Voluntary Business Broadband Speeds Code of Practice

Publication date: 26 January 2016

About this document

The Voluntary Business Broadband Speeds Code of Practice aims to provide business customers purchasing standard business broadband services with transparent and accurate information on their broadband speeds.

The Code is a voluntary commitment from the Internet Service Providers who are signatories to the Code. They undertake to provide accurate and transparent speed information on standard business broadband services at point of sale, manage business customers' speed-related problems, and allow customers to exit the contract without penalty if speeds fall below a minimum threshold.

This document outlines the detailed commitments of the Internet Service Providers who have signed up to the Code.

Contents

Section 1

Objective and scope of the Code

Objective of the Code

1.1 Businesses of all sizes and sectors rely on their broadband services to perform key functions, from communicating with their customers to running their services more efficiently. Speed is one particular measure of the quality of their broadband service which is important for customers to know, so that they can determine whether the service is appropriate to their needs.

1.2 However, there can be confusion for small business customers about the actual speeds that can be achieved by their broadband services compared with the speeds advertised prior to buying the service. There can also be some dissatisfaction from business customers about the speeds they receive after buying the service. Speeds may vary due to a number of factors, such as the characteristics of the line, the distance to the local exchange, or the number of subscribers sharing the network.

1.3 To address these issues, Ofcom and Internet Service Providers (ISPs) have worked together to develop a Voluntary Business Broadband Speeds Code of Practice (the Code). The Code represents the voluntary commitment of ISPs **to provide customers with transparent and accurate information on the speeds of their standard business broadband service,** so that they can make informed choices about their services before buying, and to help customers manage speed-related problems after buying.

1.4 The Code sets out detailed requirements under this overarching objective, and ISPs who have signed up to the Code support are committed to the principles of the Code as well as the detailed requirements.

1.5 This Code is focused on business customers and seeks to provide similarly relevant information that is currently available to residential consumers through the existing Voluntary Code of Practice: Broadband Speeds for residential products available on the Ofcom website.[1] As with the residential Code, a voluntary Code is a proportionate way to help business customers get better speeds information. This is in line with Ofcom's duty to further the interests of consumers, including business customers, as well as Ofcom's obligation to follow best practice regulatory principles, in particular to be proportionate and targeted.

1.6 A list of the ISPs who are signatories to the Code can be found on the Ofcom website: http://stakeholders.ofcom.org.uk/telecoms/codes-of-practice/business-broadband-cop-2016/. Ofcom will regularly update the list as appropriate.

Scope of the Code

1.7 The Code requires transparent, accurate information on access line speeds in relation to "xDSL" technologies, where speeds can vary depending on the technical characteristics of the line, in particular distance of the premise to the local exchange

[1] http://stakeholders.ofcom.org.uk/binaries/telecoms/cop/Broadband_Speeds_Code_June_2015.pdf

or similar, and fixed broadband delivered via fixed wireless technology. This covers "basic" business broadband using ADSL, "professional" business ADSL broadband services with business features such as enhanced upload speeds, fibre to the cabinet (FTTC) broadband services, and fixed broadband delivered via fixed wireless technology, including satellite services.

1.8 More general principles of the Code about providing customers with information on factors affecting speeds, informing them about the "throughput" speeds actually experienced (where available), and helping them manage their speeds, also apply to all standard business broadband services regardless of the technology used, including cable and fibre-to-the-premises (FTTP) technologies.

1.9 The Code does not apply to technologies and services where speeds are guaranteed and/or will not vary because the customer has its own dedicated connection. Therefore broadband services provided using Leased Lines (such as EAD), Ethernet over fibre to the cabinet (EoFTTC), Ethernet First Mile (EFM), or similar, are excluded from the scope of the Code. In addition, broadband services which connect to a private internal system rather than directly to the internet are excluded.

1.10 The Code ensures that all businesses which purchase relevant broadband services from ISPs who are signatories to the Code, receive the information required to be provided under the principles set out in the Code, regardless of the size of the business.

1.11 The Code applies in relation to new customers and existing customers buying new or different services. It does not apply to existing customers which simply retain their current service.

1.12 Annex 1 (Definitions) has a fuller explanation of the technological terms used.

Section 2

Principles of the Code

2.1 The structure of this section follows the customer journey experienced by business broadband users: receiving information on speeds at point of sale and after the sale, potentially experiencing a speed problem which is notified and managed by the ISP, and then where relevant, having a right to exit the contract if the speed problem (i.e. the speed falling below a minimum threshold) has not been resolved.

