

Response to Ofcom supplementary consultation on Copper Retirement

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Non-confidential version

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1. Executive Summary

- 1.1. BT supports Ofcom's broad objective for a copper-based services withdrawal framework. Everyone needs clarity for industry and customers on what measures need to be taken when to move services from copper to fibre-based broadband products.
- 1.2. We welcome some elements of the consultation such as the gates to allow for copper service stop-sell and pricing freedom on copper services after a coverage target is met. We also welcome focus on the needs of vulnerable users. However, we have concerns that these proposals as a whole represent an increased risk to our 20m full-fibre goal while doing little to promote the interests of the customers who will benefit from that roll-out.

We have two broad objectives – a great customer experience alongside a rapid, well-managed transition to full-fibre for all customers

- 1.3. We share Ofcom's ambition that the move to full fibre happens both quickly and in a way that protects the interests of end-users. With increasing network competition, BT has a strong commercial incentive to provide customers with a great service experience. We want to move all customers to new gigabit-capable services as quickly as possible. We do not want to trigger churn or negative experiences as a result of a disorderly migration. The customer experience will be at the heart of any transition.
- 1.4. Our points in this consultation relate more to our second objective: securing the benefits of complete full-fibre adoption and copper service withdrawal. These benefits have been long-accepted and are helpfully set out once more by Ofcom in this consultation.

The regulatory process around transition needs to be clear, provide tools that assist migration, and enable clarity on the likely timescales

- 1.5. Ofcom is aware that our commitment, given to Government, to roll-out fibre over the next decade relies on regulatory certainty given the wider investment risks involved. Such risks include decisions made both by communications providers (CPs) in providing full-fibre retail services and customer decisions in buying these. Such regulatory certainty underpins our investment case, including enabling copper network retirement as soon as possible to avoid duplication of costs.
- 1.6. We broadly welcomed Ofcom's copper retirement principles set out in the January 2020 Wholesale Fixed Market Review consultation. They supported a managed migrations process that could draw on improved products, pricing freedoms, and clear dates when copper product access conditions would be removed. They were built around triggers and actions that are within Openreach's control. However, Ofcom's additional proposals in this consultation could remove tools to encourage migration and make timescales far more uncertain.

High take-up thresholds and copper services for CNI in perpetuity will significantly delay transition

- 1.7. The additional proposals in Ofcom's consultation dilute the previous consultation's clarity of process, reducing flexibility in managing transition and creating real uncertainty on the timing or ultimate ability to retire the copper network.
- 1.8. We need a range of tools to help manage customer migrations to full-fibre. Introducing a relatively high take-up gate could significantly delay when a clear message on 'end dates' for copper access products can be used as an effective tool to encourage migrations. Using a retail take-up threshold as a trigger for copper retirement is not reasonable or proportionate given Openreach's limited ability to exert direct control on retail take-up. Such a threshold places control of copper-retirement timing in the hands of retail providers, but with no incentive or onus on these providers to support rapid and effective migration.
- 1.9. If there was such a threshold, requiring 10% or less copper-only premises before Openreach can notify copper retirement is too ambitious. Past experience demonstrates how long purely commercial take-up can take when there is no backstop timescale for withdrawing supply:
 - 11 years after its introduction in the UK, 55% of fixed-line premises have superfast broadband;
 - a significant number (8%) of people remain resistant to any broadband service and are therefore very unlikely to voluntarily adopt full-fibre services; and
 - international experience suggests a more modest glidepath toward widespread full-fibre take-up even when the broadband alternatives were not as good as the UK's current superfast services
- 1.10. Requirements to provide ongoing access to critical national infrastructure (CNI), regardless of replacement service availability, also risks frustrating the benefits of an earlier copper retirement. Ofcom's proposal reduces the incentive on CNI users to engage with a migration process as early as possible (or, indeed, at all). It also fails to recognise the necessity of CNI users migrating to future-proofed, reliable and sustainable communications services compared to an increasingly aged legacy platform.
- 1.11. Ofcom does not give any indication as to the circumstances for this exception to be removed, opening the prospect of copper services being provided in perpetuity to CNI. In making this proposal, Ofcom has also not addressed the question of who will bear the ongoing costs of the copper network being provided for a sub-set of end users.

