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# Voluntary Codes of Practice on Better Broadband Speeds

## Report on the 2018 Residential and Business Codes

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[Report on the 2018 Residential and Business Codes](#) – Welsh overview

# Contents

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## Section

1. Overview	3
2. Introduction	5
3. Our findings	8
4. Conclusions	21

## Annex

A1. Data reporting template	22
A2. List of fixed access broadband providers who provided data for this report	23

# 1. Overview

**This report sets out our findings on how the Residential and Business Voluntary Codes of Practice on Better Broadband Speeds Information ('the Codes') are working.**

Ofcom introduced the Codes<sup>1</sup> to ensure providers of fixed access broadband give residential and business customers accurate information on the speeds they can expect to receive from their broadband services. In March 2018, we made changes to the Codes to improve the information provided to customers when they buy broadband services and strengthen customers' right to exit when speeds are not met, which were implemented from 1 March 2019.<sup>2</sup>

The current Codes mean that broadband shoppers:

- are given a minimum guaranteed download speed before signing up to a new deal;
- are told what to expect during peak times when more people are online and networks are more congested; and
- have the right to exit their contract without penalty if speeds drop below the guaranteed level and this isn't fixed within 30 days.

## What we have found

Overall, based on the wide range of data provided, we find that the signatories are meeting the requirements set out in the Codes. These voluntary Codes are therefore delivering protections to broadband customers as we intended.

In summary, we find that:

- **Most broadband customers currently have broadband contracts with a signatory to the Codes and so have access to the protection provided by the Codes.** In addition, Sky has confirmed it will re-join the Residential Code later this year, which will widen the number of customers who will be covered by the Codes. We are also in discussions with additional broadband providers who are looking to join the Codes.
- **Customers are being provided with clear and realistic broadband speed information at the point of sale.** Customers who have bought services from a signatory are given information on their expected and minimum guaranteed speeds early in the sales process, which are then confirmed in writing within seven days of the sale.
- **Most speed issues are being resolved within 30 days, with only a small number of customers using their right to exit contracts.** 95% of issues raised under the Codes' minimum speed guarantee, and which relate to access line speeds, are resolved within 30 days. Of the remaining 5%, the majority of customers were offered ways to resolve their issues, with 20% of this remainder choosing to exercise their right to exit or choosing an alternative solution.
- **Processes are in place which ensure signatories' ongoing compliance with the Codes.** Evidence provided by signatories included verification of policies, training materials, training reports, quality assurance checks, results reporting, and audits.

<sup>1</sup> Ofcom first introduced the Residential Code in 2008 and the Business Code in 2016.

<sup>2</sup> This was the 4th version of the Residential Code since its original implementation in 2008.

We have also identified areas where improvements could be made:

- **Accuracy.** Currently, observed line speeds are only available for customers of signatories who use Openreach fibre-to-the-cabinet (FTTC) products, but not for customers using Virgin Media cable products and those using fibre-to-the-premises products. Going forwards, we expect signatories to develop an approach to provide observed speeds across all technologies as soon as possible rather than relying on estimates. This will be of increasing importance as full fibre networks are rolled out more widely and relied on by an increasing number of customers.
- **Timeliness.** Some broadband operators are asking customers not to report speed problems for newly connected FTTC products for between 3 and 14 days. This is to allow the technology time to adjust to the line speed to give the best stable performance for a given line. We consider 14 days is too long, and recommend that any period to allow the line speed to stabilise should be as short as possible.
- **Transparency.** We have identified a number of areas where the collection and recording of data can be improved by some signatories to help demonstrate compliance with the Codes for both internal purposes and future Ofcom reviews.

## Next steps

To ensure the Codes and protection they provide remain relevant and effective, we will continue to keep them under review and will:

- work with signatories to implement the improvements identified in this report;
- continue to monitor compliance and resolve issues as they arise to ensure the continued effectiveness of the Codes, to the benefit of both broadband customers and signatories; and
- expand the number of broadband providers who are signatories, including supporting the onboarding of potential new signatories to the Codes.

## 2. Introduction

- 2.1 The Residential and Business Voluntary Codes of Practice on Better Broadband Speeds Information were introduced to ensure broadband customers would be provided with information about the speeds of their broadband service and to enable them to make informed choices about their broadband provider.
- 2.2 We continue to believe that this information is of high importance to customers to ensure they: have clear information to help them compare broadband offers, in particular, by understanding the speed they are likely to get with their broadband service; and have protection if the actual speed they receive is below a minimum guaranteed level.<sup>3</sup>
- 2.3 We recognise that even with the Codes in place, broadband customers can still experience broadband speed issues that the Codes do not address. For example, customers may experience in-house Wi-Fi and wiring issues that slow down the speeds they receive. To help with these other issues, Ofcom has developed guides to provide advice on how these problems might be resolved.<sup>4</sup>
- 2.4 In support of the Codes, we have a broader suite of customer help and advice to ensure customers get the broadband speeds to meet their needs. For example, we have published information on our website to help consumers understand if they are getting the best package for their needs.<sup>5</sup> We also have advice that encourages broadband customers to take up faster speed services where these are available, given that superfast broadband is available to more than nine in ten premises in the UK, and can be priced more cheaply or the same as standard broadband.<sup>5</sup> In addition, Ofcom's broadband speed checker allows people to check what broadband speeds are available at homes and businesses in their postcode area.<sup>6</sup>

### Background to the Codes

- 2.5 Ofcom first introduced the voluntary Residential Broadband Speeds Code of Practice (the 'Residential Code') in 2008 to encourage broadband providers to give customers more information at point of sale on the speeds they could expect to obtain from their broadband services.
- 2.6 We updated the Residential Code in 2010. We included additional requirements for signatories to give speed estimates in the form of a range, and to give consumers the right to exit their contract without penalty within a three-month period of the start of their contract, or longer if the Internet Service provider (ISP) chose, if the actual speed was significantly below the estimated speed.<sup>7</sup>
- 2.7 In addition, we recognised how much businesses rely on their broadband services to perform key functions, from communicating with their customers to running their services more efficiently. Therefore, we also introduced the Voluntary Business Broadband Speeds Code of

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<sup>3</sup> In 2018, we improved the right to exit by introducing a 30-day time limit by which signatories must resolve speed issues, relating to the minimum speed guarantee, before allowing them to exit their contract without penalty.

