



Response to Ofcom's Consultation:

## Consultation: Reviews of Call Termination Markets and End-to-End Connectivity Condition

10 October 2025

Non-confidential

## Introduction

We welcome the opportunity to respond to Ofcom's consultation on call termination. We broadly agree with Ofcom's proposals, and appreciate the stability that the regulatory regime has been able to provide to the market. However, there are some key areas where we disagree with Ofcom's decisions or believe that it has not gone far enough to restrict BT's ability to exercise its aggregate market power to the detriment of other communication providers (CPs) and a well-functioning market. These are set out in full below, followed by our responses to the consultation questions.

### Building a fair and balanced market

This review is timely, and is an opportunity to reset the balance in the market as we move into an all-IP world. In principle, this shift should level the playing field, but due to BT's historic position in the market it continues to exert power to benefit its own business to the detriment of other CPs. We welcome Ofcom's recognition of this continued and dispersed market power, and we are glad to see the proposed tightening of BT's additional obligations.

Earlier this year, a group of CPs brought a dispute against BT to Ofcom, on the content and handling of the regulated Reference Offer (the Standard IP Interconnect Agreement or SIPIA). While BT had ostensibly fulfilled its regulatory obligations by publishing a reference offer in October 2021, it had done so with no prior consultation with other CPs and had included asymmetries in rights and obligations that would never have been accepted in a commercial contract. This would be fine had it been treated as a springboard for negotiation and clarification, however BT has been reluctant to address CP concerns and has been slow to negotiate, even in collective fora such as the UK Competitive Telecommunications Association (UKCTA) review group. From 2021 until March 2025 when the dispute was brought, BT has shown profound reluctance to deliver a service that its CP customers are content with – a sure sign of a dominant operator. Its market position continues to grant BT disproportionate power in negotiations, and combined with a commercial incentive to benefit its own business it is able to block, delay, and divert CP requests for negotiation.

Since Ofcom decided not to handle the dispute, BT has made some positive statements on key issues. [✂]. If BT is unwilling to address its customers' concerns and complaints to deliver a better service, then the additional regulation is not performing its job of restricting BT's ability to exercise its market power. We are hopeful that Ofcom's proposal to include additional conditions in the reference offer, and to disaggregate regulated and commercial services in the SIPIA, will serve to deliver some of these outcomes.

We also believe that there would be value in having an Ofcom observer in the SIPIA General Review meetings, to hold BT to account. This would serve a similar purpose to how the OTA2 supports discussions with Openreach on fixed line connectivity.

### Maintaining proportionate recompense for call termination

The price caps for WCT and MCT are important regulatory tools in the call termination markets, fostering effective competition at both the wholesale and retail levels. Nonetheless, VodafoneThree is concerned that Ofcom has chosen to keep the price caps static in nominal terms, rather than allowing them to increase by CPI. The purchasing power of money reduces over time with inflation – £1 today is worth more than £1 in a years' time – so Ofcom's proposal fails to recognise the erosion in the value of money. Furthermore, we believe that this is likely to misrepresent the actual incremental cost of delivering call termination services, and thus risks regulatory failure.

We note Ofcom's assumption that technological advances have led to efficiencies and cost savings in parts of the interconnect system. However, in reality, though some efficiencies may have been achieved, there has also been significant investment in delivering our interconnect-specific obligations under the Telecommunications (Security) Act 2021 and Ofcom requirements to block nuisance calls. We see no prospect of these cost pressures abating, indeed the Government is currently consulting on increasing security requirements. We also anticipate additional cost

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pressures may arise from a new expectation to manage more direct interconnects, should Ofcom revoke the End-to-End Connectivity Condition as proposed. Within Three UK, the cost of implementing a new SIP interconnect is upwards of [£]. These costs were not included in the original cost modelling, and certainly offset any technological cost-savings, especially when taken in the round alongside minimal retail revenue from voice calls, and operational inputs that all rise with inflation, for example energy costs, salaries, software licences or spectrum. As such, the LRIC for termination is much more likely to remain stable (and thus should increase in real terms), rather than decrease (which is what a nominal static cap would imply).

Furthermore, although there is more overlap between data and voice in terms of network architecture in an all-IP/VoLTE world, there still is an incremental cost to delivering call termination on top of pure data traffic: be it energy usage, repairing equipment wear and tear, or network capacity. If the cost of those things *as a whole* goes up by CPI, then that increment – whatever it may be – must also go up by CPI. This is not an unusual conclusion, and reflects Ofcom’s position on topics from A2P SMS pricing to annual spectrum licence fees. By choosing to keep prices static in nominal rather than real terms, Ofcom is choosing to risk setting a price cap that does not reflect the true cost of delivering call termination services on either fixed or mobile.

