

A3. Approach to obtaining and analysing information from providers

- A3.1 This annex explains our approach to obtaining and analysing service quality information from communications providers and Openreach for the purposes of our annual service quality report.
- A3.2 Ofcom requested data from providers for this report using our powers under section 136 and section 137A of the Communications Act 2003.
- a) Under section 136(1), we may require a communications provider to provide us with all such information as we consider necessary for the purpose of carrying out, with a view to publication and in the interests of the end-users of public electronic communications services, of comparative overviews of the quality of such services.¹
 - b) Under section 137A, we may require a communications provider to provide us with information to us for our publication, including information that we require the provider to produce, generate or obtain for that purpose in connection with our functions referred to in that section and in a way that is proportionate.
- A3.3 As providers have historically collected and processed information regarding faults and repairs in different ways, it was not possible for us to use our section 136 information gathering powers to obtain information that providers collect, as the resulting information would not have been comparable. Instead, we used our section 137A information gathering powers that required providers to collect and process information in a specified manner. This is the second year that such information has been collected and reported upon and we use the data for the faults and provisioning analysis. This year we have also used data collected through section 137A information gathering powers for missed appointments.
- A3.4 Fixed broadband and landline providers were sent section 137A notices. For the 2021 report, we have used data from the calendar year 2020.
- A3.5 On receiving responses to these information requests, we conducted our own analysis of providers' data to assure ourselves that it was comparable and also engaged bilaterally with providers to ensure we understood their data.
- A3.6 The metrics we have derived from information supplied by providers that we have published in this report on a provider-specific or aggregate basis are:

Customer service metrics (fixed and mobile services)

- i. Customer contacts with provider by channel [aggregate].
- ii. Overall average call waiting time [provider-specific].

¹ As well as prices of such services.

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- iii. The percentage of calls ended while the customer was queuing to speak to an advisor [provider-specific].
- iv. Complaints as proportion of subscribers [provider-specific].

Provisioning metrics (landline and fixed broadband services)

- v. Proportion of provisioning orders delivered by the agreed date [provider specific].
- vi. Average time taken to provide landline and/or a broadband service [provider-specific].
- vii. Average time to provide a service by provisioning event, New Service, Home Move, Changes to Service [provider-specific].
- viii. Average days to deliver a service, by technology [aggregate].

Faults metrics (landline and fixed broadband services)

- ix. Reported faults per 1,000 customers per month [provider-specific].
- x. Cause of fault by responsibility [aggregate]
- xi. Time to repair Total Loss of Service faults (median time and distribution of time) [provider-specific].
- xii. Time to repair Total Loss of Service faults when engineer was / was not required [aggregate].
- xiii. Proportion of re-contacts within 48 hours [provider-specific].

Missed appointment metrics (landline and fixed broadband services)

- xiv. The percentage of appointments missed (provisioning and repairs combined) [provider specific].

A3.7 In this annex, we set out how we have derived these metrics from the data supplied by providers. Unless otherwise specified, all metrics have been calculated based on data for the entire calendar year 2020.

In scope providers

A3.8 The threshold for providers to be included in the scope of our residential information request was that they had 1.5% share of the residential consumer broadband, landline or mobile pay-monthly markets throughout 2020 (this is the same criteria that we have used in our quarterly Telecoms and Pay TV reports which we have been publishing since 2011). The providers that were included were BT, BT Mobile, EE, iD Mobile, Lycamobile, O2, Plusnet, Post Office, Sky, TalkTalk, Tesco Mobile, Three, Virgin Media/Mobile and Vodafone. KCOM was also included as the universal service provider in Hull.

A3.9 In some cases, although providers were in scope of the report, they were not able to provide information in line with the definitions we had specified to obtain comparable data. Where we did not believe that a meaningful comparison could be made with an individual provider's data, we excluded them from our provider-specific analysis.

- A3.10 In some instances, while the information provided by a particular provider was not supplied on a sufficiently comparable basis to publish in a provider-specific form, we included it in our aggregate metrics if we believed this would contribute to giving a meaningful indication of cross-sector performance that would be useful to consumers.