<sup>4</sup> Ofcom 2022. [Phones and internet, tips and advice](#). [accessed 10 Apr 2022]. This web page includes links to tips including 'improving your Wi-Fi experience' and 'practical tips for improving your broadband speed'.

<sup>5</sup> Ofcom, 2022. [How to get more from your broadband](#). [accessed 14 Apr 2022]

<sup>6</sup> Available at <https://checker.ofcom.org.uk/broadband-coverage> [accessed 14 Apr 2022]

<sup>7</sup> Ofcom, [2010 Voluntary Code of Practice: Broadband Speeds](#). [accessed 14 Apr 2022]

Practice (the 'Business Code') in 2016, to provide business customers with similarly relevant information as was available to residential consumers.

- 2.8 In 2018, we introduced a number of improvements to both the Residential and Business Codes that came into effect in March 2019.<sup>8</sup> These changes included the provision of more realistic speed estimates at the point of sale to reflect peak times, always providing a minimum guaranteed download speed at the point of sale, and ensuring customers benefit from the Codes regardless of their broadband technology.
- 2.9 These 2018 improvements also included strengthening customers' rights by extending the right to exit to bundled customers, such as landline services on the same line and, for residential customers, to pay-TV services purchased at the same time as their broadband service. Other related improvements included a new 30-calendar day limit during which signatories have to improve speeds before they must offer the right to exit to customers.

## Requirements under the Codes

- 2.10 The Codes require signatories to provide customers with information on the speeds they can expect at the point of sale, which must be confirmed in writing after the sale is complete, and then allow customers to contact them if they are experiencing speeds below the minimum guaranteed at the point of sale. If contacted, signatories are required to resolve the speed issue within 30 days. If not resolved, signatories should provide customers with a right to exit the contract or provide an acceptable alternative solution.
- 2.11 There are six principles set out in the Residential and Business Codes:
- 1: Realistic information on broadband speeds at point of sale;
  - 2: Detailed information provided after-sale, in writing;
  - 3: Detailed information on the website;
  - 4: Signatories to manage speed-related problems;
  - 5: Provision of a right to exit the contract without penalty where speed problems cannot be resolved; and
  - 6: That the objectives of the Codes are delivered through appropriate processes.<sup>9</sup>
- 2.12 These principles are covered in more detail in Section 3.

## Purpose of the current review

- 2.13 In our statement on the 2018 Codes, we set out our intention to review and report on the signatories' compliance with the Codes. Compliance with the Codes is key to ensuring that the consumer protections, as set out in the Codes, are delivered in practice.
- 2.14 The purpose of this review is therefore to use the evidence submitted to us by signatories to assess compliance with the Codes and identify both best practice and any areas where improvements should be made. The inclusion of some non-signatories in our assessment allows us to take a view as to how the Codes may be influencing behaviours across the wider

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<sup>8</sup> Ofcom, 2018. [Better Broadband Speeds Information, Voluntary Codes of Practice. Statement](#). [accessed 14 Apr 2022]

<sup>9</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.2 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.2. [accessed 14 April 2022]

broadband market. A list of the broadband providers who provided the data used in this report is set out in Annex 2.

- 2.15 Under the Open Internet Access Regulation (Regulation (EU) 2015/2120)<sup>10</sup>, ISPs are under an obligation to provide certain broadband speeds information in contracts, including the minimum, normally available, maximum and advertised download and upload speeds.<sup>11</sup> From 17 June 2022, the requirements to set out this information will be incorporated into the General Conditions (GCs) on contract information.<sup>12</sup> As explained in our 2018 Statement on the Codes, we view the point-of-sale and after-sale speeds information required under the Codes as consistent with these requirements. For the avoidance of doubt, this review focuses only on the Codes and does not consider providers' compliance with the requirements of the Open Internet Access Regulation.<sup>13</sup>

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<sup>10</sup> [Regulation \(EU\) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and retail charges for regulated intra-EU communications and amending Directive 2002/22/EC and Regulation \(EU\) No 531/2012.](#)

<sup>11</sup> Following the end of the transition period on 31 December 2020, this Regulation became part of domestic UK law, as amended by the Open Internet Access (Amendment etc.) (EU Exit) Regulations 2018.

<sup>12</sup> Ofcom, 2020. [Fair treatment and easier switching for broadband and mobile customers: Statement and Consultation](#) para. 6.112 [accessed 27 Apr. 22].