Taken together, we are concerned these new proposals will materially delay copper retirement

- 1.12. If confirmed, the quickest Openreach could, in theory, retire copper in any exchange would be four years from the point of stop-sell and no earlier than June 2025. In practice, these proposals would likely set this timescale back further. We believe there is a growing disconnect between the ambitions set out by Government and which BT

is seeking to make a reality, and the approach being proposed by Ofcom. The 2018 Future Telecoms Infrastructure Review (FTIR) stated, for example, that “Running copper and fibre networks in parallel is both costly and inefficient. A fibre switchover strategy is necessary to stimulate demand for fibre, to enable new networks to achieve scale quicker”.

- 1.13. We are concerned that the additional proposals from Ofcom will add delay to the closure of copper networks, without setting out the benefits a third threshold and CNI exceptions will bring.
- 1.14. Our suggestion, therefore, is that the decision on copper removal should lie with Openreach in consultation with communications providers, consumer groups and Ofcom. These should consider all factors within each exchange, including take-up and customer readiness for migration. There would be little incentive for industry to put in place a managed migration until customers are ready.
- 1.15. CNI should not be exempted from that process but engage early with the process to support a well-managed migration.

2. Introduction

- 2.1. BT Group welcomes the opportunity to respond to Ofcom's consultation, Copper retirement – conditions under which copper regulation could be completely withdrawn in ultrafast exchanges.
- 2.2. BT Group is committed to upgrading the UK's digital infrastructure, bringing gigabit-capable full fibre – as the gold standard fixed connectivity – to as much of the UK as possible, as quickly as possible. Through our Consumer and Enterprise businesses, we are the largest providers of full fibre connectivity across the country to retail and business customers. Significantly more than half a million BT customers are already using full fibre services.
- 2.3. We support the Government's ambition to ensure nationwide availability of gigabit-capable connectivity by 2025. Government, Ofcom, industry and wider stakeholders should be doing all they can to bring forward these benefits as quickly as possible, to as much of the country as possible.
- 2.4. Covid-19 has demonstrated the need for high quality digital infrastructure in the UK. As the UK economy recovers over the coming years, more sectors will undergo digital transformation and rely on gigabit-capable connectivity. We believe full fibre will provide this foundation for UK economic growth over the coming decades and will be an enabler for investment in other parts of the economy that depend on reliable digital infrastructure.
- 2.5. The deployment of full fibre continues to happen at pace across the UK with 17% of UK premises now able to access full fibre and with its footprint growing at the rate of around 40,000 premises a week. Other fibre providers have added around a further two million lines to date. When including cable, gigabit-capable coverage stands at 27%.
- 2.6. Copper retirement is a key element of the move to a full-fibre network in the UK. It prevents two effectively separate copper and fibre access networks being run in parallel with associated increased costs compared to a single fibre network. These costs are borne by industry and, ultimately, customers. It is critical that customers move to the new fibre network as quickly as possible, both to maximise full-fibre benefits and allow the managed closure of the copper platform. This will minimise the time period during which costs are incurred of simultaneously running two networks.
- 2.7. We are alive to the risks that a disorderly migration or poor migration experience could bring as there are changes to the way some services will work. We are conscious that there are some users where disruption could have a particularly high impact. In particular, we share Ofcom's objective to ensure a successful migration for vulnerable users and for CNL. With that in mind, we are engaging with Ofcom and industry to understand the challenges these customers will face and to develop suitable solutions for them. Those discussions are ongoing. We are confident the approach we are taking will deliver good outcomes for these and all other users.
- 2.8. We look forward to further engagement with Ofcom to discuss the details of its proposals on copper retirement, including having a full understanding of the evolving legal framework which underpin these policy proposals, in the event that they are implemented.