It also departs from the assumptions that underpin the original 2020 MCT model. In Annex 2 of the Wholesale Voice Markets Review 2021-26, Ofcom specifies that the model “works in real terms (relative to CPI inflation).” This is because there was a recognition that costs – even small ones – do increase over time. A model that incorporates inflation has worked for the preceding review period, and in fact had the decision to keep the charge control static in nominal terms been taken in 2021, we would have made a significant loss on termination in the last five years. There is no reason to believe that that will be different in the next five years.

We agree that revising the 2017 WCT LRIC model and 2020 MCT LRIC model would likely result in disproportionate burden on operators to gather and provide the relevant data, as well as taking up regulatory time in analysis which would likely produce a very similar figure. Consequently, it is only reasonable for Ofcom to exercise its regulatory judgement in setting termination charge caps that recover efficiently incurred costs. As an expert regulator and, based on the fact that LRIC levels have generally been stable, that regulatory judgement is likely to deliver a viable approximation of the LRIC.

However, the necessary consequence of not going through the onerous process of revising the 2017 model is that, absent a serious stroke of luck, Ofcom’s proposed price caps are likely to either overestimate or underestimate the LRIC (albeit by a narrow margin). We strongly believe that, of those two options, the most efficient market outcomes would be delivered by an *overestimated* LRIC. This is because it would ensure full cost recovery, and any additional partial recovery of common costs would simply be a tiny step in the direction of a LRIC+ cost standard – which Ofcom has stated has no more or fewer “material allocative efficiency benefits” than pure LRIC. An upwards error does not impact the effectiveness of the regulation.

On the other hand, an *underestimated* LRIC results in providers offering termination services being unable to fully recover the incremental cost of offering those services through the regulated charge control, pushing that cost to other services. In its rejection of ‘bill and keep’, Ofcom itself makes the argument that setting WCT below the marginal cost of its provision could result in less efficient regulation. Though a much less extreme manifestation of this risk of regulatory failure, the principle remains that setting LRIC below the actual long-run incremental cost could lead to inefficiencies in the market. When faced with the choice of accidentally setting the cap too high or too low, regardless of if we are talking about fractions of a penny, the most efficient and proportionate error is to set it at a level that guarantees incremental cost recovery.

## Delivering quality of service in WCT

The transparency requirement for BT on its quality of service on WCT is an incredibly valuable regulatory tool. BT’s market power and historic market position have meant that the efficiency and quality of its service have knock-on

effects on all other market players. By setting transparency requirements, Ofcom has at least applied some accountability on BT for key interconnection inputs, allowing other providers to better serve their customers and plan their network.

We believe that all the IP interconnect KPIs should be retained in the next iteration of the direction. We have seen the reduction in port capacity orders and DMAs that Ofcom has anticipated following the move to IP, however these continue to be a service that BT provides. With lower volumes, if the transparency requirements were to fall away, there is a risk that BT deprioritises delivery – particularly as it would have every incentive to slow delivery to favour its own retail business. Given the continued need for port capacity and DMAs, and the lack of commercial safeguards, we believe that publication of KPIs a, c, e, and f continues to be necessary for this review period.

BT has consistently refused to set SLAs or service targets for interconnect. Service recovery is managed through ad hoc operational arrangements, including where a fault may have taken down a customer's access to emergency services. Increasingly, customers reliant on these voice services are vulnerable, and a fault with no repair standard can have a disproportionate impact on their access to critical services. Although, generally speaking, BT's performance has met an acceptable standard in recent times for VodafoneThree, this comes at the cost of our operational team proactively chasing BT and holding them to account. We are also one of its largest interconnect partners, so we are likely one of its better-resourced customers, with relatively high bargaining power. Yet, we still find that escalations and faults can drag on for weeks with no ability to manage our customers' expectations without clear communication from BT. We believe that this must be multiplied for smaller providers with less resource to devote to developing those ad hoc arrangements, and it is hard to say whether VodafoneThree's experience would have been as consistent without the regulatory KPIs BT must report on. Certainly, there is no equivalent commercial incentive to keep those standards consistent, particularly with the overall decline in call volumes.

In line with our request above as regards the SIPIA negotiations, we would encourage Ofcom to enhance its WCT obligations on BT by specifying that it expects BT to discharge its obligations in collaboration with its customers.

