This is the first annual service quality report to be published by Ofcom. It shows the quality of service experienced by customers of the UK’s largest landline, broadband and mobile providers in 2016. The information has been collected through our own research and directly from providers.

The report follows on from the initial conclusions of Ofcom’s Digital Communications Review, published in February 2016, which found that improvements were needed in quality of service across the telecoms industry. We therefore committed to publish an annual report that would enable consumers to compare providers’ service quality.

We will publish service quality information at least annually to update consumers on how providers are performing, and we will consider more frequent updates where appropriate.
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Comparing Service Quality: a summary

People need communications services they can rely on
Phone and internet services are central to our home and work lives. They keep us entertained, help us stay in touch with friends and family and make day-to-day tasks easier. But when they go wrong it can be inconvenient, disruptive and expensive.

This means it’s vital that communications providers deliver reliable services and proper support when things aren’t working. Drawing on information from consumers and industry, this report looks at how well the larger providers did in 2016.

Most customers are satisfied with their services overall
When asked, most internet and phone users say they are satisfied with their service. Mobile customers are more satisfied than broadband and landline customers.

But many still experience poor service, especially with their broadband
More than one in ten broadband users had a reason to complain about their service in 2016. The most common reason was the service not performing as expected, e.g. because of a slow or patchy connection. Around one in twenty mobile customers had cause for complaint, and the most common reasons were signal problems and billing.
Quality of service can vary by provider
Many aspects of service, from dealing with customer calls through to installations and repairs, differ by provider. We think people should be able to take this into account when they choose a new service. We’re publishing information to help people understand what is available and what to expect.

Broadband and landline services
Faster broadband packages should deliver a better experience
Many customers using standard ‘up to 17Mb’ broadband receive speeds that may be too slow for their day-to-day activities. Superfast products are significantly faster on average and upgrading to these, where available, should improve the customer’s experience.

But the speed of some ‘superfast’ services varies across the day
Although Virgin Media customers get faster speeds on average than those with other superfast packages, a small minority suffer severe slowdowns at peak times. Our research into home broadband speeds shows that, in November 2016, 9% of customers on Virgin Media’s ‘up to 50Mb’ package and 6% on its ‘up to 100Mb’ package received average speeds of less than 10Mbit/s between 8 and 10pm.

Service problems can arise in the home and on the network
Many broadband and landline service problems arise in the home. If diagnosed correctly, these can often be resolved quickly by providers through effective customer support. Other service problems involve a fault on the network and may need to be dealt with by an engineer.

For customers on the network operated by Openreach (the part of BT responsible for repairs and installations), these network faults occur around once every nine years for lines carrying standard broadband, once every six to seven years for lines carrying superfast broadband and once every twelve years for landline-only services.¹

<table>
<thead>
<tr>
<th>Type</th>
<th>Technology</th>
<th>Advertised speeds (Mbit/s)</th>
<th>8-10pm average speed (Mbit/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>ADSL2+ copper line</td>
<td>up to 17</td>
<td>9.8</td>
</tr>
<tr>
<td>Superfast</td>
<td>Fibre-to-the-cabinet</td>
<td>up to 38</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>up to 52</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>up to 76</td>
<td>60</td>
</tr>
<tr>
<td>Cable</td>
<td>(Virgin Media only)</td>
<td>up to 50</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>up to 100</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>up to 200</td>
<td>150</td>
</tr>
</tbody>
</table>

¹ Ofcom, Quality of Service for WLR, MPF and GEA, Consultation on proposed quality of services remedies, March 2017, p. 37: https://www.ofcom.org.uk/__data/assets/pdf_file/0033/99645/QoS-WLR-MPF-GEA.pdf
Providers can improve the experience of repairs

When a fault is reported, the provider must make a diagnosis and decide what action to take. If providers using Openreach identify a network fault, they rely on Openreach engineers to fix the problem. For customers of these providers, how quickly a network fault is fixed depends in part on when the issue is referred to Openreach and the level of service the provider has paid for from Openreach. Although Openreach does not always meet its targets, being on a better service level will generally result in a faster fix.

In 2016 most providers that rely on Openreach paid for repairs within two working days (the lowest service level) for most of their customers. At the start of 2016, Sky and TalkTalk purchased Openreach’s next-working-day service maintenance level for most of their customers. During the year, both providers decided to downgrade that service level to Openreach’s two-working-day repair service level. In contrast, in summer 2016 BT upgraded most of its customers on to Openreach’s next-working-day service level.

Providers can make a real difference to how new services are installed

Some types of installations are quicker than others. However, providers’ processes, such as the time it takes to dispatch a router, can affect how quickly new services are delivered. Providers are also responsible for managing any delays and the impacts these have on customers. Unexpected delays affected around one in ten orders in 2016, and many other customers had their original install date postponed at least once.

Three per cent of appointments for engineer visits are missed

When customers waited in for a service to be installed or repaired in 2016, around 3% of appointments were missed. Openreach significantly reduced the proportion of appointments its engineers missed during 2016, from 6% in January to 2% in December.² Less

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² In relation to the residential customers of the providers we are reporting on. Ofcom analysis of retail provider data.
than 1% of appointments with Virgin Media engineers did not take place on the agreed day (though some on-the-day appointments took place before or after the agreed slot).

Most providers rely on Openreach engineers to install new services and repair network faults

Except for Virgin Media, the UK’s largest landline and broadband providers rely on Openreach to install and maintain their connections. Openreach’s performance therefore affects the experience of many customers, and it is subject to minimum standards set by Ofcom. Although it has generally met these standards, we are consulting on introducing new binding targets for repairs and installations, as it is our view that Openreach could do better in these areas.³

Many customers are waiting too long to speak to their provider on the phone

Customer service in telecoms appears to trail behind other sectors; for example, it came bottom of the Institute of Customer Service’s Satisfaction Index for the second year in a row in 2016.⁴

On average, broadband and landline customers waited around three minutes to speak to an advisor on the phone in 2016. Calls to technical support took on average two and a half minutes longer to answer than sales calls.

Satisfaction with how complaints are handled is low

Our research found that just 56% of those complaining about their broadband service were satisfied with how their issue was handled. Only three in five broadband customers were satisfied that their provider showed a willingness to help resolve the issue, and just two in five (43%) were satisfied with the ease of getting through to their provider on the phone.

³ Quality of Service for WLR, MPF and GEA
Mobile services

Coverage is the most important factor in a consumer’s mobile experience

Coverage levels vary by operator, and can affect how satisfied people are with their service. Poor coverage is a particular problem for people in rural areas, where 19% were dissatisfied with their reception, compared to just 6% in urban areas.

But where there is coverage, our research indicates that voice call quality is typically good and the vast majority of calls made are successful. Similarly, when consumers with 4G are able to make a data connection, websites usually load successfully within seconds.

Two in five mobile data connections made by 4G customers were to 3G or 2G networks

The quality of experience for data services is markedly better over 4G networks. However, our research found that when those with 4G contracts were using mobile data, 35% of the time they did not have a 4G data connection but were on 3G or 2G.

Ofcom provides a checker tool to help consumers make informed decisions about which operator’s coverage is the most likely to meet their needs.

Customer service varies significantly between mobile providers

While most mobile providers answered calls in less than two minutes, on average, when customers went on to make a complaint only 57% said they were satisfied overall with how their complaint had been handled.

There were important differences between providers. Around three-quarters of Tesco Mobile customers who made a complaint were satisfied with how their complaint was handled, while less than half of Vodafone customers who complained were satisfied.

This is reflected in the numbers of complaints received by Ofcom in 2016, with Vodafone customers making the most complaints per 100,000 subscribers (92) and Tesco Mobile customers making the fewest (3).
This report is just one part of Ofcom’s plan to improve service quality

By publishing this report, we hope to equip consumers with information to help them make more informed decisions and to give providers an additional incentive to improve their overall service quality. However, we recognise there are limits to what can be achieved by simply making more information available. This report is one element of Ofcom’s plan to improve service quality, which also includes:

- introducing automatic compensation for consumers affected by poor service quality. We have published a consultation document inviting stakeholder comments by 5 June 2017;
- setting tougher quality of service standards for Openreach, and establishing new ones where appropriate;
- setting wholesale price controls that strengthen Openreach’s incentives to make long-term investments in service quality;
- undertaking a programme of work to improve mobile coverage, including considering how new coverage obligations can be used to improve availability and quality of coverage; and
- strengthening the rules on complaints handling as part of our current review of the General Conditions.

Let us know what you think about this report, so we can improve our future reports

We have not been able to publish some information that we believe would be useful for consumers in this first report, because providers do not collect it in a way that allows for meaningful comparison. In future, we expect to be able to use new powers conferred by the Digital Economy Bill to ensure that providers collect information in a way that will allow more aspects of their performance to be directly compared.

We will monitor how the data we have published is used by consumers to help us understand how we can make it even more relevant and accessible. We welcome comments on this report and suggestions for information we should include in future reports. These should be sent to comparingservicequality@ofcom.org.uk
### Broadband – overview of key data (2016)

<table>
<thead>
<tr>
<th>Ofcom metrics</th>
<th>Overall Average</th>
<th>BT</th>
<th>EE</th>
<th>Plusnet</th>
<th>Sky</th>
<th>TalkTalk</th>
<th>Virgin Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ofcom complaints per 100,000 subscribers</td>
<td>![][1]</td>
<td>75</td>
<td>127</td>
<td>108</td>
<td>113</td>
<td>26</td>
<td>98</td>
</tr>
</tbody>
</table>

**Consumer research metrics** *(figures marked in **bold purple** are statistically better than average, those **bold red** statistically worse)*

<table>
<thead>
<tr>
<th></th>
<th>BT</th>
<th>EE</th>
<th>Plusnet</th>
<th>Sky</th>
<th>TalkTalk</th>
<th>Virgin Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>87%</td>
<td>84%</td>
<td>-</td>
<td>-</td>
<td>88%</td>
<td>83%</td>
</tr>
<tr>
<td>Satisfaction with reliability</td>
<td>86%</td>
<td>83%</td>
<td>-</td>
<td>-</td>
<td>88%</td>
<td>83%</td>
</tr>
<tr>
<td>Customers with a reason to complain</td>
<td>13%</td>
<td>13%</td>
<td>12%</td>
<td>8%</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>Satisfaction with complaints handling</td>
<td>56%</td>
<td>56%</td>
<td>53%</td>
<td>-</td>
<td>61%</td>
<td>51%</td>
</tr>
</tbody>
</table>

**Industry metrics** *(landline and broadband)*

<table>
<thead>
<tr>
<th></th>
<th>02:51</th>
<th>03:59</th>
<th>00:52</th>
<th>07:27</th>
<th>01:42</th>
<th>00:47</th>
<th>01:39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average call waiting time <em>(mm:ss)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers hanging up before speaking to someone</td>
<td>10%</td>
<td>13%</td>
<td>4%</td>
<td>21%</td>
<td>7%</td>
<td>4%</td>
<td>7%</td>
</tr>
</tbody>
</table>

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For definitions and methodology see relevant report section and annexes 1-3. Satisfaction/satisfaction with reliability reported as of June 2016. Customers with a reason to complain is percentage of those who reported in December 2016 to have had a reason to complain in the last 12 months. Satisfaction with complaints handling refers to proportion of customers who reported in December 2016 having made a complaint in the last six months who reported being satisfied overall with how their complaint was handled. ‘-’ indicates a sufficient sample was not obtained through consumer research to be able to publish a metric for that particular provider. Metrics for KCOM (which operates in the Hull and East Yorkshire areas) are not included in this summary but covered later in the report. Averages for industry metrics include KCOM’s performance.
For definitions and methodology see relevant report section and annexes 1-3. Satisfaction/satisfaction with reliability reported as of June 2016. Customers with a reason to complain is percentage of those who reported in December 2016 to have had a reason to complain in the last 12 months. Satisfaction with complaints handling refers to proportion of customers who reported in December 2016 having made a complaint in the last six months who reported being satisfied overall with how their complaint was handled. ‘*’ indicates a sufficient sample was not obtained through consumer research to be able to publish a metric for that particular provider. Metrics for KCOM (which operates in the Hull and East Yorkshire areas) are not included in this summary but covered later in the report. Averages for industry metrics include KCOM’s performance.
For definitions and methodology see relevant report section and annexes 1-3. Satisfaction/satisfaction with reception reported as of June 2016. Customers with a reason to complain is percentage of those who reported in December 2016 to have had a reason to complain in the last 12 months. Satisfaction with complaints handling refers to proportion of customers who reported in December 2016 having made a complaint in the last six months who reported being satisfied overall with how their complaint was handled. '-' indicates information was not supplied in line with Ofcom requirements for industry metric.

### Mobile – overview of key data (2016)

<table>
<thead>
<tr>
<th>Ofcom metrics</th>
<th>Overall Average</th>
<th>EE</th>
<th>O2</th>
<th>Tesco Mobile</th>
<th>Three</th>
<th>Virgin Mobile</th>
<th>Vodafone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ofcom complaints per 100,000 subscribers</td>
<td>35</td>
<td>18</td>
<td>12</td>
<td>3</td>
<td>14</td>
<td>24</td>
<td>92</td>
</tr>
</tbody>
</table>

### Consumer research metrics

(figures marked in bold purple are statistically better than average, those bold red statistically worse)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Overall Average</th>
<th>EE</th>
<th>O2</th>
<th>Tesco Mobile</th>
<th>Three</th>
<th>Virgin Mobile</th>
<th>Vodafone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>92%</td>
<td>92%</td>
<td>93%</td>
<td>96%</td>
<td>89%</td>
<td>94%</td>
<td>89%</td>
</tr>
<tr>
<td>Satisfaction with reception</td>
<td>86%</td>
<td>85%</td>
<td>86%</td>
<td>91%</td>
<td>80%</td>
<td>87%</td>
<td>86%</td>
</tr>
<tr>
<td>Customers with a reason to complain</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Satisfaction with complaints handling</td>
<td>57%</td>
<td>57%</td>
<td>60%</td>
<td>74%</td>
<td>60%</td>
<td>60%</td>
<td>46%</td>
</tr>
</tbody>
</table>

### Industry metrics (landline and broadband)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Overall Average</th>
<th>EE</th>
<th>O2</th>
<th>Tesco Mobile</th>
<th>Three</th>
<th>Virgin Mobile</th>
<th>Vodafone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average call waiting time (mm:ss)</td>
<td>01:00</td>
<td>00:35</td>
<td>02:03</td>
<td>00:30</td>
<td>01:10</td>
<td>00:38</td>
<td>01:04</td>
</tr>
<tr>
<td>Customers hanging up before speaking to someone</td>
<td>6%</td>
<td>3%</td>
<td>8%</td>
<td>-</td>
<td>6%</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Service quality and the consumer experience

In the UK, we are relying on communications services more and more to connect with friends and family, for our work, and to access essential services. This is only likely to increase as new kinds of connected technologies appear.

As people come to depend more on their communications services, the consequences when they go wrong become more serious. Two-thirds of households say they would struggle to function without access to their broadband or mobile services.\(^5\) If these services fail they can affect day-to-day family life, disrupt work or education, or cause people to feel isolated. Some say the disruption and inconvenience caused can feel on a par with a power cut or loss of water supply.\(^6\)

Our research has indicated that like electricity and water, consumers expect their landline, broadband and mobile connections to be ‘always on’.\(^7\) Unlike these utilities – which are typically either available or unavailable – consumers also want their communications services to perform consistently at an expected level, whether that’s sufficiently fast broadband or dependably clear and uninterrupted calls.

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The quotations on this page are also from this research.

\(^7\) *Quality of service in telecoms*, p. 13 and 18
When a service fails, or underperforms, consumers generally turn to their provider for support. The ease of contacting customer services, and the speed and effectiveness with which issues are handled, are vital to a good consumer experience.

To reflect consumer experience, _Comparing Service Quality_ covers both service reliability and performance, and how effectively providers support consumers when they need assistance:

**What is ‘Service Quality’?**

**Reliability and performance:** *Does my service do what it should, consistently?*
- How the service performs against expectations/promises
- How often problems occur, and for how long

**Customer service:** *Does my provider give me the assistance I need?*
- How quickly and effectively new services are provided
- How quickly problems are resolved
- How helpful customer services are when contacted, including resolving complaints

**Promoting better service through transparency**

In the initial conclusions of the _Digital Communications Review_ in February 2016, we identified a need for service quality to improve across the telecoms sector. While most people were satisfied with the service they received, the proportion with a reason to complain had grown. Those responding to our consultation highlighted slow repairs and installations, missed appointments and poor customer service, among other issues, as areas of concern.\(^8\)

To address this, we set out a strategy to achieve a step-change in service quality. We said we would publish service quality performance data on providers, and look to introduce automatic compensation for consumers and small businesses when things went wrong. We also said we would introduce tough minimum standards for Openreach, with rigorous enforcement and fines for underperformance.

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Improvements in information alone cannot be expected to deliver the step-change required in service quality. However, Ofcom considers that there is significant value in drawing attention to differences in provider performance, as we do through our quarterly complaints publications.

At present, there is limited information available for consumers to consider the service quality of different providers. Some providers publish performance measures, but usually these are not visible at the point of sale, and cannot be used for comparison with other providers. Some third parties publish survey research on customer satisfaction with communications services, or other commentary on providers’ performance, but these organisations cannot require providers to supply their own information.

At present, consumers normally choose their communications service based on the promise made for the product - for example, its advertised speed, capacity or coverage - and its price. Service quality is not always considered, which is compounded by a lack of clear, comparable information. It is often not until they encounter a problem with the service that consumers begin to consider service quality.

In our consultation on automatic compensation, we recognise that certain features of the market may be preventing the market (and competition) from operating effectively in relation to quality of service, including the limited availability of information. By providing clear and accessible information on how providers differ on service quality, we intend to help consumers understand what is available, so that they can use this information to make informed choices. In addition, publicly-available information on comparative service quality should help improve providers’ incentive to raise their quality of service.

To make the information more accessible, we have also made it available through ‘at-a-glance’ overviews at the front of this document and on our website, as well as an interactive comparison tool, to allow consumers to view provider performance on the issue that matters most to them.

We will monitor how the information is used over the coming months and develop our future reporting so that it is as helpful and accessible as possible to consumers. We invite views on the

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9 Quality of service in telecoms, p. 4
10 The Automatic Compensation consultation also identified that behaviour biases, switching barriers and difficulties in claiming compensation mean that not all consumers will necessarily benefit from increased transparency alone. This report is therefore just one element of our strategy for improving service quality. See Ofcom, Automatic compensation, Protecting customers from quality of services problems, March 2017, pp. 26-31: https://www.ofcom.org.uk/__data/assets/pdf_file/0030/98706/automatic-compensation-consultation.pdf
contents of this first report. We discuss how we might develop our reporting in future in the final section of this report.

**Scope of the report**

This first report focuses on the UK’s largest providers of fixed and mobile communications services, as well as KCOM, which is the largest provider in the Hull area. This provides an overview of the current experience of the vast majority of households and many of the UK’s small businesses. However, there are also many other providers available to UK consumers, some of which may offer higher service quality. In future, we will look to include other, smaller providers’ performance, where proportionate.

The report covers service quality of landline telephone, fixed broadband, and mobile voice and data services. Pay-TV services and postal services are not included.

The information for this report has been drawn from a range of sources including consumer research commissioned by Ofcom, complaints made to Ofcom and information requested from communications providers. These are set out in the table below and described in more detail in annexes 1-3.