Customer service metrics (fixed and mobile services)

Metric i): Contact channel used

- A3.11 We asked providers to specify the number of contacts by channel from prospective and existing customers (telephone, webchat, email/online contact form, letter, mobile application and other). Due to differences in the way each provider was able to report on usage of mobile apps these were excluded from the calculations.
- A3.12 We calculated the proportion of contacts that were made by phone across these providers by dividing the total number of phone contacts made to providers by the total number of contacts for all providers (excluding use of mobile apps). We used the same approach to calculate the proportion of contacts by email, webchat and letter.
- A3.13 Two providers were unable to split the number of written communications received (email vs letter) between their mobile and fixed services. For these providers we took the number of letters received across both fixed and mobile services and reapportioned them according to the total contacts made for both fixed and mobile. One provider was unable to split the number of written communications received (email vs letter). For this provider we took the ratio of letters to emails observed across all other providers and applied this split to their data before calculating the industry averages.

Metric ii): Overall average call waiting time

- A3.14 The overall average call waiting time is the overall mean time in seconds that customers spent in a call queue when they were waiting to get through to a call services agent on the contact system provided for new and existing residential fixed voice and fixed broadband customers, or for mobile customers. Where applicable, this includes calls made by those enquiring about or signing up to a new service.
- A3.15 This is calculated by dividing the total time that new or existing customers who spoke to a call services agent after making an inbound call spent in the call queue during the specified time period, by the total number of inbound calls answered by call services agents in that time period. Transfers² are treated as separate calls, with a separate call waiting time, and included in the metric, as they will involve a customer entering another call queue. Lycamobile was excluded from the mobile metrics, as they were unable to provide comparable data.
- A3.16 The average waiting time for fixed services and for mobile services are calculated by dividing the total time that new or existing customers who spoke to a call services agent

² A transfer describes when a customer is put through to an agent in a different department.

after making an inbound call spent in the call queue during the specified time period by the total number of inbound calls answered by call services agents in that time period across each sector as a whole (landline & broadband, mobile). We used a standard rounding approach, i.e. anything below .5 was rounded down to the nearest whole number and anything at or above .5 was rounded up.

Metric iii): The percentage of calls that ended while the customer was queuing to speak to an advisor

- A3.17 For this metric, we asked providers to supply the overall number of occasions where a call was abandoned while the customer was in a call queue waiting to speak to a call services agent for more than 30 seconds as a percentage of total occasions customers were waiting in a call queue for more than 30 seconds. The figures presented are those supplied by providers in accordance with definitions specified by Ofcom. The metric includes instances where the customer hung up and instances where they were cut off, for example due to a technical issue. Call transfers are treated as separate calls, and therefore impact the figures.
- A3.18 The average figure for fixed services and for mobile services are calculated by taking the overall number of occasions where a call ended while the customer was in a call queue waiting to speak to a call services agent as a percentage of total occasions customers were waiting in a call queue across each sector as a whole (landline & broadband, mobile). We used a standard rounding approach, i.e. anything below .5 was rounded down to the nearest whole number and anything at or above .5 was rounded up.
- A3.19 Lycamobile, O2, Tesco Mobile, Three and Virgin Mobile were excluded from the mobile metrics, as they were unable to exclude calls where the customer waited less than 30 seconds. TalkTalk and Virgin Media were excluded from the fixed line metrics for the same reason. Instead, where possible, we have provided information on whether these providers reported better or worse levels of call abandonment compared with 2019. As some providers have been excluded from the calculation of the industry average this year the result is not comparable with previous years.

Metric iv): Complaints as a proportion of subscribers

- A3.20 We calculate and publish the number of complaints we receive about providers as a proportion of their relevant subscriber base, to compare the performance of providers and to help ensure the data is more meaningful for consumers.
- A3.21 To calculate complaints per 100,000 subscribers, we use the quarterly residential subscriber totals that telecoms providers report to Ofcom.
- A3.22 In instances where the difference between providers' performance in terms of complaints per 100,000 subscribers is less than one, we consider their performances as equivalent.
- A3.23 As an additional data point against which to measure the performance of each provider, we include an industry average line of complaints per 100,000 customers. This average shows the total number of complaints per service divided by the total number of

subscribers to all providers included in the published data for each service, divided by 100,000. We do not incorporate complaints about or subscribers to smaller providers with a market share of lower than 1.5%.

Provisioning metrics (landline and fixed broadband services)

A3.24 To publish a comparative overview of the experience of obtaining a new landline or broadband service, we asked providers to supply data on every order for residential fixed voice and/or fixed broadband service that was completed in 2020. Orders that were placed but subsequently cancelled by the provider or customer were excluded.

A3.25 This is the first year that we have used s137A data for the whole period (1 January 2020 to 31 December 2020) for all residential fixed voice and/or fixed broadband service providers.

