconvincing. In fact, recent international examples—such as the UAE—have used this spectrum primarily for FWA, not mobile broadband. FWA is fundamentally different from mobile broadband in both use case and technical requirements. It typically uses fixed, powered customer premises equipment (CPE) with directional antennas offering 10–20 dB of gain—far more suitable for the propagation characteristics of this band than smartphones, which are limited by power constraints and inefficient omnidirectional antennas.

In this regard, AIIP emphasises that FWA, often cited as a justification for allocating additional spectrum to mobile operators (IMT), should be seen as an ancillary and temporary solution compared to ultra-broadband connectivity. Moreover, even FWA connections ultimately rely on high-performance Wi-Fi networks for the last-metre delivery of services to users, and would therefore benefit from enhanced Wi-Fi capabilities. Conversely, if FWA is deployed primarily to offer lower-quality services at reduced prices compared to fibre, from a policy perspective, such deployments should not be incentivised or prioritised.

Meanwhile, Wi-Fi networks—especially in the enterprise, public venue, and advanced home markets—are surging in importance. Wi-Fi remains the dominant last-metre delivery platform for broadband, and enterprise-grade Wi-Fi 6E and Wi-Fi 7 equipment is already in widespread deployment. Demand for spectrum to support these advanced Wi-Fi services is both immediate and growing.

AIIP recognises that there is a WRC-27 agenda item addressing future mobile spectrum. However, no urgent spectrum shortage has been demonstrated that justifies reallocating the Upper 6 GHz band—especially not at the expense of Wi-Fi, which is delivering real-world capacity and performance gains today.

We therefore urge Ofcom to continue gathering real-world usage data before making irreversible decisions. There is no harm in deferring decisions on Upper 6 GHz mobile use until post-2027, once international outcomes are clearer and UK usage trends can be fully assessed.

³ <https://www.ofcom.org.uk/siteassets/resources/documents/research-and-data/telecoms-research/telecoms-data-updates/q4-2024-telecommunications-market-data-update.pdf?v=394053>;

Question 13: Do you have any evidence or views about the geographical extent of mobile networks' likely deployment in Upper 6 GHz?

Question 14: Do you have any comments on our proposed phased approach to authorisation of both Wi-Fi and mobile in the Upper 6 GHz band?

AllIP welcomes Ofcom's pragmatic, forward-looking proposal for a phased approach to the Upper 6 GHz band. Allowing Wi-Fi access to this spectrum from 2025 will ensure that UK consumers, businesses, and public services can benefit from the full capabilities of fibre infrastructure, especially in indoor and high-density environments where robust Wi-Fi is essential.

We also support the intention to revisit mobile use in a portion of the band at a later date—once there is greater clarity at the European level on how the band should be harmonised. This strikes the right balance between enabling immediate value through Wi-Fi and maintaining strategic flexibility.

In parallel, we strongly endorse the proposal to enable outdoor and higher-power Wi-Fi deployments in the Lower 6 GHz band, managed through an automated frequency coordination (AFC) system. This would open up important opportunities for delivering gigabit wireless broadband to underserved areas, enterprise campuses, and dense urban environments, while ensuring that existing services in the band remain protected from interference.

Question 15: Do you have any comments on our proposal to not include very low power portable devices in the Upper 6 GHz band at this stage, but to keep this under review?

We appreciate Ofcom's cautious approach regarding Very Low Power (VLP) devices in the Upper 6 GHz band and understand the rationale for not including them at this stage. However, as both ISPs and bundled Wi-Fi equipment vendors, we would like to stress the importance of achieving full alignment between the Lower and Upper 6 GHz bands in the long term.

Specifically, we support enabling licence-exempt use across all three classes of Wi-Fi operation—Low Power Indoor (LPI), Standard Power (SP), and VLP—within the Upper 6 GHz band. Achieving parity between the two bands is critical for ensuring seamless device functionality, global harmonisation, and supporting the full breadth of Wi-Fi use cases, including high-performance portable and wearable devices that rely on VLP operation.