## Revoking the End-to-End Connectivity Condition

We are broadly supportive of Ofcom's proposal to remove the End-to-End Connectivity Condition. While in 2006 when it was first introduced the End-to-End Connectivity Condition was recognised as necessary to restrict BT's ability to exercise its market power, we have seen it instead use the Condition as an excuse to impose asymmetric contract terms on other CPs. On the other hand, we believe that, on the whole, end-to-end connectivity is likely safeguarded by the General Conditions of Entitlement and relevant SMP access obligations. As such, we believe that the cost of continuing to give BT an excuse for unfair contractual arrangements is higher than the cost of removing its obligation to purchase termination.

Competition in the wholesale market has matured since 2006, and the transition to IP has not only lowered the cost of termination it has also enabled competitors to BT to offer transit and hosting services to smaller providers. We consider Ofcom's assessment of the changes to the market dynamics to be broadly correct and thus support its conclusions. Given operators' commercial incentives to offer a complete voice service to their customers, bolstered by their regulatory obligations, there is reason to believe that the market will continue to support seamless end-to-end connectivity.

However, there are two key caveats which we believe that Ofcom should take into account, when considering how to revoke the condition and what to leave in its place. Firstly, BT does continue to hold a monopoly as regards porting transit. [X]. [X]. When removing the End-to-End Connectivity Condition, Ofcom should also specify an obligation to supply porting transit on fair and reasonable terms.

The second caveat is that, regardless of the intention behind the regulation, we believe that BT and the rest of the market has interpreted it in different ways and has thus entrenched behaviour on the basis of divergent

interpretations. For example, we note that Ofcom bases some of its argument for deregulation on the fact that the transition from narrowband to VoIP/VoB has essentially made the End-to-End Connectivity Condition obsolete, and yet has not resulted in any significant issues in the market. However, we know that BT has used the End-to-End Connectivity Condition as a justification for a number of commercial practices which would include VoIP termination. [REDACTED].<sup>1</sup> Such examples of broad interpretation of the condition mean that it is likely that, since its introduction in 2006, it may have influenced market behaviour beyond its immediate scope, as BT sought to remove all chance of accidental non-compliance. Removal, therefore, may have unintended and unexpected consequences.

To mitigate that risk, Ofcom should be explicit in its statement about what it expects end-to-end connectivity to look like post-removal of the condition, and how it intends that to be safeguarded by General Conditions A1.2 and B4.2. It should also exercise its powers to proactively monitor for changes to BT's behaviour in interconnection that could have unintended consequences as a result of its market position.

## Responses to consultation questions

Question 4.1: Do you agree with our proposed market definition in relation to WCT?

Yes, we agree with the proposed market definition.

Question 4.2: Do you agree with our proposed market definition in relation to MCT?

Yes, we agree with the proposed market definition. Although there has been a dramatic increase in OCS use for voice calls since the last review, and we expect that increase will only continue, we agree that they cannot yet be included in the market for MCT given its lack of interoperability with traditional telephony.

Question 4.3: Do you agree with our provisional view that it is appropriate to identify the WCT and MCT markets we have provisionally identified for the purpose of considering whether to make a market power determination, on the grounds that they meet the three-criteria test set out in section 79(2B) of the Act?

Yes, we agree with this provisional view.

Question 4.4: Do you agree with our provisional conclusion that each provider of WCT has SMP in the market served by that provider?

Yes, we agree with this provisional conclusion.

Question 4.5: Do you agree with our provisional conclusion that each provider of MCT has SMP in the market served by that provider?

Yes, we agree with this provisional conclusion.

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<sup>1</sup> [REDACTED]

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Question 4.6: Do you agree with the competition concerns arising from SMP in the WCT and MCT markets that we have provisionally identified?

Yes, we agree with this provisional conclusion.

Question 5.1: Do you agree with our proposals to maintain a network access obligation on all WCT providers and additional obligations that would be specific to BT's provision of WCT?

Yes, we agree with the proposals to maintain a network access obligation on all WCT providers, particularly in light of the proposal to remove the End-to-End Connectivity Condition. To facilitate network access, we also recommend that Ofcom considers publishing a list of WCT providers on its website which is updated regularly (not just in the statutory instruments of each review period), along with contact details for CPs to be able to reach them directly. Currently, where CPs are using a hosting provider, it is often the case that that hosting provider is able to charge a transit charge in addition to a termination rate at all handover locations (whilst we accept that the regulation prohibits this, practicably it is often impossible for an upstream network to distinguish between a hosting and transit arrangement). A requirement to provide the regulator with an email address or other means of communication would allow access seekers to exercise their right to request direct interconnection.

