

Ofcom

making communications work
for everyone

The review of the market for standalone landline telephone services - Annexes

Provisional conclusions

Consultation

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Closing Date for Responses: 9 May 2017

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Annex 1

Responding to this consultation

How to respond

- A1.1 Ofcom would like to receive views and comments on the issues raised in this document **by 5pm on 9 May 2017**.
- A1.2 We strongly prefer to receive responses via the online form at <https://www.ofcom.org.uk/consultations-and-statements/category-1/review-of-landline-telephone-services>. We also provide a cover sheet (<https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet>) for responses sent by email or post; please fill this in, as it helps us to maintain your confidentiality, and speeds up our work. You do not need to do this if you respond using the online form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to retailvoicemarketreview@ofcom.org.uk, as an attachment in Microsoft Word format, together with the cover sheet (<https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet>).
- A1.4 Responses may alternatively be posted to the address below, marked with the title of the consultation.
- Catherine Warhurst
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- A1.5 If you would like to submit your response in an alternative format (e.g. a video or audio file), please contact Catherine Warhurst on 020 7981 3382, or email catherine.warhurst@ofcom.org.uk.
- A1.6 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.
- A1.7 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A1.8 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 3. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A1.9 If you want to discuss the issues and questions raised in this consultation, please contact Catherine Warhurst on 020 7981 3382, or by email to catherine.warhurst@ofcom.org.uk.

Confidentiality

- A1.10 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish all responses on our website, www.ofcom.org.uk, as soon as we receive them.
- A1.11 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A1.12 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.13 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further at <https://www.ofcom.org.uk/about-ofcom/website/terms-of-use>.

Next steps

- A1.14 Following this consultation period, Ofcom plans to publish a statement at the turn of the year.
- A1.15 If you wish, you can register to receive mail updates alerting you to new Ofcom publications; for more details, please see <https://www.ofcom.org.uk/about-ofcom/latest/email-updates>

Ofcom's consultation processes

- A1.16 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 2.
- A1.17 If you have any comments or suggestions on how we manage our consultations, please email us at consult@ofcom.org.uk. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.18 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact Steve Gettings, Ofcom's consultation champion:

Steve Gettings
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA
Email: corporationsecretary@ofcom.org.uk

Annex 2

Ofcom's consultation principles

Ofcom has principles that it follows for every public written consultation:

Before the consultation

A2.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

During the consultation

A2.2 We will be clear about what we are consulting, why, on what questions and for how long.

A2.3 We will make the consultation document as short and simple as possible, with a short summary.

A2.4 We will try to make it as easy as possible for people to give us a written response.

A2.5 If the consultation is complicated, we may provide a short Plain English / Cymraeg Clir guide, to help smaller organisations or individuals who would not otherwise be able to spare the time to share their views.

A2.6 We will consult for up to ten weeks, depending on the potential impact of our proposals.

A2.7 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.

A2.8 If we are not able to follow any of these principles, we will explain why.

After the consultation

A2.9 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish all the responses on our website as soon as we receive them. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing	<input type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input type="checkbox"/>	If there is no separate annex, which parts?	

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name

Signed (if hard copy)

Annex 3

Consultation questions

Question 3.1: Do you agree with our provisional conclusion that there is a separate market for Standalone Fixed Voice residential access which includes both voice-only and split purchase consumers? Please provide reasons and evidence in support of your views.

Question 3.2: Do you agree with our provisional conclusion that there is a separate market for Standalone Fixed Voice residential calls? Please provide reasons and evidence in support of your views.

Question 4.1: Do you agree with our provisional conclusion that, during the period covered by this market review, BT will have Significant Market Power in the Standalone Fixed Voice access market? Please provide reasons and evidence in support of your views.

Question 5.1: Do you agree with our provisional conclusion that, during the period covered by this market review, BT will have Significant Market Power in the Standalone Fixed Voice calls market? Please provide reasons and evidence in support of your views.

Question 7.1: Do you agree with the need to trial and test engagement remedies before implementation? Please explain your reasons for this.

Question 7.2: Do you agree that remedies focussed on improving consumer communications to increase engagement listed below offer a reasonable prospect of success in encouraging competition?

- *information on savings;*
- *information on the switching process;*
- *introduction of a decision point; and*
- *remedies to facilitate response to this information.*

Please explain your reasons.

Question 7.3: Do you agree with our conclusions that the other remedial options we have considered, namely the establishment of a customer database for marketing purposes and automatic switching within BT's tariffs, raise significant implementation risks and therefore do not warrant further consideration? If you do not agree or consider there are other options we should have considered, please provide your reasons.

Question 8.1: Do you agree with our approach to determining the options for the level of price controls for Standalone Fixed Voice services? If not, please give your reasons.

Question 8.2: Do you agree with our proposed basket structure if implementing a price control for Standalone Fixed Voice services? In particular, do you agree with the need for a separate sub-cap on the Line Rental within the basket? If not, please give your reasons.