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**Providers covered in this report**

**Landline and broadband**
- BT
- EE
- Plusnet
- Post Office
- KCOM (Hull & East Yorkshire only)
- Sky
- TalkTalk
- Virgin Media

**Mobile**
- EE
- O2
- Tesco Mobile
- Three
- Virgin Mobile
- Vodafone

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11 Annex 1 covers our use of information obtained from providers. Annex 2 explains the main sources of consumer research we have drawn on for this report. Annex 3 sets out our methodology for gathering information using Ofcom’s mobile research app.
Information sources for Comparing Service Quality

<table>
<thead>
<tr>
<th>Source</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-scope communications providers</td>
<td>Landline and broadband installation times, missed appointments, customer service performance</td>
</tr>
<tr>
<td>Ofcom’s SamKnows panel</td>
<td>Home broadband speeds</td>
</tr>
<tr>
<td>Ofcom’s mobile research app</td>
<td>Measuring customer experience of using mobile services, data service availability, calls dropped due to lack of service, Wi-Fi vs mobile</td>
</tr>
<tr>
<td>Ofcom’s Smartphone Cities research</td>
<td>Mobile voice and data performance in UK cities</td>
</tr>
<tr>
<td>Survey research by Ofcom</td>
<td>Consumer satisfaction with communications services; consumer reasons to complain about their service; experience of complaint handling and resolution.</td>
</tr>
<tr>
<td>Complaints made to Ofcom</td>
<td>Complaints per 100,000 subscribers</td>
</tr>
</tbody>
</table>

Not all the providers we are reporting on are included in every metric in this report. In relation to our consumer research, this is because the sample of customers we obtained for some of the smaller in-scope providers was not large enough to provide a reliable indication of performance. In relation to metrics based on industry-supplied information, this is because certain providers were unable to supply information in line with our requirements.

The comparisons between provider service quality made in this report focus on services for residential customers. While we address the experience of small businesses (see page 85 onwards), we have not published a comparison of services marketed specifically to businesses. This is because the nature and range of services currently available, including the fact many businesses use bespoke services, has precluded us from gathering comparable information on these services for this first report.

However, many smaller businesses use residential or equivalent services, and the comparisons of these services in this report will be relevant to those businesses. Ofcom is also currently consulting on requiring providers to supply better information to small businesses about their service quality, including whether they are entitled to compensation, and how much, when problems occur.¹²

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¹² *Automatic Compensation, Protecting consumers from quality of service problems*, section 11
Legal framework

Our functions

In preparing and publishing *Comparing Service Quality*, we have carried out a number of our statutory functions.

Under Section 136(1) of the Communications Act 2003 (“the Act”) we may require providers of electronic communications networks and electronic communications services to provide us with all such information as we consider necessary for the purpose set out in section 136(2). That purpose is the carrying out, with a view to publication and in the interests of the end-users of public electronic communications services, such as providers’ customers, of comparative overviews of the quality of such services.\(^{13}\)

Under Section 26 of the Act, we must arrange for the publication of such information and advice about matters in relation to which we have functions, as it appears to us to be appropriate to make available to the persons in section 26(2). These persons include providers’ customers.

Under Section 14 of the Act, we have a broad research function that we must carry out. This includes, among other things, an obligation to carry out research on:

- the experiences of consumers, including providers’ customers, in relation to the manner in which electronic communications networks and electronic communications services are provided and associated facilities made available;
- the experiences of such consumers in relation to the handling by providers and by persons making such facilities available, of complaints made to them by such consumers;
- the interests and experiences of such consumers in relation to other matters that are incidental to, or are otherwise connected with, their experiences of the provision of electronic communications networks and electronic communications services or of the availability of associated facilities.

Under Section 15 of the Act, we have a duty not only to publish the results of research carried out under Section 14, but also a duty to consider and, to such extent as we think fit, to take account of the results of that research in the carrying out of our functions.

\(^{13}\) As well as prices of such services.
Our statutory duties

When determining what appears to us to be the most appropriate way to carry out our relevant functions, for example how to carry out the comparative overview under Section 136 of the Act in a manner that is in the interests of end-users, we have had regard to the fulfilment of our statutory duties under the Act. In particular, Section 3(1) of the Act sets out our principal duty which is, in carrying out our functions:

- to further the interests of citizens in relation to communications matters; and
- to further the interests of consumers in the relevant markets, where appropriate by promoting competition.

We have also considered, among other things, the requirements in Section 3(2) of the Act to secure the availability throughout the UK of a wide range of electronic communications services, and we have had regard to the matters mentioned in Section 3(4) of the Act that appeared to us to be most relevant, specifically:

- the desirability of promoting competition in relevant markets;
- the desirability of encouraging investment and innovation in relevant markets;
- the desirability of encouraging the availability and use of high speed data transfer services throughout the United Kingdom;
- the needs of persons with disabilities, of the elderly and of those on low incomes;
- the opinions of consumers in relevant markets and of members of the general public;
- the different interests of persons in the different parts of the United Kingdom, of the different ethnic communities within the United Kingdom and of persons living in rural and in urban areas.

In line with Section 3(3) of the Act, we have had regard to the principles under which our regulatory activity, which includes in this instance the publishing of a comparative overview of the quality of providers’ communications services, should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed.

In preparing and publishing Comparing Service Quality, we have also ensured we have acted in accordance with the six European Community requirements for regulation. These should be read in
the light of the policy objectives and regulatory principles, as set out in Article 8 of the Framework Directive. Those relevant to this report include:

- promoting competition in the provision of electronic communications networks and services by ensuring users derive maximum benefit in terms of choice, price and quality;
- promoting the interests of citizens by promoting the provision of clear information.

**Use of communications providers’ data**

As mentioned above, Ofcom has gathered information for *Comparing Service Quality* from communications providers using our information powers under Section 136 of the Communications Act. Under these powers Ofcom can only require providers to supply information which they already possess; we cannot specify that providers collect new information.

In summer 2016, we began discussions with providers about the service quality information they routinely collect and which we could obtain to carry out a comparative overview. We requested information on the relevant indicators that providers gather for their business purposes. Based on responses to this request, and input from providers in a series of bilateral and round-table meetings, we formulated an information request designed to obtain information which providers already possessed and which could be used to make meaningful like-for-like comparisons between them.

On receiving this information, Ofcom has taken steps to verify the accuracy and comparability of the information provided in response to this request, including, where possible, cross-checking it against information from other sources, and requesting further clarification from providers on how the information supplied has been derived.

For the information that we have included in our comparative overview, we have conducted our own analysis of provider data, in order to derive comparable metrics. We have shared our methodology for this analysis with all providers from whom we requested the information. We also summarise our approach at annex 1 to this report.

For some of the information requested from providers, we have not, for this report, been able to obtain sufficient confidence that publishing it would provide a fair and meaningful comparison of provider service quality.

We expect to receive new information-gathering powers under the Government’s Digital Economy Bill, which should assist in gathering comparable information for future reports.
Overview

Eighty-one per cent of UK adults had a broadband service at home in 2016.\textsuperscript{14} For many of these people the internet has a central role in home life, used for everything from grocery shopping and banking to children’s homework and family entertainment. Two-thirds of households with broadband say they would “struggle to function” without it for any length of time.\textsuperscript{15}

Eighty-four per cent of UK adults had a landline phone service at home in 2016.\textsuperscript{16} For younger and family households, this is typically an important back-up, used when other services go down.\textsuperscript{17} For some people who do not own a mobile phone, particularly elderly consumers, their landline may be their principal means of communicating with friends and family, and without it they would feel isolated. Twenty-seven per cent of households with a landline say they would struggle to function without it for any length of time.\textsuperscript{18}

This section explores the service quality experienced by consumers using landline and broadband services in 2016, including:

- **Overall satisfaction** - how satisfied customers were with their service, and whether they had a reason to complain.

\textsuperscript{16} Technology Tracker H2 2016, table 15
\textsuperscript{18} Quality of service in telecoms, p. 13
- **Getting a new service** - how long it took for new services to be provided, and how often this was on time, as promised.

- **Service performance** - whether services were available and working as they should, and how quickly they were put right when something went wrong.

- **Customer service** - the experience of contacting providers and how effectively they resolved complaints.

While the focus of this section is on services marketed to households, this information will be relevant to the many small businesses that also use these or equivalent services.
Overall satisfaction and reasons to complain

While most landline and broadband customers were satisfied with their service in 2016, there were some differences between providers.

In 2016, nine in ten (89%) landline phone customers reported that they were satisfied with the overall service they received; comparable with overall satisfaction in 2015 (88%).\(^{19}\) BT customers reported higher than average satisfaction (92%). Ninety-one per cent reported they were satisfied with the reliability of their service, with no differences between providers.

Figure 1: Satisfaction with landline provider

<table>
<thead>
<tr>
<th></th>
<th>Total landline</th>
<th>BT</th>
<th>Sky</th>
<th>TalkTalk</th>
<th>Virgin Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with overall service</td>
<td>89%</td>
<td>92%</td>
<td>90%</td>
<td>83%</td>
<td>85%</td>
</tr>
<tr>
<td>Satisfaction with reliability of service</td>
<td>91%</td>
<td>93%</td>
<td>91%</td>
<td>88%</td>
<td>91%</td>
</tr>
</tbody>
</table>

Source: Ofcom Switching Tracker, July-August 2016
Base: All adults aged 16+ who are the decision-maker and express an opinion on landline (1716), receiving their service from BT (664), Sky (381), Virgin Media (334), TalkTalk (170). Providers used by fewer than 100 respondents are not shown individually but are included in the total. ‘Don’t know’ responses have been excluded from the base. NB: Figures highlighted in green/red indicate a statistically significant difference compared to the total market average.

Eighty-seven per cent of broadband customers reported that they were satisfied with their overall service, up from 83% in 2015, with 86% satisfied with reliability and 83% satisfied with the speed of their service.\(^{20}\) Virgin Media customers reported higher than average satisfaction; nine in ten customers reported satisfaction with each of these three measures.

Figure 2: Satisfaction with broadband provider

<table>
<thead>
<tr>
<th></th>
<th>Total broadband</th>
<th>BT</th>
<th>Sky</th>
<th>TalkTalk</th>
<th>Virgin Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with overall service</td>
<td>87%</td>
<td>84%</td>
<td>88%</td>
<td>83%</td>
<td>91%</td>
</tr>
<tr>
<td>Satisfaction with reliability of service</td>
<td>86%</td>
<td>83%</td>
<td>88%</td>
<td>83%</td>
<td>90%</td>
</tr>
<tr>
<td>Satisfaction with online speed</td>
<td>83%</td>
<td>80%</td>
<td>83%</td>
<td>71%</td>
<td>91%</td>
</tr>
</tbody>
</table>

Source: Ofcom Switching Tracker, July to August 2016
Base: All adults aged 16+ who are the decision-maker and express an opinion on fixed broadband (1527), receiving their service from Sky (416), BT (402), Virgin Media (357), TalkTalk (170). Providers used by fewer than 100 respondents are not shown individually but are included in the total. ‘Don’t know’ responses have been excluded from the base. NB: Figures highlighted in green/red indicate a statistically significant difference compared to the total market average.

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\(^{20}\) *Switching Tracker 2016*, tables 257-261 and 265-271
Rural customers were more likely to be dissatisfied with the reliability of their broadband service; 11% were dissatisfied compared to 8% in urban areas.\textsuperscript{21}

**Around one in eight broadband customers had reason to complain about their service in 2016**

Thirteen per cent of broadband, and 5% of landline customers, reported that they had a reason to complain about their provider in the last 12 months (both unchanged since 2015).\textsuperscript{22}

**Figure 3: Proportion of broadband and landline consumers who had a reason to complain in the last 12 months (whether or not they went on to complain)**

Source: Ofcom Quality of customer service research, face-to-face omnibus survey, fieldwork carried out by Kantar Media, December 2016. Ofcom research, omnibus survey, fieldwork carried out by Saville Rossiter-Base in August, September and November 2015. Base: All UK households 16+ (n 2016: broadband = 5368, fixed-line = 5391. n 2015: broadband = 2669, landline = 2925). Q. Have you personally had a reason to complain about any of these services or suppliers in the last 12 months, whether or not you went on to make a complaint? There was no significant change between 2015 and 2016.

Broadband customers with TalkTalk and Virgin Media were more likely than broadband customers overall to have reason to complain in the last 12 months (16% vs. 13%).

Plusnet broadband customers were less likely than broadband customers overall to have had reason to complain in the last 12 months (8% vs. 13%).

\textsuperscript{21} *Switching Tracker 2016, table 266*

\textsuperscript{22} *Ofcom, Reasons to complain research, April 2017, [https://www.ofcom.org.uk/__data/assets/pdf_file/0016/100609/reason-complain-research-2016.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0016/100609/reason-complain-research-2016.pdf)*

Fieldwork was conducted in December 2016, therefore reasons to complain date back to December 2015.
Figure 4: Proportion of broadband consumers with a reason to complain in the last 12 months (whether or not they went on to complain), by provider

<table>
<thead>
<tr>
<th>Reason to complain in the last 12 months</th>
<th>Total broadband</th>
<th>BT</th>
<th>EE/ Orange</th>
<th>Sky</th>
<th>Talk Talk</th>
<th>Virgin Media</th>
<th>Plusnet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13%</td>
<td>13%</td>
<td>12%</td>
<td>12%</td>
<td>16%</td>
<td>16%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: Ofcom Quality of customer service research, face-to-face omnibus survey, fieldwork carried out by Kantar Media, December 2016
Base: All UK households using broadband 16+ (5368), BT (1330), EE/ Orange (241), Sky (1271), TalkTalk (624), Virgin Media (1261), Plus Net (173). Q. Have you personally had a reason to complain about any of these services or suppliers in the last 12 months, whether or not you went on to make a complaint?
Red or green text indicates figures are significantly higher than those for broadband consumers overall.

Whether having a reason to complain influences a customer’s overall satisfaction with their service may depend on how long the issue lasted, and how effectively the provider dealt with it if the customer reported it to them. We examine how satisfied consumers were with complaints handling on page 53.

**The most common reason people had to complain about their broadband service was that it was not performing as it should**

Of those with a reason to complain about their broadband service, around three-quarters (73%) reported that it was because the service was not performing as it should (for example, because of a complete or intermittent loss of service, slow broadband speeds, or the service not performing as advertised). Among landline consumers, 40% of those with a reason to complain reported that their service was not performing as it should.
Figure 5: Reasons to complain about broadband or landline phone service (whether or not they went on to complain)

<table>
<thead>
<tr>
<th>Reason to Complain</th>
<th>Landline</th>
<th>Fixed Broadband</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold call/nuisance call</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Dissatisfaction with customer service from a previous occasion</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>A problem relating to the installation or set up of your service</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>A problem with a repair to the service</td>
<td>5%</td>
<td>16%</td>
</tr>
<tr>
<td>A billing, pricing or payment issue</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>The service not performing as it should</td>
<td>40%</td>
<td>73%</td>
</tr>
</tbody>
</table>

Source: Ofcom Quality of customer service research, face-to-face omnibus survey, fieldwork carried out by Kantar Media, December 2016. Base: All who had a reason to complain about their landline phone (263), all who had a reason to complain about fixed broadband provider (722). Q. What was the most recent issue you had reason to complain about in connection with your home landline / fixed broadband?
Landline and broadband: getting a new service

Consumers first experience their provider’s service quality when they place an order for a new service. People value clear and accurate advice about what is available and how it will meet their needs. Once they decide to place an order, flexibility in scheduling an installation is also valued. It is then important that the service is provided on time, as agreed, and delays are managed effectively.

We report on the differences in providers’ customer service more widely from page 46 onwards.

It took over two weeks, on average, for a new service to be provided in 2016, but consumers appear to expect much faster installations

Our research indicates that on average, consumers consider 8 calendar days an acceptable time for a new broadband service to be activated, 6 days for a landline service and 11 days for a landline and broadband service. However, in 2016, across the providers we are reporting on, it took on average 13 calendar days to provide a new standalone broadband service, and 16 calendar days to provide a standalone landline service or a landline and broadband service.

There are several reasons why new services may take this long, or longer, to provide:

- **Rules on service migrations (i.e. switches):** where a consumer switches landline and/or broadband services between providers within the Openreach or KCOM networks, Ofcom rules require that this takes a minimum of ten working days. This allows time for the switch to be stopped if, for instance, the consumer has not agreed to it, or they have changed their mind. In 2016, orders subject to this rule accounted for around 30% of those made to the providers on the Openreach network we have reported on.

  These rules do not apply to switches to or from other networks, for example, Virgin Media cable or smaller alternative network providers, or to fibre-to-the-premises connections.

- **Customer choice:** Not all consumers will want their new service to start as soon as possible. Some may be waiting for the contract for their existing service to expire, while others who are moving home may want their new service to start on the date they move in. The average times to provide new services will reflect these cases.

23 Quality of service in telecoms, p. 25
24 Automatic compensation: Consumer experience of provisioning delays, loss of service and missed appointments, pp. 22-24
25 Ofcom analysis of provider data (includes providers on the Openreach network, Virgin Media and KCOM).
26 Ofcom, Consumer Switching, A statement and consultation on the processes for switching fixed voice and broadband providers on the Openreach copper network, August 2013
Customer circumstances and the service ordered: The time taken to provide a new service also depends on the nature of the installation required. The service requested, and any service the customer already receives at their home, can affect the type of work that is needed to provide a new service. Orders requiring an engineer visit to the home typically take longer, as they require an available appointment slot that works for the customer. Around a third (30-40%) of installations by Openreach involve an engineer visit. 27

Figure 6 shows how the average time to provide a new service can vary based on the customer’s circumstances and the specific service ordered. For example, transfers of active lines on the Openreach network are completed within an average of 17 calendar days; this is effectively three calendar days longer than the minimum period of 10 working days.

Figure 6: Time to provide a new landline or broadband service, by type of order (providers on Openreach network) 28

<table>
<thead>
<tr>
<th>Order type</th>
<th>Percentage of all providers’ orders</th>
<th>Average time to provide (calendar days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New line – where a new line must be connected to the home for the service to be provided.</td>
<td>32%</td>
<td>18</td>
</tr>
<tr>
<td>Restart – where an old line running into the home is reactivated to provide the new service.</td>
<td>18%</td>
<td>11</td>
</tr>
<tr>
<td>Transfer – where an active line is transferred from the customer’s current provider to their new provider.*</td>
<td>23%</td>
<td>17</td>
</tr>
<tr>
<td>Home move – where the customer is moving home and wishes to takeover an active line at their new premises while remaining with their current provider.*</td>
<td>7%</td>
<td>17</td>
</tr>
<tr>
<td>Product change – where a customer wishes to stay with their provider but change their current service, for example by upgrading to a faster broadband speed.</td>
<td>14%</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Ofcom analysis of provider data. * indicates ten-working-day minimum switching rule applies 29

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27 Ofcom, Quality of Service for WLR, MPF and GEA, Consultation on proposed quality of services remedies, March 2017, p. 163, figure A6.4: https://www.ofcom.org.uk/__data/assets/pdf_file/0033/99645/QoS-WLR-MPF-GEA.pdf,
28 Providers included in this analysis are BT, Plusnet, Post Office, Sky and TalkTalk. Around 6% of orders were not classified or did not fit into the categories specified above. More information on how Ofcom derived this and other information from provider data can be found at annex 1.
29 Under General Condition 22.
Figure 7 shows the time taken for Virgin Media to provide new services on its network. ‘Quickstart’ orders, which can be installed by customers themselves, typically take less than half the time of orders requiring an engineer visit.