A3.26 For each order, we asked providers to supply the following information:

- The date on which the customer placed an order.
- “Date 1”: the first committed date the provider agreed with the customer that the service would be provided on, or, if the customer requests a change to Date 1 or Date 2, the date subsequently agreed with the customer.
- “Date 2”: if the provider requests a change to the date on which it had agreed that the ordered service would be delivered and working on, then Date 2 will be the new date that the provider agrees with the customer that the service will be provided on³.
- Counters for how many times the provider and/or the customer changed the activation date.
- “Customer Service Activation Date”: The date on which the provider considers the service to be delivered and working.
- The type of order, for example, whether it was a new provide or a change to existing service (regrade) or if the customer had moved home and stayed with the same provider.
- The type of service being provided (landline, broadband or both).
- The type of product being provided (e.g. ADSL, fibre-to-the-cabinet, full fibre, cable).
- Whether automatic compensation was paid, and if not, what exclusion was used.
- The postcode for the address at which the service was provided.

A3.27 In analysing the data, we excluded:

- any orders where the service activation date preceded the date the order was placed;
- any orders where Date 1 or Date 2 preceded the date the order was placed; and
- any orders that were not completed in 2020.

A3.28 The orders that were removed accounted for less than 1% of the overall dataset.

A3.29 All relevant metrics calculated using this provisioning data are measured in calendar days, not working days and we have rounded up to the nearest full day.

³ If, on the day the service is due to be provided, the CP requests a further date change, this should not be recorded as a new Date 2.

Metric v): Proportion of provisioning orders delivered by the agreed date

A3.30 Using Date 1 and Date 2 we calculated the proportion of times that these dates did not match with the customer service activation date at an industry and provider level.

Metric vi): Average time taken to provide landline and or a broadband service [provider-specific]

A3.31 To calculate this metric, we calculated the median average difference between (a) the date the order was placed and (b) the date that the service was activated

Metric vii): Average time taken to provide landline and broadband services, by provisioning event

A3.32 To calculate this metric, we calculated the median average difference between (a) the date the order was placed and (b) the date that the service was activated. This was calculated separately across providers.

A3.33 This was further segmented by using the “type of order field”, to provide a view of volumes and average days based on the type of provisioning event.

Metric ix) Average time taken to provide landline and broadband services by technology delivered

A3.34 To calculate this metric, we calculated the median average difference between (a) the date the order was placed and (b) the date that the service was activated.

A3.35 This was further segmented by using the “technology of order field”, to provide a view of the type of technology for the provisioning event. To provide a more consumer friendly approach, we have reflected the language used in consumer marketing for services to a new customer (ADSL, FTTC, full fibre, cable) when reporting on 2020 data.

Faults metrics (landline and fixed broadband services)

A3.36 We asked providers to submit data on both the volume of faults reported to them by customers and the time taken for their resolution. In this section we describe the specific data that was requested, along with the definitions used to ensure that information was consistent and comparable between providers.

Metric x): Reported faults per 1000 customers per month

A3.37 We asked providers to submit data on all faults that were registered to them by a customer using any contact means made available for this purpose (such as telephone or email). A ‘fault’ relates to the functionality of the service taken by the customer, and specifically to where the performance of this functionality is considered by the customer to be below their expectations. It would not include general support enquires, such as advice on setting up a service or understanding features.

A3.38 To compare the frequency of faults between providers, we asked providers to submit the number of faults that were, on resolution/closure, considered to have been in the customer domain (such as faulty in-home wiring).

Metric xi): Cause of fault by responsibility

A3.39 Using the data outlined for Metric x), we calculated the proportion of faults which lay in the customer domain as a proportion of all faults. Plusnet was unable to provide this information and is not included in the industry average for this metric.

Metric xii) to xiv): Total Loss of Service Faults

A3.40 This section applies to the following metrics

xii) Time to repair Total Loss of Service faults (median time and distribution of time).

xiii) Time to repair Total Loss of Service faults when engineer was / was not required.

xiv) Time to repair Total Loss of Service fault by service type.

A3.41 Please see notes under the charts for any providers excluded from the analysis.

A3.42 To ensure a consistent comparison of fault repair times, providers were asked to submit fault resolution information relating to a subset of all faults: those in which there had been a total loss of service (TLOS). For voice services, this included failures such as the inability to call or be called, or in the event that a call can be made, one of the parties cannot hear the other. For Broadband services, TLOS means not being able to access the public internet.