We also agree that it remains necessary to impose additional measures upon BT in respect of call termination. Even its scale and market share notwithstanding, BT retains a core position in call termination even after the move to all-IP, due to how calls are terminated to ported numbers. It also holds a unique position in the market as the sole provider of 999 access at its PSAP1 facility, meaning that all WCT providers in the UK must interconnect with BT at least for the purposes of offering emergency services access to their customers. Economically, no other provider could enter the market for PSAP1 provision at this stage (and indeed for eCall, BT is designated as the UK PSAP1). For small providers, having made that connection to BT, there is simply not the scale to connect to further providers. As such, additional transparency and non-discrimination requirements are necessary to mitigate the risk of BT using its market power to the detriment of other providers.

Question 5.2: Do you agree with our proposed charge control on WCT?

We support Ofcom's proposal to base the price cap for Wholesale Call Termination on the 2017 WCT cost model and the 2020 MCT cost model. Given the relative stability in the long-run incremental cost for providing termination services, we agree that undertaking a new cost modelling exercise would place an undue burden on industry for little gain.

However, as noted in the introduction, we are concerned that Ofcom has chosen to risk setting the cap below LRIC by removing CPI increases for the duration of the review period. This would be a lowering of the cap in real terms, without clear evidence of how it has reached the conclusion that the cost has lowered at an equivalent rate. The regulatory risk associated with underestimating the LRIC is higher than that of overestimating it, therefore we urge Ofcom to reconsider its pricing approach to the charge control. We have calculated that, if the FTR and MTR were to remain static in nominal terms, that would essentially result in at least a [X] loss to our voice business over the review period.

Question 5.3: Do you agree with our proposal to maintain a network access obligation on all MCT providers?

Yes, we agree with this proposal.

Question 5.4: Do you agree with our proposed charge control on MCT?

As with WCT, we agree that the charge control is needed, and we support a cap based on the 2020 MCT model which stays stable *in real terms*.

**Question 5.5: Do you agree with our proposal to maintain a reciprocity condition on the termination of international calls, subject to changes and clarifications set out in this document?**

VodafoneThree agrees with Ofcom's proposal to maintain the reciprocity condition. Since their introduction in 2021, the reciprocity conditions have resulted in a fairer market, and enabled lower prices for consumers as providers are able to recoup their wholesale costs at the wholesale level.

We also agree with Ofcom's proposed changes and clarifications. In particular, we strongly support the clear extension of the reciprocity conditions to include calls from roamers in the UK. For terminating networks, it is technically unfeasible to recognise whether a call originating from an international CLI is being made from within the UK or from overseas. A definition of roaming calls as domestic that applies only to UK operators would simply put us at a disadvantage against overseas operators, who would apply the relevant surcharge should a UK customer call the roaming customer. Clarifying the definition puts UK providers on a level playing field with international providers, as was always the intention behind the reciprocity conditions.

This is particularly important while 2G and 3G roaming is still taking place, as outbound calls by a roaming customer are routed by the UK network, so 'origination' is a lot more ambiguous (unlike VoLTE where the UK network is only involved at the data layer). We support the introduction of Ofcom's proposed wording as soon as possible, to allow operators to make changes to their billing systems as quickly as possible. We are aware, for example, that BT in particular is seeking to develop billing systems based on an interpretation of the existing regulations that calls from inbound roamers should not be surcharged. This will result in costs to both BT and terminating networks. Since the reciprocity condition sets a maximum cap rather than an obligation to 'match' the international CP's termination rate, we believe that an early introduction of the new wording into regulation would allow operators to implement it at the pace that works for them, be that sooner or later.

**Question 6.1: Do you agree with our proposal to maintain the current network access condition requiring all WCT providers to provide interconnection, accommodation and related services required to access WCT and to maintain Ofcom's guidance in relation to the technical standards used by telecoms providers for IP interconnection?**

Yes, we agree with this proposal.

**Question 6.2: Do you agree with our proposal to update Ofcom's guidance about BT's interconnection and accommodation charges?**

We accept the update as reflecting BT's current practice. We would, however, propose that Ofcom includes a statement that charges are not just "reasonably derived" from the direct costs of provision, but also that those direct costs are "reasonably incurred." This further codifies the incentive for BT to structure and offer its services efficiently.