**Figure 7: Time to provide a new landline or broadband service, by type of order (Virgin Media)**

<table>
<thead>
<tr>
<th>Order type</th>
<th>Percentage of orders</th>
<th>Average time to provide (calendar days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Quickstart’ self-install – where the home has an existing Virgin Media line and the customer can complete the installation themselves</td>
<td>55%</td>
<td>6</td>
</tr>
<tr>
<td>Engineer install - where an engineer is required to install a new Virgin Media line into the home or repair an existing Virgin Media connection</td>
<td>45%</td>
<td>18</td>
</tr>
</tbody>
</table>

*Source: Ofcom analysis of provider data. Ten-working-day minimum switching rule does not apply to Virgin Media orders.*

The time taken to complete an order for a new service may also depend on where the customer lives. On average, orders in rural areas took an additional day to be completed in 2016.30

A provider’s own processes may also affect the time it takes for a service to be provided. Figure 8 shows how the time taken to complete orders for new landline and broadband services varied by provider on the Openreach network in 2016, in both urban and rural areas.31 Sky completed the highest proportion of orders placed in urban areas within one week (20%) and two weeks (59%), while TalkTalk completed the smallest proportion in one week (5%) and two weeks (47%).32

30 Ofcom analysis of provider data.
32 Differences in provider performance may in part be the result of different customer circumstances. However, there are also indications that some providers on the Openreach network can provide the same type of order significantly faster than others. We intend to explore this further in future reports.
Figure 8: Percentage of new landline and broadband services in urban areas provided within one, two, three and four weeks of the order date (providers on Openreach network)

<table>
<thead>
<tr>
<th>Provider</th>
<th>One week</th>
<th>Two weeks</th>
<th>Three weeks</th>
<th>Four weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>13%</td>
<td>51%</td>
<td>84%</td>
<td>93%</td>
</tr>
<tr>
<td>Sky</td>
<td>20%</td>
<td>59%</td>
<td>89%</td>
<td>95%</td>
</tr>
<tr>
<td>TalkTalk</td>
<td>5%</td>
<td>47%</td>
<td>87%</td>
<td>94%</td>
</tr>
</tbody>
</table>

Source: Ofcom analysis of provider data

Virgin Media, to whom the ten-working-day transfer rules do not apply, completed 53% of orders in urban areas within one week and 74% within two weeks.

Figure 9: Percentage of new landline and broadband services in urban areas provided within one, two, three and four weeks of the order date (Virgin Media)

<table>
<thead>
<tr>
<th>Provider</th>
<th>One week</th>
<th>Two weeks</th>
<th>Three weeks</th>
<th>Four weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virgin Media</td>
<td>53%</td>
<td>74%</td>
<td>86%</td>
<td>92%</td>
</tr>
</tbody>
</table>

Source: Ofcom analysis of provider data

KCOM completed 13% of orders placed in the (mostly urban) Hull and East Yorkshire areas it serves within one week, and 80% within two weeks.

Figure 10: Percentage of new landline and broadband services in Hull and East Yorkshire provided within one, two, three and four weeks of the order date (KCOM)

<table>
<thead>
<tr>
<th>Provider</th>
<th>One week</th>
<th>Two weeks</th>
<th>Three weeks</th>
<th>Four weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCOM</td>
<td>13%</td>
<td>80%</td>
<td>90%</td>
<td>95%</td>
</tr>
</tbody>
</table>

Source: Ofcom analysis of provider data

In rural areas, Sky and BT completed the highest proportion of orders within one week (13%) and Sky completed the highest proportion of orders within two weeks (52%). TalkTalk completed the smallest proportion of orders in rural areas in one week (4%) and two weeks (41%). Virgin Media’s network is available in relatively few rural areas so we have not reported on its time to provide in these areas.

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33 Ofcom analysis of provider data. The time taken to provide a new service is calculated by taking the difference between the date the order was logged and the date that billing for the service began. More detail on our methodology is available in annex 1. Plusnet, EE and the Post Office were unable to provide data in line with our requirements and have been excluded from this analysis.

34 Virgin Media indicated that the date billing starts may not always be the most appropriate proxy for when its services are made available to its customers, and therefore provided alternative information for this analysis, based on either the date an engineer reported the service was made available, or the estimated arrival date of self-start routers.

35 Ofcom analysis of provider data.
Figure 11: Percentage of new landline and broadband services in rural areas provided within one, two, three and four weeks of the order date (providers on Openreach network)

<table>
<thead>
<tr>
<th>Provider</th>
<th>One week</th>
<th>Two weeks</th>
<th>Three weeks</th>
<th>Four weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>13%</td>
<td>50%</td>
<td>80%</td>
<td>91%</td>
</tr>
<tr>
<td>Sky</td>
<td>13%</td>
<td>52%</td>
<td>87%</td>
<td>94%</td>
</tr>
<tr>
<td>TalkTalk</td>
<td>4%</td>
<td>41%</td>
<td>85%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Source: Ofcom analysis of provider data

Very long installation times may cause frustration and inconvenience for consumers, even if their expectations have been managed by their provider. In 2016, 6% of orders took more than 30 days to be completed and 1% of orders took more than 60 days. Sometimes long installation times are due to factors outside providers’ control; for example, where permission to conduct street works is required, or ‘wayleaves’ need to be agreed to install equipment on private land.

More than one in ten landline phone and broadband orders are not completed on the date agreed with the customer

Unexpected delays in providing a new service can cause serious inconvenience and harm. People may have to spend time rearranging the installation, and wait in again if an engineer visit is required. Consumers may also be left without a service entirely if their old service has been switched off.

In analysis for our automatic compensation consultation, we found that 12% of orders for landline and/or broadband services are subject to delays. Ofcom is consulting on requiring providers to automatically compensate consumers when a provider promises to deliver a service on a specific date and fails to do so. Under the provisional proposals, consumers would be compensated if their provider missed the date they had originally promised in writing, regardless of whether consumers had been given notice in advance of the delay.

For this report, we had intended to publish a provider comparison of orders completed on time. However, due to differences between some providers in how the date agreed with the customer is recorded, we are not confident that the data we have obtained is sufficiently comparable to enable us to publish a breakdown for each provider.

We also asked providers to indicate how often, for orders in 2016, they rearranged the date agreed with their customers. Several providers were unable to supply this information and this has limited

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36 Ofcom analysis of provider data.
37 Quality of service in telecoms, p. 25
39 Automatic Compensation, Protecting consumers from quality of service problems, p. 24
our ability to make a fully informed assessment of performance. We consider that this data should be captured and tracked as a measure of customer experience, and we will consider what action may be required to ensure this information is recorded and available for future reports.

**Openreach has an important role in ensuring new services are provided on time**

With the exception of Virgin Media and KCOM, the UK’s largest communications providers rely on Openreach to install connections. Since 2014, Openreach has been subject to minimum standards in relation to how many installations it completes on time, and when it offers appointments for engineer visits.\(^{40}\) It is also required to publish information on its performance in these areas.\(^{41}\)

Openreach has complied with the minimum standard of 90% on-time installations for landline and standard broadband services over the past three years. But it has not consistently performed much better than the minimum, despite a 2015 commitment to do so.\(^{42}\) Ofcom is therefore consulting on proposals to raise the minimum to 95% for on-time installations, and to include superfast broadband within this standard.\(^{43}\)

In 2014 Ofcom required Openreach to increase the proportion of engineer appointments it offers within 12 working days from 42% in 2012 to 80% by 2017, for landline and standard broadband installations. It has exceeded this minimum, making appointments available within 12 working days for more than 90% of relevant orders requiring an engineer visit in 2014/14 and 2015/16.\(^{44}\) We believe Openreach can sustain a high level of performance, and are proposing to increase the minimum requirement to 90%, including superfast broadband installations, and to reduce the required lead time from 12 to 10 working days.\(^{45}\)

We believe these proposals will reduce delays and give providers on Openreach’s network more certainty about when an installation will take place.

**Missed installation appointments can also cause delays and harm**

When a customer waits in for an installation but no one arrives in the agreed slot to provide it, not only will the customer not get the new service as expected but they may suffer from wasted time waiting in and having to reschedule. Ofcom is consulting on provisional proposals to require

\(^{40}\) This standard applies to the installation of full copper (ADSL) connections, but not fibre connections (fibre to the cabinet/premises).

\(^{41}\) Available at [https://www.homeandwork.openreach.co.uk/OurResponsibilities/our-performance.aspx](https://www.homeandwork.openreach.co.uk/OurResponsibilities/our-performance.aspx)

\(^{42}\) *Quality of Service for WLR, MPF and GEA*, p. 75

\(^{43}\) *Quality of Service for WLR, MPF and GEA*, section 6

\(^{44}\) *Quality of Service for WLR, MPF and GEA*, p. 80

\(^{45}\) *Quality of Service for WLR, MPF and GEA*, pp. 88-91
providers to compensate consumers if an appointment is missed or cancelled with less than 24 hours’ notice.46

In relation to the residential customers of the retail providers we are reporting on here, Openreach missed 3.6% of installation appointments during the year.47 It significantly reduced the proportion of installation appointments its engineers missed over the course of 2016; from 6% in January to 2.2% in December.48 When an Openreach engineer does not arrive during the originally agreed slot or before the agreed slot with the agreement of the customer, the appointment is recorded as ‘missed’ by Openreach even if it is carried out later the same day.

In 2016, 0.6% of Virgin Media installation appointments did not take place on the date agreed with the customer.49 Virgin Media has indicated that its engineers call the customer in advance of an appointment that day, and if the engineer is running early or late, they will try to arrange an alternative time on the same day to complete the work. Where the appointment is agreed to take place earlier or later that same day (and attended) Virgin Media does not class the appointment as ‘missed’. In the final quarter of 2016, for 20% of installation appointments Virgin Media engineers arrived either more than one hour before the slot originally agreed with the customer, or sometime after the agreed slot.50

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46 Automatic Compensation, Protecting consumers from quality of service problems, section 7
47 Ofcom analysis of retail provider data.
48 In relation to the residential customers of the retail providers we’re reporting on. Ofcom analysis of retail provider data.
49 Ofcom analysis of Virgin Media data.
50 Virgin Media data.
Landline and broadband: service performance

A reliable connection is essential to get the most from landline and broadband

A reliable connection is a key requirement for broadband and landline customers. Our qualitative research\textsuperscript{53} indicates there are two important aspects to this:

- **Day-to-day performance** - broadband users say they expect their connection to meet the speed promised to them when they bought the service, and to be fast enough to cope with the activities they and their household want to perform online. Landline phone users expect a clear line and no echo.

- **Service availability and fault repair** - people say that they expect their broadband to be ‘always on’ and will tolerate only very occasional periods of down-time. When things go wrong, they expect their providers to repair the service as quickly as possible. The same applies to landline phones, particularly for those people who are dependent on it, for example if they do not have a mobile phone.

The biggest driver of reasons to complain about broadband and landline services is failure to meet these expectations.\textsuperscript{52} Despite this, only around one-third of customers consider broadband speeds (35%) and reliability (30%) when choosing their broadband provider; price is often the most important factor (62%).\textsuperscript{53} Reliability is a factor in choice of landline provider for 24% of people.

**Day-to-day performance**

The broadband speeds a household experiences depend on the product chosen, the location and how the household uses the service

Download speeds - and how they vary throughout the day – are a key factor in determining the quality of consumers’ experience when they use the internet. Data-intensive activities such as video streaming are becoming more popular and, with the growth in internet-enabled devices, it is common for a household to have multiple users connected to the internet at the same time. If speeds are not adequate, consumers will find these activities slow or even impossible to carry out.

Our 2016 *Connected Nations* report highlighted that as people move from standard to superfast speeds, the amount of data they use grows. In particular, the relatively low data consumption on

\textsuperscript{51} Quality of service in telecoms, p. 18

\textsuperscript{52} See Figure 5

\textsuperscript{53} Automatic compensation: Consumer experience of provisioning delays, loss of service and missed appointments, p. 18
connections with an average download speed below 10Mbit/s suggests that people with these connections may be constrained in what they can do with their service.

The speeds available over ADSL standard broadband and fibre-to-the-cabinet superfast broadband depend on the length and quality of the copper phone wire going from the telephone exchange or cabinet to the customer’s house. Ofcom’s broadband checker can be used to view the availability and highest predicted speeds of services at an address.

Average broadband speeds are increasing year on year, but many with standard broadband may be getting speeds that are too slow for their day-to-day activities

Ofcom’s measurement of home broadband performance

Ofcom, in conjunction with its research partner SamKnows, researches the performance of fixed broadband services using a panel of volunteers who connect a measurement unit to their broadband router. The research tests a number of aspects of the service provided to consumers, including: recording the download and upload speeds on a regular basis, and any disconnections from the service. We also report on the level of quality for internet video services (this year in relation to Netflix).

The volunteers are customers of all the major, and many smaller, broadband providers across a range of services, and the panel is compiled to ensure that it is representative of UK broadband customers overall.

Our latest report on home broadband performance is published alongside this report.\(^54\) It shows that average UK residential broadband speeds were 36.2Mbit/s in November 2016, up from 28.9Mbit/s in 2015. This has largely been due to an increasing proportion of people buying ‘superfast’ (above 30Mbit/s) broadband services; either fibre-to-the-cabinet (FTTC) products such as BT Infinity, Sky Fibre or TalkTalk Fibre Broadband, or Virgin Media’s cable products. However, while superfast broadband is available at 89% of premises\(^55\), only around 49% of households with a broadband service have a superfast product.\(^56\)

Many customers are still using ‘standard’ broadband based on a copper line from the home to the street cabinet and then to the telephone exchange. While speeds of standard broadband services have increased, on average they are still lower than 10Mbit/s. Ofcom consumer research in late


\(^{56}\) *UK Home Broadband Performance report 2016*
2015 found that 14% of standard broadband users felt that the speed of their connection was often too slow to meet their needs, compared to 6% of superfast users. For many on standard broadband products, the only way to significantly improve their experience is to upgrade to a superfast connection, if available in their area.

People in rural areas tend to experience slower speeds than those in urban areas. This is in part because of longer distances between local exchanges, street cabinets and people’s homes, requiring longer copper lines over which speeds will reduce. Superfast connections are also not available in some rural areas due to slower roll-out of fibre-to-the-cabinet infrastructure and low cable broadband availability. However, gradual deployment of superfast products into rural areas, for example under the Broadband UK rural roll-out programme, is delivering improvements in the speeds available.

Figure 12: Average actual urban and rural broadband download speeds across the day and at peak times (Mbit/s)

<table>
<thead>
<tr>
<th></th>
<th>Urban Standard (ADSL)</th>
<th>Rural Standard (ADSL)</th>
<th>Urban Superfast (FTTC)</th>
<th>Rural Superfast (FTTC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-hour</td>
<td>10.3</td>
<td>6.3</td>
<td>44.6</td>
<td>39.2</td>
</tr>
<tr>
<td>8pm to 10pm</td>
<td>10.1</td>
<td>6.2</td>
<td>44.0</td>
<td>38.9</td>
</tr>
</tbody>
</table>

*Source: Home Broadband Performance report 2016.*

Most consumers experience variation in their broadband speed across the day

Our research indicates that broadband speeds vary throughout the day, with speeds often falling during peak hours, when more people on the network are using their broadband at the same time. The extent to which a consumer’s speed varies, and when it varies, can affect their ability to use the service as they expected. Our research recorded the maximum, the minimum, and the average speeds received by panellists over a 24-hour period, and in the peak period of 8pm to 10pm during November 2016.

The variation was greatest for cable products, particularly the fastest 200Mbit/s service, where the average peak-time speed was 14% lower than the average speed throughout the day. However, the average peak-time speeds experienced for Virgin Media’s 100Mbit/s and 200Mbit/s are still relatively high (80Mbit/s for 100Mbit/s cable and 150Mbit/s for 200Mbit/s cable) and, depending on


58 [https://www.gov.uk/guidance/broadband-delivery-uk](https://www.gov.uk/guidance/broadband-delivery-uk)
how they use their service, customers receiving these speeds may not notice the variation in performance.

Figure 13: Average download speeds, by technology, throughout the day

Source: UK Home Broadband Performance report 2016

A minority of cable customers suffer large drops in speed during peak evening periods

Slowdowns in peak periods do not affect all customers equally. For example, while many of Virgin Media’s customers received consistently high speeds (47% of ‘up to’ 50Mbit/s cable panellists had an 8-10pm peak-time average speed of 50Mbit/s or higher), some customers experienced severely degraded speeds in peak times. Figure 14 below shows that 9% of those with a 50Mbit/s cable connection received an average peak-time speed of less than 10Mbit/s, as did 6% with a 100Mbit/s cable connection. It was rare for the average peak time speed of any fibre-to-the-cabinet connection to consistently drop below 10Mbit/s.

Figure 14: Percentage of broadband users receiving an average peak-time (8pm to 10pm) download speed below 20Mbit/s, by product type

<table>
<thead>
<tr>
<th></th>
<th>Less than 10 Mbit/s</th>
<th>10-15 Mbit/s</th>
<th>15-20 Mbit/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ADSL</td>
<td>57%</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>38 Mbit/s fibre to the cabinet</td>
<td>0%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>52 Mbit/s fibre to the cabinet</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>76 Mbit/s fibre to the cabinet</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>50 Mbit/s cable</td>
<td>9%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>100 Mbit/s cable</td>
<td>6%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>200 Mbit/s cable</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: UK Home Broadband Performance report 2016
Greater variation in speeds for Virgin Media cable connections is in part a consequence of the structure of the cable network: users share the bandwidth between the home and Virgin Media’s ‘cable head end’ (the equivalent of an Openreach exchange). Services using the Openreach network have a dedicated connection between the home and the cabinet (for fibre-to-the-cabinet) or exchange (for ADSL), although contention in providers’ backhaul and core networks (i.e. between the local exchange and the connections to the wider internet) can reduce speeds during busy times.

Superfast broadband connections are less likely than standard broadband connections to disconnect. Another potential cause of inconvenience and frustration is when a broadband service unexpectedly disconnects for short periods of time. Our research, which runs approximately 5,200 tests throughout the day, found that in November 2016, standard broadband disconnected for 30 seconds or longer on average around once a day (1.1 disconnections per day), compared to an average of just under once every three days (0.3 per day) across superfast services.  

The voluntary Code of Practice on Broadband Speeds seeks to protect consumers who receive slower than expected speeds. All of the large providers are signatories to Ofcom’s voluntary Code of Practice on Broadband Speeds, which requires that customers are given an estimate of the speed of broadband that will be provided, and that customers have the right to exit their contract, penalty-free, if speeds fall below the minimum speed provided. We are looking to update the Code so that estimates and minimum speeds are based on peak-time performance (i.e. 8-10pm), and it is made clearer to customers when they have the right to exit a contract. We expect to consult on an updated Code later in 2017, when we will also publish the results of mystery shopping against the current Code.

The actual speed experienced can also be affected by how a consumer sets up and uses their broadband service. Practical tips to help consumers improve their speeds within the home are available on Ofcom’s website. Ofcom’s broadband and mobile checker app enables consumers to run tests to check how well their Wi-Fi is performing and get tips on how performance can be improved.

Service availability and fault repair

When a consumer’s broadband or landline service becomes unavailable, it can be a cause of serious harm. While short disconnections can be frustrating, longer outages can be harmful. Our research has found that within the last two years, around a quarter (24%) of landline and broadband customers

59 UK Home Broadband Performance report 2016
experienced a complete loss of service for more than an hour. Of these, 42% said it had a negative impact on their day-to-day activities and 36% said it caused them stress and anxiety.⁶⁰

Sometimes customers lose their service because of a problem originating in the home. Common in-home issues include the Wi-Fi router being incorrectly set up, microfilters not being used properly, or the re-use of old routers for new services.⁶¹ Customers may also be unable to connect because of a problem with the device they are using or the content they are trying to access.

For these types of service problem, effective first-line customer service may be able to help resolve the problem quickly and with minimal hassle. We discuss providers’ customer service on page 46 below. Providers may also be able to reduce the frequency of some of these problems by supplying effective information to customers when they provide a new service, for example on the correct set-up and location of the Wi-Fi router.

In our consultation on wholesale quality of service, we identified that a significant proportion of faults reported to telecoms providers on Openreach’s network can be cleared by the provider without referral to Openreach.⁶² This suggests that many of the problems experienced by consumers whose services are supplied over Openreach’s network arise in the home.

When service problems originate outside the home, on the customer’s line or the wider network, an engineer will usually be needed to address the fault. How often these network faults affect an individual customer may depend on the broadband product used, their location, and how the provider (or the provider’s network operator) manages the network.

