

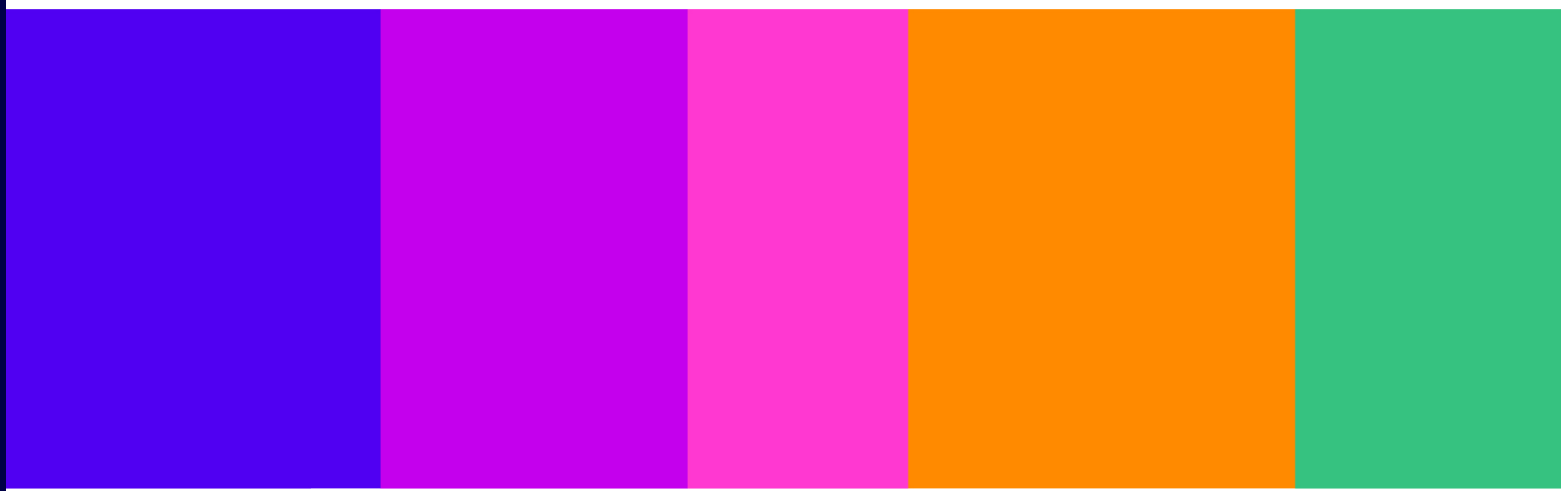
# Reviews of Call Termination Markets and End-to-End Connectivity Condition

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Annexes 4-6

**Statement**

Published 26 March 2026



# Contents

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## **Annex**

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# A4. Equality and Welsh language impact assessments

## Equality impact assessment

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- A4.1 Section 149 of the Equality Act 2010 imposes a duty on Ofcom, when carrying out its functions, to have due regard to the need to eliminate discrimination, harassment, victimisation and other prohibited conduct related to the following protected characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex and sexual orientation. The Equality Act 2010 also requires Ofcom to have due regard to the need to advance equality of opportunity and foster good relations between persons who share specified protected characteristics and persons who do not.
- A4.2 Section 75 of the Northern Ireland Act 1998 imposes a duty on Ofcom, when carrying out its functions relating to Northern Ireland, to have due regard to the need to promote equality of opportunity and have regard to the desirability of promoting good relations across a range of categories outlined in the Northern Ireland Act 1998. [Ofcom's Revised Northern Ireland Equality Scheme](#) explains how we comply with our statutory duties under the Northern Ireland Act 1998.
- A4.3 To help us comply with our duties under the Equality Act 2010 and the Northern Ireland Act 1998, we assess the impact of our proposals on persons sharing protected characteristics and, in particular, whether they may discriminate against such persons or impact on equality of opportunity or good relations.
- A4.4 When thinking about equality we think more broadly than persons that share protected characteristics identified in equalities legislation and think about potential impacts on various groups of persons (see paragraph 4.7 of our [impact assessment guidance](#)).
- A4.5 In particular, section 3(4) of the Communications Act also requires us to have regard to the needs and interests of specific groups of persons when performing our duties, as appear to us to be relevant in the circumstances. These include:
- the vulnerability of children and of others whose circumstances appear to us to put them in need of special protection;
  - the needs of persons with disabilities, older persons and persons on low incomes; and
  - the different interests of persons in the different parts of the UK, of the different ethnic communities within the UK and of persons living in rural and in urban areas.
- A4.6 We examine the potential impact our policy is likely to have on people, depending on their personal circumstances. This also assists us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers, regardless of their background and identity.

