BT's response to Ofcom's consultation document

Broadband Speeds Codes of Practice

Proposals to revise the Residential and Business Voluntary Codes of Practice on Broadband Speeds

17 November 2017

CONFIDENTIALITY - This response is BT's 'Non Confidential' response.

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1   Executive Summary

1. This response is on behalf of two BT Group Lines of Business ('LoBs') – Consumer (which provides BT, EE Home and Plusnet broadband services to residential customers), and Business & Public Sector (B&PS).

2. Today, more than ever, consumers and businesses rely heavily on broadband services for a wide range of activities to support their daily lives. The speed customers are likely to get is a key consideration when choosing which service to buy.

1.1   Voluntary approach should continue

3. We agree with Ofcom that a continuation of a voluntary Code of Practice is the best and most appropriate way to ensure customers get the right supplementary information about broadband speeds and receive a proportionate level of consumer protection. We are pleased that Ofcom thinks the current Codes are working well, that ISPs are providing speed information in the correct way, and that rates of compliance are increasing.

1.2   Encouraging wider adoption

4. We believe Ofcom should consider how to encourage more providers (including smaller ISPs and newer entrants) to sign up. And in the meantime, we propose that all ISPs should be required to make it clear, on their websites, to prospective and existing customers whether or not they are signatories. ✂

1.3   Realistic speed estimates are essential

5. We agree it is essential for estimated speeds given to customers to reflect any slowdown at peak times, when customers are most likely to use the service. Peak time speed estimates are closer to the true speed the customer will experience, which is influenced by the technology used and the level of network investment provided by the ISP. Providing more realistic speed information helps manage customer expectations and allows customers to make more informed choices.

1.4   Risk of confusing customers at point of sale

6. We believe it is very important to strike a reasonable balance between the amount of speed information which providers should give to a customer before they buy, and how useful this information is in helping customers choose the right service. This should also be considered in the context of wider information about price, payment and other terms which providers need to explain to customers before contracting. Providing too much information, some of which is highly technical, could create confusion, meaning a customer may not be able to make a well-informed buying decision. It could also mean extending the duration of the sales journey, whether in a call or in store, leading to frustration and inconvenience for those customers not wanting this level of detail.

7. For the increasing number of customers who are now ordering broadband online, it is very easy for providers to present a comprehensive range of information. These customers are likely to be more experienced users. Customers ordering by phone are likely to be less experienced or even new users, and potentially confused by the full range of information being given at the point of sale. However, should the customer request information or a sales advisor determine a need to explain the detail, more information could be offered. It is important that providers have the flexibility to tailor conversations to individual customers' needs and understanding, thereby giving customers a first class experience when they are buying products and services.

1.5   Right to exit ('RTE')

8.   We agree it is reasonable for customers to expect any speed issue to be rectified within a certain time period before they are able to exercise their RTE (if the speed cannot be improved to the Minimum Guaranteed Speed ('MGS')). There needs to be some flexibility to allow ISPs to identify and fix any problems, for example to schedule any required engineering visits.

1.6   Timing

9.   It is critical that providers work to a common implementation date, so that any speed estimates given at point of sale are provided on the same basis, and using the same methodology, to take account of speeds achieved at peak times. ✂

10.   We firmly believe that providers need a minimum period of 12 months to implement the code following the publication of Ofcom's Final Statement. This is because we will need to schedule systems capacity, development and testing, human resource and budget within set development cycles. Our development roadmaps for the year ahead are already heavily contended with other regulatory obligations requiring implementation, and these will need to compete with the requirements for the voluntary Code of Practice.

11.   BT is very pleased to signal its *intent* to become a signatory, but we will only 'sign' once we are confident we, along with the other signatories, can meet Ofcom's proposed implementation date, having reviewed the work needed to make the required changes.