For customers of providers on the Openreach network, we estimate that these faults occur approximately once every 9 years for lines carrying standard broadband services, once every 12 years for landline-only services, and once every 6 to 7 years for lines carrying superfast broadband services.⁶³

We obtained information for this report with a view to publishing a comparison of service problems originating on the network, including between providers on the Openreach network and those using alternative networks such as Virgin Media. However, we are not satisfied that the data we have

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⁶⁰ Automatic compensation: Consumer experience of provisioning delays, loss of service and missed appointments, p. 38
⁶¹ Information supplied to Ofcom by providers.
⁶² Ofcom analysis of the data of three providers using the Openreach network. The percentage of faults cleared by the provider ranged from 20% to 79% depending on provider and the product type. Quality of Service for WLR, MPF and GEA, p. 35
⁶³ Quality of Service for WLR, MPF and GEA, p. 37
obtained is sufficiently comparable to enable us to publish provider-specific performance for this report. This is something we intend to report on in future.

The longer it takes to repair a service, the greater the potential harm to the customer
While consumers might tolerate short outages, if a loss of service becomes drawn out, problems accumulate.64 Our consumer research indicates that for those affected by a loss of service in the last two years, in most cases (65%) service was restored two calendar days after the provider had been notified of the issue. A further 4% of respondents had their service restored on the third day, while 23% of households had to wait more than three days.65

While 76% of those who reported the loss to their provider and had their service restored within a day were satisfied with their provider’s response, only 34% were satisfied when it took two days or longer, falling to 13% for repairs that took longer than three days.66

The time taken to restore service will depend on how long it takes to diagnose the nature of the fault (for example, whether it is in the home or on the network), the speed at which an engineer is dispatched by the provider or their supplier, if one is required, and the nature of the problem.

When an engineer is sent to address a network fault, they are usually able to find and fix the problem but sometimes this may not be possible.67 This can be because the problem actually lies in the home or somewhere outside the responsibility of the engineer to fix, or because the cause cannot be identified, which means that further investigation may be necessary causing a delay.

The time taken to fix a fault can also depend on where the customer lives. Repairs in rural areas can take more time because, for example, longer lines to the cabinet or telephone exchange may mean faults are harder to locate.68

There is currently little information available to consumers about repair times. Most providers do not specify a guaranteed or target time in their contracts for residential broadband and landline

64 Quality of service in telecoms, p. 3
65 The remaining respondents (7%) could not recall or did not know how long it took to restore their service. Automatic compensation: Consumer experience of provisioning delays, loss of service and missed appointments, p. 34, question F5
66 Automatic compensation: Consumer experience of provisioning delays, loss of service and missed appointments, p. 36
67 Our analysis of provider data suggests a fault is not found on investigation by the engineer on around 20% of occasions.
68 Our analysis of provider data indicates that faults in rural areas can take around 20% longer to fix compared to those in urban areas.
services. We consider that it would be useful to publish a comparison of the actual time taken to repair services, by provider; however, as above, we are not satisfied that the data we have obtained on this occasion is sufficiently comparable to enable us to publish provider-specific performance.

Given the potential inconvenience and harm caused by a drawn-out loss of service, Ofcom is consulting on requiring providers to automatically compensate consumers whose service is not restored within two working days. Under our provisional proposals, consumers would receive £10 for each calendar day that the service is not restored after two working days has passed.

Repair times for services using the Openreach network will be affected by the service maintenance level a retail provider buys from Openreach. All the largest broadband and landline providers in the UK, apart from Virgin Media and KCOM, rely on Openreach engineers to investigate and address faults with their customers’ connections. When a provider notifies Openreach of a fault on Openreach’s network, Openreach must repair it within an agreed time, depending on which service maintenance level (SML) has been purchased, or pay the provider compensation. The SMLs available range from resolution within two working days to within six hours.

Figure 15: Openreach service maintenance level (SML) repair times

<table>
<thead>
<tr>
<th>Service level</th>
<th>Contractually agreed repair time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Fault clear by 23.59 day after next, Monday to Friday, excluding public and bank holidays.</td>
</tr>
<tr>
<td>Level 2</td>
<td>Faults clear by 23.59 next day, Monday to Saturday, excluding public and bank holidays</td>
</tr>
<tr>
<td>Level 3</td>
<td>Report by 13.00, fault clear by 23.59 same day. Report after 13.00, fault clear by 12.59 next day, seven days a week, including public and bank holidays.</td>
</tr>
<tr>
<td>Level 4</td>
<td>Fault clear within six hours, any time of day, any day of the year.</td>
</tr>
</tbody>
</table>

Source: Openreach

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69 Ofcom internal analysis of standard provider contractual terms, November 2016.
70 Automatic Compensation, Protecting consumers from quality of service problems, p. 40
71 Except for circumstances beyond the reasonable control of Openreach, such as when civil engineering works are required to repair a fault, or where the customer requests a repair appointment beyond the specified timetable (for example, because they cannot be available at the offered time).
Retail providers have a choice of which Openreach service level to take. They may then pass on this choice and the cost of any service level to the customer, over and above the default level. The pricing structures are complex, but an upgrade from Openreach’s most basic service level (SML1 – resolution within two working days) to its next service level (SML2 – resolution by the end of the next working day) for standard broadband and landline services typically costs between around £2 and £6 a year more. SML2 is currently the basic repair service level available from Openreach for its fibre products.

In 2016, SML1 and SML2 were the most common Openreach service levels purchased by the major providers on the Openreach network, applying to over 99% of the residential customers of the providers we are reporting on (excluding Virgin Media and KCOM). Almost all the customers of Plusnet and EE were on SML1 throughout 2016. Around three in five Post Office customers were on SML1, and two in five were on SML2 throughout 2016.

The take-up of Openreach service levels by TalkTalk, Sky and BT changed over the course of the year:

- At the start of 2016, Sky and TalkTalk purchased Openreach’s next-working-day service maintenance level for most of their customers. During the year, they decided to downgrade that service level to Openreach’s two-working-day repair service level for most customers.

- In contrast, BT started the year with most of its customers on Openreach’s basic maintenance level, but upgraded most residential customers onto Openreach’s next-working-day service level in summer 2016.

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73 https://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=o1GUUZA4oSGmoXUSic%2BgZQD265ft6W32TNfEUU7w1FZ6rN2ujnCs99N8iKJ2PD9hXYmijjxH6wr%0ACQm97GZMyG%3D%3D [Accessed 10 April 2017]. For standard broadband and landline services SML3 typically costs £37.20-£43.52 and SML4 £48 – £54.32.

74 Provider data on volume of residential landline and broadband subscribers on each service maintenance level. More than 99% of Plusnet’s were on SML1 during the year, as were more than 98% of EE’s residential subscribers.

75 Ofcom analysis of provider data.

76 91% of Sky’s residential customers were on SML2 in January, as were over 99% of TalkTalk’s residential subscribers.

77 In December 2016, 21% of TalkTalk’s residential subscribers were on SML2. 2% of Sky’s residential subscribers were on SML2.

78 85% of BT’s residential subscribers were on SML1 in January 2016.

79 Over 99% of BT’s residential subscribers were on SML2 from July 2016.
The information we have gathered from providers indicates that the customers of providers which had more customers on SML2 received faster repairs during 2016.

Although choosing SML2 over SML1 should generally result in a faster repair service, Openreach does not always complete repairs within the promised time. In 2014, after a gradual decline in Openreach’s performance on fault repairs over several years, Ofcom introduced a minimum standard, requiring it to complete 80% of repairs within service level agreement timescales for SML1 and SML2 by 2017.\(^{80}\)

Since the introduction of this minimum standard, there appears to have been a degree of improvement in the number of repairs completed within the service level agreement timescales. However, fault repair performance has not quite returned to 2009/10 levels.\(^{81}\)

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\(^{80}\) Ofcom, *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30, Volume 1: Statement on the markets, market power determinations and remedies*, June 2014, section 11: https://www.ofcom.org.uk/__data/assets/pdf_file/0032/78863/volume1.pdf. The standards made allowances for matters beyond the reasonable control of Openreach; for example, extreme weather events or criminal or negligent damage.

\(^{81}\) *Quality of Service for WLR, MPF and GEA*, p. 48
Ofcom is consulting on introducing new standards to require Openreach to meet agreed timescales for SML1 and SML2 93% of the time by 2021.\(^{82}\) We are also proposing a secondary quality standard to protect customers who fall outside the 93%: Openreach would be required to complete 97% of repairs no later than five working days beyond the relevant service level agreement.

For lines maintained by Openreach, this should improve the consumer’s experience of faults, over time. However, customers may not be offered any guarantees regarding the resolution of faults in their contracts, and the actual service experienced may not always mirror the Openreach service levels.

As well as the maintenance level their provider chooses, consumers’ experience of network fault resolution on the Openreach network will continue to be shaped by their provider’s own customer service and the time it takes them to refer a fault to Openreach. Service problems that originate in some parts of the network; for example, provider equipment in the Openreach exchange or the provider’s backhaul service\(^ {83}\), also remain exclusively the responsibility of the retail provider.

**Missed engineer appointments can delay fault repairs, and inconvenience consumers**

When a customer waits in for an engineer or technician to address their service issue and the engineer does not arrive, it can both prolong the problem and waste the customer’s time.

In relation to customers of the providers we are reporting on here, provider-supplied data indicated that Openreach missed 2.7% of repair appointments on average in 2016. It significantly reduced its rate of missed repair appointments over the course of the year, from 5.7% in January 2016 to 2.1% in December 2016.\(^ {84}\) When an Openreach engineer does not arrive during the originally agreed slot or before the agreed slot with the agreement of the customer, the appointment is recorded as ‘missed’ by Openreach even if it is carried out later the same day.

Providers on the Openreach network, such as Sky, TalkTalk and EE, also use their own or other third-party technicians to address service issues in the home. We have not been able to obtain comparable data on the appointments missed by these technicians for this report, but this is something we will consider reporting on in future.

\(^{82}\) *Quality of Service for WLR, MPF and GEA*, p. 52. Under these proposals, Openreach would also be required to complete 97% of repairs within six or seven working days, dependent on service level.

\(^{83}\) Backhaul is the part of the communications network which connects the local exchange to a provider’s core network.

\(^{84}\) Ofcom analysis of retail provider data.
In 2016, 0.2% of Virgin Media repair appointments did not take place on the date agreed with the customer.\(^5\) As with installation appointments, Virgin Media has indicated that its engineers call the customer in advance of an appointment that day, and if the engineer is running early or late, they will try to arrange an alternative time on the same day to complete the work. Where the appointment is agreed to take place earlier or later that same day (and attended) Virgin Media does not class the appointment as ‘missed’. In the final quarter of 2016, for 8% of repair appointments Virgin Media engineers arrived either more than one hour before the slot originally agreed with the customer, or sometime after the agreed slot.\(^6\)

Given the harm caused by missed appointments for the provision and repair of services, Ofcom is consulting on requiring providers to compensate consumers when an engineer does not turn up for a scheduled appointment, or cancels with less than 24 hours’ notice.\(^7\)

**Investment in new infrastructure should improve the reliability and capability of broadband**

As noted above, the gradual deployment of superfast services through the BDUK programme, and any broadband universal service obligation the Government chooses to implement, should improve the availability of faster broadband services across the country, and in turn the experience of those who choose to take up these services.

Several providers have indicated they intend to invest in fibre-to-the-premises infrastructure over the coming years. The increased capacity of ‘full fibre’ networks should mean that the speeds experienced by consumers will be more stable and less likely to degrade at peak times. Because they are less likely than copper-based connections to be affected by water ingress, full fibre connections to the home can also be more reliable and less prone to faults.

We therefore welcome the commitments made by various providers to deploy more fibre-based connections from this year onwards:

- In summer 2017 BT will begin deploying hybrid-fibre G.fast connections delivering speeds of up to 330Mbit/s, with the aim to reach 10 million premises by 2020.\(^8\) In addition, BT intends to roll out full fibre broadband to 2 million premises by 2020.\(^9\)

\(^5\) Ofcom analysis of provider data.

\(^6\) Virgin Media data.

\(^7\) *Automatic Compensation, Protecting consumers from quality of service problems*, section 7


• Virgin Media’s parent company has stated that it aims to connect 700,000 to 800,000 homes to its UK network during 2017 as part of its Project Lightning programme.\textsuperscript{90} Once completed, more than half of the deployment under Project Lightning is expected to be fibre-to-the-premises rather than co-axial cable.\textsuperscript{91}

• KCOM expects around three-quarters of its network to have ultrafast capability by the end of 2017.\textsuperscript{92}

• TalkTalk, Sky and CityFibre have committed to extend their FTTP network in York from an initial trial of 14,000 properties across the city to cover a further 40,000 homes.\textsuperscript{93}

• Smaller network providers such as Gigaclear, Hyperoptic and IFNL continue to invest in full fibre services in some parts of the country.

Ofcom has recently consulted on allowing providers to build their own fibre networks direct to the home by using BT’s existing telegraph poles and ducts. This should incentivise more investment in new ultrafast network infrastructure.\textsuperscript{94}

\textsuperscript{90} http://www.libertyglobal.com/pdf/presentations/Liberty-Global-Group-Q4-2016-Investor-Call-Presentation-FINAL-AMENDED.pdf In March 2017 Liberty Global (Virgin Media’s parent company) indicated it had overestimated the total number of connections made under Project Lightning at the end of 2016. It indicated that this will affect the total number of premises that are connected to Virgin Media’s network during the first half of 2017, but that any shortfall during this timeframe should not affect the total number of premises that will be added.

\textsuperscript{91} http://www.virginmedia.com/corporate/media-centre/press-releases/virgin-media-q3-2016-results.html

\textsuperscript{92} https://www.kcomhome.com/products/broadband/lightstream/


Landline and broadband: customer service

Customer service in communications continues to trail behind other sectors

When a communications service goes wrong, the outcome for the customer depends on the speed and effectiveness of their provider’s response. Good customer service can prevent a minor issue becoming a major problem and can minimise the adverse impact of a major issue. In contrast, poor customer service can cause customers to expend additional time and energy to get a resolution, leaving them dissatisfied.

The communications sector appears to be lagging behind other sectors when it comes to customer service. Some consumers see communications providers as lacking the flexibility and proactivity of companies in sectors such as retail, and telecoms and media was the lowest-ranked sector in the Institute of Customer Service (ICS) satisfaction index for 2016. However, some providers do appear to be offering a better quality of customer service than others.

Research commissioned by Ofcom shows that when customers have a problem with their communications service, they aim to get it off their ‘to-do list’ as painlessly as possible. Ideally their provider should:

- Take responsibility for the problem, including explaining how the issue will be managed, coordinating with other parties and providing regular updates.
- Resolve the problem quickly, as promised, and with minimal customer effort.
- Minimise any stress by showing empathy and being helpful, polite and flexible.

In some cases, consumers can help themselves quickly and with relatively little effort by using information on their provider’s website, app or automated telephone system (‘IVR’). However, many consumers prefer to talk to a real person, and some consumers, including those in vulnerable circumstances, may not be able to access or use web-based information or successfully navigate IVRs.

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95 Quality of service in telecoms, p. 3
96 Quality of service in telecoms, p. 4
98 Quality of service in telecoms, p. 18
Making good quality information accessible is a key part of good customer service, and consumers should consider what is available and what they need when they research new providers.

Even high quality customer information will not remove the need for some consumers to contact their provider. This report focuses on this aspect of customer service, particularly:

- **ease of contact**: how easy it is for consumers to contact their provider in the first place; and
- **complaints handling**: how effectively providers respond to consumers’ complaints.

**Phone remains the most popular way for customers to contact their landline and broadband providers**

As noted above, many issues with broadband and landline phone services originate in the home and can be addressed by the customer with assistance over the phone, by email or by webchat. Provider-supplied data indicate that, on average, landline and broadband providers resolved 77% of issues or queries in a single contact with customers who called them in 2016.99

However, a minority of customers with a reason to complain chose not to contact their provider to complain because of the perceived effort involved.100 Around one in four customers with a reason to complain about their landline and broadband services customers in 2016 chose not to do so.101102

For those who did contact their provider in 2016, data supplied by providers show that the phone

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99 Ofcom analysis of provider data on the proportion of calls made to each call destination, for existing residential retail customers with enquiries about a fixed voice or broadband service, where the same customer did not call back into the same call destination within the next seven calendar days.

100 Ofcom Reason to Complain research, April 2017, [https://www.ofcom.org.uk/__data/assets/pdf_file/0016/100609/reason-complain-research-2016.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0016/100609/reason-complain-research-2016.pdf). Of the broadband customers who had a reason to complain about their provider but chose not to in 2016, one in five said it was “not worth the hassle” or they “didn’t have the time.”

101 Reason to Complain research.

102 Call transfer quotation from *Quality of service in telecoms*, p.38
remained the most popular method of contact, used 89% of the time. Other methods, such as email and webchat, may be becoming more common, but accounted for only 3% and 8% of contacts respectively.  

While email responses generally take hours rather than minutes, customers do not have to wait at the end of a phone, and some find email easier to use when explaining a complicated problem. Webchat is considered easier for quick-to-answer issues, such as a sales query or checking on a local service issue. Both give customers a printable record of their conversation. Letters accounted for less than 1% of contacts. We did not request information on contacts via social media, but some providers have told us that such contacts are growing year on year.

**Landline phone and broadband customers waited 3 minutes on average to speak to their provider on the phone in 2016, with one in ten not getting through at all.**

All the providers we are reporting on used interactive voice response (IVR) systems to direct customers to the appropriate department in 2016. This involves dialling or speaking through voice recognition software to select a route.

If a customer chooses to speak to someone and an advisor is not available immediately, they will usually be placed in a call waiting queue. The average time spent waiting before speaking to a customer services advisor (the ‘call waiting time’) was around 3 minutes in 2016 for the landline and broadband providers we are reporting. Plusnet had the longest average call waiting time, taking 7 minutes 27 seconds. TalkTalk had the shortest average call waiting time, with an average of 47 seconds.

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103 Ofcom analysis of provider data.
104 *Quality of service in telecoms*, p. 36
105 Ofcom analysis of provider data.
106 Provider data. Average call waiting time is the overall mean time, in seconds, 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 broadband customers, not including time taken to navigate options before being placed in the queue. The data reported is the overall average for calendar year 2016. It includes all call types, including calls enquiring about new services and those reporting problems with existing services.
Figure 17: Average call waiting time, landline and broadband providers (2016)

Source: Ofcom analysis of provider data

*BT offered customers waiting in the call queue in 2016 the option to receive a call back, which may reduce call waiting times. BT was unable to provide information on how long on average it takes to get back to a customer when they have been offered a call-back. Dotted line indicates average (2 minutes 51 seconds).

Averages do not show the daily variations in the call waiting time, which can be significant. For example, more people tend to call before and after working hours, and waiting times may be much longer at these times. Plusnet provides live information about answering times on its website, allowing customers to make an informed choice about when to call. 107

Figure 18: live customer service information provided by Plusnet (accessed 23 March 2017)

107 http://www.plus.net/supportpages.html?a=212
The average call waiting time also varied over the course of the year for individual providers. When an issue affects many customers, it can lead to an increase in calls and in turn an increase in the call waiting time. For example, there was a spike in several providers’ call waiting times during December 2016 following the Mirai worm attack which affected customers’ broadband routers.\textsuperscript{108}

Calls about customer service typically had a longer call waiting time than sales calls. Across providers, sales calls were answered, on average, 2 minutes 35 seconds faster than technical support calls. Calls about cancelling a service (‘cancellations’ or ‘retentions’) were answered 2 minutes 12 seconds faster than technical support calls.\textsuperscript{109} In our research, we found that some customers call the sales line when they have a problem, thinking it likely to be answered more quickly than the main customer services number.\textsuperscript{110}

\textbf{Figure 19: Average call waiting time by call type, landline and broadband providers (2016)}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure19.png}
\caption{Average call waiting time by call type, landline and broadband providers (2016)}
\end{figure}

\textit{Source: Ofcom analysis of provider data}

Longer average call waiting time correlated strongly with the number of consumers hanging up before they got through to speak to an advisor. As well as having the highest call waiting time, Plusnet had the highest ‘abandonment rate’, with more than one in five (21\%) customers leaving the call queue before speaking to someone. EE and TalkTalk had the lowest rate, at 4\%.\textsuperscript{111}

\textsuperscript{108} Ofcom analysis of provider data.
\textsuperscript{109} Ofcom analysis of provider data.
\textsuperscript{110} Quality of service in telecoms, p. 24
\textsuperscript{111} Provider data. The abandonment rate is the overall number of occasions where a customer abandoned the call while 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 during calendar year 2016.
Figure 20: Customer calls abandoned while waiting in the call queue, landline and broadband providers (2016)

Source: provider data. Dotted line indicates average (10%).