Wider policy also needs to support maximum full-fibre take-up, including fibre to fibre migrations

- 2.9. This consultation addresses the narrow issue of how and when copper-based services can be withdrawn at a retail level. However, we have an additional comment to those raised in our previous submissions on the WFTMR and which refers to the wholesale level.
- 2.10. If Ofcom's objective is, like ours', to maximise rapid fibre take-up before any migration, then we need policies that support full-fibre adoption. The proposed policy on connection charges is another example of one that does not support rapid adoption.
- 2.11. The policy as set out by Ofcom highlights the importance of achieving rapid and widespread take-up of fibre services to realise the benefits of copper retirement. But current proposals on connection charges versus migration charges will inhibit this. Whilst charges for initial FTTP connections are uncapped (Openreach charge £97 as standard), Openreach can only charge £2.99 for full-fibre migrations from one communication provider on Openreach's network to another. This leads to a market dynamic where retail providers are incentivised to "go second", waiting for another retail provider to move the customer to FTTP (incurring the full connection charge) and then investing much less to win the customer given the relatively modest migration charge. The result is a reticence to 'go first' by any retail provider that could delay fibre take-up.
- 2.12. We recognise the importance of a dynamic switching market but suggest Ofcom should allow more flexibility for Openreach to rebalance these charges in order to drive full-fibre adoption.

3. Responses to questions

Question 1. Do you agree with our proposals to set conditions under which remaining regulation of existing copper-based services would be withdrawn?

- 3.1. We agree with the broad principle that a framework should be set for the withdrawal of copper-based services. These could provide clarity on when Openreach would be allowed to migrate customers from its copper to fibre network, where available. This would further translate into a far better experience for customers if an orderly process of migration can be enabled.
- 3.2. As we set out below in our responses to Questions 2 and 3, however, we have concerns over the specific approaches Ofcom is taking in this consultation. There are also several areas where we would welcome further clarity from Ofcom.

Question 2: Do you agree with our proposal that those conditions should take effect two years after Openreach has given notification, in respect of an exchange, notifying that fewer than 10% of relevant premises remain on copper-based services in the completed exchange, and only where measures are in place to support vulnerable consumers?

- 3.3. As we note above, we have several concerns over details of Ofcom's proposals on the 10% third threshold. These relate first to whether it is reasonable, necessary or proportionate to stipulate such a threshold at all and second, and notwithstanding this, to the overly ambitious level of the threshold itself.

Setting a threshold level for retail take up is unreasonable and not proportionate

- 3.4. This is a crucial issue for BT in realising our ambition to roll out fibre to the UK as quickly as possible and ensuring that customers enjoy the benefits of gigabit-capable services. We have committed to an ambitious fibre-build programme for the next decade. But this relies on Openreach being able to encourage, and ultimately move, customers to a single fibre network as a soon as possible in each fibre-build area. The copper network can then be retired to avoid prolonged cost duplication.
- 3.5. There will be circumstances where Openreach has limited ability to secure an objective, such as securing coverage to premises where there are significant external barriers. Ofcom has accepted that Openreach has such limitations and, accordingly, is seeking solutions which reflect this. This is demonstrated, in particular, by the forthcoming consultation on defining where exceptions to the definition of "complete" coverage in an exchange will be allowed.
- 3.6. The proposals in this latest consultation deal with issues which are outside of Openreach's direct control. Ofcom is seeking to put in place thresholds at a retail level which could prevent the retirement of copper services and frustrate the accepted benefits of early copper retirement. Increased pricing freedom through the removal of charge controls is clearly helpful. However, it is unclear how quickly any pricing signals from Openreach to CPs will lead to significant migrations of end users away from copper-based services. There are a number of variables which will

influence this such as CP's response to Openreach pricing signals and customer response to any change in CP pricing.

The 10% threshold required for retiring copper-based services is too ambitious

- 3.7. Notwithstanding the above, we generally welcome ambitious connectivity targets. However, they would need to be grounded in what is credibly achievable in a reasonable timeframe and proportionate, given the shared objective of enabling copper retirement. No evidence has been provided by Ofcom to substantiate the proposed threshold figure and no impact assessment provided to underpin an analysis of the proposal.
- 3.8. Ofcom is proposing that copper retirement can only take place in an exchange area where copper services within the Openreach footprint (including exceptions to "complete" coverage at the second threshold; an issue which we address below) are being provided to fewer than 10% of premises. This implies a very significant commercially driven take up of FTTP services in the exchange area – theoretically as high as 90%¹.
- 3.9. Ofcom should consider the following factors in that respect:
- The take-up levels envisaged by Ofcom in an exchange area is unrealistic given the rate of take up in the UK of superfast broadband;
 - International comparators suggest that the pace of migration to FTTP services is slower than suggested in this consultation; and
 - Exceptions, defined at the "complete" coverage second threshold stage, would need to be removed from the calculation of total premises in an area as there is no certainty, at this stage, to how prevalent exceptions will be and what difficulties will arise in addressing them
- 3.10. We also note Ofcom's signal in paragraph 3.38 that while it could take a more flexible approach in determining the level of each third threshold figure in light of local circumstances, it does not expect to use that power. We disagree with that assumption. Each exchange will provide different challenges. Any threshold figure, in our view, would need to be treated with a high degree of flexibility in light of the uncertainties involved.