## Our initial assessment

- A4.7 In summary, in the 2025 Consultation (paragraphs A8.57 to A8.58), we provisionally concluded that our proposals would help to advance equality of opportunity, and they would have no impacts on persons sharing the protected characteristics, identified in the

Equality Act 2010 and / or the Northern Ireland Act 1998, which may discriminate against such persons. We also said that the proposed revocation of the End-to-End Connectivity Condition would not have any equality implications under the Equality Act 2010 or the Northern Ireland Act 1998.

## Stakeholder responses

A4.8 We received the following comments from stakeholders:

- Telecom2 (representing itself and other providers) agreed with our initial equality impact assessment.<sup>1 2</sup>
- Commenting on the reciprocity conditions for the termination of international calls, Simwood suggested that higher termination rates for calls from some countries may have a disproportionate impact on ethnic minority communities in the UK if they receive fewer calls from abroad as a result.<sup>3</sup>
- Voxyonder said that some smaller CPs serve a “target market” that “could meet the protected characteristics threshold of the Equality Act” (for example, by offering “bespoke networks/services setup for those who would have protected characteristics”), and that “[c]hanges that are likely to impact smaller CPs more than large CPs financially increase the likelihood of those protected characteristics being negatively impacted”. In its view, imposing the same price cap on all WCT providers (instead of a higher cap on smaller providers) and revoking the End-to-End Connectivity Condition, are likely to have a disproportionate impact on smaller providers.<sup>4</sup>

## Our conclusions

A4.9 We remain of the view that our decisions will continue to promote competition in the markets for phone calls to UK geographic numbers, mobile numbers and 070 numbers and to support positive consumer outcomes. As a result, they could have a particularly positive impact on groups of people that use voice-only landline services (without broadband) and those that use a standard mobile phone (that is not a smartphone), as well as groups of people who are more likely to lack access to broadband at home, when compared to the general population, thus helping to advance equality of opportunity. These groups of consumers could be more reliant on making and receiving phone calls, given their limited access to OCS. There is evidence suggesting that people over 65 and those on low incomes are more likely to fall into some of these groups of consumers. We do not consider there to be any impacts of our proposals on persons sharing the protected characteristics, identified in the Equality Act 2010 and / or the Northern Ireland Act 1998, which may discriminate against such persons.

A4.10 We address Simwood’s comment about the impact of the reciprocity conditions on ethnic minority communities in the UK in Section 5. In brief, we remain of the view that an approach to regulation based on reciprocity is most likely to result in reciprocal low termination rates, benefitting any UK customers that are more likely to originate or receive international calls.

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<sup>1</sup> Telecom2’s [response](#) to QA8.2.

<sup>2</sup> Core Telecom, Mediatel, Mobile Billing, Swiftnet, Neil Penny, Square One Communications and The Number UK.

<sup>3</sup> Simwood’s [response](#), pages 6 to 7.

<sup>4</sup> Voxyonder’s [response](#) to QA8.2.

- A4.11 We consider that the revocation of the End-to-End Connectivity Condition will not have any equality implications under the Equality Act 2010 or the Northern Ireland Act 1998. For the reasons set out in Section 9, we believe that people’s ability to call each other using phone calls (i.e., end-to-end connectivity) will continue to be supported by commercial incentives and by other regulatory conditions.
- A4.12 We note Voxyonder’s suggestion that our regulatory decisions could have a disproportionate impact on smaller providers, some of which it says may offer services that disproportionately meet the needs of persons sharing protected characteristics. However, we consider that our decisions to continue to impose a single price cap on all WCT providers (see Section 5) and to revoke the End-to-End Connectivity Condition (see Section 9) do not have a disproportionate impact on small providers and therefore it follows that these decisions are unlikely to have disproportionate impacts on persons with protected characteristics that are served by smaller providers as well.