<sup>13</sup> In November 2021, we published our 5th annual report on compliance with the net neutrality requirements. Ofcom, 2021. [Monitoring compliance with the Open Internet Regulation](#) [accessed 27 Apr. 22]

## 3. Our findings

- 3.1 Just over two thirds of customers in the fixed broadband market (residential and business) are signed up to a broadband service provider who is a signatory to the Codes and so have widespread access to the benefits and protection provided by them.<sup>14</sup> More recently, Zen became a signatory in July 2021, along with Sky confirming it will re-join the Residential Code later this year. This means that the protection provided by the Codes will widen to cover c.85% of fixed broadband customers by the end of the year.<sup>15</sup>
- 3.2 We gathered data from both signatories and two of the largest non-signatories, Sky and Vodafone. We chose Sky and Vodafone because they have significant shares in the residential broadband market,<sup>14</sup> comparable with other large providers, and either have been previously part of and/or are considering joining the Codes.
- 3.3 This rest of this section identifies a number of areas where we see the Codes working as intended, as well as areas where the implementation of the Codes could be further strengthened. We cover five main areas:
- the sales process used with customers when explaining the likely speeds they will get, the minimum speed guarantee, and the right to exit process;
  - the methodology for calculating broadband line speeds customers receive to ensure the broadband speed information is as accurate as possible;
  - the after sales process to ensure that customers have received the most up to date speed information within seven days of the sale;
  - the numbers of consumers who raise speed issues using the broadband providers' speeds complaints process through to the number of customers who exercise the right to exit; and
  - the internal audit processes for ensuring continued compliance.

### Providing broadband speed information at the point of sale

#### Requirements under the Codes

- 3.4 Principle 1 of the Codes sets out that ISPs must provide information on estimated normally available download and upload speeds, and minimum guaranteed download speed, ***as early as practicable in the broadband sales process***.<sup>16</sup>
- 3.5 The sales process commences as soon as customers are asked to input or provide any information about them personally or their business (such as their address or landline number), regardless of the channel by which the customer chooses to contact the ISP, or the method of communication (e.g., webchats or emails).
- 3.6 For existing customers changing their current broadband service, speed information must also be provided as early as practicable, and before they agree that their broadband speed will be upgraded or downgraded.

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<sup>14</sup> Ofcom, 2021. [Communications Market Report 2021 – Interactive data](#), Fixed Telecoms, Broadband connections by ISP [accessed 14 Apr 2022]

<sup>15</sup> Zen became a signatory after we sent out the information requests for this review.

<sup>16</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.3 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.3. [accessed 14 April 2022]

- 3.7 In addition, Principle 1 of the Codes require ISPs to provide a clear and meaningful explanation to the customer that actual throughput speeds may be lower than the estimated normally available speed, and that it can be influenced by a number of factors such as:
- the use of Wi-Fi; and
  - traffic management policies or fair usage/acceptable usage policies (if applicable).<sup>17</sup>
- 3.8 If requested by the customer, further explanation of any speed issues should be provided.<sup>17</sup> In addition, where relevant, signatories must specifically explain, where a traffic management policy applies, what this means for the customer and how their speeds may be affected. Similarly, where a traffic management or fair usage policy applies, signatories must explain what this means for the customer, how their use of the service may be affected, and set out any specific limits. This accompanies the requirement (under Principle 3) for information on traffic management and fair usage to be published on signatories' websites.<sup>18</sup>
- 3.9 The Codes also state that in the exceptional circumstances where the relevant line information is not available to ISPs and they are therefore unable to provide the required speed information, providers must have clearly explained that an estimate is not available and obtained the customer's explicit permission to proceed, having clearly explained and given them an option not to continue with the process.<sup>19</sup>

## Findings

- 3.10 We asked signatories and the non-signatories, Sky and Vodafone, to provide copies of the most recent version of customer agent call scripts, web scripts, and screen shots or any other instructions they require their staff to follow during a sales process with new and existing customers.

### Information must be provided at the point of sale and before the sale is agreed

- 3.11 We found that signatories have demonstrated that processes are in place for their customer services agents to provide customers with information on the normally available download and upload speeds, as well as the minimum guaranteed speed early in the sales process, as required by the Codes. In particular, copies of customer agent scripts showed that agents were required to present this information before being able to complete the order. Screenshots of this information being given during the online sales process were also provided by signatories.
- 3.12 In instances where the relevant line information was not available, customer agents' scripts were set up to require that they let the customer know that the information was not available, and to ask if they wished to proceed without this information or not.

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<sup>17</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.27 – 2.30 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.27 – 2.30. [accessed 14 April 2022]

<sup>18</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.48 – 2.50 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.48 – 2.50. [accessed 14 April 2022]

<sup>19</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.4 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.4. [accessed 14 April 2022]

### **Signatories must provide information on the normally available and minimum guaranteed speeds at the point of sale in the format required under the Codes**

- 3.13 Signatories provided evidence that they require their customer service agents to present the normally available upload and download speeds and minimum guaranteed download speed information to customers in the format required by Principle 1 of the Codes.
- 3.14 Some signatories refer to the minimum guaranteed download speed by a different term. As an example, BT's website refers to the minimum guaranteed speed as a 'Stay Fast Guarantee'.<sup>20</sup> We consider that using alternative wording to "minimum guaranteed speed" is acceptable under Principle 1 provided that the relevant wording makes it clear that this is the speed below which customers can exit the contract without penalty if the ISP cannot resolve the speed problem.
- 3.15 Call scripts provided by signatories showed that agents should tell customers that the range of normally available download speeds provided is only an estimate, and that if the customer receives a download speed which is below the minimum guaranteed speed (or alternative term used by some signatories) for three successive days, they should contact the provider to start the 30 day resolution process.
- 3.16 The practices of Sky and Vodafone are similar to those of the signatories i.e., they require their customer service agents to present the normally available upload and download speeds and minimum guaranteed download speed information to customers in the format required by Principle 1 of the Codes.