It is important to note that not all customers choose to leave the call queue because of how long they have been waiting. Recorded messages that are played while on hold may cause customers to leave the queue after receiving useful information, for example on a known fault that is being investigated. Providers using these messages may therefore show higher abandonment rates.

The volume of complaints received by Ofcom differed by provider over 2016

On average, Ofcom receives nearly 300 calls a day from consumers, who also contact us by post and through our website. Many of these contacts result in complaints, often made after a consumer has been unable to resolve an issue with their provider to their satisfaction. We record these complaints by service and by provider but we do not investigate cases on an individual basis. However, the complaints we receive about providers can be an indicator of poor service quality.

Each quarter Ofcom reports on the complaints we receive, in order to help inform consumer decision-making. Below we set out the complaints generated by each of the providers reported on in this document, over the whole of 2016. In line with our quarterly reports, the data is presented as complaints per 100,000 subscribers (using subscriber figures at 30 June 2016). Further information about how we compile our complaints data can be found in the most recent quarterly report publication.

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112 We decided to use subscriber figures at a single point (rather than averaging across the four quarters) in the year, to minimise manipulation of the data. We chose to use subscriber figures as of 30 June as this represents the mid-point of the calendar year reported on.
The Post Office and Plusnet generated the highest number of complaints per 100,000 subscribers to Ofcom about landline phone services in 2016 (89) closely followed by TalkTalk (85). Sky generated the lowest number of complaints (25), and Virgin Media (35) was also below the industry average (56).

<table>
<thead>
<tr>
<th>Landline: complaints per 100,000*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Most complaints</strong></td>
</tr>
<tr>
<td>Post Office</td>
</tr>
<tr>
<td>Plusnet**</td>
</tr>
<tr>
<td>TalkTalk</td>
</tr>
<tr>
<td>EE**</td>
</tr>
<tr>
<td>BT</td>
</tr>
<tr>
<td>Virgin Media</td>
</tr>
<tr>
<td>Sky</td>
</tr>
<tr>
<td><strong>Fewest complaints</strong></td>
</tr>
</tbody>
</table>

*All figures rounded to nearest whole number. Actual measurable difference may in some cases be less than one. **Brand owned by BT Group. Note: Industry average is limited to those providers included in the report. Source: Ofcom, CCT data.
For broadband services, BT generated the highest number of complaints per 100,000 subscribers to Ofcom in 2016 (127). As with landline phone complaints, Sky generated the lowest number of complaints (26), and Virgin Media (40) was also below the industry average for broadband complaints (75).

**Only 56% of those who complained to their provider about their broadband service in 2016 were satisfied with the response**

Most customers who have a reason to complain about their service complain to their provider, not to Ofcom.\(^{113}\) Complaints handling is a crucial part of customer service. Unless providers respond

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\(^{113}\) 77% of broadband customers with a reason to complain about their service in 2016 went on to make a complaint, 1% of those who complained did so to Ofcom and 23% did not make a complaint at all. 76% of landline customers with a reason to complain complained to their provider, 3% of those who complained did
effectively to dissatisfied customers, issues can become drawn-out and any harm can increase. Ofcom requires communications providers to have in place transparent, accessible and effective complaints handling procedures.114

Our research on satisfaction with complaints handling has found that around three in five landline phone customers (64%) and just over half (56%) of all broadband customers who complained to their provider in the last six months of 2016 were satisfied with how their complaint was handled.115 Only 62% of complaints about landline services and 57% of complaints about broadband services were completely resolved in the time period asked about.

Previous Ofcom research had showed that satisfaction with customer service received is generally lower for those who contact their provider with a complaint, than those who contact them about something else.116 Nevertheless, as complaints handling is such a crucial element of customer service, we consider that significant improvement is required in the sector’s overall performance.

Satisfaction with certain aspects of complaints handling was lower than we would expect. As noted above, ease of contact is vital to the customer’s experience of dealing with their provider, and may shape their willingness to make a complaint in future. But only 43% of those who complained about their broadband service were satisfied with the ease of getting through to their provider on the phone117 and just 53% were satisfied with the time taken to handle their issue.

Research by The Institute of Customer Service indicates that average satisfaction with the handling of complaints in the telecoms and media sector was lower than in any other UK sector except national public services in 2016. Telecoms and media customers were also less satisfied on average so to Ofcom and 24% did not make a complaint at all. Reason to complain research, April 2017. 


114 See Ofcom’s Approved Complaints Code of Practice: https://www.ofcom.org.uk/__data/assets/pdf_file/0035/85967/complaints-handling-code.pdf

115 Ofcom, Quality of Customer Service research: https://www.ofcom.org.uk/__data/assets/pdf_file/0008/100610/quality-customer-service-research-2016.pdf

The research was conducted via an online panel sample and fieldwork took place from 8 December 2016 to 6 January 2017 (as such the last six months refers to the six months prior to fieldwork: i.e. June 2016-December 2016). More details can be found at annex 2.

116 For example, in 2015 53% of broadband customers who contacted their provider with a complaint were satisfied with the customer service they received, compared to 74% who contacted their provider for another reason. Savile Rossiter-Base, Quality of Customer Service Report, January 2016, p. 19: https://www.ofcom.org.uk/__data/assets/pdf_file/0018/83025/quality_of_customer_service_report_2015.pdf

117 Among those who contacted their provider over the phone.
with specific aspects of complaints handling, including staff understanding the issue, staff doing what they say they will do, the attitude of staff and speed of resolving complaints.  

**Overall satisfaction with complaint handling in the landline market did not vary by provider**

In the landline market, overall satisfaction with complaint handling did not vary by provider, although Sky performed above the landline sector average for three of the nine specific aspects of customer service that we measured.

**Figure 23: Landline - overall satisfaction and satisfaction with specific aspects of customer service measured**

<table>
<thead>
<tr>
<th>Overall satisfaction with service you received over this complaint - % satisfied</th>
<th>Total landline</th>
<th>BT</th>
<th>Sky</th>
<th>Talk Talk</th>
<th>Virgin Media</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>62%</td>
<td>62%</td>
<td>65%</td>
<td>61%</td>
<td>58%</td>
</tr>
</tbody>
</table>

% Satisfied with specific aspects of customer service measured:

| Ease of finding provider contact details | 59% | 59% | 65% | 61% | 66% |
| Ease of getting through to the right person (PHONE)¹ | 45% | 45% | 60% | 44% | 52% |
| Time taken to handle your issue | 59% | 59% | 64% | 57% | 59% |
| Getting the issue resolved to your satisfaction | 65% | 65% | 63% | 61% | 61% |
| Courtesy and politeness of advisors | 64% | 64% | 71% | 64% | 69% |
| Advisor doing what they said they would do | 61% | 61% | 68% | 61% | 62% |
| Logging of query details to avoid having to repeat yourself | 60% | 60% | 65% | 58% | 63% |
| Offering compensation or a goodwill payment | 52% | 52% | 58% | 55% | 54% |
| Willingness to help resolve your issue | 65% | 65% | 67% | 66% | 65% |

Source: Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017. Base: All who complained about landline service in past six months (2468), BT (925), Sky (489), TalkTalk (537), Virgin Media (517). Base: All contacting by phone (1341/501/240/278/322). Red or green text indicates significantly higher/lower than the sector average at the 95% confidence level.

Among landline phone customers whose complaint had been completely resolved, TalkTalk customers were more likely than the sector overall to report that the complaint had been resolved in less than an hour, and less likely to report that it took five days or more.


¹¹ The data in the charts is presented at both a total sector level and at a provider level. Total sector level data is weighted to be representative of the UK overall, and any provider-level data is unweighted. The provider-level data is therefore representative of customers of the provider with a complaint in the six months prior to fieldwork and who are online. More information can be found in annex 2.
Figure 24: Landline - time taken to completely resolve the complaint (among those whose complaint was completely resolved)

<table>
<thead>
<tr>
<th>Provider</th>
<th>Less than 1 hour</th>
<th>Several hours but within the day</th>
<th>2-4 days</th>
<th>5 days or more</th>
<th>Average time to resolve (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Landline</td>
<td>45%</td>
<td>25%</td>
<td>14%</td>
<td>15%</td>
<td>2.7</td>
</tr>
<tr>
<td>Sky</td>
<td>23%</td>
<td>35%</td>
<td>21%</td>
<td>21%</td>
<td>3.3</td>
</tr>
<tr>
<td>Virgin Media</td>
<td>35%</td>
<td>24%</td>
<td>22%</td>
<td>19%</td>
<td>3.1</td>
</tr>
<tr>
<td>BT</td>
<td>49%</td>
<td>25%</td>
<td>11%</td>
<td>14%</td>
<td>2.7</td>
</tr>
<tr>
<td>TalkTalk</td>
<td>62%</td>
<td>18%</td>
<td>11%</td>
<td>9%</td>
<td>1.7</td>
</tr>
</tbody>
</table>

**Source:** Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017 Q. How long did it take to resolve the issue with [provider]? Base: All who complained about the landline service in the past six months whose issue was completely resolved – All (1583), BT (606), Sky (293), TalkTalk (378), Virgin Media (306) Arrows indicates significantly higher/lower than the sector average at the 95% confidence level.

TalkTalk and BT customers were more likely than the sector overall to report that the complaint had been resolved in one contact, and less likely to report that it needed two or three contacts.
Figure 25: Landline - number of contacts with provider to completely resolve the complaint

Source: Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017. Q. How many times have you been in contact with [provider] in relation to this particular complaint so far? Base: All who complained about the landline service in past six months whose issue was completely resolved – All (1583), BT (606), Sky (293), TalkTalk (378), Virgin Media (306). Arrows indicates significantly higher/lower than the sector average at the 95% confidence level.

Sky customers were more likely to be satisfied with complaints handling

Sky broadband customers were more likely than the sector average to report being satisfied overall with how a complaint was handled (61%), and with five of the nine specific aspects of customer service measured. TalkTalk (51%) performed below average for overall satisfaction with complaint handling, and for six of the nine specific aspects of customer service measured.
Figure 26: Broadband - overall satisfaction and satisfaction with specific aspects of customer service measured

<table>
<thead>
<tr>
<th></th>
<th>Total broadband</th>
<th>BT</th>
<th>EE/Orange</th>
<th>Sky</th>
<th>TalkTalk</th>
<th>Virgin Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction with service you received over this complaint - % satisfied</td>
<td>56%</td>
<td>56%</td>
<td>53%</td>
<td>61%</td>
<td>51%</td>
<td>54%</td>
</tr>
<tr>
<td>% Satisfied with specific aspects of customer service measured:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of finding provider contact details</td>
<td>62%</td>
<td>58%</td>
<td>55%</td>
<td>65%</td>
<td>60%</td>
<td>67%</td>
</tr>
<tr>
<td>Ease of getting through to the right person (PHONE)</td>
<td>43%</td>
<td>41%</td>
<td>46%</td>
<td>56%</td>
<td>44%</td>
<td>54%</td>
</tr>
<tr>
<td>Time taken to handle your issue</td>
<td>53%</td>
<td>54%</td>
<td>50%</td>
<td>56%</td>
<td>46%</td>
<td>53%</td>
</tr>
<tr>
<td>Getting the issue resolved to your satisfaction</td>
<td>56%</td>
<td>58%</td>
<td>53%</td>
<td>59%</td>
<td>51%</td>
<td>54%</td>
</tr>
<tr>
<td>Courtesy and politeness of advisors</td>
<td>66%</td>
<td>63%</td>
<td>58%</td>
<td>72%</td>
<td>65%</td>
<td>68%</td>
</tr>
<tr>
<td>Advisor doing what they said they would do</td>
<td>60%</td>
<td>57%</td>
<td>59%</td>
<td>68%</td>
<td>56%</td>
<td>61%</td>
</tr>
<tr>
<td>Logging of query details to avoid having to repeat yourself</td>
<td>56%</td>
<td>57%</td>
<td>50%</td>
<td>64%</td>
<td>50%</td>
<td>55%</td>
</tr>
<tr>
<td>Offering compensation or a goodwill payment</td>
<td>45%</td>
<td>47%</td>
<td>44%</td>
<td>48%</td>
<td>40%</td>
<td>42%</td>
</tr>
<tr>
<td>Willingness to help resolve your issue</td>
<td>61%</td>
<td>60%</td>
<td>60%</td>
<td>68%</td>
<td>57%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Source: Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017
Base: All who complained about broadband service in past six months (3558), BT (1017), EE/Orange (215), Sky (660), TalkTalk (843), Virgin Media (823)
Base: All contacting by phone (2290/583/134/459/515/599)

Red or green text indicates significantly higher/lower than the sector average at the 95% confidence level.

TalkTalk and BT broadband customers were more likely than the sector average to report that their complaint had been resolved in less than an hour

Around 70% of resolved broadband complaints were reported as having been resolved within a day, while 13% of resolved broadband complaints were reported as taking two to four days to resolve, and 16% took five or more days to resolve. Among those with a resolved broadband complaint, BT and TalkTalk customers were more likely than the sector average to report that their complaint had been resolved within an hour.

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120 The data in the charts is presented at both a total sector level and at a provider level. Total sector level data is weighted to be representative of the UK overall, and any provider-level data is unweighted. The provider-level data is therefore representative of customers of the provider with a complaint in the six months prior to fieldwork and who are online. More information can be found in annex 2.
Figure 27: Broadband - time taken to completely resolve the complaint (among those whose complaint was completely resolved)

<table>
<thead>
<tr>
<th>Provider</th>
<th>Less than 1 hour</th>
<th>Several hours but within the day</th>
<th>2-4 days</th>
<th>5 days or more</th>
<th>Average time to resolve (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Broadband</td>
<td>43%</td>
<td>27%</td>
<td>13%</td>
<td>16%</td>
<td>2.8</td>
</tr>
<tr>
<td>EE/Orange</td>
<td>25%</td>
<td>26%</td>
<td>28%</td>
<td>19%</td>
<td>3.8</td>
</tr>
<tr>
<td>Sky</td>
<td>29%</td>
<td>33%</td>
<td>16%</td>
<td>20%</td>
<td>3.4</td>
</tr>
<tr>
<td>BT</td>
<td>48%</td>
<td>26%</td>
<td>9%</td>
<td>16%</td>
<td>2.8</td>
</tr>
<tr>
<td>TalkTalk</td>
<td>56%</td>
<td>19%</td>
<td>9%</td>
<td>19%</td>
<td>2.7</td>
</tr>
<tr>
<td>Virgin Media</td>
<td>41%</td>
<td>29%</td>
<td>16%</td>
<td>14%</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Source: Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017

Q. How long did it take to resolve the issue with [provider]?
Base: All who complained about broadband service in past six months whose issue was completely resolved – All (2010), BT (622), EE/Orange (114), Sky (361), TalkTalk (466), Virgin Media (447)
Arrows indicates significantly higher/lower than the sector average at the 95% confidence level.

Eighty per cent of completely resolved broadband complaints were resolved with one or two contacts.

On average, completely resolved broadband complaints were resolved in just under two contacts with the provider. Nine per cent of complaints were resolved in four or more contacts. On average, Sky and EE/Orange customers reported more contacts to resolve an issue, and BT customers reported fewer, compared to the sector overall.
Figure 28: Broadband: number of contacts with provider to completely resolve the complaint

Source: Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017

Q. How many times have you been in contact with [provider] in relation to this particular complaint so far?
Base: All who complained about broadband service in past six months whose issue was completely resolved – All (2010), BT (622), EE/Orange (114), Sky (361), TalkTalk (466), Virgin Media (447)
Arrows indicates significantly higher/lower than the sector average at the 95% confidence level.

Customers who are not satisfied with how their complaint was handled may wish to take their case to an alternative dispute resolution scheme

If a customer believes their provider is not dealing with a complaint properly, they can escalate it to the appropriate alternative dispute resolution (ADR) scheme. The scheme will examine the complaint and decide whether it should be resolved, wholly or partly, in favour of the customer or the provider. Complaints can be taken to ADR when a provider sends a ‘deadlock’ letter on request, or after eight weeks without resolution.

All communications providers must be signed up to one of two ADR schemes approved by Ofcom: Ombudsman Services: Communications (OS), and Communications and Internet Services Adjudication scheme (CISAS).

Both OS and CISAS have recently published data summarising the subject matter of the complaints they received between October and December 2016, broken down by provider. The information can be found on their respective websites: OS and CISAS

In relation to broadband and landline services, the main complaint drivers over the period were ‘service quality’ (for example, loss of service, disconnections and broadband speeds), billing, and
contract issues. Figure 29 shows the most common types of complaint made to ADR schemes in relation to each of the largest providers.

**Figure 29: Most common type of complaints made to ADR schemes, largest landline and broadband providers**

<table>
<thead>
<tr>
<th>Provider</th>
<th>Most common</th>
<th>Second most common</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>Service quality(^{123}) (41%)</td>
<td>Billing (22%)</td>
</tr>
<tr>
<td>Plusnet</td>
<td>Service quality (39%)</td>
<td>Contract issues (17%)</td>
</tr>
<tr>
<td>Post Office</td>
<td>Service quality (38%)</td>
<td>Billing (22%)</td>
</tr>
<tr>
<td>Sky</td>
<td>Service quality (46%)</td>
<td>Billing (17%)</td>
</tr>
<tr>
<td>TalkTalk</td>
<td>Service quality (47%)</td>
<td>Contract issues (17%)</td>
</tr>
<tr>
<td>Virgin Media</td>
<td>Contract issues (28%)</td>
<td>Service quality (19%) / billing (19%)</td>
</tr>
</tbody>
</table>

*Source: Ombudsman Services and CISAS*

**Ofcom is looking at ways to improve consumers’ experience of complaint handling**

We are currently reviewing the rules on complaints handling that apply to providers (General Condition 14).¹²⁴ We have proposed strengthening the rules in several areas, including requiring that providers inform consumers how their complaint will be handled, how long it will take, and that they have the right to use ADR if their complaint concludes without resolution. A statement setting out our conclusions from this review will be published later in 2017.

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¹²¹ Both schemes log one case per service. That means that each case logged may include a number of different complaints relating to the same service (for example, a consumer may complain about their bill but also their provider’s customer service in relation to their broadband service). Both schemes allocate each case to a single category of complaint according to what they perceive to be the main issue raised by the complainant.

¹²² This data also includes ADR complaints to the mobile customers of these providers, where relevant.

¹²³ ‘Service quality’ complaints include, for example, those relating to loss of service, network coverage, disconnections and download speeds.

We are also currently carrying out a review of our approval of Ombudsman Services and CISAS, which will consider whether the schemes continue to meet required criteria such as accessibility, effectiveness and fairness.¹²⁵


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Free and independent assistance for consumers wishing to complain

**Citizens Advice**
Can provide advice on consumer problems and tell you which laws apply to your situation.
Helpline: 03454 04 05 06
Website: [www.citizensadvice.org.uk](http://www.citizensadvice.org.uk)

**Consumer Council - Northern Ireland**
Investigates enquiries and complaints on behalf of consumers.
Complaints line: 0800 121 6022
Email: complaints@consumercouncil.org.uk
Website: [www.consumercouncil.org.uk](http://www.consumercouncil.org.uk)

**Resolver**
Provides easy access to provider contact details and a log of your complaint details. Also makes recommendations on steps to take with a complaint.
Website: [www.resolver.co.uk](http://www.resolver.co.uk)
Mobile services

Overview

More than nine in ten adults in the UK use a mobile phone. As well as making and receiving calls, three-quarters use their mobiles to access the internet, and the use of mobile data continues to rise year on year.