## Welsh language impact assessment

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- A4.13 The Welsh language has official status in Wales. To give effect to this, certain public bodies, including Ofcom, are required to comply with Welsh language standards in relation to the use of Welsh, including the general principle that Welsh should not be treated less favourably than English in Wales. Accordingly, we have considered the potential impact of our review on (i) opportunities for persons to use the Welsh language; and (ii) treating the Welsh language no less favourably than the English language.

## Our initial assessment

- A4.14 In summary, in the 2025 Consultation (paragraphs A8.59 to A8.60), we invited BT to consider the needs of providers in Wales and whether, in complying with the proposed publication requirements, BT should make the specified information available in Welsh as well as English.

## Stakeholder responses

- A4.15 We received the following comments from stakeholders:
- Telecom2 agreed with our initial assessment.<sup>5</sup>
  - As noted above, Voxyonder considered that our proposals would have a greater impact on small providers than large providers. It said there is a risk that this might lead to an adverse impact on the Welsh language if the small selection of providers that support the Welsh language are among those affected. In its view, “more data is required here to assist in understanding the options available to Welsh language subscribers and in some respects see them as a separate market pool”.<sup>6</sup>

## Our conclusions

- A4.16 To the extent we have discretion in the formulation of our proposals and final decisions, we have considered the potential impacts on opportunities to use Welsh and treating Welsh no less favourably than English where relevant. We do not consider that, under our powers to impose SMP (services) conditions, we are able to specify a language

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<sup>5</sup> Telecom2’s [response](#) to QA8.3.

<sup>6</sup> Voxyonder’s [response](#) to QA8.3.

requirement in relation to BT's publication requirements as described in Sections 5 and 6. However, noting that BT operates across the United Kingdom, we invite BT to consider the needs of providers in Wales and whether, in complying with these publication requirements, they should make the specified information available in Welsh as well as English. To this extent, we consider our decisions are likely to have positive effects or increased positive effects on opportunities to use Welsh and treating Welsh no less favourably than English.

- A4.17 As noted above, we do not consider that our regulatory decisions could have a disproportionate impact on small providers. We do not, therefore, consider it necessary to gather further data in relation to Welsh subscribers of telecoms services for the purpose of reaching final decisions in this review, as suggested by Voxyonder.

# A5. Impact of the reciprocity conditions for international calls

A5.1 In this annex, we analyse the development of international termination rates since we introduced the reciprocity conditions in 2021, to help us assess if the conditions have contributed to our policy objective of reciprocal low rates.

## Background

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A5.2 Prior to 2021, we set a single charge control for the termination of calls on UK fixed networks and a single charge control for the termination of calls on UK mobile networks – regardless of where the call originated.<sup>7</sup>

A5.3 We changed our regulatory approach in 2021 to allow more pricing flexibility for UK providers when terminating calls that originate outside of the UK. Specifically, in both WCT and MCT markets, we introduced a reciprocity condition whereby the termination rate charged by the UK provider can be no more than the reciprocal termination rate charged by the relevant international telecoms provider for a call originating in the UK, or the relevant UK domestic rate, whichever is the higher.<sup>8</sup>

## Our reasoning and objectives in 2021

A5.4 As set out in our 2021 Statement (paragraphs 6.121 to 6.134), our policy goal was to encourage reciprocal low rates between the UK and international providers, on the basis that this would yield the most benefit for consumers:

- a) For calls originated in the UK, low rates in the destination country reduce the cost for UK providers to send calls to that country, which could help to keep call prices lower for customers calling that country from the UK.
- b) For calls terminated in the UK, the impact of low rates is more ambiguous as these charges are paid by the international counterparty when its customers call the UK. However, there may be indirect benefits; if low UK rates on international calls are passed on to consumers in those countries via low retail rates, then this could support the likelihood that UK customers who value international calls continue to receive calls from abroad.

