



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

**Our approach to future mobile use in high density areas and
incumbent users in this band**

BT's response to Ofcom's consultation issued on 13 April 2026

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Executive summary

1. BT welcomes Ofcom's intention to prioritise 540 MHz of spectrum in the upper 6 GHz band for mobile networks. This spectrum band is important to support growing mobile network capacity requirements and will be needed by the end of this decade. It will be particularly important to support introduction of future 6G given the wide bandwidths that could be made available.
2. The proposal to auction sub-national licences covering urban areas could be workable if the areas are appropriately defined; and if outside of these areas mobile base stations can still be authorised individually, on a priority basis with respect to the Wi-Fi use that Ofcom proposes to share the band.
3. The sub-national licence areas should be defined so that they enable fixed links in remote rural areas to continue operations. In such remote rural areas, the existing fixed links are likely to represent optimal and efficient use of the spectrum as demand to use the band for mobile and Wi-Fi is likely to be low whereas alternatives to fixed links may not be technically viable.
4. The proposed areas to be included in the sub-national licences are the right ones but should include further areas. They already include a high proportion of the places where BT deploys base stations that use 3.4-3.8 GHz band assignments or where we have plans to do so by 2028. Nevertheless, Ofcom should consider whether the areas could be enlarged to reflect the full extent of our existing 3.4-3.8 GHz planned deployments and recognise that in the longer term the spectrum will be required beyond these currently identified areas. Furthermore, it should be clarified that the specified areas are where base stations can be deployed, and that a buffer zone will be in place around these areas, where mobile services are provided using these base stations, to avoid interference with possible shared non-prioritised Wi-Fi deployments.
5. Ofcom's proposals to revoke 32 specific BT fixed link licences in Scotland is expected to be manageable over a five-year timeframe as our network modernisation progresses. However, a small number of new links may need to be accommodated in other bands. Elsewhere in Scotland existing fixed links continue to be important.

1 Introduction

BT welcomes Ofcom’s Consultation Document (CD)¹ setting out its proposed high density areas and proposals to ensure that mobile operators will be able to deploy in those areas without significant constraint from incumbent users.

Our response to the various consultation questions is given below in **section 2**.

2 High density areas approach

Question 1: Do you agree with our proposed set of 88 high density areas for 6 GHz authorisation? If you disagree, please provide your reasoning and evidence.

Appropriateness of sub-national licences

BT agrees that very rural areas could be excluded from the auction licences – not because we think there will be significant demand for Wi-Fi in those areas, but because we believe that retaining fixed links in remote rural areas represents a much more economically efficient use of the spectrum than clearing them for other uses.

The high value for remote rural fixed links stems from the fact that in many cases alternative means of providing service are not economically or technically viable and we consider that such fixed links should be able to continue operation.

Our support for subnational licences, which we believe should cover more areas than those proposed, is on the understanding that outside of these areas mobile use will still be prioritised over Wi-Fi and made available based on individual site licences.

Specification of the sub-national licence areas

We consider that mobile use is more likely to be required than Wi-Fi use in most places in the U6 GHz band. We agree that required utilisation of the U6 GHz for mobile will at least initially follow the patterns of 3.4/3.6 GHz deployments, as that band was used to roll out a new technology generation (5G) beginning with places where capacity demand is highest. However, the 3.4/3.6 GHz rollout is ongoing, and the deployments used by Ofcom as of January 2026 do not represent the full extent of our planned deployments.

We estimate that the proposed high-density areas (HDAs) would encapsulate the following proportion of our current 3.4/3.6 GHz deployments and our planned deployments to [X] as set out in Table 1 below.

Table 1 analysis of EE mobile base stations in the 3.4/3.6 GHz bands

EE mobile base station sites in 3.4 GHz and 3.6 GHz bands	% of EE mobile base stations in the proposed 6 GHz high density areas
Live sites ([X])	[X] %
Live and planned sites ([X])	[X] %

¹ https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/expanding-access-6-ghz-band-approach-to-future-mobile-use-in-high-density-areas/main-documents/expanding-access-to-the-6-ghz-band-for-mobile-and-wi-fi-services_approach-to-future-use.pdf

In addition to our current planned deployments to [X] as detailed above, there is a good chance we may deploy significantly more sites beyond this, perhaps [X] and more beyond then.

BT believes that Ofcom should consider further expanding the proposed 6 GHz high density areas where this will not further impact the remote rural fixed links that are proposed to be permitted to be retained. This will ensure that the use of more burdensome local licensing for mobile deployments outside the HDAs will be reduced.

Mobile rights within the HDAs

We understand that the defined HDAs represent where mobile base stations may be deployed (as implied in this consultation at Table 3.1 and at para 4.33) and that mobile services within the coverage range of these mobile stations will be protected.

This is slightly different to the situation at mmWave where, according to Ofcom's coordination procedure² that is referenced from the 26GHz and 40 GHz spectrum access licences, there are some restrictions placed on the mmWave base stations in terms of distance of low power base stations from the HDA boundary and field strength limits at that boundary in relation to medium power base stations. A different approach at U6 GHz is appropriate as the cell areas of mmWave are very small relative to those applicable to the U6 GHz base stations.

We note that the Table 3.1 title makes reference to MNO sites and *fixed links*, but the content of the table does not appear to relate to fixed links?