1.7   Scope should be future-proof

12.   We agree with Ofcom that the Codes of Practice should apply to all technologies used to deliver fixed broadband, including cable and FTTP. Given the focus of the new Code is to include peak time performance, it is an opportune time to extend the scope of the Code to newer products, as we know peak time performance can be more variable in certain technologies and customers should be able to compare all the options. We would welcome discussion with Ofcom on how new products are treated under the Code, for example Ultra-fast and all-IP, and how the MGS is measured for products which are in the early stages of gaining significant volumes. We believe a framework needs to be set out in the Code relating to the introduction and evaluation of new technologies, such as ultrafast full fibre products and 1G.Fast.

1.8   Bundles

13.   We agree with Ofcom's suggested approach regarding the treatment of bundles, so that a customer can exit all related services bought as part of a triple-play bundle, but excluding mobile services.

14.   For Business, we support the ongoing flexible approach in the revised Business Code to associated products so that customers exercising their RTE when encountering broadband speed problems can avoid stranding other products, or retain them if it is more convenient.

1.9   Post-implementation

15.   We urge Ofcom to undertake a review of the new Code, once implemented, to ensure proportionality and effectiveness of the Code for both customers and providers, and to ensure that the new requirements are not unduly onerous or confusing. ✂

2   Background

16. Providing meaningful and accurate broadband speed information is complex and challenging for suppliers and providers. We are committed to giving customers the best information available before they make a buying decision. However, it is imperative that all stakeholders understand that information provided at the point of sale is estimated, and primarily for guidance only.

17. In the longer term, we suggest industry should work together to allow real results to be fed into Openreach to improve forecasting accuracy, so that a customer's specific line conditions are taken into account and a MGS can be specific to the line rather than being based on a statistical distribution.

18. We agree with Ofcom that the reasons set out (i.e. the length of the connection to the user's home or premises, network congestion which can reduce speeds at busy times, and factors in the customers' own home or premises) are the main causes of variations and slowdown in fixed broadband speed, and none of them suggest a fault that an ISP can fix. To address factors in the customer's own home or premises, customer awareness is vital so customers' speeds are maximised. ISPs can help customers get the best out of their broadband services by providing clear information post-sale and on their websites (e.g. on use of wi-fi and any limitations, and ways to maximise performance). It could also be part of the on-line order process (with links), as well as being included in any guidance provided by Ofcom e.g. its Customer Guide.

2.1   Advertised Speeds

19. We are encouraged by Ofcom's close working with the ASA and CAP on a holistic view of speed advertising, especially at the point of sale. It is essential that definitions and positions are consistent across the various regulatory bodies in order to reduce the potential for further confusion. BT is fully engaged in the concurrent discussions with Ofcom, ASA and CAP.

2.2   Scope of the Residential Code

20. We agree that extending the revised Code of Practice to cable broadband technologies is a helpful initiative for customers. All technologies suffer some speed degradation over distance, and we agree that cable technology is less susceptible. However, as Ofcom notes, there is greater speed contention at peak times for cable technologies. Extending the revised Code means that customers can compare all the options and make an informed decision regardless of technology.

2.3   Proposed changes to the Business Code

21. We support the proposed updates to the Business Code:

- To provide an access line upload speed estimate at the point of sale.

- Where the RTE applies, the ISP can ask the customer to return the internal equipment it provided (e.g. modem), as long as they do not require the customer to pay the delivery cost of returning the equipment; and

- The RTE applies not just to individual broadband services but also to certain types of associated and dependent services, for example cloud voice services.

3 Review of Codes

3.1 New EU regulation

22. The Open Internet Access (EU Regulation) Regulations 2016 ("the Regulation") contain a requirement to include certain speed information in customers' contracts. We note that this applies to all ISPs, irrespective of whether they are signatories to the voluntary Ofcom Code of Practice. This information includes minimum guaranteed (download) speeds, normally available (download and upload) speeds, maximum download and upload speeds, and advertised download (and upload if applicable) speeds.

23. In principle we are happy for this information to be referenced out from our contractual terms and conditions. We do not agree that maximum speeds should be provided in addition to the top (i.e. 80th percentile) of the 'normally available' download speed range estimate. Please see our comment in Section 4 below (para 63).