A5.5 We considered that the reciprocity conditions were most likely to deliver these objectives:

- a) When terminating calls from abroad, reciprocity would prevent UK providers from raising their rates where a counterparty keeps their own rate low. In the case that an

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<sup>7</sup> Ofcom. 30 November 2017. [Narrowband Market Review: Statement](https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/103319-mobile-call-termination-market-review/associated-documents/final-statement-mobile-call-termination-market-review-2018-2021.pdf?v=323084). <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/103319-mobile-call-termination-market-review/associated-documents/final-statement-mobile-call-termination-market-review-2018-2021.pdf?v=323084>

<sup>8</sup> The 2021-26 market review reciprocity conditions are set out in [Annex 5](#) to the 2021 Statement. In relation to WCT, see Condition 3B for BT (at pages 14-15 of [Annex 5](#)), and Condition 2B for the other WCT providers (at pages 52-53 of [Annex 5](#)). In relation to MCT, see Condition M3 (at page 133 of [Annex 5](#)).

international provider sets high rates for calls from the UK, reciprocity would at least mitigate the risk of UK providers from being disadvantaged relative to their international counterparty.

- b) While we have no direct control over the rates set by international providers for terminating calls originated in the UK, the ability of UK providers to respond to high rates may help deter providers abroad from charging high rates for calls from the UK.

## Our analysis of international termination rates

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A5.6 We collected information from seven large UK providers of mobile and landline phone services on:

- a) the termination rates charged to them for the termination of outbound international calls made by their customers<sup>9</sup>; and
- b) the rates they charge as UK providers for the termination of inbound international calls received by their customers.

A5.7 We asked for this data for each of the countries that collectively make up the majority of a provider's international call traffic in relation to the period running from Q1 2019/2020 to Q2 2024/2025.<sup>10</sup> Our analysis of this information has helped us assess whether the reciprocity conditions have influenced market outcomes, specifically termination rates between UK providers and their international counterparts, during the 2021-2026 market review period, relative to the counterfactual of our previous regulatory approach. We have also considered how providers have applied the reciprocity conditions and whether there have been obstacles preventing providers from making use of any pricing flexibility permitted by the reciprocity conditions.

## UK providers generally appear to be charging low rates

A5.8 Using the UK domestic rates as a benchmark (which we regulate by setting price caps), we found that UK providers have generally charged low rates for the termination of calls from abroad (i.e. at the level of, or below, the relevant regulated UK rate).

## Market outcomes have varied across three broad categories

A5.9 For each country in the dataset, we analysed the trends in termination rates charged by UK providers to providers in a given country and compared them with the trends in termination rates charged by providers in that country to UK providers.

A5.10 We observed three broad categories of market outcomes, which we set out below. We include an illustrative example for each category showing the evolution of rates between a UK operator and its international counterpart over the period. We have selected examples where the country sends and receives a high volume of calls to and from the UK.

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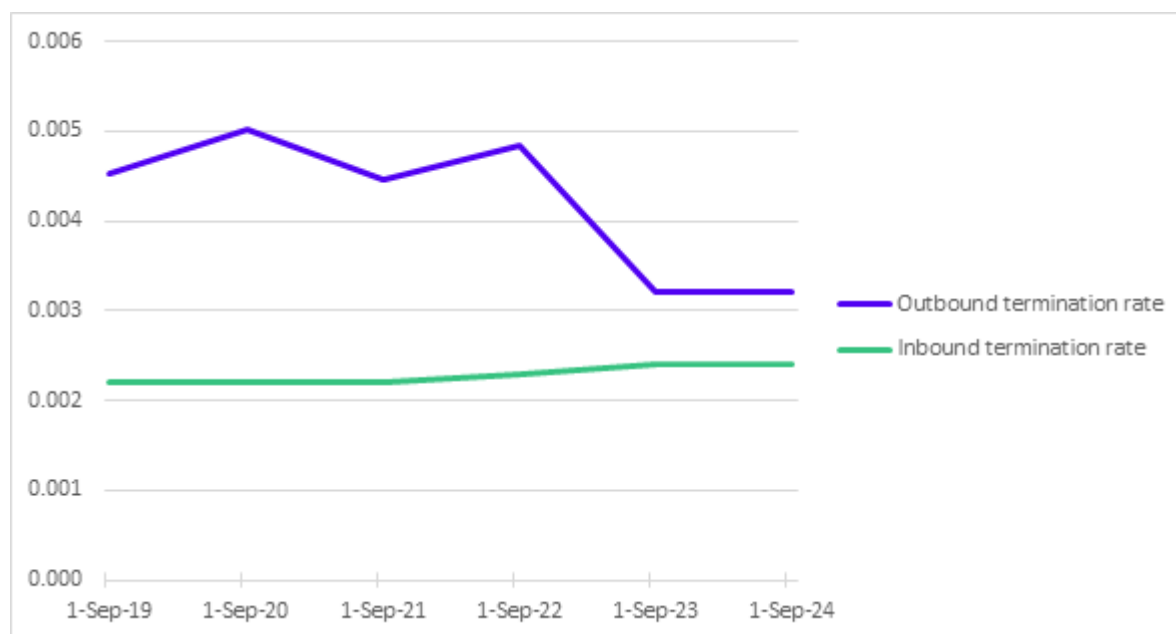
<sup>9</sup> We asked providers to provide this information on a country-level. If, for a specified date, providers were charged more than one rate (for example, if they faced multiple rates from different providers in one country), we asked them to provide an average figure.