### **Other speed information to be given during the sales process**

- 3.17 All signatories provided customer service agent call scripts which showed that customer service agents are required to explain to customers that actual throughput speeds can be affected by a number of factors. The factors referred to varied between signatories but included the use of Wi-Fi, the customer's equipment, distance from their exchange, internal wiring, peak time congestion and the number of subscribers accessing a particular website.
- 3.18 In addition, the scripts were also structured so that customers who purchased deals online were directed to where this information was contained on the signatory's website.
- 3.19 Signatories also provided call scripts which evidenced that customer service agents would be prompted to direct customers to where information about how speeds can be affected by policies on traffic management and fair usage where these were in place.
- 3.20 Some signatories stated that they did not have traffic management policies, but that they did operate acceptable fair usage policies which could be viewed on their website. Others stated they had no usage limit or fair usage policy, with some even going as far to say that their packages are completely unlimited, with no usage caps, extra charges, or speed reductions, even at peak times. Other signatories provided sample contracts, in which information about acceptable use policies were contained within the terms and conditions.

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<sup>20</sup> BT, 2022. [What is BT's Stay Fast guarantee](#). [accessed 5 May 2022]

- 3.21 During the online sales process, signatories must also provide information relating to the speed required to undertake common internet activities, including browsing, email, downloading media files, and streaming music/films at standard and high-definition quality.
- 3.22 Signatories provided screenshots of their online sales journeys, which either pointed to where there were descriptions of which speeds were suitable to carry out internet activities or provided information about what package customers would need to select to undertake certain internet activities.
- 3.23 The practices of Sky and Vodafone are in line with that of the signatories i.e., requiring sales agents to explain the factors that can impact on actual speeds and that speeds that could also be affected by traffic management or fair usage policies. Both providers scripts also prompted sales agents to point customers to terms and conditions which contain information on whether packages were subject to traffic management or acceptable use policies.

#### **Other information to be made available on signatories' websites**

- 3.24 Principle 3, in addition to requiring signatories to publish information on traffic management and fair usage, requires that a link is provided to the Codes and to a line/speed checker facility. The line speed checker is so that customers can easily find out what their normally available upload and download speeds and minimum guaranteed download speed will be if they choose to purchase a service.<sup>21</sup>
- 3.25 To check that signatories are meeting these requirements, we verified that the signatories provide links to the Codes and to line/speed checker tools on their websites. We also found that Sky and Vodafone provided links to a line/speed checker tool.

#### **Summary and conclusions**

- 3.26 The materials provided by signatories show that customer service agents are being directed to provide customers with the information required by Principle 1 of the Codes. As such, customers should be receiving clear information on their normally available download and upload speeds, their minimum guaranteed speed, what activities they should be able to conduct with these speeds, and are being informed of the factors that can affect actual throughput speeds in a clear and meaningful way.
- 3.27 In addition, there was evidence that signatories are also complying with Principle 3 and that relevant information is available to customers on their websites where this is required.
- 3.28 Sky and Vodafone are also in line with the Code signatories with regard to ensuring that the information required by Principles 1 and 3 of the Codes is given to customers.

### **Ensuring the broadband speed information is as realistic as possible**

#### **Requirements under the codes**

- 3.29 Principle 1 of the Codes also requires that speed information should be clear and realistic. The speed information should include the expected upload and download speed, expressed as a

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<sup>21</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.52 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.52. [accessed 14 April 2022]

range, together with a minimum speed guarantee. Where possible, actual/observed speeds should be used, and if not, then an appropriate estimate should be used.<sup>22</sup>

- 3.30 To ensure a consistent approach that would work across a number of technologies (e.g., FTTP, cable, FTTC), we set out guidance on how the measurements should be made in Annex 5 of the Codes. Further detail on measuring actual/observed speeds for those using Openreach fibre to the cabinet technology GEA products was set out in Annex 6 of the Codes.
- 3.31 We asked signatories to explain how their broadband speeds were derived and set out our findings below. We also asked Sky and Vodafone, for the same explanation.

## Findings

- 3.32 The signatories and non-signatories provided evidence of the method used to collect and analyse data to ensure realistic data is provided to customers, and how the minimum speed guarantee was calculated to comply with requirements set out in the Codes. Data was also provided setting out, for example, sample sizes and frequency of sampling, and the calculation of congestion coefficient. Providers using a 3<sup>rd</sup> party network wholesaler relied on information provided by the wholesaler to demonstrate compliance.

### Speed data presented to customers

- 3.33 All the signatories confirmed that they were using the methodology for calculating speed ranges as set out in the Codes, i.e., the 80<sup>th</sup> percentile and 20<sup>th</sup> percentile of speeds to set the estimated speed range and the relevant calculation to determine the minimum guaranteed speed which was then presented to customers.
- 3.34 We also note that all signatories who use Openreach's FTTC and G.fast networks use Openreach 'Range A' data when estimating broadband speeds. 'Range A' gives a higher minimum speed guarantee value than using Openreach 'Range B' data which would, if used, give a lower minimum speed guarantee as it is for lines whose speed may be reduced by a technical issue.<sup>23</sup> 'Range A data' is also more likely to represent the speed of customers actually receive.<sup>24</sup> The use of Range A data is a requirement of the Codes as it is representative of the speed a customer is likely to get, it sets a more exacting standard than 'Range B', and is therefore of greater benefit to the customer. It is also a requirement for a broadband provider to join the Codes.

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<sup>22</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.8 – 2.10 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.8 – 2.10. [accessed 14 April 2022]. For 'observed speeds' – sometimes referred to as Livesync or sync speeds - we mean the broadband speed measured between the customer premise broadband modem and the network equipment – observed speeds are currently only made available by Openreach for its Fibre to the Cabinet VDSL2 and G.fast products.