That said, we acknowledge that opening the band to LPI operation initially is a pragmatic and timely first step, and we urge Ofcom to avoid any further delays that might hinder Wi-Fi adoption or technological readiness. The Wi-Fi ecosystem has already been impacted by prolonged uncertainty and postponements, and providing immediate access for LPI is essential to allow momentum to build and for industry to begin deploying next-generation Wi-Fi solutions.

As next steps, we would encourage Ofcom to consider the following:

- Extending Standard Power (SP) operation to the full Upper 6 GHz band, enabled by Automated Frequency Coordination (AFC). This would allow for consistency across the full 6 GHz range, ensure appropriate protections for other services such as Radio Astronomy (RAS), and align with potential future policy outcomes on mobile use.
- Authorising Very Low Power (VLP) use, both indoors and outdoors, in the Upper 6 GHz band. VLP is particularly important for portable and wearable device ecosystems, and

its inclusion will help unlock the next wave of consumer and enterprise Wi-Fi innovation.

We are confident that this staged but comprehensive approach can provide the necessary safeguards for incumbent services while unlocking the substantial benefits of Wi-Fi in the full 6 GHz band—both for users and for the broader connectivity ecosystem in the UK.

Question 16: Do you have any comments on our proposal to authorise the use of low-power indoor Wi-Fi access points and client devices to use 6425–7125 MHz?

We support Ofcom's proposal to allow LPI in the Upper 6 GHz band under Ofcom's proposed technical conditions.

Question 17: Do you have any comments on the proposed technical conditions?

We believe it is essential that the regulatory framework for client devices in the Upper 6 GHz band mirrors that of the Lower 6 GHz band. Any added technical complexity required to manage coexistence and compliance can and should be handled at the access point level, avoiding unnecessary constraints on client devices.

If Ofcom proceeds with a band split that prioritises part of the Upper 6 GHz band for Wi-Fi, we strongly recommend that usage conditions within that segment reflect those of the Lower 6 GHz band, particularly with respect to access mechanisms such as contention-based protocols. Maintaining consistency across both bands is key to ensuring interoperability, reducing deployment friction, and accelerating product availability.

We also encourage Ofcom to work closely with industry stakeholders to assess a broad set of solutions — ranging from straightforward implementations to more sophisticated techniques — that support a wide array of Wi-Fi use cases while meeting all necessary regulatory protections. This collaborative approach will help strike the right balance between innovation and coexistence.

Question 18: Do you have any comments on the proposed VNS draft?

AIIP also suggests that the Voluntary National Specification (VNS) formally recognises the unique capabilities of fixed broadband operators to manage spectrum use at the customer premises level. Specifically, ISPs deploying fixed access networks have precise knowledge of the end-user location and maintain operational control over Customer Premises Equipment (CPE), including Wi-Fi access points. Through remote management protocols such as TR-069 and TR-369 (USP), ISPs can dynamically enforce channel selection, power limits, and operational constraints on end-user devices. This makes them ideally suited to ensure compliance with coexistence requirements, and allows for the efficient and responsible activation of high-frequency channels even in shared spectrum contexts. This is without prejudice to the end-users' right to use terminal equipment of their choice, nor does it preclude the possibility of identifying other qualified professionals (e.g., system integrators, enterprise qualified technician) to ensure compliance of the devices they configure and/or manage on behalf of the end-user, nor does it preclude that the coexistence requirements are guaranteed as product requirements by the manufacturers themselves, by allowing location-specific configuration options depending on the geographical area of deployment.

Question 19: Do you have any suggestions for an appropriate mechanism for enhanced sensing, or comments on the proposed solution above?

AIIP questions the necessity of introducing an "enhanced sensing" requirement for Wi-Fi operations in the Upper 6 GHz band.

Wi-Fi has consistently been designed with coexistence in mind, operating successfully alongside a wide range of other technologies. The proposition that mobile networks—operating at transmit powers 50 to 60 dB higher than Wi-Fi—require additional protection from Wi-Fi operations is not persuasive. The technical asymmetry between the two systems suggests that mobile services are inherently less vulnerable to Wi-Fi interference than some analyses imply.