24. Subject to this point, we agree that providers should be contractually obliged to provide this information, in a manner to suit each provider. As our terms and conditions are not specific to individual customers it will not be possible to include customer-specific speed estimates or MGS within the terms themselves. Instead we will use our judgement as to how best to present this to our customers. At a minimum the information will be included in our order summary emails which are sent to customers immediately following their purchase. We propose to update our terms and conditions to state expressly that we will provide the required speed information to customers, and the purpose of this information.

3.2 Evidence used to inform the review

25. With reference to Ofcom's programme of Mystery Shopping, we appreciate the difficulties associated with carrying this out, but we would suggest closer engagement between Ofcom, ISPs and Market Research agencies, in advance of any mystery shopping, to ensure that ISPs' sales processes are accurately reflected in any subsequent mystery shopping programmes, and that the methodology is appropriate and its relevance substantiated.

26. We are pleased that Ofcom undertook extensive engagement with ISPs to discuss how the new Codes should be shaped. This helped in ensuring that improvements in speed information were achievable with improved accuracy. However, we think it would be really helpful for all stakeholders if Ofcom were to undertake a 'post-implementation' review to check that the conclusions from that engagement were right, that the new Code works well, is proportionate, and fit-for-purpose, and that it allows ISPs to give all their customers and prospective customers a first class and informative experience.

3.3 Key proposed revisions to the Code

3.3.1 Providing more realistic speed estimates

27. We agree that more accurate speed information can only benefit consumers, and reduce the likelihood of frustration as a result of their speed not matching what is indicated at point of sale. It is important that consumers understand that speeds can slow down at peak times, and which providers' services are most resilient to contention, and perform best at peak times, when consumers are most likely to use their broadband services. Therefore we agree that peak time contention should be reflected in all relevant speed information provided to customers – including the normally available download speed range estimate, MGS estimate, and normally available upload speed range estimate.

3.3.2 Always providing a minimum guaranteed speed (MGS) estimate at point of sale

28. ✂

29. ✂

30. A customer has to digest a large amount of information on a sales call. Introducing into the conversation the suggestion that the product we are providing may not achieve the MGS, and that the RTE may apply, will involve a technical discussion e.g. line speeds and throughput speeds, wi-fi performance and a provider's full end-to-end faults process. To achieve the right balance, we would want the customer to know that they have an appropriate level of consumer protection, but we do not believe that a full explanation of the MGS and RTE process is appropriate or in the customer's best interests. This information is better provided post-sale when the customer has the opportunity to fully digest it.

31. Whether it is discussed pre-sale or post-sale, we understand from Ofcom via its industry workshops that ISPs will have discretion on the naming of the MGS, and this can be tailored in order to minimise any confusion with other potential product or service definitions. We agree there needs to be clarity that the MGS is the speed which would trigger the customer's RTE.

3.3.3   Strengthening the right to exit

32. If a customer is getting significantly below their predicted speed estimate, then this could signal a fault, which all ISPs will try to fix. If it is not a fault, it would suggest, for DSL technologies, that the slower speed is characteristic of the line (i.e. line length, cable type, distance from cabinet/exchange), for which there may be no current cost-effective remedy. No ISP wants to have dissatisfied customers, and BT is happy to offer a RTE; but collectively, Ofcom, ISPs and other stakeholders need to ensure that remedies are appropriate, and in customers' best interests. We are concerned about the positioning of the RTE once any corrective action has been undertaken by the ISP. It needs to be made clear to a customer that they are unlikely to experience an improvement in speed by moving to another ISP using the same technology.

33. A significant number of customers do not demand or need fast speeds to deliver their broadband experience; they could be light users who use broadband for emails, watching TV, web-browsing, video streaming, making VOIP calls, etc. where a low minimum speed (and stability) suffices. For such customers, even if they do not get their MGS, exercising their RTE may not be necessary or beneficial.

34. Ofcom is concerned that there has been a low take-up of the RTE, possibly indicating a lack of awareness among customers. In the light of the points we have made in paras 32 and 33 above, it is clear that exercising a RTE can only ever help a small number of customers, and there appears to be no evidence that material numbers of customers are suffering from an inability to get their MGS. Ofcom must ensure that requirements relating to transparency of the RTE are proportionate.