<sup>10</sup> BT response dated [redacted], Gamma response dated [redacted], Sky response dated [redacted], Platform X Communications response dated [redacted], Three response dated [redacted], Virgin Media O2 response dated [redacted], Vodafone response dated [redacted] to questions 11 to 18 of the December 2024 Information Request.

## Reciprocal low rates following the introduction of the reciprocity conditions

- A5.11 Prior to 2021, our charge controls required that UK providers charged rates equivalent to the domestic regulated level for the termination of all calls from abroad, regardless of what they were being charged in return by their international counterparts. In some cases, this resulted in a ‘low-high’ outcome – i.e., with low rates charged by UK providers for calls from abroad and high termination rates charged by international providers for calls from the UK (with instances of the rate charged by international providers reaching over 10 times the UK rate).
- A5.12 As previously described, the potential since 2021 for UK providers to respond to higher rates was thought to potentially deter providers abroad from charging higher rates for calls from the UK.
- A5.13 There is some evidence of the termination rates charged by international providers (outbound termination rate) coming down following the introduction of the reciprocity conditions, to align more closely with the low rate charged by a UK provider (inbound termination rate) – see illustrative example in Figure A5.1.

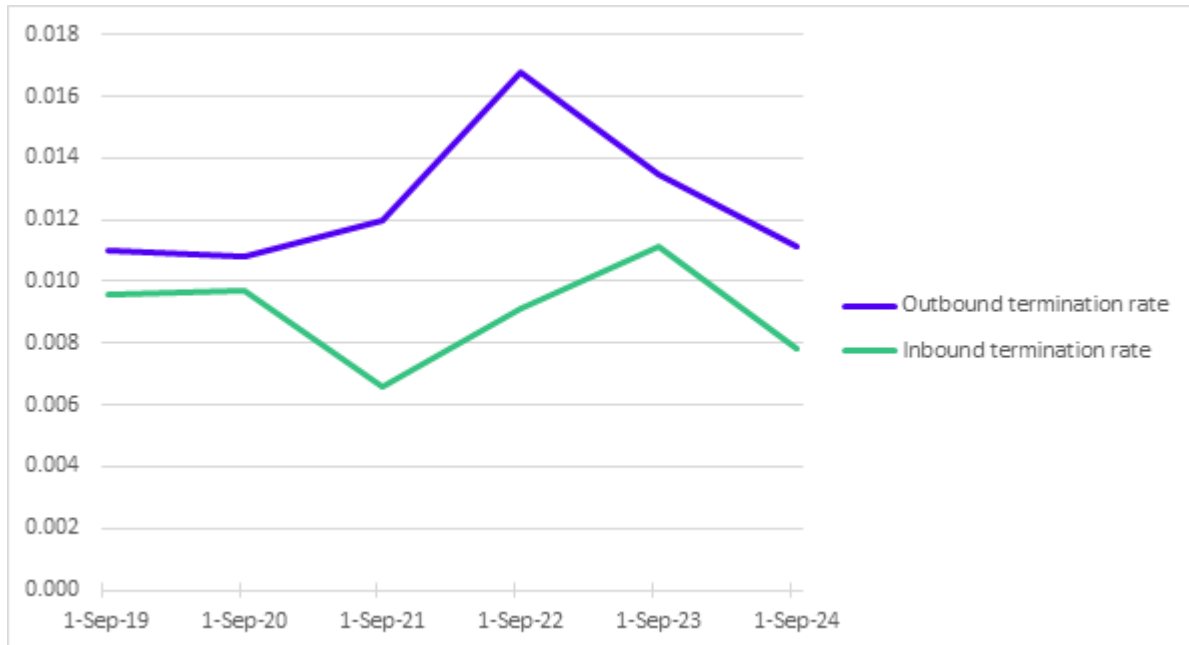
**Figure A5.1: Termination rates between UK provider [X] and a high-volume, low termination rate country [Y] between 2019 and 2024 for calls terminated on a fixed network (pence per minute)**