2.2 Overall the principles of the Code are:

- Principle 1: Transparent and accurate information on broadband speeds at point of sale;
- Principle 2: Detailed information after the sale and on the website;
- Principle 3: Manage speed-related problems;
- Principle 4: Right to exit the contract without penalty where speed problems cannot be resolved; and
- Principle 5: Deliver the objectives of the Code through appropriate processes

Principle 1: Transparent and accurate information on broadband speeds at point of sale

Information at the point of sale and before the sale is agreed

2.3 ISPs must provide information on estimated download and upload access line speeds as detailed in paragraphs 2.11-2.18, and throughput speeds (if available), as early as practicable in the sales process. The sales process commences as soon as customers are asked to input or provide any information about the business (such as the address or landline number), regardless of the channel by which the customer chooses to engage with the ISP. For existing customers changing from their current broadband service, speed information must also be provided as early as practicable, and before they agree that their package will be upgraded (or downgraded).

2.4 Except for the limited exception set out in paragraph 2.5 below, ISPs must always provide speed information prior to the customer agreeing to purchase the service. This will normally be before ISPs ask for the customer's financial details. In cases where the speed information on one or more lines may be unavailable at the first point of contact with the customer, e.g. in face to face meetings, ISPs must seek the customer's consent to proceed with the purchase of the service after the speed information is provided.

2.5 There is a single, narrow exception for large business customers[2] who have a pre-existing contractual relationship with the ISP and have explicitly agreed to bespoke

[2] By large customers, we refer to corporate customers, often businesses with more than 250 employees, which have significant communications needs and usually multiple sites, and are distinguishable from the majority of businesses because they negotiate with their ISP a customised order placement system to deal with the volume of line orders.

order placement arrangements. In such cases, the ISP will supply speed data as soon as practicable before the customer becomes irrevocably committed to the purchase, i.e. the point before which a customer may cancel the order without financial consequences.

2.6 ISPs and their representatives must also ensure that customers are made aware that there is additional information on the particular broadband service provided on the ISPs' websites.

2.7 ISPs must also provide a full copy of the Code through an easily accessible link on their respective websites.

2.8 ISPs and their representatives must also inform customers that further information on estimated speeds, how speeds may be affected by policies such as traffic management and fair usage and what the customer can do if they experience problems will be set out in more detail after the sale. ISPs must specify whether this information will be made available by letter, email and/or posted in "My Account" or in some other durable form.

Information must be communicated in the most relevant way to the customer

2.9 ISPs must ensure that the information is provided regardless of the sales channels, so that the information can be provided at point of sale on the telephone, on the website, or face to face. Where a customer switches sales channels to progress the transaction (for instance starts on the website and continues on the telephone), ISPs must provide information on each channel used.

2.10 When giving information and advice, ISPs and their representatives must take reasonable steps to ensure that customers who may have difficulty understanding the products or services that are available (e.g. elderly customers or customers whose first language is not English) are adequately and appropriately informed about all available products and services.

Access line speeds information where the underlying technology used may result in lower access line than headline speeds

2.11 ISPs must give transparent and accurate information on access line speeds, where a customer wishes to buy a standard broadband service using "xDSL" technologies (principally ADSL or FTTC) or fixed broadband delivered via fixed wireless technology.

2.12 ISPs must provide information on both access line download and upload speeds.

2.13 ISPs must provide a facility (line/speed checker) on their website so that customers can find out, in a clear and easily accessible manner, what their estimated access line download and upload speeds will be if they choose to purchase the service. ISPs must ensure that access line speeds information is given due prominence on the line/speed checker speed results webpage (i.e. the page on which a customer's access line speed estimate is generated following the input of a customer's postcode and/or landline number). For example, ISPs should underline or embolden the estimated figures.

2.14 ISPs must ensure that the download access line speed information is provided in the form of a range which is equivalent to the access line speeds achieved by the 20th to 80th percentiles of the ISP's similar customers (i.e. customers with similar line

characteristics and who are on broadband packages of the same headline speed as the package about which the customer is enquiring), except if the range of relevant download speed is less than 2Mbit/s.