For many younger, and family households, a reliable mobile service is considered vital, especially for those with an out-and-about lifestyle. Two-thirds of households say they would struggle to function without their mobile service.

This section explores the service quality that mobile users received from their providers in 2016, including:

- **Overall satisfaction** - how satisfied customers were with their service and whether they had a reason to complain.

- **Service performance** - whether services were available and working as they should.

- **Customer service** - the experience of contacting providers and how effectively they resolved complaints.

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127 Technology Tracker H2 2016, table 32


While the focus of this section is on services marketed to individual consumers, this information will be relevant to the many small businesses that also use these, and equivalent, services.

**Overall satisfaction and reasons to complain**

**Most mobile users were satisfied with their service in 2016 but there were differences between providers**

Ninety-two per cent of mobile phone customers reported they were satisfied with their service overall in 2016, up from 89% in 2015.\(^{130}\) Tesco Mobile customers had higher than average satisfaction, with 96% of customers reporting satisfaction with the overall service.

**Figure 30: Satisfaction with mobile phone provider**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>EE</th>
<th>O2</th>
<th>Tesco Mobile</th>
<th>Three</th>
<th>Virgin Mobile</th>
<th>Vodafone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with overall service</td>
<td>92%</td>
<td>92%</td>
<td>93%</td>
<td>96%</td>
<td>89%</td>
<td>94%</td>
<td>89%</td>
</tr>
</tbody>
</table>

Source: Ofcom Switching Tracker, July to August 2016
Base: All adults aged 16+ who are the decision-maker and express an opinion on mobile (2262), receiving their service from EE (577), O2 (555), Vodafone (315), 3 (225), Virgin (150), Tesco (140). Providers used by fewer than 100 respondents are not shown individually but are included in the total. ‘Don’t know’ responses have been excluded from the base.

NB: Figures highlighted in **green/red** indicate a statistically significant difference compared to the total market average.

**Only 4% of mobile users had a reason to complain about their service in 2016, although this varied by provider**

Four per cent of mobile customers reported that they had a reason to complain about their provider in the last 12 months, a decrease since 2015 (6%).\(^{131}\) The proportion of mobile customers with a reason to complain was significantly lower than for broadband customers (13%) and landline phone customers (5%).

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\(^{130}\) Ofcom, *Switching Tracker H2 2016*, table 72:
[https://www.ofcom.org.uk/__data/assets/pdf_file/0025/95524/Switching-Tracker-2016-Data-tables.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0025/95524/Switching-Tracker-2016-Data-tables.pdf)

\(^{131}\) Ofcom, *Reason to complain research*, April 2017,

Fieldwork was conducted in December 2016, therefore reasons to complain date back to December 2015.
Figure 31: Proportion of mobile consumers who reported a reason to complain in the last 12 months, whether or not they went on to make a complaint

![Bar chart showing the proportion of mobile consumers who reported a reason to complaint over a period of years.](image)

Source: Ofcom Quality of customer service research, face-to-face omnibus survey, fieldwork carried out by Kantar Media, December 2016. Ofcom research, omnibus survey, fieldwork carried out by Saville Rossiter-Base in August, September and November 2015. Base: All UK households 16+ (n 2016: mobile = 5875. n 2015: mobile = 3033).

Q. Have you personally had a reason to complain about any of these services or suppliers in the last 12 months, whether or not you went on to make a complaint?

Represent a significant increase or decrease since 2015.

The proportion of Vodafone customers with a reason to complain was higher than mobile customers overall (7% vs. 4%). This is in line with complaints to the Ofcom contact centre, which received considerably more complaints per subscriber from Vodafone customers than from any other mobile provider. Data collected by Ombudsman Services (the scheme which provides alternative dispute resolution for Vodafone) shows that a majority of complaints about Vodafone (53%) related to billing issues.\(^{132}\)

\(^{132}\) [https://www.ombudsman-services.org/for-consumers/complaints-data](https://www.ombudsman-services.org/for-consumers/complaints-data)
Figure 32: Proportion of mobile customers with a reason to complain in the last 12 months, by provider

<table>
<thead>
<tr>
<th>Provider</th>
<th>Total Mobile</th>
<th>EE/Orange/T-Mobile</th>
<th>O2</th>
<th>Tesco Mobile</th>
<th>Three</th>
<th>Virgin Mobile</th>
<th>Vodafone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason to complain in the last 12 months</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: Ofcom Quality of customer service research, face-to-face omnibus survey, fieldwork carried out by Kantar Media, December 2016. Base: All UK households using a mobile phone 16+ (5875), EE/Orange/T-Mobile (1517), O2 (1349), Tesco Mobile (464), Three (624), Virgin (360), Vodafone (859). Q. Have you personally had a reason to complain about any of these services or suppliers in the last 12 months, whether or not you went on to make a complaint? Red or green text indicates figures are significantly higher or lower than those for mobile consumers as a whole (4%).

Of those with a reason to complain, the most common reason was the service not performing as it should (42%), e.g. poor call or line quality, loss of service or voicemails being delivered late. The second most common cause for complaint was billing, pricing or payment issues (33%).

Figure 33: Reasons to complain about mobile service or provider

Source: Ofcom Quality of customer service research, face-to-face omnibus survey, fieldwork carried out by Kantar Media, December 2016. Base: All who had a reason to complain about their mobile phone (231). Q. What was the most recent issue you had reason to complain about in connection with your mobile phone?

We examine below how satisfied consumers were with complaint handling, among those who had made a complaint to their provider (see page 76).
Mobile: service performance

Mobile signal coverage is the most important single factor in consumers’ quality of experience. Without adequate signal, mobile services cannot meet consumers’ basic needs and expectations. Poor mobile signal can lead to:

- calls dropping out, or not being able to make and receive calls at all;
- loss of voice quality, so that parts of the call are missed and the conversation cannot flow;
- text messages being undelivered or delivered late; or
- data being unavailable or slow to connect.

Mobile network capacity is another factor in the consumer experience; the issues listed above also arise when the parts of the network to which the consumer is connected fill up with other users’ traffic (become ‘congested’). At busy times, when many people are trying to use mobile services at once, even mobile users who have a signal may not get the performance they expect from their network.

Good coverage is essential for a reliable mobile experience

Coverage levels vary by operator, and this is reflected in how satisfied people are with their reception. In 2016, 86% of customers were satisfied with the reception, or ease of accessing their mobile service (an increase from 81% in 2015), with Three customers reporting below-average satisfaction (80%).

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133 Quality of service in telecoms, Residential consumer and SME experiences of quality of service in fixed line, broadband and mobile telecoms, p. 18
134 Switching Tracker 2016, table 76
Figure 34: Customer satisfaction with their provider’s service reception\textsuperscript{135}

<table>
<thead>
<tr>
<th>Total</th>
<th>EE</th>
<th>O2</th>
<th>Tesco Mobile</th>
<th>Three</th>
<th>Virgin Mobile</th>
<th>Vodafone</th>
</tr>
</thead>
<tbody>
<tr>
<td>86%</td>
<td>85%</td>
<td>86%</td>
<td>91%</td>
<td>80%</td>
<td>87%</td>
<td>88%</td>
</tr>
</tbody>
</table>

Source: Ofcom Switching Tracker, July to August 2016
Base: All adults aged 16+ who are the decision-maker and express an opinion on mobile (2262), receiving their service from EE (577), O2 (555), Vodafone (315), 3 (225), Virgin (150), Tesco (140). Providers used by fewer than 100 respondents are not shown individually but are included in the total. ‘Don’t know’ responses have been excluded from the base. NB: Figures highlighted in green/red indicate a statistically significant difference compared to the total market average. Tesco Mobile is provided over the O2 network and Virgin Mobile is provided on the EE network.

Nineteen per cent of people in rural areas were dissatisfied with their mobile reception, compared to 6% of people in urban areas and 8% overall. This is a significant decrease since 2015, when 31% of those in rural areas reported being dissatisfied.\textsuperscript{136}

Each year, in our Connected Nations report, we provide an update on the levels of voice and data coverage available across the UK. The most recent report shows coverage levels as of June 2016. We also offer a tool which consumers can use to check the latest coverage levels offered by providers in their area: [https://checker.ofcom.org.uk](https://checker.ofcom.org.uk).

Figure 35 below shows the coverage of mobile voice services for each operator in the UK, as of June 2016. We expect improvements during 2017 as operators deploy more voice-enabled 4G infrastructure.

Figure 35: UK coverage for each operator’s mobile voice service, June 2016

| Indoor, premises | 96% | 95% | 96% | 95% |
| Outdoor geographic, landmass | 78% | 82% | 80% | 76% |
| Outdoor, premises | 99% | 99% | 99% | 99% |

Source: Ofcom analysis of operator data (Connected Nations 2016)

\textsuperscript{135} Switching Tracker 2016, table 76
\textsuperscript{136} Switching Tracker 2016, table 76
All four network operators increased their 4G coverage between 2015 and 2016, with outdoor premises coverage increasing from 46% in 2015 to 86% in 2016. Outdoor coverage reached 40% of the UK landmass, up from 8%. However, coverage in rural areas, particularly in Scotland and Wales, still lags behind other areas of the UK. Overall coverage by data services is still driven by 3G, which is available more widely than 4G, but this will change in 2017 as 4G roll-out continues.

Figure 36: UK coverage for each operator’s mobile data services, based on combined 3G and 4G coverage, June 2016

<table>
<thead>
<tr>
<th>Indoor, premises</th>
<th>O2</th>
<th>Vodafone</th>
<th>EE</th>
<th>Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor geographic, landmass</td>
<td>63%</td>
<td>66%</td>
<td>76%</td>
<td>70%</td>
</tr>
<tr>
<td>Outdoor, premises</td>
<td>96%</td>
<td>97%</td>
<td>99%</td>
<td>97%</td>
</tr>
</tbody>
</table>

Source: Ofcom analysis of operator data (Connected Nations 2016)

Poor coverage on transport networks is also a cause of concern for many consumers. The UK motorway networks, on average, have 97% voice coverage, falling to 62% on A and B roads.

Mobile operators have committed to continue to improve their coverage in 2017:

- In 2014 the UK Government reached an agreement with the four mobile operators to improve mobile coverage. In this agreement, reflected in the operators’ licence obligations, each operator committed to provide voice coverage to 90% of the UK’s landmass by the end of 2017.

- O2 is required under the terms of the 4G licence it was awarded in 2013 to provide indoor coverage for mobile data to 98% of the population by the end of 2017. Other providers have indicated they will match this level of coverage over the same period.

Where consumers experience poor coverage, particularly in buildings, providers may offer various solutions, depending on the customer’s contract. All the mobile network operators now offer Wi-Fi.

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137 Ofcom, Connected Nations 2016, December 2016

138 Ofcom, Connected Nations 2016, December 2016, p. 40:

139 The signal levels used in the coverage measures we report in Connected Nations are based on Ofcom’s own field testing of the minimum mobile signal levels needed for a good consumer experience. These signal levels differ from those used in existing mobile operator licences, so even when these obligations are met at the end of 2017, the coverage levels we report may differ from the licence targets.
calling, which can be activated directly on newer smartphones or via the provider’s app. There are also devices available from mobile providers to boost signal within the home using the customer’s home broadband network.

**Mobile signal in the home**

- The location and characteristics of a property can affect the mobile signal available indoors. Thick walls, metal window frames, ceilings, pillars, or basement rooms can all impair coverage. Signal may also be blocked if the property is in the ‘shadow’ of a hill or large building.

- One way to overcome poor coverage in the home is **Wi-Fi calling and texts**. This service, offered by all the mobile operators, allows customers to make calls and send texts over a Wi-Fi network.

- The operators also offer **devices for the home** which can be bought or supplied by the operators to improve in-home signal (EE’s Signal Box, O2’s Boostbox, Three’s Home Signal, Vodafone’s Sure Signal). These work by connecting to a router and sending traffic over the broadband network to increase the mobile signal within homes and buildings.

Ofcom believes that more needs to be done for consumers experiencing poor coverage. We will work in 2017 to help improve mobile coverage by: ensuring that existing coverage obligations are met; considering targeted new obligations, where appropriate; and considering spectrum options to support connectivity on trains. Other measures we are working on include the development of new rules to allow the use of licence-exempt mobile repeaters to help consumers improve coverage in the home.

**If mobile coverage is available, most people appear to experience good call quality**

For most consumers, the ability to make and receive calls is still a key requirement of their mobile service. Text messages, which are being used less frequently with the rise of instant messaging and social media, are also carried over voice networks.

The findings below are based on Ofcom’s research via our testing for the *Smartphone Cities* report (where Ofcom testers compared the performance of mobile networks in UK cities) and our mobile research application (which uses a nationally representative panel of mobile customers and measures their experience of using mobile services using an app installed on their phone).

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These two sets of research measure different aspects of mobile performance (and in the case of the app, user behaviour) using different methodologies and over different time periods. Figure 37 highlights the key differences in methodology.

**Figure 37: Differences between Ofcom’s mobile performance research methodologies**

<table>
<thead>
<tr>
<th></th>
<th>Smartphone Cities(^{141})</th>
<th>Mobile research app(^{142})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td>Benchmark network performance and provide information to consumers on market level</td>
<td>Benchmark consumer experience and satisfaction, and provide information to consumers on market level</td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
<td>Managed walk and drive testing</td>
<td>Passive monitoring of consumer research panel via an Android app</td>
</tr>
<tr>
<td><strong>Geographic scope</strong></td>
<td>Case studies in UK cities</td>
<td>Nationally representative</td>
</tr>
<tr>
<td><strong>Latest test fieldwork</strong></td>
<td>July - October 2016</td>
<td>September - December 2016</td>
</tr>
</tbody>
</table>

Our *Smartphone Cities* report provides a snapshot of mobile network performance in the UK cities where we carry out our testing.\(^{143}\) As part of this, we measure voice call success rate, which is the proportion of calls successfully completed, compared with those that dropped within 90 seconds or failed to be set up at all. In our most recent research (with fieldwork between July and October 2016), the large majority of calls made in the tested cities were successful, with 99% of calls being completed on Vodafone and Three, 98% on EE and 97% on O2.\(^{144}\)

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\(^{141}\) More information on the methodology used for our *Smartphone Cities* research is available at the technical annex of the December 2016 *Smartphone Cities* report.

\(^{142}\) More information on the methodology used for our mobile research app research is available at annex 3 of this report.

\(^{143}\) In our most recent fieldwork, these were: Belfast, Birmingham, Cardiff, Edinburgh, London, Sheffield and Southampton which we chose because they all had 4G coverage from each of the four operators. London was not included in our analysis of call success rates. Ofcom, *Smartphone Cities, Measuring 4G mobile broadband and voice performance*, December 2016: https://www.ofcom.org.uk/__data/assets/pdf_file/0027/95904/Smartphone-Cities-Dec16.pdf

\(^{144}\) *Smartphone Cities, Measuring 4G mobile broadband and voice performance*, p. 26
Figure 38: Call success rate (Smartphone Cities research; tested cities only - not nationally representative)

<table>
<thead>
<tr>
<th>Provider</th>
<th>Completed</th>
<th>Dropped</th>
<th>Failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>98%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>O2</td>
<td>97%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Vodafone</td>
<td>99%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Three</td>
<td>99%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Ofcom mobile broadband measurements, fieldwork July to October 2016. We used 4G SIMs that were uncapped on speed. In the case of EE, testing was carried out on an uncapped 4G EE tariff, but EE also offers tariffs which are capped in relation to speed. Vodafone, O2 and Three do not differentiate on speed, and so testing was carried out on standard 4G SIMs. Tariffs offered by each operator can change. Consumers need to check with each operator for up-to-date information.

Our mobile research app measures how many calls were dropped due to loss of service. As with the Smartphone Cities research, voice services had a very high success rate (over 99%) with few calls dropped before completion. There were no significant differences between operators. Unlike our Smartphone Cities research, the app does not measure whether customers can make a call in the first place.

For our Smartphone Cities report, we also tested the quality of voice calls. On average, in the cities where we carried out our testing, the actual voice quality of calls was good. With providers now offering high-definition voice calling, the quality levels are set to improve, with further innovation likely as providers implement 4G voice services.

The deployment of 4G networks is improving consumers’ experience of data services

Consumers’ ability to connect to internet applications and services is becoming more and more important. In 2016, 74% of adults with a mobile phone used data services on their mobile (up from 69% in 2015.) Those who use mobile data are also using more of it, as video streaming and other

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145 Ofcom mobile research application 2016.
146 Ofcom mobile broadband measurements, fieldwork July to October 2016. On average across operators the average was a ‘Mean Opinion Score’ of 4. Mean Opinion Score ranges from 1.0 (bad) to 5.0 (excellent), using ITU T P.863 POLOQA (Perceptual Objective Listening Quality Assessment), an internationally recognised quality estimate of the quality in the voice (speech): https://www.itu.int/rec/T-REC-P.863-201409-I/en
data-intensive applications become more popular. Average data use per mobile connection increased by 45% between June 2015 and June 2016.\footnote{Connected Nations 2016, p. 45, figure 23}

Our research in UK cities indicates that where 4G data services are available, consumers should generally experience a high level of performance from their network provider. The websites tested (YouTube, BBC and Amazon) rarely failed to load, and typically took between one and five seconds. There were differences between providers; for example, in average download speed. Whether these differences are noticeable will depend on the behaviour and expectations of individual consumers.

**Figure 39: Smartphone Cities 2016 key metrics scorecard (4G results)**

<table>
<thead>
<tr>
<th></th>
<th>4G Web browsing speed</th>
<th>4G Download speed</th>
<th>Voice call</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average speed</td>
<td>Successful loading</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average speed</td>
<td>Speeds over 2Mbit/s</td>
</tr>
<tr>
<td>BBC</td>
<td>4 seconds</td>
<td>99%</td>
<td>32Mbit/s</td>
</tr>
<tr>
<td>Amazon</td>
<td>2 seconds</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>YouTube</td>
<td>1 second</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>5 seconds</td>
<td>67%</td>
<td>13Mbit/s</td>
</tr>
<tr>
<td>O2</td>
<td>2 seconds</td>
<td>98%</td>
<td>99%</td>
</tr>
<tr>
<td>Three</td>
<td>1 second</td>
<td>98%</td>
<td>99%</td>
</tr>
<tr>
<td>Vodafone</td>
<td>2 seconds</td>
<td>98%</td>
<td>18Mbit/s</td>
</tr>
<tr>
<td></td>
<td>1 second</td>
<td>99%</td>
<td>99%</td>
</tr>
</tbody>
</table>

Source: Ofcom mobile broadband measurements, fieldwork July to October 2016. Note: Average (mean for web browsing and median for download speed) of all tests gathered, with 4G as the best bearer. We used 4G SIMs that were uncapped on speed. In the case of EE testing was carried out on an uncapped 4G EE tariff, but EE also offers tariffs which are capped in relation to speed. Vodafone, O2 and Three do not differentiate on speed, and so testing was carried out on standard 4G SIMs. Tariffs offered by each operator can change. Consumers need to check with each operator for up-to-date information.\footnote{Smartphone Cities, Measuring 4G mobile broadband and voice performance, p. 5}

**More than two-thirds of internet connections on mobile phones are made using Wi-Fi**

Our mobile research app records the type of network that users connect to when actively using apps and transferring data. This information is collected on a second-by-second basis and provides an overall picture of the type of network mobile users are connecting to most frequently when using the internet during app sessions.