<sup>23</sup> Openreach 'Range B' data is an estimate for lines where performance may be impacted by technical issues related to wiring issues or copper line conditions which may affect speed, and therefore tend to give lower speed results than 'Range A' data. An example of 'Range A' and 'Range B' speeds can be found by using the [BTWholesale broadband availability Checker](#) [accessed 5 May 2022]

<sup>24</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), paragraphs 2.11 [accessed 14 Apr 2022]

## Actual 'observed' vs estimated speeds

- 3.35 Data was provided by two signatories on the use of observed data and estimated data for VDSL and G.fast services.<sup>25,26</sup> The percentage of users receiving observed data (rather than estimated data) varied between [ ]% and [ ]% for these two operators.
- 3.36 For one provider, the ability to use FTTC observed data was limited in some instances by their systems design, meaning that for some of its customers, an estimated speed was used instead of observed data. This is a recognised limitation and the provider has committed to addressing this issue during 2022.
- 3.37 We expect the percentage of users receiving observed speed information for FTTC/G.fast services to be high across all signatories, in the region of 60-80%. However, we recognise that the number of new FTTC/G.fast connections provided by a given provider will affect what is seen in practice (hence the variation in the percentage by operator). Looking forward, it is likely to be further affected as FTTP is rolled out which is likely to result in more FTTP connections and fewer new FTTC/G.fast connections.
- 3.38 A few signatories who rely on a wholesaler such as BT Wholesale and TalkTalk to manage their FTTC/G.fast access network connections (see below), were not able to provide information on observed and estimated speeds.<sup>27</sup> This limited the conclusions we could draw from the data. However, going forwards, we expect all ISPs to develop the capability to collect and report on this data when requested by Ofcom, even when the access networks are provided through a third-party wholesaler.
- 3.39 Longer term, we expect consumers to be provided with observed speeds when purchasing FTTP and cable network based broadband services, and expect industry to make every effort to achieve this as soon as possible (as set out in the Codes).<sup>28</sup> The provision of this information will become more important to consumers as full fibre becomes widely available and an increasing proportion of customers move to full fibre broadband.
- 3.40 Although Sky and Vodafone were not required to provide the data on observed and estimated speeds, they would be required to collect this data should they, or other ISPs, become signatories in the future.

## Congestion calculations

- 3.41 Signatories confirmed that they calculated congestion factors which were then applied to calculating broadband speeds. One operator, as an example of best practice, provided particularly detailed explanation on the sizes of samples, the frequency of sampling, and how this information was used to regularly update the congestion factors.<sup>29</sup>

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<sup>25</sup> VDSL and G.fast are technologies used mainly by BT Openreach to deliver broadband using copper for the final connection to the customer (from a nearby 'fibre to the cabinet'/FTTC) and use observed data. This is different from full fibre technologies (i.e., 'fibre to the premise'/FTTP) and hybrid copper/fibre cable technologies used by cable operators (mainly Virgin Media) where only estimated speeds are currently provided for these technologies

<sup>26</sup> The data used was for a 5 month period, Dec 2020 to Apr 2021.

<sup>27</sup> ISPs using wholesale networks have relied on the observed/estimated data collected by the wholesaler rather than recording the data at the ISP retail level.

<sup>28</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), paragraphs 2.24-2.26. [accessed 4 Apr 2022]

<sup>29</sup> Ofcom, 2019. [Annex 5 to the Voluntary Codes of Practice \(Residential and Business\) on Better Broadband Speeds Information: High-Level Testing Principles](#), para. 2.6 [accessed 14 Apr 2022]

- 3.42 Although evidence was provided by all signatories that showed they were meeting the Codes' requirements and regularly review their congestion factors, we would remind all signatories that "data used to calculate congestion must be updated at least quarterly"<sup>29</sup> as part of a planned activity and should be documented. This is to ensure broadband speed calculations, including any congestion calculations, remain up to date, closely reflect the speeds experienced by consumers, and that compliance can be clearly demonstrated.
- 3.43 Evidence was also provided by Sky and Vodafone that showed they were also regularly reviewing their congestion factors. To ensure full compliance, these factors would need to be updated (and recorded) at least quarterly.

### Use of intermediate wholesale networks

- 3.44 Some retail broadband providers purchase a wholesale service from an intermediate<sup>30</sup> in order to provide their retail service, with the wholesaler responsible for managing a number of features on which the retail service depends. For example, Talk Talk and BT Wholesale (part of BT's Enterprise division) provide a managed wholesale service, using Openreach to provide the underlying broadband access line. This leaves the retail broadband provider free to focus on managing the customer, with the wholesaler taking care of connecting and maintaining the network connections.
- 3.45 When using a wholesaler, the Codes are clear that "*the ISP [signatory] must provide details of the wholesaler's methodology to Ofcom for monitoring*" purposes. For example, one provider demonstrated compliance by providing the wholesaler's methodology used to calculate broadband speeds and congestion factors. In other cases, the provider simply referred to the information being available from the wholesaler rather than providing the details of the methodology directly.
- 3.46 We consider that a signatory who uses a wholesaler, even if the wholesaler is part of an ISP that is itself a signatory, should provide evidence of the wholesaler's methodology rather than assuming compliance by the wholesaler. Going forward, this evidence should include clear documentation showing the end-to-end process and how each element in the supply chain is compliant with the Codes as it is the retail signatory with overall responsibility for compliance.