**Question 6.3: Do you agree with our proposed remedies that would be specific to BT's provision of interconnection, accommodation and related services required to access WCT? These proposed remedies include: (i) a requirement not to unduly discriminate, (ii) a requirement to publish a Reference Offer, (iii) a requirement to notify changes to charges, and (iv) a requirement to publish certain quality of service information (supplemented by a direction about BT's provision of interconnection).**

We strongly agree with Ofcom's proposed remedies that are specific to BT. Our experience has been that BT as attempted to exercise its SMP wherever it can, doing the bare minimum to address CP concerns – which has often simply been doing nothing at all. As such, we are particularly supportive of Ofcom's decision to further clarify what should be included in the Reference Offer, and what should be allowed to be split out (i.e. commercial services). This will support CPs in being able to access WCT without having to agree to unreasonable terms on unregulated services, simply because both are wrapped up in a single agreement.

**Question 6.4: Do you agree with the quality of service KPIs in relation to its provision of IP interconnection services that we are proposing BT should be required to publish?**

Yes, we agree with the proposed quality of service KPIs.

As outlined in the introduction, we believe that all the KPIs proposed are required to keep BT focused on delivering good quality of service on interconnection and related services. Particularly given the recalcitrance CPs have faced when attempting to negotiate service targets on a commercial basis, the transparency requirement is vital.

We also support the removal of the TDM-related KPIs, although we note that there remain some services which are not supported via SIP (notably CPS traffic and CSD services used by utility companies). Such TDM interconnects will likely be required until the end of Openreach's extended closing date for WLR in January 2027.

**Question 7.1: Do you agree with our proposed regulatory reporting requirements on BT?**

We agree with Ofcom's proposals, and consider the reporting requirements incredibly important in keeping BT accountable on its non-discrimination obligations, and in providing critical information to Ofcom for the purposes of making regulatory decisions. Aligning the obligations with those proposed in the Telecoms Access Review 2026-31 is also reasonable. However, we would also like to see Ofcom include a reporting requirement – whether public or private – which allows it to monitor BT's compliance with its obligations to trade internally on the basis of its Reference Offer or, where the terms diverge, to publish those variances.

Finally, we believe that Ofcom should also look into whether BT has been discharging its reporting obligations to date, particularly around emergency services. As per our response to Question 5.1, BT also holds a unique position in emergency services access, but has never published an audit of its PSAP1 network arrangements despite it being necessary for CPs to fulfil their regulatory obligations under GC A3.2. This adds another line of concern to a broader issue with emergency services access provision in the UK, which we believe needs a complete audit and structural reform. Alongside the call termination-specific reporting requirements, we urge Ofcom to start a separate workstream to review the market for emergency services access provision in the UK and to consult next year.

**Question 8.1: Do you agree with our proposed market definition in relation to 070 WCT?**

Yes, we agree with the proposed market definition.

**Question 8.2: Do you agree with our provisional view that it is appropriate to identify the 070 WCT markets we have provisionally identified for the purpose of considering whether to make a market power determination, on the grounds they meet the three criteria test set out in section 79(2B) of the Act?**

Yes, we agree with this provisional view.

Question 8.3: Do you agree with our provisional conclusion that each 070 termination provider has SMP in the market served by that provider?

Yes, we agree with this provisional conclusion.

Question 8.4: Do you agree with the competition concerns arising from SMP in the 070 WCT markets that we have provisionally identified?

Yes, we agree with this provisional conclusion. There had been consumer harm of bill shock prior to the introduction of the regulations, so it is reasonable to assume that this would be the case again were the regulation to fall away.

Question 8.5: Do you agree with our proposed charge control on 070 WCT?

Yes, we agree that the 070 WCT charge control cap should be set at the MTR cap. However, we note our response to question 5.4, that the MTR cap should increase by CPI over the review period.

Question 8.6: Do you have any initial view about the ongoing effectiveness of the service designation of 070 numbers as personal numbers and, more generally, on the future of the 070 number range?

VodafoneThree would be supportive of retiring the 070 range as personal numbers, and integrating it into the mobile range. Traffic on 070 is minimal, and the purpose of personal numbers can now be fulfilled by ubiquitous mobile use, OCS, and other services. We note, however, that at least in principle customers who purchased 070 numbers did so ostensibly for life. As such, there may be some customers who have a personal attachment to the number (as, for example, to a personalised number plate on a car). Ofcom may wish to consider an option for customers to retain their numbers should they wish to, similar to how businesses were able to transport their premium-rate number into the 09 range.

Question 9.1: Do you agree with our proposal to revoke the End-to-End Connectivity Condition with effect from 1 April 2026?

As stated in the introduction, we agree with the proposal to revoke the End-to-End Connectivity Condition. However, we note the caveat presented, that Ofcom should actively monitor the aftermath of that revocation, to step in early in the case of unintended consequences.