35. We are happy to agree to a 30 day time limit (with longer allowed in exceptional circumstances) for ISPs to remedy any speed issues or faults, before offering the RTE to customers. We agree that it is reasonable to provide clear information to customers post-sale, explaining the linkage between the MGS and the RTE process, and to which of a customer's products it applies.

3.3.4   Ensuring all customers benefit from the codes, regardless of their broadband technology

36. We agree that broadband services of all technologies should be fully covered by the Code, including cable and FTTP.

37. ✂

38. In light of the need for further discussion, it may be that FTTP can only be brought into the scope of the Code following implementation for other technologies.

3.3.5   Customer guide

39. We agree it would be helpful for Ofcom to publish a Customer guide, but we would welcome the opportunity to be involved – by providing any input required, and in reviewing the guide before it is published – we suggest via an industry forum with other ISPs.

3.4   Implementation

40. We believe a minimum period of 12 months is required, from publication of Ofcom's Final Statement, for ISPs to undertake the necessary systems development work and testing, before they implement the Code and become signatories. It is crucial that signatories "go live" on the same date.

41. ✂

4 Comments on proposed improvements in Ofcom's Annex 1

4.1 Information at point of sale

42. As we have stated above, it is important the sales journey gives customers a balanced and relevant level of information to enable them to make an informed buying decision. We do not believe it is proportionate or in customers' interests to require ISPs to provide numerous types of speed information which do not help customers make informed choices. An example of this is describing "factors than can affect your broadband". These are fairly well understood, and are common across most providers. They can be time-consuming and laborious to discuss at the point of sale and would be best provided post-sale, although of course we are happy to discuss these issues with customers should they ask for more detail. Providing such information post-sale (factors impacting speed performance, where to position the router, how to optimise wi-fi performance) is much more appropriate, when the customer is actively seeking this information.

4.2 Normally available download speed

43. We support Ofcom's proposed approach to measuring and providing normally available download speed estimates based on peak time speeds. We are confident our servers on-net can meet Ofcom's requirement that "testing will measure the speed from the router (also known as Customer Premises Equipment (CPE)) to the edge of the ISP's network where it connects to the internet".

44. ✂

45. For new technologies that will be launched to the market, we suggest that Ofcom considers a 'product maturity period', before the requirements of the Code fully apply. An example of such a new product is G.Fast (where the technology is fully rate-adaptive, and the line speed will automatically adjust to accommodate performance of the physical transit layer, all of which improves the customer experience). Industry agreement over the period and number of speed tests (and sync rates) will need to be established.

46. For these new services that are due to be launched, there will be a lack of statistics, due to the immaturity of the products, making it challenging to provide meaningful speed data to customers. There needs to be discussion at an industry level to agree the way forward.

4.3 Use of actual line speeds

47. ✂ We would welcome further Ofcom and industry engagement to discuss and agree the approach going forward. ✂

48. It is ✂ unclear how this relates to the MGS: for example, how the MGS would be calculated using the "actual" line speed and relate to the normally available speed. Further, it is unclear what would happen if a customer's "actual" line speed is below the MGS as indicated by Openreach's 10th percentile value.

49. To avoid confusion and misrepresentation, all signatories to the Code of Practice should align behind one agreed methodology of calculating estimated performance for the same technology. ✂

50. We agree, subject to further internal review, with the proposed approach for calculating normally available download speeds for cable and FTTP technologies, i.e. "their normally available speed range will be drawn directly from the 20th – 80th percentiles of the sample group at peak time". However we would appreciate additional information on how this would be calculated to ensure consistency amongst providers. Also please note our comments above regarding new technologies.

51. For DSL technology, we agree that testing to prepare speed estimates should take place at a national level, as opposed to at exchange level. We agree with the proposed approach for FTTP, again subject to internal review as volumes increase.

4.4   High Level Testing Principles

52. We have provided comments on these below.

4.5   Minimum guaranteed speed

53. We agree that the current threshold for MGS for DSL services is maintained at the 10th percentile of customers on similar lines, but adjusted to reflect peak time contention.