The 10% threshold figure and implications for take-up is unrealistic based on UK superfast migration

- 3.11. Ofcom will be aware that up-to-date figures in the UK show a take-up figure for any fixed broadband to be 80% of premises. Take-up of superfast broadband accounts for 55% of total UK premises. This is after 11 years of significant marketing activity from all CPs. This strongly suggests that the take-up figures envisaged by Ofcom in this consultation are unlikely to be achieved in a timescale consistent with a timely withdrawal of copper services.
- 3.12. We are committed to driving ever greater adoption of broadband services at higher speeds. However, as set out in the January 2019 ComRes report, Digital Exclusion

¹ This would be in an exchange area where there are no alternative fixed line providers to Openreach and fixed line take-up was 100%. We expect that, in reality, the ultrafast take-up threshold will likely be lower than 90% but, in some cases, not significantly so.

Research, there is a cohort of the UK public who remain committed to not being connected to broadband at all.

- 3.13. The research showed that some 8.4% of UK adults have never used the internet and that a further 1.6% have not used it recently. We would expect however that a good number of this cohort may currently receive a WLR voice service and would continue to receive a SOGEA (copper-based) product after PSTN has been switched off. This means that they would fall within the 10% premises for the purposes of any future assessment for copper retirement.
- 3.14. When the report looked at the reasons for this lack of use the majority of these non-users stated they were “proud” of the fact that they don't use the internet and see no use for it in their day to day lives. Further follow up research post COVID-19 has also shown that these attitudes have generally not changed as a result of the Lockdown and general increase in use of the internet by the wider “connected” population.

International evidence points to slower migration timescales to FTTP

- 3.15. It is useful to look at the experiences of other EU countries to understand their experiences of translating high FTTP coverage to retail take-up. The table below sets out coverage levels and take-up for 4 countries who are more advanced in their roll-out of FTTP.

*Table 1: FTTP coverage and take up in selected EU countries at September 2019
(Source: FTTH Council Europe Webinar, April 23 2020)*

	FTTP Coverage (of total premises)	Take-up (where FTTP available)
Sweden	86.5%	65.7%
Spain	85.6%	63.4%
France	57.1%	44.8%
Italy	30.6%	13.5%

- 3.16. These figures demonstrate the challenges of achieving the kinds of take-up levels that Ofcom envisages in its proposals. Despite significant levels of FTTP roll-out over a period of years, take-up is appreciably lower than the levels envisaged by Ofcom to enable copper retirement.
- 3.17. By way of illustration, Spain embarked on an accelerated roll-out of FTTP from as far back as 2008, achieving the highest coverage of all (then) EU28 countries by 2014. Yet, as this table shows, this has translated to an FTTP take-up level of 65.7% where FTTP is available by September 2019.
- 3.18. In the context of the above, Ofcom's threshold implies a protracted period of dual running of the copper and fibre network. This would be without the option to

encourage migration not just with commercial offers but also by setting a retirement programme date out earlier on in the process.

Exceptions from the “complete” coverage threshold should not be included in any figures for the third threshold

- 3.19. The proposed approach to exceptions, outlined in paragraph 3.39, casts further doubt on how realistic the proposed 10% threshold is. Ofcom is proposing to include exceptions when defining the households receiving a copper service. However, this is only two-years from the point where Ofcom accepts that these premises are too difficult for Openreach to make FTTP available. This is problematic on two levels:
- It is unclear whether the obstacles to connecting fibre that lead to a premise being designated an exception will or, even, can be resolved within a two-year period; and
 - We will not know the extent of total exceptions within each exchange area until after Ofcom has consulted on how to define “complete” coverage in the 2021. There is a risk that Openreach's experience in rolling out fibre could lead to a higher level of exceptions than envisaged, making any proposed take-up level effectively unachievable.
- 3.20. Ofcom should remove the exceptions from the total premises count in exchange areas. Indeed, even with that removal we believe that the 10% threshold to be too ambitious with a high risk that take up of ultrafast broadband services will be impossible to achieve.
- 3.21. Our suggestion, therefore, is that the decision on copper removal should lie with Openreach in consultation with communications providers, consumer groups and Ofcom. These should consider all factors within each exchange, including take-up and customer readiness for migration. There would be little incentive for industry to put in place a managed migration until customers are ready.