### Summary and conclusions

- 3.47 Overall, we found that the broadband speed data being collected and made available to customers is broadly consistent with Principle 1 of the Codes.
- 3.48 Although we find general compliance with the Codes, we have noted a number of areas where improvements could be made. We will continue to work with providers to ensure they continue to meet the requirements for measuring speeds, and where appropriate, to improve reporting transparency to demonstrate that:
- congestion factors are regularly updated and documented;
  - the proportion of observed to estimated speeds is recorded and documented; and

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<sup>30</sup> This can also be referred to as a network aggregator, as described and illustrated in Figure 2.18 of [Ofcom's 2021 WFTMR statement – Volume 2: market analysis](#) [accessed 14 Apr 2022]

- where a wholesaler is being used, the evidence of the measurement methods used by the wholesaler is demonstrated to be compliant and documented by the broadband service provider;

3.49 Longer term, and as set out in the Codes, we expect industry to make every effort to measure actual observed speeds on cable and FTTP technologies (as with FTTC/G.fast today).

## Detailed information to be provided after a sale is completed

### Requirements under the Codes

- 3.50 Principle 2 of the Codes require broadband providers to give customers the following information, in a durable written format, within seven calendar days of the sale:
- 1) the normally available speed range for both upload and download, and the minimum guaranteed speed for download; and
  - 2) an explanation of any factors that may affect the throughput speed experienced by a customer.

This is important because it provides a clear and reproducible record to which customers can refer at a later stage if needed.<sup>31</sup>

3.51 Signatories must also give customers information on the right to exit with equal prominence (in relation both to position and to size or other appearance of the text) compared to the rest of the information provided. This information must explain that the right to exit applies if the customer receives an actual speed which is below the minimum guaranteed download speed, and the problem has not been resolved within 30 calendar days from when it was first recorded.<sup>32</sup>

3.52 Where applicable, providers must give information of any fair usage policies and traffic management policies, including setting out any usage limits.<sup>32</sup> In addition, signatories must provide customers with information about the Codes, such as what membership of the Codes means for customers, and the URL of Ofcom's customer guide to the Residential and Business Codes.

3.53 We asked signatories and non-signatories to provide copies of any correspondence and documentation containing the information required under Principle 2 of the Codes which are sent to new and existing customers who sign up to a broadband service following the sales process.

### Findings

3.54 All signatories gave examples of providing customers with the relevant after sale information in a durable written format within seven days of the sale, regardless of the sales channel used. These included information on normally available upload and download speeds, in the correct range as mandated by the Codes, as well as the minimum guaranteed speed.

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<sup>31</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.34 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.35. [accessed 14 April 2022]

<sup>32</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.39 – para 2.41 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.39 – 2.41. [accessed 14 April 2022]

- 3.55 Copies of correspondence and documentation, containing the information sent out to customers following the sales process showed that signatories provided information to customers that actual throughput speeds could be affected by a number of factors.<sup>33</sup>
- 3.56 The information provided also referred to the fact that actual speeds could be lower than estimated particularly at peak times, and that high usage due to major sporting events could cause congestion. The information also referenced that there are a number of factors outside of the providers control such as the use of Wi-Fi, the customer's device, internal wiring, the number of users online, and accessing a particular website that could also affect actual speeds.
- 3.57 For all signatories, the right to exit information was provided alongside the minimum guaranteed speed, and in equal prominence. The information also advised customers to contact them if their actual download speeds fell below the minimum guaranteed speed.
- 3.58 The practices of Sky and Vodafone are similar to the signatories of the Codes, with regard to providing the information outlined in Principle 2 of the Codes.

### **Signatories setting time periods before customers should report speed issues**

- 3.59 We identified some instances of signatories setting periods of time that customers should wait before reporting speed issues, once the broadband service has been connected.
- 3.60 One provider asked customers to contact them if their speed fell below the minimum guaranteed download speed after 3 consecutive days or more. In contrast, another operator said that customers should contact them if their broadband speed is lower than the minimum guaranteed speed, and had been up and running for 14 days or more, whilst a third of operators said that customers should contact them if their speed is a lot lower than the estimate after ten days.
- 3.61 We recognise that it is normal for speeds to go up and down during the stabilisation period after a broadband service is first connected. This applies in particular to customers who are using the Openreach fibre to the cabinet products which require time for the technology to adjust the line speed to give the best stable performance for a given line, and that is outside the control of the ISP.<sup>34</sup>
- 3.62 However, we advise signatories against setting unreasonable periods of time for customers to wait before reporting speed issues when their broadband is first connected. In the worst case, this could mean a customer does not get their broadband speed issue resolved until day 44 i.e. 14 days for the line to stabilise plus 30 days available to resolve the speed issue. We consider that a 14 day stabilisation period is too long and we recommend that any stabilisation period should be as short as possible.

### **Summary and conclusions**

- 3.63 We are satisfied that signatories are providing customers with the information required by Principle 2 of the Codes within 7 days of a sale. The practices of Sky and Vodafone are also in line with the Codes.

3.64 We consider a 14 day stabilisation period is too long and we recommend that any stabilisation period should be as short as possible.

## Customers are exercising their right to exit

### Requirements under the codes

3.65 Principle 4 of the Codes requires ISPs to manage customers' problems when reporting that they are experiencing speed related problems. For example, ISPs must have a robust process for logging a speed problem, logging if the problem is within the customer's premise (or not), the cause of the problem, and once all steps have been made to correct the problem, logging whether the right to exit has been offered.<sup>34</sup>

3.66 Under principle 5 of the Codes, signatories are required to give customers the right to exit their broadband contract, without penalty, where their download speed falls below the minimum guaranteed speed for at least three successive days and the provider does not restore this within 30 days since the customer reported the problem.<sup>35</sup>

3.67 The 2018 Codes also extended this right to exit to phone services from the broadband provider delivered over the same line and to other services (from the same provider) delivered over the broadband connection. For the residential Code, the right to exit also applied to any pay-TV services purchased or renewed at the same time as the broadband connection.