54. ✄

55. We would ✄ welcome further consultation on how the RTE threshold would be calculated and measured; for example, would a customer with a cable or FTTP broadband service be able to exercise their RTE if the MGS is breached at peak time for three consecutive days? We would welcome further clarity on this aspect.

4.6   Normally available upload speed

56. We agree with Ofcom's proposal that during sales calls, upload speeds should only be provided to residential customers on request. They will always be provided for online order journeys. We agree with Ofcom's proposed methodology for calculating peak time upload speed measurements.

57. For business services we agree upload speeds should always be provided, irrespective of sales channel used, as for many business customers these are important.

4.7   Speeds needed for common activities

58. We agree with Ofcom's suggestion that customers buying broadband services online are provided with information about speeds required for common broadband uses. We believe that the ISP should undertake this themselves to ensure any guide aligns with a ISP's brand, with suggested content from Ofcom as per its published Consumer Guide (as well as the relevant parts of the 'Ofcom Mobile and Broadband Checker White Paper', with input from Sam Knows). We support Ofcom's guide, but it needs to be reviewed to ensure it is still current and valid for the revised Code. This aligns with our wider objective to make broadband speeds more readily understood by existing and prospective customers.

4.8   How speeds information might be presented to online customers

59. We agree that Ofcom's example of how to provide speed estimates and information to customers for online orders looks sensible. We assume Figure 3 is for illustrative purposes only, and ISPs will have the flexibility to provide their own appropriate wording; for example, "if it is an ongoing problem we will try to fix it, but if we are unable to improve your speed, we will…." may be more suitable when dealing with a speed below MGS.

60. As agreed with Ofcom, and as mentioned in para 31 above, ISPs will have discretion on the naming of the MGS to align with their brand.

61. Within 30 days we would be able to advise the customer where the issue lies (i.e. with BT or in the customer's domain). There will be exceptions where we cannot guarantee the resolution of speed issues within 30 days, due to, for example, complex technical issues.

4.9   Improving after-sale information

4.9.1   Speed estimates

62. We will reference speed estimate information in our contracts provided to customers, and this information will be provided once a sale is completed. With regard to signatories "ensuring this information is incorporated into the contract for the provision of the relevant services to the customer, in a "legally enforceable way", we believe the best approach is for ISPs to state in the contract that we will advise customers separately of their speed information, including the MGS. Our contracts already explain the RTE.

63. With regard to the speeds required by The Regulation:

    - We agree with Ofcom that the minimum upload speed does not carry any guarantee linked to the RTE.

    - We do not agree that 'maximum speed' (80th percentile as for similar customers, upload and download – the maximum at the quiet hour/s) is useful information for a customer and could cause confusion. Providing it could result in the customer being provided with up to <u>nine </u>different speed values. We believe that the proposed 'maximum speed' is an obsolete concept and does not protect the customer from any mis-selling or misrepresentation

    - 'Normally available speeds' would be speed range estimates for upload and download adjusted for contention at peak time.

    - Advertised speed is pending CAP review and guidance

64. There is a significant amount of information that must be conveyed to customers to comply with the Regulation. Whilst we believe the information provided at point of sale should be kept to a minimum to ensure customers are not confused or overloaded, all required information will be provided post-sale, provided it is relevant, in a format to best meet customer needs.

65. ✂

4.9.2   The right to exit

66. We agree that it is reasonable to explain the RTE clearly post-sale, display it prominently, and explain the linkage to the MGS.

4.9.3   Customer information

67. We agree that the publication of a Customer guide will be helpful, and would hope Ofcom will give ISPs the opportunity to input to and review the guide.

4.9.4   Managing speed problems

68. We agree with Ofcom's suggestions, and we will continue to provide extensive advice to customers and help with any speed problems, whether or not the problem is caused by the network, in order to help them obtain the best broadband experience.