Source: Ofcom analysis of [X] response to December 2024 Information Request

- A5.14 In another example (in Figure A5.2), providers in one high-volume EU country initially increased the rates charged to one UK provider but dropped their rates after the UK provider used its pricing flexibility to increase its rates in response – and both outbound and inbound rates seem to have been negotiated down to lower levels more recently.

**Figure A5.2: Termination rates between UK provider [X] and a high-volume EU country [X] between 2019 and 2024 for calls terminated on a mobile network (pence per minute)**

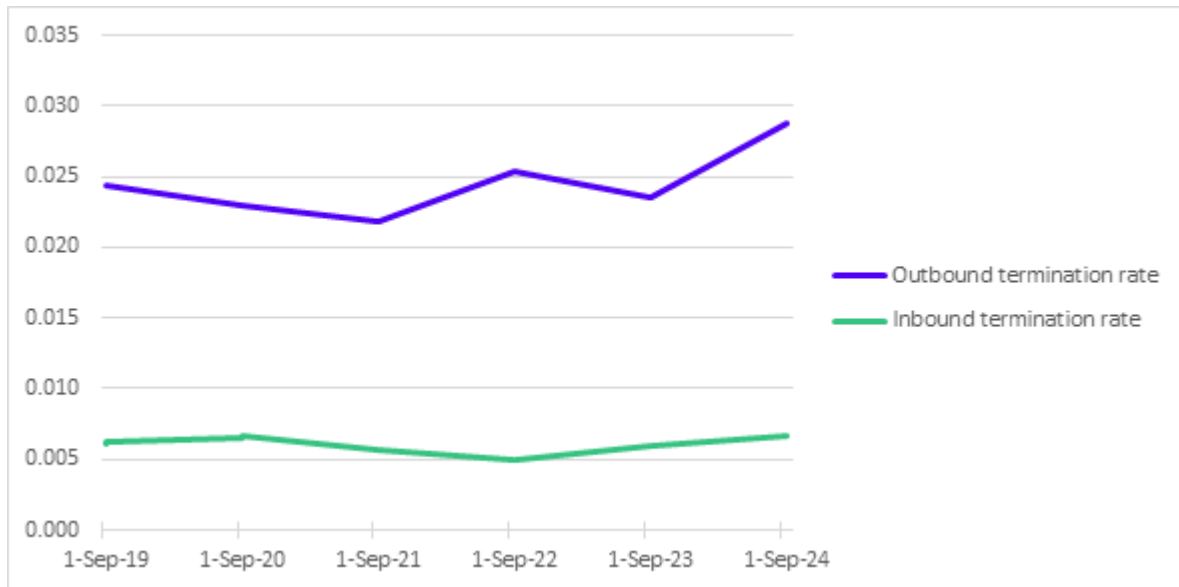


Source: Ofcom analysis of [X] response to December 2024 Information Request

### In the majority of cases UK providers have kept prices stable across the period

- A5.15 The introduction of the reciprocity conditions aimed to increase pricing flexibility for UK providers by allowing them to implement origin-based pricing for the first time.
- A5.16 Some providers have taken up this flexibility by adopting origin-based pricing for all international calls. We have also seen some pricing experimentation in the data as providers appear to have adapted their approach to setting rates. In contrast, one provider in our sample did not apply surcharges to calls from any location and instead charged the relevant UK domestic rate – regardless of the rates charged by their international counterparts.
- A5.17 Most of the larger UK providers we collected data from have taken a hybrid approach and have not applied surcharges to calls from most locations, instead charging the relevant UK domestic rate – except for a select few countries where the reciprocal rate set by the international counterpart is particularly high (as illustrated in the example in Figure A5.2) and / or the volumes of calls are sufficient to incentivise changing the rates.
- A5.18 The approach of maintaining pricing stability for calls from most countries reflects evidence we received from UK providers’ documentation, which suggests that the process of monitoring and adjusting rates can be a manual process, with considerable complexity involved – particularly when the reciprocity conditions were first introduced. However, there is evidence that UK providers have taken steps to simplify the process – for example by applying reciprocal pricing on a country-level, rather than at individual provider level, by setting their rates relative to the lowest rate of all providers in a given country.
- A5.19 Where UK providers have chosen an approach of pricing stability, there have been a mixture of market outcomes. In many cases, rates have remained reciprocally low; in other cases, UK providers have faced ‘low-medium’ rates – as illustrated in the example in Figure A5.3.