### Findings

3.68 The signatories provided information on the number of customers logged as having speed problems through to recording customers who exercised the right to exit after all reasonable remedial actions had been exhausted or a satisfactory alternative was provided. Information was also collected from Sky and Vodafone. The data covers the six-month period November 2020-April 2021.

3.69 Specifically, the data showed that:

- Residential customers raised c.580,000 complaints with signatories about their broadband speeds. Of these, following investigation, 40% of these were found to be where speeds were below the minimum guaranteed speed. Of this 40%, 27% (c.64,000) were network related faults (i.e. related to the connections to the customer's premise), with the remainder due to other reasons, such as issues with 'in home' wiring or Wi-Fi connections.
- 95% of these network faults (c.61,000 out of c.64,000), which were identified as affecting performance and prevented customers from receiving their minimum guaranteed speed, were fixed within 30 days.<sup>36</sup>
- Of the remaining 5% (2,732), whose minimum speed guaranteed was not restored within 30 days, the majority of customers (64%) were offered an alternative way to resolve their issues in addition to

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<sup>34</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.53 – para 2.54 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.53 – para 2.54. [accessed 14 April 2022]

<sup>35</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.55 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.55. [accessed 14 April 2022]

<sup>36</sup> No data was available for [ ] customers prior to March 2021, meaning that the actual number is likely to be slightly higher than 95%.

a right to exit. Ultimately, 6% (164) exercised their right to exit<sup>37</sup> with 14% (429) taking an alternative (such as, a discount on their existing service or being moved to a higher speed product). Although 20% exercised their right to exit or chose an alternative, the remaining 80% (2,330) decided to stay with their existing provider without taking up an additional offer.

- Some of the signatories' residential customers who exercised the right to exit also exited contracts for other bundled services that they took from their broadband provider, such as pay-TV: for example, [%] of [%] and [%] of [%] customers who used the right to exit also exited their pay-TV service.
- Among the signatories' business customers, 60% of the small number of customers whose minimum guaranteed speed was not restored within 30 days exercised their right to exit their broadband contract.
- Sky and Vodafone also enabled residential and business customers to leave their contract when they could not restore the customers' contractual minimum speed within [%] days for [%] and [%] days for [%]. The proportion of eligible [%] customers who exited their broadband contracts ([%]) was comparable to the proportion that left the signatories in the same circumstances (a comparable figure was not available for ([%])).

## Summary and conclusions

- 3.70 Customers' use of the right to exit (particularly among business customers) suggests that the Codes' right to exit provisions are working in practice, and demonstrates that the majority of signatories' customers (95% for residential, 97% for business) experiencing a speed problem covered by the Codes have their faults fixed within 30 days.
- 3.71 Of the remaining 5% of residential customers whose fault was not fixed within 30 days, 20% exercised their right to exit or chose an alternative solution, while 80% decided to stay with their existing provider without taking up an alternative offer from them. At this point, we are not unduly concerned that 20% is relatively low, as there may be a number of reasons for customers choosing to remain with their existing provider and on their existing broadband package. We will however keep this under review.
- 3.72 Sky and Vodafone operated very similar right to exit policies to those required by the Codes and were able to demonstrate that some customers were using this right to exit.
- 3.73 Overall, we consider that signatories appear to have met the right to exit requirements under Principle 5 of the Codes. We are also satisfied that data is being logged appropriately and that signatories are meeting Principle 4 of the Codes.
- 3.74 One issue identified during the data collection process is the variation in which broadband providers record and categorise some of the data (such as recording solutions offered as an alternative to the user exercising their right to exit). It will be useful for future Ofcom reviews for providers to ensure data is collected and recorded using the standardised reporting structure as illustrated in Table A3 of the residential and business codes, and re-presented in Annex A. This will also apply to broadband providers seeking to join the Codes in the future.
- 3.75 Going forward, we are proposing to amend the definition of a bundle in the Codes, which applies to a customer's right to exit, in a manner consistent with Ofcom's revised General Conditions of Entitlement which are to be implemented from 17 June 2022. The details of these

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<sup>37</sup> Data on one provider [%] was incomplete, meaning that the actual number is likely to be slightly higher than 6%

proposals, including our rationale, are set out in our consultation '[Proposals to revise the Voluntary Codes of Practice on Broadband Speeds](#)' published today, alongside this report.

## Processes are in place which ensure providers' ongoing compliance with the Codes

### Requirements of the Codes

- 3.76 Principle 6 of the Codes requires providers to have processes in place to ensure that their customer service agents understand the objectives and spirit of the Codes and that they receive appropriate training to ensure they are able to give the information required by the Codes. Providers must also have their own internal processes to check their compliance with the Codes.<sup>38</sup>
- 3.77 We asked signatories to provide a copy of the latest version of any documents setting out their internal processes for checking compliance with the Codes.