2.15 Similarly, ISPs must ensure that upload speed information is provided at the point of sale. The upload speed information must be within the same range as the download speed information, if available, but can be a single point estimate if a range is not available or if the 20^{th}-80^{th} percentile range is narrower than 2Mbit/s (for instance on ADSL services).

2.16 ISPs may:

- supplement the range provided with an additional single-point estimate within the range which is no higher than the median access line speed achieved by the ISP's similar customers;

- adopt an alternative approach to calculating the range to that set out above if the ISP is able to demonstrate that this approach provides a more accurate estimate of customers' access line speeds. Any alternative approach used by the ISP must provide a narrower range than using the approach set out above, result in at least 60% of customers achieving an access line speed within the range provided and must be set such that, in cases where customers' actual access line speeds fall outside the range provided, fewer customers' actual access line speeds lie below the bottom of the range provided than lie above the top of the range. In using an alternative approach, ISPs may supplement the range provided with an additional single-point estimate provided that this estimate is the arithmetic mean of the top and bottom of the range; and

- regardless of the approach used to calculate the range, provide the customer with a single-point estimate instead of the range, where the size of the calculated range is 2Mbit/s or less, provided that the customer is informed that the single point estimate is only likely to be accurate within +/-1Mbit/s.

2.17 ISPs should also explain to the customer that the range of access line speeds provided is only an estimate and that if the customer receives an access line speed which is significantly below this range then the customer should contact the ISP.

2.18 If asked to explain further or asked to state the definition of "significantly below", ISPs should provide information on the access line speed achieved by the bottom 10th percentile (or a higher percentile if chosen by the ISP) of the ISP's similar customers ("the minimum guaranteed access line speed") and explain that if the customer's actual access line speed is below the minimum guaranteed access line speed, then it will follow the process set out in Principle 4.

Other relevant speed information to be given during the sales process, regardless of the technology used

2.19 ISPs must provide information on the actual throughput speeds customers are likely to receive under normal circumstances, where available. This is in addition to the access line speeds information provided on relevant technologies.

2.20 ISPs must explain to the customer in a clear and meaningful way that the actual throughput speed experienced by a customer will be influenced by a number of factors and may be lower than the estimated access line speed (where relevant).

2.21 ISPs must specifically explain where a traffic management policy applies, what this means for the customer and how their speeds may be affected. Similarly, the ISP must explain where a fair usage policy applies, what this means for the customer, how their use of the service may be affected, and set out any specific usage limits.

2.22 ISPs should provide further explanation where a customer requests further information on any issue at the point of sale. Where the transaction is online, all appropriate information must be available to customers during the sales process.

Principle 2: Detailed information after the sale and on the website

ISPs must provide detailed information within 7 calendar days of the sale

2.23 Once the customer has purchased a service, ISPs must provide the customer with the information below in a written, durable format which the customer can refer to at a later stage, and in a way that is clear and transparent to the customer. This is most likely to be in an introduction/starter pack sent by letter, email and/or in "My Account" (in the latter case, notifying them when they have done so), but can also be provided in other ways. ISPs must provide this information regardless of the sales channel used.

a) For "xDSL" technologies and fixed broadband delivered via fixed wireless services, ISPs must state the estimated download and upload access line speed range, the minimum guaranteed access line speed (download only) and the customer's right to exit the contract.

b) ISPs must provide an estimate of throughput speed (where available) and an explanation about any factors that may affect the actual throughput speed experienced by a customer, including:

- the nature of the customer's line;
- the ISP's network capacity;
- the number of subscribers sharing the network;
- the ISP's traffic shaping and management policy; and
- the number of subscribers online and accessing a particular website e.g. at any one time, or by time of day.

c) ISPs must also provide an explanation of the factors which may cause peak time congestion.

d) For "xDSL" technologies and fixed broadband delivered via fixed wireless services, ISPs must give equal prominence, compared with the rest of the information to be provided, to the fact that customers have the ability to leave their contract without penalty (the right of exit described in Principle 4) if:

- The customer receives an access line speed which is below the minimum guaranteed access line speed; and
- The measures set out in Principle 4 have been taken and the issue has not been resolved. This right does not affect the customer's contractual rights or any other rights that may apply.

e) Where applicable, ISPs must provide information on any fair usage policies – explaining what fair usage means, how this may affect the customer's use of the service and setting out any specific usage limits which apply – and including, where appropriate, weblinks to the information set out in paragraphs 2.25-2.30 below.

f) Where applicable, ISPs must provide information on traffic management policies – explaining what traffic management means and how the customer's speeds may be affected – and including, where appropriate, weblinks to the information set out in paragraphs 2.25-2.30 below.

g) ISPs must provide business customers information about the Code. As a minimum this must include information about membership of the Code and what it means for business customers. ISPs must also provide a full copy of the Code through an easily accessible link on their respective websites.