**Figure A5.3: Termination rates between UK provider [X] and a high-volume, medium termination rate country [X] between 2019 and 2024 for calls terminated on a mobile network (pence per minute)**



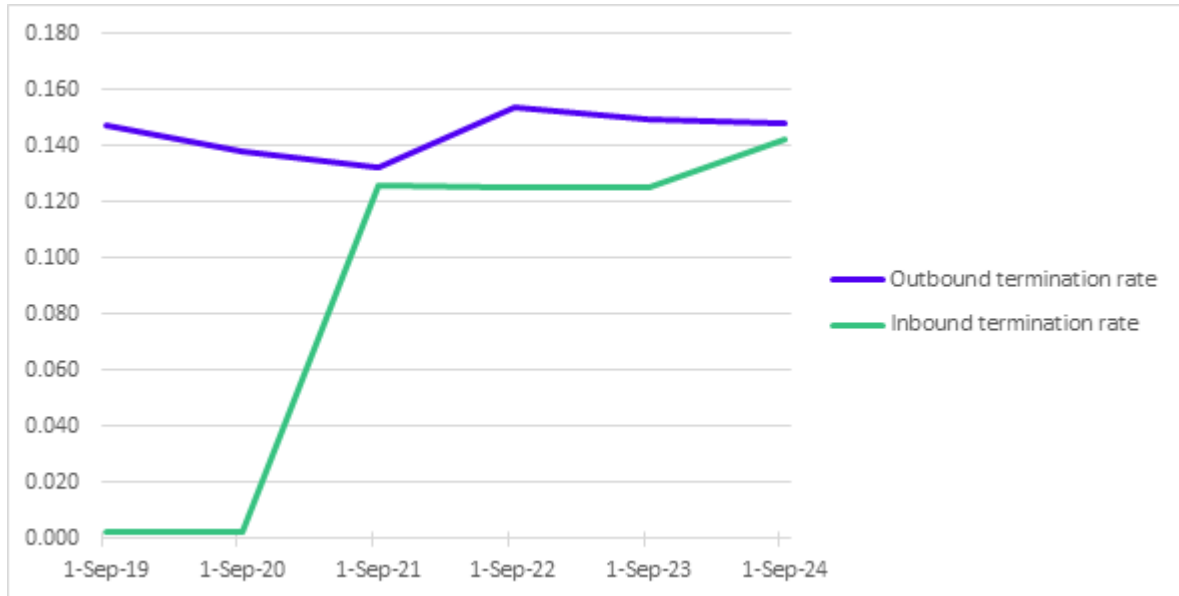
Source: Ofcom analysis of [X] response to December 2024 Information Request

A5.20 While this may be a less optimal outcome than low-low rates, UK providers are no worse off than under the scenario where we continued to apply a single charge control for calls from any location, regardless of how high some international termination rates are set. And, even in these cases where providers have kept rates at a steady level, the ability of UK providers to surcharge calls may have still acted as a deterrent, discouraging providers abroad from significantly increasing their rates.

### Reciprocal high rates following the introduction of the reciprocity conditions

A5.21 We have observed some examples of high-high rates, where UK providers have used the pricing freedom allowed by the reciprocity conditions to match the high rates charged by their international counterparts. However, there are only limited examples of high-high rates, and in these cases, we note that reciprocity has prevented UK providers from continuing to be disadvantaged relative to their international counterparts.