3 Coexistence with existing users

Question 2: Do you agree with our proposal to clear fixed links from the Upper 6 GHz band in and around high density areas, and to leave the band open to new fixed link licence applications outside of high density areas, subject to coordination?

Yes, BT agrees that this is the best option. The alternatives of clearing all fixed links or requiring new mobile licensees to coordinate with or reach commercial agreements to clear fixed links are not options that BT would advocate or support as they would not represent efficient or would be unlikely to achieve optimal and efficient use of this spectrum.

Concerning BT's existing fixed links that Ofcom is proposing to revoke with 5 years' notice, we have provided comments against each specific BT licence in the confidential Annex 1 to this response.

In summary, Ofcom proposes to revoke 32 licences held by BT plc and these revocations will affect 5 fixed link routes (paths) in Scotland. [X]

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At least one of the five affected fixed link routes is required in the longer term to support network resilience. We have previously required such links even where fibre connections are available, for example where a fibre connection is vulnerable to cable damage from shipping. BT welcomes Ofcom's stated willingness to engage with stakeholders on any specific fixed links that are proposed for licence revocation if there is particular concern. We request Ofcom's assistance in identifying alternative frequencies (ideally

² See Section 4 of <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/237135-enabling-mmwave-spectrum-for-new-uses/associated-documents/nov-2014-updates/annex-5-coordination-procedures-under-the-spectrum-access-high-density-26-ghz-and-40-ghz-licences-sept-25.pdf?v=402787>

in the Lower 6 GHz band) to accommodate a replacement link using modern fixed link technology as set out in Annex 1.

BT agrees with the proposal that outside HDAs the U6 GHz band should remain open for new licence applications, subject to coordination.

BT is in the process of upgrading many of the fixed links that use the Upper 6 GHz band in other more rural parts of Scotland. Ofcom has not identified these as candidates for revocation; we emphasize that these links are important and, unlike the currently identified links, are required on a long-term basis and their removal would be problematic.

If Ofcom were to expand the proposed mobile licence areas and identify further fixed links as candidates for licence revocation, it would be helpful to indicate by what margin the predicted interference would exceed the protection criterion for each affected fixed link. If the exceedance is by a very small margin, it might be better to offer the licensee the option to run the link at risk of interference, allowing it to operate potentially with a slightly degraded availability when mobile gets deployed, rather than requiring its complete removal, at least for a period of time beyond the proposed revocation deadline.

Question 3: Do you agree with the approach we have set out to identify the links which will be affected by the proposed revocation?

The assumption of 10 degrees mobile base station downtilt is greater than we might typically employ in existing (lower) frequency bands. In the U6 GHz band, base stations employing AAS would likely be used and we accept that it is difficult to come up with a single number for downtilt as the beams will track the location of users.

The assumed maximum mobile base station EIRP of 73 dBm for a 100 MHz channel seems on the low side³. We would not advocate a reduced power for general deployments but could consider it being used as a mitigation measure in special cases.

The fixed link protection of I/N of -10 dB is lower than the I/N of -6 dB Ofcom proposes for the Wi-Fi sharing with AFC databases⁴ in the lower 6 GHz band and represents at worst a 0.5 dB reduction in fixed link fade margin. We do not say the assumption is wrong, but it is something to bear in mind if marginal cases were to be considered.

Question 4: Do you agree with our proposal to remove access to the frequencies 7110 – 7125 MHz for PMSE use, but to retain the option of allowing users to “borrow” spectrum from the Upper 6 GHz band for occasional major events?

Yes, BT agrees that this is a sensible approach.

Question 5: Do you agree with our proposal to require mobile base stations to protect RAS usage of the band at the levels specified?

BT agrees that Ofcom's proposals seem reasonable.

Question 6: Do you have any comments on how we should manage coexistence between mobile and any other users in the Upper 6 GHz band (i.e., RAS, EESS, SRDs, FSS and MOD use)?

BT agrees with Ofcom's assessment of how coexistence with other users in the Upper 6 GHz band should be managed, as is set out in the consultation document.

³ ECC Report [ECC Report 375](#) considers EIRP of 86.2 dBm for a 100 MHz carrier for base stations in the U6 GHz band.

⁴ See para 5.15 of Ofcom's consultation on ["Enabling automated frequency coordination \(AFC\) in the 6 GHz band"](#)

Question 7: Do you have any comments on our assessment of the impacts of our proposals (to the extent not covered by previous questions)?

BT has no further comments.

Question 8: Do you have any comments on our Equality impact assessment?

BT has no comments.

Question 9: Do you have any comments on our Welsh Language impact assessment?

BT has no comments.

4 Next steps

BT encourages Ofcom to provide an indication of the timetable for the award of U6 GHz band mobile licences for the urban areas, and more generally a future spectrum roadmap that includes other potential bands that Ofcom anticipates making available.

BT requests Ofcom to provide more clarity on how access to the 540 MHz of U6 GHz band spectrum prioritised for mobile networks use will be made available outside the urban areas.

We look forward to working with Ofcom on the clearance of the BT fixed links subject to the proposed licence revocations and on the identification of alternative spectrum assignments where requested.

Annex 1- BT's fixed link licences proposed by Ofcom for revocation

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