2.24 The information set out in this section should be sent as soon as possible after the sale has been concluded, and in any event must be sent within 7 days of the transaction date.

ISPs must provide information on the website

2.25 ISPs must include clear information relating to their respective policies on fair usage, traffic management and traffic shaping in a prominent place on their websites. At a minimum, these should cover the information below.

2.26 In relation to fair usage policies, ISPs should publish:

- any criteria they use for determining breaches of its fair usage policy; and
- the actions they intend to take if a user exceeds a usage limit or breaches a fair usage policy.

2.27 Where ISPs apply usage limits, ISPs should:

- provide a means by which users can measure their usage over the relevant billing period, where it is reasonably possible to do so; and
- consider providing advance notification to subscribers approaching a usage limit.

2.28 ISPs should provide users with email notification when users exceed a usage limit or breach a fair usage policy, where the ISP has a user's email address. This email should inform users about the precise consequences of doing so.

2.29 ISPs must publish information on their traffic management and traffic shaping policies. This should include the types of applications, services and protocols that are affected and specific information on peak traffic periods.

2.30 ISPs must also provide a link to the Code.

Principle 3: Manage speed-related problems

2.31 ISPs must be prepared to manage customers' problems when they report that they are experiencing speed related problems.

2.32 To achieve this principle, regardless of the technology used, ISPs must:

a) Have a robust process for identifying whether the cause of the speed related problem is within the ISP's control.

b) Where the cause of the problem is within the control of the customer, the ISP must explain clearly to the customer the possible causes of the lower speeds, how such problems could be addressed, and provide assistance to alleviate the problem.

c) Where the cause of the problem is within the ISP's control (including via its arrangements with the network provider), take all reasonable steps to ensure the speed problem is corrected.

d) Monitor the problem through to resolution, or until reasonable remedial actions (which include, for relevant technologies, right of exit or provision of equivalent service – see below) are exhausted, or the customer is satisfied with the outcome.

e) Keep the customer appropriately informed throughout the process.

2.33 The ISP must ensure that these processes are clearly highlighted on a prominent position on the ISP's website or in the introduction/starter pack (or any other durable format) that typically accompanies a customer's provision of service. For "xDSL" technologies and fixed broadband delivered via fixed wireless services, information on how the ISP manages speed-related problems and the principle of the right of exit must in any event be provided as part of the introduction/starter pack (or any other durable format), as explained in paragraph 2.23.

Principle 4: Right to exit the contract without penalty where speed problems cannot be resolved

Right to exit the contract without penalty if download access line speeds fall significantly below the range given at point of sale

2.34 ISPs must allow customers to exit contracts without penalty, at any time during the contract, if the customer's download access line speeds fall significantly below the range given at point of sale, and the issue cannot be resolved. In the remainder of this document, we refer to this right as "the right of exit".

2.35 In some cases, the right to exit also applies to other services bought alongside the broadband service, for example, certain bundled products or 'dependent' services (i.e. services which rely on the relevant broadband line in order to operate). The circumstances in which a right of exit applies are described in this Principle.

2.36 The download access line speeds determine whether the right of exit applies in any particular case. The download access line speed is considered to fall significantly below the range given at point of sale if the speed is below the access line speed achieved by the bottom 10th percentile of the ISP's similar customers (or a higher percentile if chosen by the ISP). The access line speed achieved by the bottom 10th percentile of the ISP's similar customers is called "the minimum guaranteed access line speed" (or a higher percentile if so guaranteed by the ISP).

2.37 The relevant measure of the minimum guaranteed speed, against which the ISP will check if there is a speed issue reported by the customer, is the measure given to the

customer at point of sale (if requested) or in the information provided to the customer within 7 days of the sale. The speed checker used to assess the speed on the line where a speed issue has arisen is the ISP's own performance checker. The right of exit can only apply after the ISP has taken all reasonable steps to resolve the speed issue, and the speed remains below the minimum guaranteed access line speed.