4.9.5   Raising customer awareness of the right to exit

69. ✂ Explaining the linkage to the RTE in addition to describing the RTE process is best left to post-sale communication, as very few customers would need to know about this upfront, and at this point in the sales journey the information would be irrelevant, potentially causing confusion. It only becomes relevant post-installation when a customer knows their actual speed.

4.9.6 Improving the right to exit process

70. We agree with Ofcom's proposals, but the Code needs to provide specific guidance to customers in order to clarify and confirm that it is the ISP's measurement, i.e. line speed, that determines the speed the customer is getting – not the customer's measurement, which may be affected by wi-fi performance, poor positioning of the router etc. Only if the ISP agrees that the speed is a problem (i.e. it is not due to the customer's own domain), should the ISP start its process for dealing with slow speeds. It is incumbent on both ISPs and Ofcom to play significant parts in providing and maintaining the relevance of such guidance.

71. We agree with the proposed 30 day time limit to fix problems, but would suggest that the 30 day period could also be extended by exception: for example, by unavailability of engineering appointments (not within the control of the ISP), to meet the preferences of the customer, and adverse weather conditions etc.

72. We would welcome explicit clarity from Ofcom on when the 30 day process begins (to allow us to best develop system tests and processes to support customers) and a worked example. Does a customer need to experience 3 discrete occurrences of sub-MGS before the 30 day cycle commences, or does the cycle commence as soon as the customer initially reports a speed issue, and continue as long as the customer has a minimum of a further 2 days of slow speeds? And does 'slow speed' mean sub-MGS? (We would try to help customers optimise their broadband performance if they had 'slow' speeds, even if they were achieving in excess of their MGS). We believe the proposed 3 days of slow speeds should exclude one-off (temporary) speed issues.

73. We agree it is reasonable for customers to be able to leave under the GPL process to switch to another provider, and to ensure that ETCs or other penalties are not charged. However we would appreciate further guidance in how to manage customer interaction where we believe no improvement in speed will be gained from moving to another ISP with similar technology. This is especially important for customers with higher MGS which are unlikely to cause any material degradation in service. Customers are likely to still be comparing the speed estimates from another ISP they were quoted when making the original purchase, when in fact there has subsequently proved to be a speed issue which is unlikely to be fixed by switching.

4.9.7 Figure 4 – Flowchart of the right to exit for residential service customers.

74. We think this is a helpful illustration, particularly the split between any issue being in the customer's own domain or a network issue. We believe that there should be an additional box after the customer first reports the speed problem – i.e. the ISP has to verify the customer's speed and confirm there is a speed problem. ISPs should have the opportunity to acknowledge that there is a problem first, before identifying where the issue originates.

4.9.8 Applying the right to exit to related residential services

75. We agree with Ofcom's proposal that customers who buy triple-play services should be allowed the RTE for all services, i.e. line, broadband and pay-TV.

76. For business customers, as explained above, we are satisfied with the customer-flexible approach to bundled and associated products.

4.9.9 The scope of the new codes

77. We agree that for existing customer contracts, where customers are renewing on the same package, new and revised speed estimates and MGS should be provided again post-sale, but not pre-sale. Customers would be unlikely to be renewing their contract if they were not happy with the speed and service provided over the course of the original minimum term. However it is likely in most cases that speeds will have changed over time, so it is beneficial for both the customer and the ISP that the customer should receive refreshed speed estimates (peak time rate and MGS) post-sale.

78. We would be able to include this information in order confirmations, with another link to our terms and conditions when re-contracting.

4.9.10   Monitoring compliance with the codes.

79. We are happy with Ofcom's proposals, and agree it is reasonable for Ofcom to ask ISPs to collect information on customer speed problems and the extent to which they offer the RTE. However, ISPs will need time to develop this capability as currently we do not have a full process to collect this information.

80. We would suggest that the Code includes a requirement for ISPs to act in good faith, as is the case for the Ofcom Home Broadband Performance and Connected Nations Reports.

5 Answers to Ofcom's questions

> Do you have any comments on the proposed changes to the codes, as outlined in this consultation document (including Annex 1)? Please provide reasons for your response. In particular:

81. Please see above.

> a) Do you agree that the codes should require the provision of speed estimates that reflect peak-time network congestion?