The interference concerns cited by ECC PT1 studies are based on highly conservative, worst-case modelling assumptions that do not reflect practical, real-world deployment conditions. Both Wi-Fi and mobile networks are engineered to be resilient and routinely operate across multiple spectrum bands. If the Upper 6 GHz band is approached as supplementary spectrum for both ecosystems, then adding complexity through an enhanced sensing requirement appears unnecessary.

Moreover, it is important to acknowledge that modern applications and protocols are highly adaptive. Situations such as a user transitioning from a Wi-Fi to a mobile network during an ongoing session—such as a call—are typically handled seamlessly at higher protocol layers. Services like instant messaging and similar applications are designed to recover from brief interruptions or degradation without noticeable impact on the user experience. In this context, we would welcome further clarification regarding which specific mobile applications would require a more stringent interference protection regime than current technologies.

In addition, we recommend that the discussion be reframed around the concept of "detection and avoidance" rather than being narrowly focused on "sensing" mechanisms. Sensing is just one among several viable approaches to managing coexistence. A more flexible and collaborative framework — allowing for the development and use of various detection and avoidance strategies tailored to diverse operational environments — would better reflect the heterogeneous nature of real-world Wi-Fi deployments. There is no compelling need for a uniform, one-size-fits-all regulatory solution.

Ultimately, we believe that prioritising simplicity, practicality, and technological neutrality — while avoiding unnecessary regulatory burdens — will deliver the best outcomes for users, operators, and the broader wireless ecosystem.

We also highlight that fixed ISPs already possess the technical capability to enforce "detect and avoid" or "sensing-equivalent" behaviour via centralised control systems. Managed Wi-Fi platforms can identify the RF environment, push configuration updates to access points, and avoid specific channels based on regulatory guidance or detected interference, all without requiring sensing hardware on client devices. Given that these access points are installed at known, fixed locations and under the control of qualified operators, this enables a highly effective coexistence model, far superior in precision and compliance to unmanaged or mobile deployments.

Therefore, we recommend that Ofcom considers a regulatory mechanism where fixed ISPs are allowed to operate full-band Wi-Fi, including upper 6 GHz, under a declaration or certification model. This would formally acknowledge the ISP's ability to enforce coexistence parameters remotely and securely.

Question 20: Do you agree with our proposal to restrict Wi-Fi from transmitting in the 6650-6675.2 MHz band to protect the radio astronomy service? Please provide any technical evidence to support your view.

We do not consider it proportionate to impose a nationwide restriction on Wi-Fi use within the 6650–6675.2 MHz band solely to protect the radio astronomy service (RAS). As identified in ECC Report 364,

there are several mitigation options available — of which outright restriction is just one. Alternatives such as geographic exclusion zones or coordinated access can be equally, if not more, effective.

As we've previously highlighted, modern Wi-Fi equipment can often determine or be provided with its location, meaning that more nuanced, location-aware solutions are technically feasible. In practice, this would allow operation in the RAS band to be restricted only where necessary, rather than applying a blanket prohibition across the UK. The use of an Automated Frequency Coordination (AFC) system is one potential method for managing this selectively.

Question 21: Do you agree with our assessment of Wi-Fi coexistence with existing users of the band? If not, please provide details.

AIIP recognise the significant effort that went into producing ECC Report 364, which provides a thorough assessment of sharing and compatibility issues concerning WAS/RLAN use in the 6425–7125 MHz band. From our perspective, the findings are robust and well-supported, and we fully support the conclusions presented in the report.

Question 22: Do you have any evidence about the costs to operators of moving fixed links in and around “high density” areas (such as urban centres) to other bands?

Question 23: Do you have any comments on our initial assessment of our likely approach to coexistence between future mobile use and current users in the Upper 6 GHz band?

As we outlined in our response to Question 12, it has become increasingly clear that Fixed Wireless Access (FWA) is emerging as the primary interest among operators trialling IMT in the Upper 6 GHz band. This is particularly notable given that FWA was not part of the original use cases considered during the WRC-23 cycle or in the technical studies compiled in ECC Report 366.