Figure A5.4: Termination rates between UK provider [X] and a high-volume, high termination rate country [X] between 2019 and 2024 for calls terminated on a fixed network (pence per minute)



Source: Ofcom analysis of [X] response to December 2024 Information Request

# A6. Guidance about BT's interconnection and accommodation charges for WCT

- A6.1 Updated version of Ofcom's guidance about BT's charges for interconnection and accommodation provided in connection with the provision of WCT, incorporating amendments discussed in Section 6.

## IPEX service setup charges and interoperability testing charges

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- A6.2 These non-recurring charges are levied by BT when telecoms providers first establish IP interconnection with BT using the IPEX service.
- A6.3 We would expect that in many instances, both parties might incur set-up and interoperability testing costs and both parties would be likely to benefit from interconnection. In such circumstances the parties may choose to bear their own costs without the need for an exchange of charges.
- A6.4 In other circumstances such costs may be borne wholly or predominantly by BT, and so it may be appropriate for BT to make a charge for set-up and interoperability testing. If so, we would expect that any charges would be cost based.
- A6.5 We have therefore decided to provide guidance that BT's charges for these services will be presumed to be fair and reasonable provided it can demonstrate that its charges in aggregate are reasonably derived from the direct costs of provision of the applicable service plus an appropriate mark up for the recovery of common costs (e.g. general overheads) including an appropriate return on capital employed (where applicable).

## IPEX interconnect circuit charges (direct access)

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- A6.6 Where interconnection is provided at a BT exchange, we consider that the relevant costs are those relating to the interconnect circuits used to connect telecoms providers' equipment to BT's interconnect nodes. These are intra-building fibre circuits which are closely analogous to Openreach's Internal Cablelink Variant 1 service which provides fibre connectivity between telecoms providers' equipment in different locations within a BT exchange.
- A6.7 In the TAR 2026 Statement, we have imposed a cost-based charge control (CPI-0%) on Cablelink charges in the Wholesale Local Access (WLA) markets for the next market review period (2026-2031).<sup>11</sup>
- A6.8 In view of this, we consider that Internal Cablelink Variant 1 is a suitable benchmark against which to assess whether BT's charges are fair and reasonable. We have therefore decided

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<sup>11</sup> TAR Statement. [Volume 4](#), Table 5.2.

that BT's charges for IP interconnect circuits will be presumed to be fair and reasonable if, in aggregate, they do not exceed the relevant charge for Internal Cablelink Variant 1 in the WLA markets.

## **IPEX interconnect port charges (direct access)**

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A6.9 Our expectation is that fair and reasonable IP interconnect charges should not make any allowance for the interconnect node costs. This is because the price cap for WCT is a continuation (adjusted to CPI), of a level estimated by the 2017 WCT cost model, which incorporated the LRIC of the network components associated with interconnect nodes.<sup>12</sup> Therefore, we expect these charges to be zero as they currently are.

## **IPEX interconnect port charges (neutral access points and indirect access)**

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A6.10 It is unclear whether interconnection at neutral access points and indirect access gives rise to costs in addition to the interconnect node costs which, as discussed above, we consider to be adequately covered by WCT charges. To the extent there are material additional costs associated with these methods of interconnection, we expect that fair and reasonable charges for such interconnect services will in aggregate be reasonably derived from the direct costs of provision plus an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

A6.11 We expect that the equipment used to provide direct access at neutral access points is also used by BT to provide other services such as internet peering. We therefore expect the incremental costs associated with providing interconnect for WCT would be comparatively small, and that any mark-up for common/shared costs should reflect the size of this activity as a proportion of all activities and services supported by that equipment.

## **Accommodation, power and Cablelink charges**

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A6.12 Telecoms providers interconnecting with BT at BT exchanges require accommodation (and related services) in those exchanges to house their transmission equipment.

A6.13 In the TAR 2026 Statement, we have imposed measures to address the risk of excessive pricing of accommodation, power and Cablelink services in the WLA markets (BT's charges for accommodation and Cablelink are subject to charge controls and BT's charges for power are subject to a basis of charges obligation).<sup>13</sup> Our expectation is that BT's charges for accommodation, power, and Cablelink in connection with the provision of WCT will be fair and reasonable if they do not exceed BT's charges for the corresponding services provided in the WLA markets.

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<sup>12</sup> Specifically, the session border controller and associated aggregation layer, including interconnect node capacity provided for resilience purposes.

<sup>13</sup> TAR Statement. [Volume 4](#), Table 5.6.