Question 3: Do you support the exclusion of services that support CNI from our proposals allowing for full copper deregulation

- 3.22. We are working with CNI customers, and will continue to do so, to understand their needs and help test and identify where existing devices attached to copper might need replacement in order to work on a copper-free network.
- 3.23. The priority for CNI needs to be focussed on preserving continuity for connections that directly support critical national infrastructure. This is as opposed to the normal business communications service use of companies operating in these CNI sectors.
- 3.24. We do understand Ofcom's concerns that CNI customers need to have credible and practical alternatives to move to as copper is retired. Ofcom is aware that BT Enterprise and Global are developing products and engaging with CNI customers to make sure this happens, with any associated risks being minimised. To further support CNI, for example, Openreach has put in place an exceptions process for CNI in the context of the move to All-IP and withdrawal of WLR. These, under specified circumstances, could allow continued orders for copper-based products after stop-sell.

- 3.25. We have a firm objective to support CNI through the copper migration process. However, this proposal does not strike the right balance between protecting CNI and incentivising them to migrate in an orderly fashion, providing a stable, resilient long-term platform for their connectivity requirements.
- 3.26. In its proposals for continued copper connections for CNI services, it is unclear what functionality or end goals Ofcom wants to protect for CNI customers who rely on connectivity. It is also unclear how Ofcom has assessed how far alternative communications products (including fibre and other connectivity options) will or will not meet specific CNI needs. We are aware, for example, that any CNI customer who uses our copper network as a power source will need to make alternative arrangements with energy suppliers as part of the migration from copper. While BT or other CPs can engage with CNI customers where this issue arises, the responsibility for ensuring power supply ultimately rests with the customer. The same applies to CNI customers responsibility to source IP-compatible end-user equipment.
- 3.27. The impact of allowing CNI customers to remain indefinitely on the copper network creates additional risks to BT's fibre roll-out programme. Removing the costs of running parallel networks is critical to the underpinning business case for the move to full-fibre. We also note that Ofcom has not considered the ongoing costs of maintaining a copper network for a smaller number of connections. This would likely involve high costs being recovered from a small set of users.
- 3.28. Accordingly, we do not think it makes sense to retain copper networks long into the future as this undermines the wider benefits of full-fibre rollout and adoption. Given the importance of CNI, there are even clearer benefits for these services to move to a fibre network against the increasing risk of relying on an ageing copper network.
- 3.29. We note for example, in paragraph 3.22 Ofcom states
- our proposed additional third threshold and consequent deregulation provides an additional incentive for Openreach to complete ultrafast coverage in an exchange area, as the value to Openreach of reaching 'complete' becomes greater*
- 3.30. The ambition to retire copper as soon as possible makes sense but should similarly apply to CNI. Ofcom does not explain why it proposes to adopt a different policy for CNI beyond noting that these customers have "complex communications needs". Similarly, it describes in paragraph 3.22 the "additional benefits to Openreach of regulatory withdrawal would be brought forward, in particular avoiding the costs of maintaining remaining copper lines". Here again, it does not explain why this logic should not apply to ongoing provision of copper-based services to CNI apart from the reference to complexity.
- 3.31. For clarity, our view is that any proposals for the retirement of copper should apply similarly for CNI as it does for all users. In particular, if a suitable replacement product is made available to a CNI customer to replace a copper-based communications service, the existing copper-based product can be withdrawn after coverage has been completed in an exchange area - as would be the case for all other users.
- 3.32. By signalling to CNI users that they do not need to move to alternative products and, therefore, do not need to invest in modern replacement equipment, Ofcom would be removing the incentive on these users to secure new solutions and stop using services which rely on the copper network. This removes the most powerful driver for

migrating users as there is a risk that these customers will deprioritise this business change against other competing priorities. Moreover, there are no details on when and under what terms this exception would be withdrawn. This leaves BT in the invidious position whereby it has no visibility at all of when it can retire copper in an exchange and with users who have little or no incentive to stop their use of copper-based services.