2.38 In addition to right to exit, ISPs can also offer other remedies (e.g. discount or new lines). In most cases, the customer is under no obligation to accept these remedies. There is an exception in relation to cases where 'dependent' services are affected by the relevant broadband line – see further explanation below.

The ISP can choose to ask for the equipment to be returned

2.39 Where the right of exit applies, ISPs may require the customer to return the internal equipment provided by the ISPs (e.g. modem), providing they do not require the customer to pay the delivery cost of returning the equipment. A customer's failure to return equipment shall entitle the ISP to withdraw the right of exit penalty-free i.e. they may seek to charge the customer early termination charges.

2.40 Where the customer has paid an upfront charge for the equipment, the ISP must reimburse the customer when it requires a return of the equipment. This may be subject to depreciation and reasonable time limits for reimbursements that must be detailed by the ISP to the customer in a timely manner.

Scope of the right of exit

<u>The right of exit applies to certain technologies</u>

2.41 The right of exit only applies in relation to the "xDSL" technologies, where download access line speed is given (including ADSL and FTTC) and fixed wireless access, including satellite.

2.42 For the purpose of this principle, "relevant technology" refers to DSL, FTTC/VDSL or fixed broadband delivered via fixed wireless technology.

2.43 The right of exit does not apply to cable or fibre to the premises technologies.

<u>The right of exit applies to individual broadband services, and certain types of bundles and dependent services</u>

2.44 Provided that the service is supported by a relevant technology, the right of exit principle applies to the following services and bundles:

a) To individual standard broadband services; and

b) To bundles of standard voice and broadband services purchased at the same time. This includes bundles where standard voice and broadband services were bought separately, but where an ISP made a change which made the services not possible to be separated out again[3].

[3] For example, where an ISP has migrated a customer from WLR+SMPF to MPF, and so the provision of voice and broadband effectively becomes inseparable.

c) To broadband services and their "dependent" services i.e. services such as Voice over IP (VoIP) and Cloud-based services which are dependent on the affected broadband service and where such services would be 'stranded' were the customer to stop purchasing the affected broadband service (we refer to these services as "dependent services"). It is irrelevant whether the dependent service was purchased at the same time or a different time to the affected broadband service.

2.45 Where a customer has purchased multiple lines, the right of exit only relates to the specific line with the speed issue (and by extension, cases where there is a broadband and voice bundle, or a dependent service reliant on that specific line).

2.46 The right of exit does not apply to any other services which are not covered above and which can operate independently of the affected broadband service. For instance where broadband service is bundled with mobile services or leased lines, the right of exit penalty-free only applies to the broadband service where the speed remains below the minimum guaranteed speed.

Process to be followed when the right of exit may apply

<u>The right of exit applies to individual broadband services and broadband and voice bundles after the ISP has taken all reasonable steps to resolve the issue with the existing line (paragraph 2.44 (a) and (b) above)</u>

2.47 Where the customer uses a relevant technology, and the customer has a broadband service or a bundle of voice and broadband services:

a) The ISP must have a robust system for identifying whether the problem relates to a slower than expected access line speed.

b) When the fault is reported, the ISP must log the problem as a "technical fault" if the actual access line speed is at or below the minimum access guaranteed speed.

c) As soon as possible after the problem is logged as a technical fault, the ISP must tell the customer their minimum guaranteed access line speed and explain that if the technical fault cannot be resolved, the customer has a right to exit the contract without penalty.

d) The ISP must take all reasonable steps to ensure that the fault is corrected on the existing line. This includes running all appropriate diagnostics and, if appropriate, logging a fault with Openreach, as well as additional actions to correct the fault on the existing line (examples include, for instance, a broadband "boost").

e) If it appears from the diagnostics that the fault is likely to have resulted from factors within the customer's control, the ISP should advise the customer of that fact and provide assistance to alleviate the problem.

f) The ISP must allow the customer the right to exit the contract without penalty, after the ISP has taken all reasonable steps to correct the speed problem (and the customer has followed the ISP's advice to alleviate the speed problem on that line), but the speed remains below the minimum guaranteed access line speed. The ISP can also offer other remedies i.e. pay for a lower speed package, but

must make clear that the customer is under no obligation to accept them and always offer the customer the option of a right of exit.