Notably, most connections do not use a cellular network, but connect using Wi-Fi. This enables consumers to retain their 3G and 4G data allowances for when they are outside the home or other Wi-Fi coverage areas.\footnote{Ofcom mobile research application 2016}
The success rate of connecting to the network and downloading data is high among 4G users

When users are connected to their mobile network rather than Wi-Fi, our mobile research app records whether they make a successful connection and download data. Every 15 minutes, an automated test is run in the background which attempts to download a small file and logs whether this can be done successfully. The research indicates that for 4G panellists, 96% of tests were successful.  

35% of mobile data connections by 4G customers were to 3G or 2G networks

As noted earlier, 4G coverage was lower than 3G coverage in 2016. As such, 4G customers may connect to 3G or 2G networks where a 4G signal is not available. This is likely to result in a lower-speed internet service. This may also occur when mobile providers manage traffic on their network by moving 4G customers onto 3G at peak times if the network is congested. Figure 41 indicates that when 4G customers were connected to a mobile data network (i.e. not via Wi-Fi) and using apps, 35% of the time they did not have a 4G data connection but were on 3G or 2G.

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151 The results represent the success rate of the connection tests (every 15 min) for each network. Panellists were chosen so that they all have 4G services. Therefore, each time 4G is not available, the device will try to connect to 3G, and if 3G is not available, then 2G. The low success percentages of 2G do not actually represent poor 2G coverage; they represent the cases where 2G was available (or not) when neither of the other technologies (3G, 4G) were available. Similarly, the 3G % represents the cases were 3G was available when 4G wasn’t.
Losing access to mobile services can cause harm

With mobile voice and data services so important to many consumers, losing them can cause significant difficulties and inconvenience. While landline services and in-home solutions such as Wi-Fi calling might be a temporary solution for those who have them, they will not always be available outside the home.

Our research indicates that in the last 12 months around one in ten (8%) mobile users experienced a loss of service in an area where they would normally get good coverage.¹⁵² Service can be lost for a variety of reasons – from faulty handsets through to network problems such as mobile masts failing or operating at reduced capacity.

Mobile providers do not have in place systems and processes that routinely calculate how many of their customers lose service due to network failures.¹⁵³ We have therefore not been able to compare how frequently network outages affected the customers of the mobile providers covered in this report. Our analysis for our consultation on automatic compensation indicates that the vast majority (c.87%) of mast outages are fixed within 24 hours, but a significant minority of consumers experience loss of service for longer periods of time.¹⁵⁴

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¹⁵² Automatic compensation: Consumer experience of provisioning delays, loss of service and missed appointments, p. 134

¹⁵³ In part this is because, typically, an outage on one mast will not affect a consumer if their handset can receive service from a different mast with overlapping coverage.

Mobile: customer service

Billing issues are a key area of concern for some mobile customers, and effective customer service is crucial in dealing with these

As noted above, the most common reasons customers had to complain about their mobile service in 2016 related to the service not performing as it should (42%) and billing, pricing and payment issues (33%).

Billing issues accounted for 38% of complaints to Ofcom about pay-monthly mobile services in 2016, compared to 15% of complaints about broadband services and 23% of complaints about landline phone services. They were also the biggest driver of complaints to alternative dispute resolution schemes about mobile services in 2016. Billing issues may occur more often in relation to mobile services than other communications services because mobile bills are more likely to change month by month, and by larger amounts; for example, due to traveling abroad.

Ofcom requires communications providers to accurately bill customers for their usage. If providers breach these requirements, Ofcom can investigate and issue a penalty. In 2016, Ofcom fined Vodafone £3.7m for its failure to credit pay-as-you-go customers’ accounts between December 2013 and April 2015. Ofcom also fined EE £2.7m for overcharging customers who contacted its customer service number while roaming in the EU. In March 2017 Ofcom fined the landline and broadband provider Plusnet £880,000 for continuing to bill former landline and broadband customers who had cancelled their service.

In 2016 mobile customers waited less than half as long as landline and broadband customers, on average, to speak to their provider

Mobile customers have access to the same customer service channels as do landline and broadband customers, as described on page 26. Information on a mobile provider’s website, apps or automated telephone systems can sometimes remove the need to contact a provider in the first place. For

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155 42% of mobile customers with a reason to complain about their mobile service reported it was because the service was not performing as it should, 33% reported that it was because of billing, payment or pricing issues (see Figure 33).
156 Ofcom complaints data.
157 Ofcom regulates under General Condition 11: Metering and Billing. Regulated communications providers have a ‘relevant turnover’ in their most recent complete financial year exceeding £40m and must be signed up to an external approval body.
158 https://www.ofcom.org.uk/about-ofcom/latest/features-and-news/vodafone-fined-4.6-million
159 https://www.ofcom.org.uk/about-ofcom/latest/features-and-news/ee-fine
160 https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2017/plusnet-fined-880,000
example, mobile customers can use their providers’ online coverage checkers to see whether there are service problems in their area and how long these are likely to last.

Data supplied by providers show that most mobile customers used their phone when contacting their provider in 2016, accounting for 83% of contacts on average.\(^{161}\) Webchat accounted for 12% of contacts on average, emails and online contact forms 4%, and letters less than 1%.\(^{162}\) Some mobile providers also offer help in local stores, allowing customers to bring in their handsets to discuss problems face-to-face.

**Figure 42: Average call waiting time, mobile providers (2016)**

![Graph showing average call waiting times for mobile providers in 2016](image)

Source: provider data. * Vodafone offered customers waiting in the call queue in 2016 the option to receive a call back, which may reduce call waiting times. Vodafone was unable to provide information on how long on average it takes to get back to a customer when they have been offered a call-back. Dotted line indicates average (1 minute)

In 2016 the average call waiting time for mobile providers was 1 minute, nearly 2 minutes shorter than for landline and broadband providers.\(^{163}\) The provider with the longest overall call waiting time was O2, at 2 minutes 3 seconds, and the shortest was Tesco Mobile, at 30 seconds. Unlike for

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\(^{161}\) Ofcom analysis of provider data. More information on how Ofcom derived this and other metrics from provider data can be found at annex 1.

\(^{162}\) All but one provider had 2% or fewer contacts by email or online contact form. One provider had a significantly higher contact rate, which increased the average to 4%.

\(^{163}\) Ofcom analysis of provider data. 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 broadband customers. The data provided is the overall average for calendar year 2016. It includes calls enquiring about new services and those reporting problems with existing services.
landline and broadband providers, the average difference between sales calls and other call types for mobile providers was very small.

Figure 43: Customer calls abandoned while waiting in the call queue, mobile providers (2016)

![Customer calls abandoned while waiting in the call queue, mobile providers (2016)](chart)

Source: provider data. Dotted line indicates average (6%)

The proportion of mobile customers hanging up before reaching an advisor was lower than for landline and broadband customers, corresponding with lower average call waiting time. However, as noted above, not all customers leave the call queue because of the length of time they have been waiting; some customers may ‘abandon’ because they receive useful information through an automated message. This can reduce the effort required by customers and the time spent in the queue.

**Vodafone customers were much more likely than customers of other mobile providers to complain to Ofcom**

As noted above, only a small number of consumers with reason to complain choose to complain to Ofcom, but this can be indicative of poor service quality. There were fewer complaints per 100,000 subscribers made to Ofcom in 2016 concerning mobile services than about landline or broadband.

Each quarter Ofcom reports on the complaints received by its Consumer Contact Centre. Below, we set out the complaints generated by each mobile provider for pay-monthly services, over the whole year.

164 The abandonment rate is the overall number of occasions where a customer abandoned the call while 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 during calendar year 2016.
of 2016. Ofcom receives significantly fewer complaints about pay-as-you-go mobile services and does not regularly report on these. Further information about how we compile our complaints data can be found in our most recent quarterly report publication.

In 2016 Vodafone generated the most pay-monthly mobile complaints to Ofcom per 100,000 subscribers (92) while Tesco Mobile generated the fewest (3).

Figure 44: Pay-monthly mobile complaints per 100,000 subscribers to Ofcom in 2016

<table>
<thead>
<tr>
<th>Most complaints</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vodafone</td>
<td>92</td>
</tr>
<tr>
<td>Virgin Mobile</td>
<td>24</td>
</tr>
<tr>
<td>EE</td>
<td>18</td>
</tr>
<tr>
<td>Three</td>
<td>14</td>
</tr>
<tr>
<td>O2</td>
<td>12</td>
</tr>
<tr>
<td>Tesco Mobile</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fewest complaints</th>
<th></th>
</tr>
</thead>
</table>

*All figures rounded to nearest whole number apart from where they are less than 0.5.
Actual measurable difference may in some cases be less than one.
**Brand owned by BT Group
Note: Industry average is limited to those providers included in the report
Source: Ofcom, CCT data

165 This information has been normalised using subscriber numbers as of June 2016.
The quality of complaints handling varied considerably across mobile providers in 2016

Our consumer research into complaints and complaint handling found that mobile customers are less likely than broadband customers to have a reason to complain, and those who do have a reason are less likely to proceed to make a complaint (64% compared to 77% broadband).²⁶⁷

However, among those who did complain to their mobile provider, there were low levels of satisfaction with how their complaints were handled. Our research found that in the second half of 2016 less than three in five (57%) mobile consumers were satisfied with how their complaint was handled.²⁶⁸ This is lower than levels of overall satisfaction with complaint handling in the landline phone market (62%) but in line with the broadband market (56%).

Across mobile providers, satisfaction with some specific aspects of complaints handling was also low. For example, although the average waiting time for customer service calls to mobile providers is significantly lower than to landline phone and broadband providers, only 54% of customers were satisfied with the ease of getting through to the right person on the phone.²⁶⁹ As noted above, the Institute of Customer Service found that the telecoms and media sector overall performed below most other sectors for complaints handling in 2016.

There were differences between mobile providers in their customers’ level of satisfaction with complaints handling. As shown in Figure 45 below, Tesco Mobile (74%) performed above the sector average for overall satisfaction with how complaints were handled, and Vodafone (46%) below average. Unsurprisingly, overall satisfaction with complaint handling, among those whose complaint was completely resolved at the time of the research (78%), was higher than among those whose complaints were not completely resolved (28%).

Tesco Mobile performed above the mobile sector average for seven of the nine specific aspects of customer service measured. Vodafone performed below the market average for all nine specific aspects of customer service measured.

¹⁶⁸ Ofcom, Quality of customer service research, April 2017 https://www.ofcom.org.uk/__data/assets/pdf_file/0008/100610/quality-customer-service-research-2016.pdf
¹⁶⁹ The research was conducted via an online panel sample and fieldwork took place from 8 December 2016 to 6 January 2017. More details can be found in the research annex.
¹⁶⁷ Among those who contacted their provider over the phone.
Figure 45: Mobile - overall satisfaction and satisfaction with specific aspects of customer service measured

<table>
<thead>
<tr>
<th></th>
<th>Total mobile</th>
<th>EE/Orange/ T-Mobile</th>
<th>O2</th>
<th>Tesco Mobile</th>
<th>Three</th>
<th>Virgin Mobile</th>
<th>Vodafone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction</td>
<td>57%</td>
<td>57%</td>
<td>60%</td>
<td>74%</td>
<td>60%</td>
<td>60%</td>
<td>46%</td>
</tr>
<tr>
<td>% Satisfied with specific aspects of customer service measured:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of finding provider contact details</td>
<td>65%</td>
<td>62%</td>
<td>67%</td>
<td>69%</td>
<td>70%</td>
<td>72%</td>
<td>60%</td>
</tr>
<tr>
<td>Ease of getting through to the right person (PHONE)</td>
<td>54%</td>
<td>55%</td>
<td>57%</td>
<td>66%</td>
<td>62%</td>
<td>50%</td>
<td>43%</td>
</tr>
<tr>
<td>Time taken to handle your issue</td>
<td>58%</td>
<td>58%</td>
<td>64%</td>
<td>78%</td>
<td>58%</td>
<td>62%</td>
<td>44%</td>
</tr>
<tr>
<td>Getting the issue resolved to your satisfaction</td>
<td>59%</td>
<td>59%</td>
<td>66%</td>
<td>80%</td>
<td>59%</td>
<td>59%</td>
<td>45%</td>
</tr>
<tr>
<td>Courtesy and politeness of advisors</td>
<td>67%</td>
<td>69%</td>
<td>69%</td>
<td>65%</td>
<td>65%</td>
<td>71%</td>
<td>61%</td>
</tr>
<tr>
<td>Advisor doing what they said they would do</td>
<td>61%</td>
<td>63%</td>
<td>65%</td>
<td>67%</td>
<td>63%</td>
<td>64%</td>
<td>50%</td>
</tr>
<tr>
<td>Logging of query details to avoid having to repeat yourself</td>
<td>57%</td>
<td>55%</td>
<td>64%</td>
<td>72%</td>
<td>58%</td>
<td>63%</td>
<td>45%</td>
</tr>
<tr>
<td>Offering compensation or a goodwill payment</td>
<td>51%</td>
<td>46%</td>
<td>57%</td>
<td>74%</td>
<td>49%</td>
<td>62%</td>
<td>42%</td>
</tr>
<tr>
<td>Willingness to help resolve your issue</td>
<td>63%</td>
<td>62%</td>
<td>67%</td>
<td>81%</td>
<td>65%</td>
<td>65%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Source: Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017
Base: All who complained about mobile phone service in past six months (2989), EE/Orange/T-Mobile (666), O2 (729), Tesco Mobile (327), Three (500), Virgin Mobile (258), Vodafone (509)
Base: All contacting by phone (1490/373/295/128/270/139/285)
Red or green text indicates significantly higher/lower than the sector average at the 95% confidence level.

Tesco Mobile customers were more likely than the mobile sector average to report that their complaint had been resolved in under an hour

Among those whose complaint had been completely resolved, Vodafone and Virgin Media consumers were less likely to report their complaint had been resolved in under an hour, compared to the market average. Vodafone customers were also more likely to report that their complaint took five days or more to be resolved.
Figure 46: Mobile - time taken to completely resolve the complaint (among those whose complaint was completely resolved)

Source: Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017

Q. How long did it take to resolve the issue with [provider]?
Base: All who complained about mobile phone service in past six months whose issue was completely resolved – All (1758), EE/Orange/T-Mobile (370), O2 (457), Tesco Mobile (264), Three (266), Virgin Mobile (153), Vodafone (248)

Arrows indicates significantly higher/lower than the sector average at the 95% confidence level.

Tesco Mobile and O2 customers were more likely than the mobile sector average to report just one contact to completely resolve their complaint

On average, mobile complaints that were completely resolved took just under 2 contacts (1.7) to resolve. Three per cent of completely resolved complaints took four contacts to resolve, and 4% took five contacts or more.

The average number of contacts required to completely resolve a complaint was higher than the sector overall for Vodafone and Virgin Mobile, and lower for Tesco Mobile and O2.

![Figure 46: Mobile - time taken to completely resolve the complaint (among those whose complaint was completely resolved)](image-url)
Figure 47: Mobile - number of contacts with provider needed to completely resolve the complaint

![Contact Distribution Chart]

Source: Ofcom Quality of customer service – complaints research, online survey, fieldwork carried out by BDRC Continental, December 2016/January 2017

Q. How many times have you been in contact with [provider] in relation to this particular complaint so far?

Base: All who complained about mobile phone service in past six months whose issue was completely resolved – All (1758), EE/Orange/T-Mobile (370), O2 (457), Tesco Mobile (264), Three (266), Virgin Mobile (153), Vodafone (248)

Arrows indicates significantly higher/lower than the sector average at the 95% confidence level.

Customers who are not satisfied with how their complaint was handled may wish to take their case to an alternative dispute resolution scheme

The two ADR schemes that Ofcom approves, CISAS and OS, have released data on the subject matter of the complaints they received between October and December 2016, relating to pay-monthly mobile service providers. That data can be found on their respective websites: CISAS and OS.

In relation to mobile services, the main complaint drivers over the period were billing and contract issues. Figure 48 shows the most common types of complaint made to ADR schemes in relation to each of the largest providers.
Figure 48: Most common types of complaints made to ADR schemes (October - December 2016), mobile providers\textsuperscript{170}

<table>
<thead>
<tr>
<th></th>
<th>Most common</th>
<th>Second most common</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>Billing (33%)</td>
<td>Contract issues (22%)</td>
</tr>
<tr>
<td>Telefonica (including O2)</td>
<td>Billing (33%)</td>
<td>Customer service (19%)</td>
</tr>
<tr>
<td>Tesco Mobile</td>
<td>Service quality\textsuperscript{171} (27%)</td>
<td>Contract issues (23%)</td>
</tr>
<tr>
<td>Three</td>
<td>Billing (24%)</td>
<td>Service quality (22%)</td>
</tr>
<tr>
<td>Vodafone</td>
<td>Billing (53%)</td>
<td>Contract issues (18%)</td>
</tr>
</tbody>
</table>

Source: Ombudsman Services (Communications); CISAS

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Community-based customer service

Some mobile providers are innovating in how they provide customer service. One example is the use of community forums that incentivise customers to help each other find solutions to problems, often through a reward system offering discounts, vouchers or prizes.

This approach allows giffgaff, for example, to help customers without having a traditional call centre. An email response service is provided for issues that cannot be resolved through the community forum. While we have not reported on giffgaff’s performance in this report, due to its size, it was the highest-scoring telecoms and media provider in the Institute of Customer Service 2016 Satisfaction Index, and the only telecoms company to feature in the top ten of KPMG Nunwood’s 2016 UK Customer Experience Excellence Analysis.

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\textsuperscript{170} This data also includes ADR complaints to the landline and broadband customers of these providers, where relevant.

\textsuperscript{171} ‘Service quality’ complaints include, for example, those relating to loss of service, network coverage, disconnections or download speeds.
This chapter focuses on the service quality experience of small and medium-sized enterprises (SMEs). There are around 5.4 million SMEs in the UK, accounting for 99.9% of businesses and employing 15.7 million people. SMEs are fundamental to the success of the UK economy, and it is essential that the success of UK businesses is not unduly constrained by the service quality they receive in respect of communications services. Most use fixed landline (96%), broadband (80%) and mobile phone (64%) services, while a minority (5%) pay for dedicated connectivity such as leased lines.

The market that provides these services to businesses is structured very differently to the residential market. BT Business accounts for more than 40% of broadband and landline business connections, with Vodafone, Virgin Media, Daisy, TalkTalk, Verizon, Southern and COLT making up about 25%, and a long tail of other providers and resellers making up the rest of the market. We estimate that there are up to 2,500 resellers, i.e. providers selling on the services offered by the larger providers. Vodafone, EE and O2 are the major providers of mobile business services.

It is a complex marketplace, with many suppliers and a very wide range of products and service levels. For this first report, we have not directly compared business service providers, but we aim to do this in future reports. However, while larger SMEs (those with more than ten employees) often buy business products on a negotiable bespoke basis, smaller businesses often use residential or

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172 SME is defined as a private business that employs up to 249 people. The ONS estimates that 99.3% of UK businesses are small business (0-49 employees), and a further 0.6% are medium-sized businesses (with 50 to 249 employees).


equivalent packages. The comparisons we make elsewhere in the report will therefore be relevant to these businesses.

Service quality can be even more important to businesses than to residential consumers

Eighty-one per cent of the SMEs we surveyed agree that communications services are fundamental to their business. Most rely on them to communicate with their customers, while some use them to sell products or services. So when services do not work, the consequences can be serious, including reduced sales or reputational damage.

In 2016, 53% of SMEs that experienced a loss of their landline or broadband service suffered a negative impact on their work, while 44% experienced anxiety. A smaller proportion of residential consumers suffered negative impact (42%) and anxiety (36%) in this situation.

Because of their reliance on these services, SMEs expect faster repairs than consumers do, and many are willing to pay for them. On average, SMEs considered one and a half days a reasonable time to wait for a fault to be fixed (compared to three days for consumers) and 64% stated that they would be willing to pay more for same-day repair (compared to 48% of consumers). While SMEs have similar expectations to consumers as to how long installations should take (on average five and a half days), more SMEs are willing to pay at least £5 for faster installation. In 2016, slow speeds, poor reliability and service reliability were the main reasons SMEs considered switching provider, reflecting the importance of service quality to business consumers.