- 3.33. We think it is crucial that alternatives need to be available to current copper-based product and we expect to be one of the key partners for CNI achieving a successful migration. At the same time, CNI users need incentives and clear messaging on timescales for change to ensure engagement. We would argue that the crucial nature of these users makes incentivising them away from copper services more of an imperative².
- 3.34. We also note that prolonging the running of the copper network as proposed here may have an impact on any future programme of exchange closures across the UK. This should be avoided as an exchange closure programme and the subsequent reduction in costs could provide benefits for all industry and for customers.
- 3.35. In terms of any decision to make special provisions for CNI, this would require a precise definition of which users and usages come within the definition of CNI. Government has provided a list of 13 industries which it considers to constitute CNI. These, though, do not provide sufficient detail for industry to know with certainty who comes under the definition or what services need to be supported.
- 3.36. Ofcom needs to agree with Government what constitutes a CNI customer. It cannot be for the communications industry to make decisions on the 'criticality' of specific activities. Only policymakers can judge the relative importance of specific services that have wider public value compared to the costs of special provisions or specific interventions made to protect them. Government and Ofcom need to facilitate a debate about how those services should be provided in future, including the costs associated with any specific intervention.

² The FTIR states, for example, "Full fibre networks are faster, and more reliable to operate than their copper predecessors" (page 2)

4. Other points in relation to this consultation

Healthcare devices

- 4.1. We have a concern on Ofcom's approach to healthcare devices as set out in paragraph 3.47:

in cases where a care alarm or similar device cannot be supported by the fibre line or a replacement found, an alternative way to protect customers may include retaining or re-connecting their copper line

- 4.2. A healthcare alarm using an existing copper connection requires the PSTN to provide a service. Ofcom is aware that the PSTN is being switched off in December 2025 and this option will not, therefore, be available beyond this date. However, evidence to date shows that healthcare alarms work successfully when connected to the phone port of a digital voice service.
- 4.3. We are concerned that the suggestion in paragraph 3.47 may send unwanted signals to the market as it prepares to migrate these important customers away from PSTN services. Telecare providers need to take measures to ensure that their customers are all migrated to new replacement digital products. This needs to be in the context of their understanding that existing copper lines will not be part of the available options once PSTN has been withdrawn on a UK-wide basis.

Vulnerable users

- 4.4. We share Ofcom's objective to support and protect vulnerable users as they migrate from copper to fibre services. No user should be left behind in the move to full-fibre and it is the responsibility of all industry to ensure that the most vulnerable should share in the resulting benefits. It is not clear to us, however, why the onus for securing this objective should sit primarily with Openreach and not with retail and service providers.
- 4.5. Openreach does not have an end relationship with users. It clearly has a key role in working with CPs and Ofcom in successfully and seamlessly migrating vulnerable users. We believe, though, that this obligation needs to sit collectively with all retail providers as well as Openreach and look forward to further engagement in the relevant industry working groups to that end.

Where Openreach is not the primary fibre provider in an area

- 4.6. The market dynamics for fibre broadband provision has changed markedly in recent years and will continue to do so over the next five years. For example, there will be areas where ultrafast broadband is available, either principally or wholly, through fibre providers other than Openreach.
- 4.7. Ofcom has not considered this scenario in this consultation and it is unclear to us whether or how the copper retirement proposals would apply. We think it is right for network operators to take the lead on investment and migration decisions for their

services. However, we would welcome more clarity on how the availability of alternative fibre network services alongside Openreach's would play into any assessment of ultrafast availability and the regulatory gates for Openreach's own migrations plans.

Withdrawal of WLR and switch-off of the PSTN

- 4.8. We note that the scope of this consultation covers those products which are regulated under the WLA regulatory framework. Subject to confirmation by Ofcom as part of its WFTMR, we expect WLR will be deregulated from 2021 and therefore outside the scope of these proposals. There are no remaining regulated products which rely on the PSTN.
- 4.9. As a result, the December 2025 withdrawal date for WLR and switch-off date for PSTN are unaffected by these proposals. We would be grateful if Ofcom could confirm our understanding in this regard.

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