82. Yes, because it is a key measure which impacts customer experience. However there will be added complexity and risk for systems development which need to be factored into the timeline for implementation.

> b) Do you agree that the minimum guaranteed speed should always be given to customers at point of sale?

83. No, ✂ we do not agree, as we believe customers may become confused by additional speed measures during a sales call. We always provide this information in online orders, and in post-sale order/email confirmation. ✂

> c) Do you agree that, where a customer's speed falls below the minimum guaranteed level, there should be a limit on the length of time providers have to fix the problem before offering the right to exit? Do you agree that the limit should be 30 calendar days?

84. Yes – 30 days is reasonable, but ISPs should have some discretion, for example if it proved difficult to arrange an engineering appointment. ISPs providing DSL-based services are dependent on what Openreach can deliver, and ISPs will need customers to accept and be present for any engineering appointments.

85. We are aware that after a broadband service is connected, speeds may need several days to stabilise, and therefore we would expect 10 days to elapse post-installation before any speed-related fault reports have to be acted upon.

> d) Do you agree that the right to exit should also apply to a landline service sold over the same line, and to pay-TV services purchased at the same time, as the broadband service?

86. Yes, as customers are likely to want to switch all three services, especially if bought together, if their broadband is slow, and they should be able to do so without penalty. However the choice should be with the customer – they may wish to retain one or two of the remaining services.

87. We agree that related products that are dependent on the broadband service are included in the scope of the right to exit. For business, associated products such as Cloud Services would be included in the RTE process should the customer wish to cease, as these are related to, and dependent on, the broadband service.

> e) Do you agree that the codes should be capable of being applied in full to all standard fixed broadband technologies, including cable and FTTP?

88. Yes, this is essential, especially where there is peak time slowdown. ✂ We also believe Ofcom should give consideration as to how new and emerging products are covered by the Code, through discussion at industry meetings. We are aware that certain new technologies may well have been implemented by the time the revised Code becomes effective, and welcome ongoing discussion with Ofcom.

f) How long do you consider that signatories should be given to implement the proposed changes following publication of the final version of the codes?

89. We will need a minimum of 12 months from the publication date of Ofcom's Final Statement and we will need to avoid IT system development "lockdown" around Christmas/New Year 2018/19.

6   Comments on the Draft Codes

6.1   Residential Broadband Speeds

6.1.1   Principle 1: Realistic information on broadband speeds at point of sale.

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

We do not agree with Ofcom's proposal that ISPs must always provide the required speed information prior to the customer agreeing to purchase the service, as customers may be happy to buy the service if for some reason the ISP does not have this information available. In these circumstances we would seek to obtain a customer's consent if they want to buy the service without this information being available, and endeavour to provide it post-sale.

✂

✂

6.2   Business Broadband Speeds

Our comments are included above.

7 High-Level Testing Principles (Ofcom's Annex 5)

7.1 High Level Principles

90. We are aware that the proposed automatic tests to calculate the peak-time and quiet-time contention coefficients are measuring IP throughput speed downstream and upstream and not 'access line speed'.

91. If the user always has traffic running, we are concerned that tests may never complete. Many users now have several connected devices and there will increasingly be a background level of traffic at any time of day. So we would welcome further clarity on conditions on when tests can be run and the impact they may have on the customer Quality of Experience.

92. ✂

93. ✂

94. We agree with Ofcom's approach confirming flexibility for ISPs over quiet hour or hours: "To determine the maximum speed achieved on the panellist's line, ISPs may test throughout the day rather than solely in the expected quiet hour." We also agree that a (minimum of a) quarterly update is reasonable. We support Ofcom's proposal of 5 second duration tests. ✂

7.2 Sampling

95. Regarding ISPs testing speeds that represent their typical customer speeds, and speed data is broadly representative of the network, we would urge Ofcom to ensure normalisation is undertaken across speed and utilisation.

96. In terms of sample size, and this now being statistically-based, we understand that this means that the estimate of the peak-time overhead needs to be accurate to 5%. ✂