In relation to broadband and 'dependent' services, the ISP must offer the right of exit without penalty or provide an equivalent service within 15 working days (paragraph 2.44 (c) above)

2.48 Where the customer uses a relevant technology, and has dependent services supported by the broadband service which has the speed problem, the ISP must follow the same process than for single broadband services and broadband and voice bundles outlined in paragraph 2.47, except that:

a) When the fault is reported the ISP must tell the customer their minimum guaranteed access line speed and accurately explain when the right to exit applies for these services.

b) If the speed remains below the minimum guaranteed access line speed and the ISP has taken all reasonable steps to fix the fault, the ISP must either:

- 1) offer the right of exit outlined in paragraph 2.34; or

- 2) provide an alternative, equivalent broadband service within 15 working days at the same (or lower) price for the remainder of the existing contract period for the affected broadband line. Where it chooses to provide an alternative, equivalent broadband service, it must inform the customer of this, including the process and when the right to exit might apply.

c) If the ISP opts to provide an alternative, equivalent broadband service, the service must achieve a download access line speed above the minimum guaranteed access line speed under the original service contracted for and it must be provided within 15 working days, otherwise the right of exit applies (unless exceptional circumstances apply).

d) In exceptional circumstances which are outside of the ISP's control, there may be a delay to providing the new service within 15 working days. Potential examples of such 'exceptional circumstances' beyond the ISP's control include:

- a missed or delayed Openreach appointment;

- the customer not being able to be at the premises at the time of the appointment; and

- street-works permissions.

e) When such exceptional circumstances occur, the ISP must explain the reasons for the delay to the customer, and keep the customer informed of progress. Ofcom expects ISPs to work within the spirit of the Code, and make progress to install the new service as speedily as possible.

f) In these exceptional circumstances, the right of exit only applies if the new service which has been provided does not achieve or exceed the minimum guaranteed access line speeds.

2.49 A flowchart of when the right of exit applies is available at Annex 2.

Principle 5: Deliver the objectives of the Code through appropriate processes

Speed information must be as accurate as possible

2.50 While Ofcom recognises that some ISPs who contract with an end-user are dependent on the wholesale services provider to pass on speed information, the ISP must take all reasonable steps to ensure that the information initially provided to customers at point of sale is as accurate as possible, including ensuring that information on access line speeds at point of sale is the most up-to-date information available.

Provision of speed information by wholesalers

2.51 ISPs contracting with the end user are responsible for providing the speed information described in the Code.

2.52 Where these ISPs also provide wholesale services and products (either over their own network or when re-selling them) to other ISPs, they must provide accurate access line speed information to the purchasing ISP.

ISPs must have appropriate supporting processes

2.53 ISPs must have processes in place to ensure that their agents understand the objectives and spirit of the Code and that they receive appropriate training to ensure they are able to give the information on speed and right of exit required by the Code

2.54 ISPs should also have their own internal processes to check their compliance with the Code.

ISPs support the spirit of the Code

2.55 The expectation of Ofcom and all ISP signatories to the Code is that all signatories fully endorse the objectives of the Code and its principles. This means that the overall test of whether ISPs are compliant with the Code is whether signatories are working within the spirit of the Code and are making every reasonable effort to comply with it. This includes agreeing to co-operate fully with Ofcom in its operation of the Code, including, for example, by agreeing to all reasonable requests to provide Ofcom with information about how they comply with the Code.

2.56 Ofcom also intends to monitor compliance with the Code through mystery shopping, and other similarly appropriate methods, e.g. audits of ISPs' internal processes.

2.57 ISPs who sign up to the Code but fail to apply the principles it sets out may be removed as signatories to the Code.

2.58 Ofcom will examine matters of possible non-compliance on a case-by-case basis and discuss these with the relevant ISP. In cases where Ofcom considers removal to be an appropriate action to take in respect of non-compliance, Ofcom will notify the ISP before it takes a final decision, explaining its reasons for considering removal to be appropriate and providing an opportunity to comment. If, having been removed as a signatory, an ISP subsequently resumes compliance with the Code, Ofcom may agree to reinstate it as a signatory.

2.59 Ofcom may issue statements about the conduct of specific ISPs which goes against the spirit of the Code.

Implementation

2.60 ISPs must have implemented the Code by 30 September 2016. ISPs must inform Ofcom when they have implemented the Code.

2.61 ISPs which have indicated to Ofcom that they wish to become signatories after the Code has been published must implement the Code before being confirmed as signatories.