While most SMEs are satisfied with the service they receive, a significant minority are dissatisfied - particularly with their broadband

In 2016, 83% of SMEs were satisfied with their landline phone service and 89% were satisfied with their mobile service, while four in five were satisfied with their fixed-line broadband service.

Satisfaction with internet services varied by the type of connection: those with cable (87% satisfied)
and fibre/superfast (81%) broadband were significantly more satisfied than those with standard ADSL broadband (62%).

Figure 49: SME satisfaction with services used

Source: Jigsaw, The SME experience of communications services: research report (2016). Question: Thinking about the (named) services your organisation uses, please can you tell me how satisfied or dissatisfied you are with your overall experience of each, using the following scale. Base: all users of each service (sample sizes as indicated) *NOTE: SMALL SAMPLE SIZE

Businesses are opting increasingly for fibre-based internet connections (5% increase in take-up from 2014 to 2016) rather than standard ADSL broadband (13% decrease in take-up), although satisfaction with fibre services fell from 93% in 2014 to 81% in 2016.

For those dissatisfied with their landline phone and broadband services, the main drivers were service quality/reliability and speed issues, while coverage and service quality/reliability were the main concerns for mobile.

181 The SME experience of communications services: research report, p. 34
183 The SME experience of communications services: research report, p. 34
Less than half of SMEs were satisfied with the signal reliability of their mobile service. SMEs in rural and remote rural locations were more likely to face service quality problems with their mobile service than those in urban areas, see Figure 51 below. Rural business consumers are also the heaviest users of both standard mobiles and smartphones, underlining the importance of a reliable mobile connection to rural SMEs.184


Figure 51: SME satisfaction with mobile service, by urbanity (%)
We estimate that at least 15% of SMEs suffer quality of service problems each year

In Ofcom’s consultation on automatic compensation we reported the extent of quality of service problems experienced by SMEs. Data from providers indicated that 780,000 landline and broadband SME customers suffered loss of service incidents, provisioning delays and missed appointments each year between 2014 and 2016, accounting for around 15% of the total number of SMEs. Our survey of SMEs found a higher incidence of quality of service problems: 39% reported that they had experienced loss of service due to a fault over the last two years, and 5% had experienced provisioning outside the time-scale given, over the past five years.185

A wide range of service quality options are available to SMEs

Our research has indicated that 33% of SME users have a residential contract for their broadband service, while 30% have a residential landline phone contract.186 However, residential contracts for landline and broadband typically do not contain specified service care levels, and as such may not be suitable for businesses that need a high level of service quality.

Some business broadband contracts do include specified levels of service or service level agreements (SLAs) which can provide assurance about the service quality to expect.187 Among SMEs on a business contract, 57% reported that they had SLAs for their landline service, and 53% reported they had SLAs in their broadband contract.188 Among those who had SLAs in their landline and broadband contracts, 77% and 81% respectively were satisfied that these SLAs were being upheld by their provider.189

For large UK-wide providers other than Virgin Media, these SLAs are underpinned by agreements with Openreach, the part of BT responsible for maintaining installing and repairing connections on its network. The highest service level offered by Openreach for wholesale broadband and landline phone services is a six-hour repair target. However, this option is not widely offered by business communications providers. Some providers offer other fast repair options at additional costs, starting at £6 per month extra.190

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186 *The SME experience of communications services: research report*, p. 119

187 *The SME experience of communications services: research report*, p. 85; *Automatic compensation: Consumer experience of provisioning delays, loss of service and missed appointments*, p. 66, questions B8A and B11A

188 *Automatic compensation: Consumer experience of provisioning delays, loss of service and missed appointments*, p. 66, questions B8A, B8C, B8D, B11A, B11C and B11D

189 *The SME experience of communications services: research report*, pp. 87 and 92

190 From data supplied by communications providers to Ofcom.
Most of the large business providers, including BT Business, only offer customers an end-of-next-business-day target repair time for broadband services. Vodafone and Daisy are among those which offer 8-hour broadband repair times, and Zen offers guaranteed 12-hour repair times with some products.\textsuperscript{191} Faster repair is more widely available for landline services (and it is of course the case that many broadband faults may be due to line failures). For example, Virgin Media and BT have landline target repair times starting from six hours.

Businesses that are very reliant on their internet service can purchase a dedicated connection or ‘leased line’. A leased line customer does not need to share bandwidth with other businesses, so speeds are generally higher and less variable throughout the day.\textsuperscript{192} Improved bandwidth is reflected in the price of leased lines; an entry-level dedicated connection typically costs five times as much as a premium business broadband product.\textsuperscript{193}

Businesses experience of mobile communications can be enhanced by features such as guaranteed rapid replacement of employees’ lost phones, dedicated customer care representatives,\textsuperscript{194} international roaming,\textsuperscript{195} and data packages that can be shared among employees.\textsuperscript{196} However, these will not address coverage issues outside the office, the key driver of dissatisfaction for SMEs.

There are a very wide range of service care options available to business customers. The table below provides a high-level overview of service aspects which SMEs should be able to compare when choosing provider.\textsuperscript{197}

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\textsuperscript{191} See provider websites: [Vodafone](#), [Daisy](#), [Zen](#).

\textsuperscript{192} In comparison, around 20 businesses broadband users will share bandwidth at any one time. Approximately 50 residential users might share bandwidth at given time.

\textsuperscript{193} See [BT Business Broadband](#), [Vodafone business broadband](#), [Vodafone dedicated internet access](#).


\textsuperscript{195} [https://www.talktalkbusiness.co.uk/products/mobile/](https://www.talktalkbusiness.co.uk/products/mobile/)

\textsuperscript{196} [https://business.bt.com/products/mobile/?msgtype=05&s_cid=btb_ppc_maxus_google_bt_business_mobile_abroad_2_sitelink_talk_time_sharer&gclid=COXC-5TA8NICFYwQ0wodASYPEg&dclid=CP2UKZXA8NICFa8i0wodgyEIAg](https://business.bt.com/products/mobile/?msgtype=05&s_cid=btb_ppc_maxus_google_bt_business_mobile_abroad_2_sitelink_talk_time_sharer&gclid=COXC-5TA8NICFYwQ0wodASYPEg&dclid=CP2UKZXA8NICFa8i0wodgyEIAg)

\textsuperscript{197} For resources for businesses, see [https://www.ofcom.org.uk/advice-for-businesses](https://www.ofcom.org.uk/advice-for-businesses)
Effective, knowledgeable customer support is important to address service quality issues quickly. Various levels of customer support are available:

- Some offer online and on-the-phone support only during working hours, while others can be contacted 24 hours a day, 7 days a week.
- Some have a dedicated business contact centre or customer care team, while others have a shared contact centre that also supports their residential customers.
- An account manager may be assigned for an individual customer depending on factors such as contract length, spend, or number of employees. Generally only available for high value contracts.

Given the potential harm caused by a loss of service, it is important to have an easy route to report faults so that businesses can get back online and continue their work. Some providers offer a direct fault reporting phone line.

Some communications providers offer a range of repair packages at different prices, with target fix times ranging from six or eight hours to five days.

Technical support provides SMEs with an extra layer of help for more difficult-to-manage issues. This can range from providing customers with tools such as online chat, to remote access IT support.

Other service add-ons are available which do not fall neatly into one of these categories. For example, Vodafone allows customers to purchase various service packages for additional monthly payments, and Daisy offers a disaster-recovery package including infrastructure and data recovery. In addition to standard products that are available, SMEs can specify, and contract for, bespoke aspects of service quality, and negotiate service levels. These may cover general performance issues such as connection speed, as well as those relating to quality of service, such as fault repair and installation time.

The Advice for Businesses portal on Ofcom’s website contains information on key considerations when choosing a service, including a contract checklist.

However, SMEs’ choices are inhibited by a lack of clear and comparable information on providers’ quality of service commitments

In our assessment of the marketplace for SMEs, as part of our work on automatic compensation, we reached a provisional view that although there are a range of different quality of service offers

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198 From data supplied by communications providers to Ofcom, and Daisy’s website: https://daisygroup.com/business-continuity/business-continuity-smb-2/
available, SMEs do not have clear and comparable information on providers’ quality of service commitments. We found that there is often very little information available to SMEs at the point of sale on service levels and compensation, particularly when compared to the emphasis on other characteristics of the product such as price and speed.

To address this, in our consultation on automatic compensation we propose that SMEs which buy business products should be provided with greater clarity on the quality of service they are entitled to under their contracts, and whether they can claim compensation when problems occur.

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199 Automatic Compensation, Protecting consumers from quality of service problems, section 11
Ofcom will continue to work to improve service quality across the sector

More needs to be done for those people and businesses who experience poor service quality. *Comparing Service Quality* is just one element of Ofcom’s work programme to encourage competition in service quality and to raise standards across the sector. Our other work to improve consumers’ experience of telecoms service includes:

- **Improving Openreach’s performance** - as noted above, improvements to service quality must be delivered at both the wholesale and retail levels. Ofcom is currently consulting on quality of service for Openreach’s Metallic Path Facility (MPF), Wholesale Fixed Analogue Exchange Line (WFAEL) and Generic Ethernet Access (GEA) products. We propose to introduce new binding quality targets for Openreach, to ensure greater certainty for providers on the speed at which faults are resolved, and to improve on-time provision of services. In turn this should improve the experience of end-users on Openreach’s network.

- **Requiring compensation when things go wrong** – Ofcom is consulting on proposals to require communications providers to automatically compensate consumers who experience delayed repair following a loss of service, delayed provision or missed appointments. These new rules would provide consumers with adequate compensation when their provider does not deliver service quality standards in line with consumers’ reasonable expectations, as well as incentivising providers to do more to improve their service quality.

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• **Creating certainty about broadband speeds** – later this year Ofcom will consult on revising the voluntary broadband speeds Codes of Practice. Our aim is to improve the information available to consumers on the speeds they can expect to receive. We will also ensure there are appropriate routes of redress when consumers are not getting the speeds they should.

• **Promoting better mobile coverage** - we will develop policies to deliver improved mobile coverage, both inside and outside premises. We will do this by ensuring existing coverage obligations are met, by introducing targeted new obligations where appropriate, and by considering spectrum options to support better connectivity across the railway network. Other measures include the development of new rules to allow the use of licence-exempt mobile repeaters to help consumers improve coverage in the home.

• **Encouraging investment in new infrastructure** – in December 2016, Ofcom consulted on plans to make it quicker and easier for rival providers to build their own fibre networks direct to homes and offices using BT’s existing telegraph poles and ducts. These plans would promote continued investment in ultrafast broadband, and in turn help improve service capability and reliability for consumers with access to these networks.

• **Guiding consumers with relevant information** - we will continue to publish information to help inform consumer decision-making, including: quarterly updates on complaints to Ofcom, research on mobile services in UK cities, research on home broadband performance, and our checker app which shows the availability of mobile and broadband services across the UK.

• **Ensure providers meet their obligations** – in 2016, we took enforcement action against several providers for breaching their obligations under the General Conditions of Entitlement, which allow companies to offer communications services to consumers. Ofcom will continue to act to protect consumers where we believe there is evidence that obligations have been breached.

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We invite comments on this report and how it should develop

This report is the first of its kind. We will monitor provider performance over 2017, for example through consumer research and the complaints we receive, ahead of the next report in 2018.

We recognise that many consumers may not think to turn to Ofcom for this information, and that only the most engaged may seek it out. Consumer needs and expectations are changing rapidly across the sector, and the kinds of information that are most useful, and the ways in which consumers will access this information, are changing accordingly. In response to this, we will continue to develop our data collection and reporting over the coming years to ensure it is accessible and relevant to as many consumers as possible.

To help us do this, we invite views on the content, scope and format of this report, and how we can ensure that it is as useful and accessible as possible to consumers. We also welcome input on our initial proposals for what we might cover in the next report, outlined below. Please email any comments to comparingservicequality@ofcom.org.uk

Measuring what matters most to consumers
This report focuses on issues identified as key areas of concern through consumer research and stakeholder consultation during Ofcom’s Strategic Review of Digital Communications. We will continue to conduct research into the service issues that matter most to consumers, and use this to inform the themes we focus on in the next report. We also welcome views on the areas that would benefit most from greater transparency.

Collecting more comparable information from providers
For this report, Ofcom has had to rely on our powers under the Communications Act to request information from providers, collected as part of their ordinary business processes during 2016. We have only published that information which we believe was collected sufficiently consistently by the providers to allow us to make a useful comparison between providers.

In some areas, although providers measure their performance, they do not do so sufficiently consistently across the industry to allow for a useful comparison. In other areas, some providers do not currently collect or retain the information which would be needed to effectively compare their performance. This has limited the amount of information that we could publish in this report.

For future reports, we expect to be able to use new information-gathering powers, under the new Digital Economy Bill, which will allow us to, where proportionate, require providers to collect
information in a way that would enable a direct comparison of provider performance. We will be engaging with providers shortly to commence our work on gathering enhanced data for next year’s report on 2017. However, in some cases the new information that we gather using our new powers may only be available for inclusion in later reports (for example, where providers do not currently collect certain information or have to make changes to IT systems).

Examples of areas in which we will consider using these powers to report on in future include:

- **On-time delivery of new services (broadband and landline)** - how often orders for new services are delivered on the date originally agreed with the customer, and whether any delays were notified in advance. As noted above, some providers do not currently keep a record of the date originally agreed with the customer, and some cannot identify when an agreed date was missed without advance notice.

- **Fault rates and time taken to repair (broadband and landline)** - the frequency of faults and the time taken to repair a service when it goes wrong. While most providers collect detailed information on when faults are raised and addressed, to enable us to provide a comparison, a consistent definition of what counts as a fault will need to be developed. Ideally, this definition would relate to how consumers experience faults, rather than the underlying cause.

- **Network availability (mobile)** - while mobile operators measure the proportion of time that their networks are available throughout the year, they do not have in place processes that routinely calculate how many of their customers lose service, and for how long, because of network failures. We will explore whether such a measure could be developed with providers, to enable a comparison of availability across different networks.

**Expanding the scope of our reporting**

This first report covers only the largest providers of fixed and mobile communications services. Ideally, consumers should be able to identify the provider that would offer them the best service quality, regardless of size. We will explore whether to extend the scope of our reporting to cover the wider market, without imposing disproportionate reporting requirements on smaller providers.

We have only included comparative information on residential services in this report. While this information is useful to those small businesses that use residential or equivalent services, in future we will consider expanding the information we publish on business services, to allow small and
medium-sized enterprises to use the report to compare providers. We would like to hear from businesses about the information they think they need to navigate the business services market.

**Reaching more consumers**

Ofcom will monitor how the information it has published here is used by consumers over the next year, and consider how to make it even more accessible. This will include reviewing the formats and channels in which we have published the information. We are also open to working with third parties to make information more accessible to consumers.

**Regularly updating information**

Provider-specific service quality information can only help consumers understand what is available if it is an up-to-date and reliable indicator of performance. In addition to publishing annual reports on service quality, Ofcom will consider the case for making some of the metrics contained in this report available on a more frequent basis, where it would be helpful to consumers, and if it does not impose an excessive reporting burden on providers. We already publish a report detailing complaints received by Ofcom on a quarterly basis.
Glossary

**2G** Second generation of mobile systems. Uses digital transmission to support voice, low-speed data communications, and short messaging services.

**3G** Third generation of mobile systems. Provides higher-speed data transmission and supports multimedia applications such as video, audio and internet access, alongside conventional voice services.

**4G** Fourth generation of mobile systems designed to provide faster data download and upload speeds on mobile networks.

**ADR** Alternative dispute resolution schemes. Act as an independent middleman between the service provider and the customer when an initial complaint cannot be resolved.

**ADSL** This is the technology supporting standard broadband services, delivered over a copper telephone line. These are often advertised with ‘up to’ download speed of 17Mbit/s. ADSL stands for Asymmetric Digital Subscriber Line. ‘Asymmetric’ means that it allows higher speeds in one direction (‘downstream’ towards the customer) than the other.

**Backhaul** The part of the communications network which connects the local telephone exchange to the broadband provider’s core network.

**BDUK** Broadband Delivery UK. Part of the UK Government’s Department for Culture, Media and Sport which is delivering superfast broadband and better mobile connectivity where commercial deployment is limited.

**Broadband** A data service or connection generally defined as being 'always on' and providing a bandwidth greater than narrowband (dial-up) connections.

**Cable** An alternative technology for providing superfast broadband, where the service is delivered over a cable network (instead of the copper telephone line). Services with download speeds up to 300Mbit/s are currently available from this type of network.

**Call abandonment rate** The percentage of inbound phone calls made to a provider where the customer hangs up while in a call waiting queue before speaking to an agent.

**Call waiting time** The amount of time waiting on hold to talk to a customer service agent.

**FTTC** Fibre to the Cabinet. The most commonly used technology for superfast broadband services using the existing telephone line to the end user premises. High broadband speeds are achieved because the telephone line is connected to a cabinet installed in the street which is connected to the rest of the network using optical fibres. These are often advertised with ‘up to’ download speed of 38Mbit/s, 52Mbit/s or 76Mbit/s. The higher speeds are achieved by reducing the length of the copper telephone line between the premises and the network equipment.
FTTP / Full fibre broadband Fibre to the Premises. An alternative technology for fibre broadband service, where the optical fibre is installed all the way from the local exchange (or similar building) to the household, and is capable of providing ultrafast broadband speeds.

G.fast A new way of providing ultrafast broadband speeds over the copper telephone line, where optical fibre is installed at to a point very close to the premises (usually less than 100 metres). This location may be a telegraph pole, a street cabinet or an underground street chamber, depending on the circumstances. The telephone line to the house is then connected to the equipment installed at this point, and is normally able to offer ultrafast broadband speeds.

High definition voice the standard of telephone audio quality which extends the frequency range of audio signals transmitted over telephone lines, resulting in higher quality speech than standard definition voice services.

Interactive voice recognition system (IVR) A technology that allows a computer to interact with humans through the use of voice and touch tones input via a telephone keypad.

Landline - The copper connection delivered to the home carrying voice services over the public switched telephone network (PSTN).

Mbit/s Megabits per second (1 Megabit = 1 million bits). A measure of bandwidth in a digital system.


Mobile Virtual Network Operator An organisation which provides mobile telephony services to its customers, but does not have allocation of spectrum or its own wireless network and instead buys a wholesale service from a mobile network operator.

Openreach The part of BT that owns and maintains the network that connects nearly all premises in the UK to the national telephone and broadband network and that is responsible for installing and maintaining connections over that networks.

Retail provider (provider) An organisation that provides electronic communications services directly to end consumers.

Smartphone A mobile phone that offers more advanced computing ability and connectivity than a basic 'feature' phone.

SME Small and Medium Enterprises. Businesses with 249 or fewer employees.

Standard broadband Broadband services that deliver download speeds of less than 30Mbit/s, typically over a copper telephone line.

Superfast broadband Broadband services that deliver download speeds of at least 30 Mbit/s, typically over fibre to the cabinet connection or coaxial cable (on Virgin Media’s network).

UHD Ultra high-definition television also known as 4K, that provides high resolution picture quality.

Ultrafast broadband Broadband services that deliver download speeds of at least 300 Mbit/s.

VoLTE Voice over LTE, also known as 4G voice. A service that allows voice calls to be made over 4G networks.
**Webchat** A system that allows consumers to communicate in real time with provider’s customer service agents using messaging on the supplier’s website.

**Wi-Fi** A short range wireless access technology that allows devices to connect to a network. These technologies allow an over-the-air connection between a wireless client and a base station or between two wireless clients.

**Wi-Fi calling** a service typically for smartphones providing the ability to make and receive phone calls over a Wi-Fi connection.