Question 8.3: Do you agree that it would be appropriate to allow the prices in a price control basket to rise by up to consumer price index (CPI)? If not, please give your reasons.

Question 8.4: Do you agree that we should exclude Home Phone Saver and Line Rental Plus from the price control? If not, please give your reasons.

Question 8.5: Do you agree that it is appropriate for the Line Rental sub-cap to have greater price flexibility than the overall price cap to allow BT to rebalance pricing between the line rental and call prices? If not, please give your reasons.

Question 8.6: Do you agree with the services we are proposing to include in a price control remedy basket for Standalone Fixed Voice services? If not, please set out your alternative proposals and please give your reasons.

Question 9.1: Do you agree with our proposed set of remedies for the Standalone Fixed Voice services markets, that is a price control, with a one-off adjustment set with reference to the costs of BT competitors in this market, and an obligation on BT to work with us to explore and ultimately implement information options to promote competition? If not please set out your reasons.

Question 9.2: Do you agree that BT should have at least one month after the date of the statement to implement the new price structure? If not, please set out your reasons.

Question 9.3: Do you have any additional comments on our analysis or conclusions in this consultation?

Annex 4

Equality Impact Assessment

Introduction

- A4.1 Ofcom is required by statute to assess the potential impact of all our functions, policies, projects and practices on equality.¹ An equality impact assessment (EIA) also assists us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- A4.2 We have not considered it necessary to carry out separate EIAs in relation to race or sex equality, or equality schemes under the Northern Ireland and Disability Equality Schemes. This is because we anticipate that our regulatory intervention will not have a differential impact on people of different sexes or ethnicities, consumers with protected characteristics in Northern Ireland² or disabled consumers compared to consumers in general.

Equality Impact Assessment

- A4.3 We have considered whether the proposed remedies would have an adverse impact on promoting equality. In particular, we have considered whether the remedies would have a different or adverse effect on UK consumers and citizens with respect to the following equality groups: age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation, and, in Northern Ireland, political opinion and persons with dependants.
- A4.4 We are consulting on proposals to impose a set of regulatory obligations on BT that will promote competition, by for example, encouraging consumers to look for better value deals, and protect consumers from harmful conduct, such as the charging of prices above the competitive level.
- A4.5 We consider that our proposals will not have a detrimental impact on any defined equality group. Rather, we consider that our proposals will further the aim of advancing equality of opportunity between different groups in society by furthering the interest of all consumers in the standalone voice markets, many of which are in older age groups.³
- A4.6 Further, we do not propose to carry out separate EIAs in relation to race, gender equality or equality schemes under the Northern Ireland and Disability Equality Schemes. This is because we anticipate that our proposed regulatory intervention would not have a differential impact on people of different genders or ethnicities, consumers with protected characteristics in Northern Ireland or on disabled consumers compared to consumers in general.

¹ We explain why we undertake an Equality Impact Assessment (EIA) and how we have done it in Section 2. Ofcom has a general duty under the 2010 Equality Act to advance equality of opportunity in relation to age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation.

² In addition to the characteristics outlined in the 2010 Equality Act, in Northern Ireland consumers who have dependents or hold a particular political opinion are also protected.

³ As illustrated in Figure 2.2 in Section 2.

Annex 5

Profitability of standalone fixed voice services

- A5.1 In this Annex we examine different measures of profitability for SFV (standalone fixed voice) services.
- A5.2 In the first part of this annex we consider how we should measure profitability given the nature of SFV services and how we wish to use profitability to determine the level at which to set a price control on SFV services. In particular, we set out why we consider that when assessing the profitability of SFV services, we should use a return on sales (ROS) approach rather than a return on capital employed (ROCE) approach.
- A5.3 In the second part of this section we present the returns that BT is currently earning on SFV services and our assessment of potential levels of profitability that are consistent with competition developing for SFV customers.

Approach to measuring profitability at the retail level

- A5.4 In order to calculate the profitability of SFV services, we must first understand the cost of providing those services including an appropriate rate of return. Typically, when we set charge controls on wholesale telecommunication services, we use a measure of ROCE to determine the reasonable rate of return. As we discuss below and in Section 8, we have considered a number of options for how to set the level of a price control beyond just being set at BT's level of costs. Specifically, we have considered the level of profitability of other CPs' SFV services who may compete with BT for SFV customers. We would therefore wish to use a measure for the reasonable rate of return that enables us to compare across these options.
- A5.5 Calculating the ROCE requires us to calculate a Weighted Average Cost of Capital (WACC) and then apply this to a Regulatory Asset Base (RAB). Some regulators and competition authorities have recognised that under certain circumstances, such as when the service to be charge controlled is "asset-light" on an accounting basis⁴, a ROCE approach might not be a reliable measure of determining returns. In some cases, an alternative approach, such as ROS, has been used when determining the appropriate rate of return.
- A5.6 An asset-light service or business has relatively low accounting capital employed for the assets used compared to the economic value of the assets. This can occur when the provision of a service only requires a small base of tangible assets, but has a large base of intangible assets associated with its provision.