### Findings

- 3.78 Most of the signatories provided documents which outline their processes by which they check their ongoing compliance with the Codes. This included verification of policies, training materials, training completion reports, quality assurance checks, results reporting, and audits. Providers had different approaches for checking compliance with the Codes.
- 3.79 Some providers operate a standard three lines of defence model for risk and regulatory compliance. This encompasses compliance professionals being responsible for three things: ensuring that there is good regulatory adherence; testing and making recommendations to improve procedures; and providing audit assurance.
- 3.80 One provider stated that they had a compliance programme framework in place to check compliance with the Codes. This included audits in which calls were observed, to see if the speed information was given correctly at the point of sale, that the customer was told about factors that might affect their speeds, that they should contact them if they have speed issues, and explained the customers right to exit if speed issues remained unresolved after 30 days. Shop floor observations were also completed to ensure adherence to Codes.
- 3.81 Two other providers said that their sales process was specifically designed in a way that the customer sales agent would not be able to complete the sales process without providing the customer with the relevant broadband speed information. This would ensure that the customer receives the information required by the Codes, before providing any personal financial details.
- 3.82 One provider stated they ensured compliance with the Codes through their compliance functional units that regularly conducted call monitoring, internal audits and other oversight activities. In contrast, another provider stated it had a team in place which completed a monthly review by sampling sales calls. This includes checking that agents follow the call script by providing the relevant speed information correctly and explaining the right to exit clearly, and providing feedback to agents not adhering to the Codes.

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<sup>38</sup> Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Residential\)](#), para 2.92-2.93 and Ofcom, 2018. [Better Broadband Speed Information: Voluntary Codes of Practice \(Business\)](#), para 2.92-2.93. [accessed 14 April 2022]

3.83 We recognise that operators have taken different approaches to ensuring compliance, and although the frequency of reviews are not specified in the Codes, we recommend a review should be carried out and formally documented at least annually.

### **Summary and conclusions**

3.84 Whilst signatories have different approaches to checking their compliance with the Codes, we consider that they should all be suitable for meeting Principle 6 of the Codes. We note that one provider checks sales calls monthly using samples and we consider this best practice. In addition, we would encourage other providers to carry out a formal documented review at least annually.

## 4. Conclusions

4.1 Overall, based on the wide range of data provided, we find that the signatories are meeting the requirements set out in the Codes. These voluntary Codes are therefore delivering protections to broadband customers as we intended.

4.2 We also found that Sky and Vodafone currently provide some of the protections required by the Codes. We consider that the Codes are likely to have had a positive influence on the behaviours of these non-signatories and also in setting standards for meeting broadband customers' expectations of being provided with both broadband speed information and a right to exit when minimum guaranteed download speed levels are not met.

4.3 In summary, we find that:

- **Most broadband customers currently have broadband contracts with a signatory to the Codes and so have access to the protection provided by the Codes.** In addition, Sky has confirmed it will re-join the Residential Code later this year, which will widen the number of customers who will be covered by the Codes. We are also in discussions with additional broadband providers who are looking to join the Codes.
- **Customers are being provided with clear and realistic broadband speed information at the point of sale.** Customers who have bought services from a signatory are given information on their expected and minimum guaranteed speeds early in the sales process, which are then confirmed in writing within seven days of the sale.
- **Most speed issues are being resolved within 30 days, with only a small number of customers using their right to exit contracts.** 95% of issues raised under the Codes' minimum speed guarantee, and which relate to access line speeds, are resolved within 30 days. Of the remaining 5%, the majority of customers were offered ways to resolve their issues, with 20% of this remainder choosing to exercise their right to exit or chose an alternative solution.
- **Processes are in place which ensure signatories' ongoing compliance with the Codes.** Evidence provided by signatories included verification of policies, training materials, training reports, quality assurance checks, results reporting, and audits.

4.4 We have also identified areas where improvements could be made:

- **Accuracy.** Currently, observed line speeds are only available for customers of signatories who use Openreach fibre-to-the-cabinet (FTTC) products, but not for customers using Virgin Media cable products and those using fibre-to-the-premises products. Going forwards, we expect signatories to develop an approach to provide observed speeds across all technologies as soon as possible rather than relying on estimates. This will be of increasing importance as full fibre networks are rolled out more widely and relied on by an increasing number of customers.
- **Timeliness.** Some broadband operators are asking customers not to report speed problems for newly connected FTTC products for between 3 and 14 days. This is to allow the technology time to adjust to the line speed to give the best stable performance for a given line. We consider 14 days is too long, and recommend that any period to allow the line speed to stabilise should be as short as possible.
- **Transparency.** We have identified a number of areas where the collection and recording of data can be improved by some signatories to help demonstrate compliance with the Codes for both internal purposes and future Ofcom reviews.

# A1. Data reporting template

A1.1 This template is taken from the Residential and Business Codes, Table A3, and sets out the data that signatories are expected to collect and the point at which the data should be collected ('when to collect').

Data		When to collect
Date speed problem <sup>19</sup> was first raised by customer		At point of customer contact about the speed problem (e.g. initial call/email)
Problem in customer premises? Y/N		After diagnostics have established the cause of the speed problem.
Date RTE was offered to customer, if applicable		When RTE is formally offered
If relevant, note the exceptional circumstances that led to the RTE being offered more than 30 calendar days after the speed problem was first reported.		When RTE is formally offered
Date RTE accepted – put note on customer’s file to facilitate GPL switching, where applicable	OR	RTE turned down (and other remedy accepted, if relevant)
		At point that customer confirms their decision (for accepting RTE, this may be when they initiate the GPL process, where relevant)

## A2. List of fixed access broadband providers who provided data for this report

A2.1 This annex provides a list of the fixed access broadband providers (broadband ISPs) who provided the data used in this report, obtained using Ofcom's formal data collection powers.

### **Signatories<sup>39</sup>**

- BT Consumer (residential)
- BT Enterprise (business)
- Daisy (business)
- EE (residential)
- Plusnet (residential)
- Talk Talk (residential and business)
- Utility Warehouse (residential)
- Virgin Media (residential and business)
- XLN (business)

### **Non-signatories**

- Sky
- Vodafone

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<sup>39</sup> Zen Internet joined the Codes after the data was collected and so is not included in this report.