Since WRC-23, several key assumptions have shifted — including network deployment patterns, such as a higher proportion of rooftop installations using the existing 3.5 GHz site grid, and proposed operations involving increased power levels. These developments significantly alter the context in which compatibility and coexistence with Wi-Fi were initially assessed.

From our perspective, we are especially concerned about the implications of reallocating valuable mid-band spectrum to support FWA. Such a policy risks distorting competition in the broadband market by enabling a performance-limited alternative to fibre, particularly in areas already served by high-capacity fibre networks. This could create an artificial bottleneck in service quality and undermine the benefits of combining fibre with advanced Wi-Fi technologies for both consumers and enterprises.

Eventually, AIIP welcomes Ofcom's continued engagement in CEPT discussions and urge careful consideration of the broader market dynamics and long-term competitiveness implications of spectrum decisions in the Upper 6 GHz band.

Question 24: Do you have any other comments on our policy proposals or any of the issues raised in this document?

AIIP would like to draw Ofcom's attention to an important operational and regulatory consideration that we believe deserves explicit recognition in the UK framework: the unique ability of fixed broadband Internet Service Providers (ISPs) to ensure safe and controlled use of the upper 6 GHz band within indoor environments, through centralised device management.

Unlike mobile operators or unmanaged consumer setups, fixed ISPs deploying fibre and other high-capacity access networks maintain a deterministic relationship with the Customer Premises Equipment (CPE) they install. They know the exact location of the access point, its operating parameters, and, critically, they retain administrative control over it through standardised protocols such as TR-069, TR-369 (USP), SNMP, or proprietary management platforms. It should be noted that, even in scenarios where the end-user has the right to choose and control their own terminal equipment (as is the case in Italy, according to AGCOM Decision No. 348/18/CONS), the provider of Internet access services may legitimately stipulate contractual controls regarding the usage and configuration of the end-user's terminal equipment. Additionally, the provider can implement restrictions approved by the National Regulatory Authority on the usage of the terminal equipment by the end-user.

This creates a technical environment where coexistence with future mobile deployments or incumbent services in the 6 GHz band can be actively and dynamically enforced by the ISP itself. Wi-Fi channels can be selectively enabled or disabled, power levels tuned, DFS-like behaviour simulated, and interference conditions responded to in near real time, all via remote configuration.

For this reason, AIP recommends that Ofcom formally recognises and incorporates this ISP-managed capability into its final regulatory design. Specifically, we propose introducing a concept of "operator-managed authorisation mode" within the Voluntary National Specification (VNS) and related guidance documents. Under this mode, full-band indoor operation, potentially including parts of the spectrum otherwise restricted, would be permitted only for CPEs under verified ISP management, or management by other qualified professional entity (e.g. system integrator, ecc).

Such a model would offer several regulatory and practical advantages:

- It avoids the need for universal client-side sensing or enhanced detection mechanisms, reducing hardware complexity and compliance costs.
- It ensures accountability through ISP self-certification and audit mechanisms.
- It allows more efficient spectrum use in dense residential settings, where interference conditions are predictable and geographically bounded.
- It aligns with real-world ISP deployment models, particularly in fibre-to-the-home (FTTH) and 10G or 50G-PON scenarios, where last-metre Wi-Fi performance is critical to end-user satisfaction.

We further note that this approach would align with the overall direction of Ofcom's pragmatic and technology-neutral framework. It builds on existing capabilities already deployed in the field and avoids introducing new regulatory burdens where effective safeguards are already in place.

We encourage Ofcom to initiate a targeted dialogue with fixed ISPs and CPE vendors to develop practical criteria for such an operator-managed authorisation path, potentially including technical declarations, remote management attestations, and firmware compliance features.

Such a model could unlock the full potential of the upper 6 GHz band for in-home use, particularly in markets where fibre-based ultra-broadband is widespread, while maintaining robust protection for any future mobile deployments or sensitive incumbents.