A3.43 As the full extent of a fault may not be established until a fault has been investigated, faults are not classified as TLOS until after the fault has been resolved and categorised correctly. The onus is on the provider rather than the consumer to determine whether a fault has resulted in a total loss of service.

A3.44 Intermittent faults or degradation in service are not classified as TLOS. Neither are issues resulting from provisioning of service or associated porting of numbers (e.g. for house moves).

A3.45 The time taken to resolve the fault is critically dependent on the accurate recording of the opening and closure of faults. The opening of a fault is when the customer first contacts the provider to report an issue (so, for example, it is not when the issue is escalated to other departments or organisations for resolution). Fault closure is defined as when the provider considers the fault resolved. If the customer re-contacts the CP regarding the same fault within 48 hours, then the fault remains open until further action is taken, and this is recorded against the fault.

A3.46 For each Total Loss of Service fault we ask providers to submit the following information:

- Date that the fault ultimately determined to be total loss of service, was first reported by the customer.
- Service (Voice and/or broadband) and service detail (ADSL, FTTP etc).
- Postcode.

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- Whether an engineer visit was required (even if the engineer was not required to attend the premises).
 - Outcome (for example, whether the fault was found to be the responsibility of the provider).
 - Whether automatic compensation was paid, and if not, what exclusion was used.
 - Whether the customer re-contacted the provider at least once within 48 hours following initial closure.
 - Final date of fault closure.
- A3.47 The calculation of repair times is in days (date of fault closure from the date of fault reporting). When providers submit times as well as dates, we disregard the time. In that way a fault reported late one evening and fixed early the next morning would be recorded as resolved within 1 day. This is to be consistent with those providers that simply report dates for fault reporting/closure.
- A3.48 To ensure consistency, we did not require providers to receive positive confirmation from the customer that a fault had been resolved and specified that they must not keep the fault 'open' for arbitrary periods of time. Providers could continue their own practices regarding customer engagement and contact, but for reporting purposes providers should not have included arbitrarily added dates or extra time to the closure date to allow a window for monitoring or feedback purposes.
- A3.49 Additional information was gathered, such as details of any automatic compensation payments, to aid corroboration and quality auditing purposes.
- A3.50 The definitions and information that are used for service quality activity have been established to ensure that consistent and comparable data can be obtained. As such they may not exactly align with the definitions and measures used for automatic compensation, so direct comparisons cannot be made.
- A3.51 For each of these Total Loss of Service metrics the report uses the median rather than the mean as the measure of the average to reduce the impact of outliers in the data. In each table of supplier level data the Industry Average is calculated using the data provided by the suppliers included in that table.

Metric xvi): Proportion of re-contacts within 48 hours

- A3.52 As noted above, where there was a Total Loss of Service the providers reported to us whether or not the fault, once repaired, was reopened by the customer within 48 hours. This metric was calculated using the relevant flag and dividing the total number of incidents in which there was at least one recontact by the total number of incidents.

Missed appointments (landline and fixed broadband services)

Metric xvii): The percentage of appointments missed, provisioning and repairs combined

A3.53 Ofcom requested that each fixed provider supply the total number of repair and provisioning appointments that were booked, the total number that were missed, and the total number that were missed *due to a customer* for each month in 2020. Key definitions were as follows:

- a) Provisioning appointments were defined as appointments for the provision of a residential fixed voice and/or fixed broadband service that has been made with a customer, and that requires a visit to the customer's premises by an engineer or technician.⁴
- b) Repair appointments were defined as appointments for fault repair to a residential fixed voice and/or fixed broadband service that has been made with a customer, and that requires a visit to the customer's premises by an engineer or technician.
- c) A 'missed appointment' was defined as an instance where an appointment is not kept, even if the appointment takes place on the same day outside of the agreed slot with the customer. If an appointment was rearranged prior to the calendar day on which it was originally agreed to take place, we specified that it should not be reported as 'missed' for our purposes. BT was unable to provide complete data on its level of missed appointments so is not reported or included in the industry average for this metric.

Automatic compensation (landline and fixed broadband services)

A3.54 Ofcom requested information on the automatic compensation scheme under section 135 of the Communications Act 2003 from BT, Hyperoptic, Sky, TalkTalk, Utility Warehouse, Virgin Media and Zen Internet. The data requested included information regarding the amount of automatic compensation paid and the number of automatic compensation payments made in 2020, and a summary of this information is included in the report.

⁴ These are referred to as installation appointments in the report.