Annex 1

Definitions

Speed Related

a) **headline** or advertised speed – This is the speed that ISPs use to describe the packages that they offer to customers. They are often described as 'up to' speeds, but these are often only a guide as to the speed an ISP can provide and at what price;

b) **access** line speed – This refers to the speed of the data connection between the broadband modem and the local exchange or cable head end. This constitutes the maximum speed a customer will be able to experience on his/her individual line;

c) **actual throughput** (or **download**) speed – This is the actual speed that a customer experiences at a particular time when they are connected to the internet. This figure is often dependent on factors such as the ISP's network, its traffic shaping and management policy, the number of subscribers sharing the network and the number of people accessing a particular website at a particular time.

d) **average throughput** (or **download**) speed – This is an average of actual throughput speed for each different broadband product offered by an ISP.

e) **upload speed** - Also uplink or upstream speed. Rate of data transmission from a customer's connection to a network operator's access node, typically measured in Megabits per second (Mbit/s).

f) **contention** – This is the sharing of bandwidth within a network by multiple users where the bandwidth available is less than the aggregate demand.

Technology Related

g) **Cable** – Sometimes referred to as Hybrid Fibre Coaxial (HFC) networks, cable networks combine optical fibre and coaxial cable (a cable made up of a conductor and a tubular insulating layer) to carry TV and broadband signals to end-users;

h) **DSL** (or **Digital Subscriber Line**) – A family of technologies generally referred to as DSL, or "xDSL", capable of transforming ordinary phone lines (also known as 'twisted copper pairs') into high speed digital lines, capable of supporting advanced services such as fast internet access and video-on-demand. ADSL (Asymmetric Digital Subscriber line), HDSL (High Data Rate Digital Subscriber line) and FTTC are all variants of "xDSL";

i) **FTTC** (or **Fibre to the Cabinet**) – An access network consisting of optical fibre extending from the access node to the street cabinet. The street cabinet is usually located only a few hundred metres from the subscriber premises. The remaining segment of the access network from the cabinet to the customer is usually copper pair, but another technology such as wireless could be used;

j) **Satellite** – Satellite broadband is a data service where satellites are used to provide the wireless data connectivity. A satellite dish at the customer's premises connects to a geostationary satellite and transmits signals through the air;

k) **VDSL** (or **Very high data rate digital subscriber line**) – A digital technology that allows the use of a standard telephone line to provide very high speed data communications, which is used in fibre-to-the-cabinet deployments;

Exclusions

The following types of services offered by ISPs are excluded from the Code:

l) **uncontended** - This term denotes a service which is not subject to any sharing of network capacity which could cause a slowdown in speed. The available bandwidth is always the same.

m) **EAD (Ethernet Access Direct)** - An Openreach product that provides point-to-point data connectivity between sites.

n) **EFM** (**Ethernet in the first mile**) – A network technology for the delivery of Ethernet services over access networks. Although the technology also encompasses fibre access networks, in common usage, EFM refers to the provision of Ethernet services over copper access networks.

o) **EoFTTC** (**Ethernet over Fibre to the Cabinet**) - A service which offers ostensibly non-contended Ethernet connectivity over FTTC lines with guaranteed SLAs.

p) **leased lines** - A transmission facility which is leased by an end user from a CP, and which is dedicated to that user's traffic.

q) **Services linking to a private network** – Connectivity services that directly access a private network. Any Internet access is only available indirectly via the private network.

Other

r) **Dependent services** - Services which are dependent on, or require, that particular ISP's broadband service in order to function.

s) **Metallic Path Facilities (MPF)** - The provision of access to the copper wires from the customer premises to a BT Main Distribution Frame (MDF) that covers the full available frequency range, including both narrowband and broadband channels, allowing a competing provider to provide the customer with both voice and/or data services over such copper wires.

t) **Shared Metallic Path Facility (SMPF)/shared access** - The provision of access to the copper wires from the customer's premises to a BT MDF that allows a competing provider to provide the customer with broadband services, while BT continues to provide the customer with conventional narrowband communications.

u) **Wholesale Line Rental (WLR)** - The service offered by BT to other CPs to enable them to offer retail line rental services in competition with BT's own retail

services. Line rental is offered along with calls (and other service elements, such as broadband) to retail customers.

Annex 2

Right of exit: flowchart

Flowchart of when the right of exit applies