⁴ The asset base would exclude intangible assets. Once these intangibles are included, the service in question may not be asset light.

The ROCE and ROS approaches for setting an allowed return

Theoretical underpinning for profitability assessment

- A5.7 The Internal Rate of Return (IRR) and Net Present Value (NPV)⁵ of cash flow streams are the conceptually robust approaches for measuring rate of return as they allow us to measure the economic cost of an investment against the revenue that the investment earns.
- A5.8 The economic costs can be considered in two parts:
- i) the efficiently incurred operating costs of a firm; and
 - ii) the required return on the capital invested in the business – the investor's expected return on capital for investing in a risky asset over time.
- A5.9 When prices are set equal to economic costs the IRR of an investment would be expected to be equal to the discount rate at which the NPV of the investment would be zero (we would expect this to be equivalent to the WACC⁶ of the investment). However, IRR and NPV calculations are challenging to calculate in reality due to the practicability of assessing the cashflows over the lifetime of the investment which may last many years.
- A5.10 Some form of a ROCE approach tends to be adopted by economic regulators as a practical proxy for the IRR approach. By using a ROCE approach, regulators can rely on accounting cost data rather than trying to estimate cashflows over the life of the investment. In practice, we use Earnings before Interest and Tax (EBIT) to approximate the yearly return and an estimate of the accounting value of the assets to approximate the capital employed. The key strength of the ROCE approach over a ROS approach is that it takes account of the capital required to operate the business on which investors will expect a positive return. This means that we are able to compare the ROCE to an estimate of WACC. In a competitive market, we would not generally expect the ROCE to be significantly and persistently above the WACC.⁷
- A5.11 A ROS⁸ approach is an alternative measure of profitability that is widely used by companies, investors, analysts and other stakeholders as a measure for comparing performance across companies and company performance over time. A ROS approach equates the rate of return to some measure of profit divided by total sales.
- A5.12 Economic regulators and competition bodies, including Ofcom, have adopted a ROS approach to assessing profitability and setting price controls where there are concerns with the practical difficulties of applying a ROCE approach. However, from a regulator's perspective as ROS does not explicitly allow for a return on the capital employed, it is less clear how to derive an appropriate benchmark level of ROS that would indicate profitability in excess of a reasonable return.

⁵ A practical application of this approach is through a discounted cash flow analysis.

⁶ Weighted average cost of capital.

⁷ In some markets, we may set prices that mean the ROCE is above the WACC. For instance, we may make adjustments to asset values if we believe the accounting value of the asset is different from the economic value.

⁸ Also referred to as EBIT (earnings before interest and tax) margin.

Regulatory precedent

- A5.13 Due to its strong economic underpinning most economic regulators in the UK use some form of ROCE approach. However, in a number of cases regulators have recognised that a ROCE approach may be unreliable where the business is considered as “asset-light”. Most utility businesses are reliant on a physical network of assets such as wires, pipes, airports, power stations or tracks. In some cases, businesses may be described as “asset-light” as they have a small physical asset base compared to the revenues the business generates.
- A5.14 Examples of the use by UK regulatory bodies of a ROS approach to assess asset light businesses include:
- Ofwat’s decision to include an allowance for returns based on a retail net profit margin in its 2015-20 retail price controls for household water⁹.
 - The decision of the Northern Ireland Authority for Utility Regulation (NIAUR) to adopt a ROS approach in its 2014 Power NI energy supply price control¹⁰.
 - Ofcom’s own 2012 decision on the regulatory framework for the postal sector¹¹ where we concluded that an EBIT margin approach to assessing the financial sustainability of the universal postal service network was more appropriate than a ROCE approach.

The challenges in using the ROCE approach for standalone fixed voice services

- A5.15 The use of a ROCE approach requires valuing the RAB and calculating a WACC as the benchmark for the return. In order for us to use this approach for all of our measures of profitability, we would need to be able to calculate the ROCE and RAB for BT and other CPs. We consider the following to be challenges for applying a ROCE approach to the SFV services:
- Observable accounting capital employed may understate the true economic value of the assets invested in by the company due to material unrecognised intangible assets, resulting in an undervalued RAB.
 - Developing a RAB that incorporates a robust valuation of the intangible assets is challenging and it may be disproportionate to develop a RAB if that asset base can only be calculated with a strong element of subjectivity.
 - Disaggregating the value of the assets and allocating this appropriately to the different services provided by BT Consumer such that a robust valuation is determined for the services we are considering regulating.
 - We would need to be able to calculate an appropriate WACC for a number of different operators.

⁹ ‘Setting price controls for 2015-20 – final methodology and expectations for companies’ business plans’, Ofwat, 2013.

¹⁰ ‘The 2014 Power NI supply price control – Decision paper’, UR, 19 December 2013.

¹¹ ‘Securing the Universal Postal Service, Decision on the new regulatory framework’, Ofcom, 27 March 2012: <https://www.ofcom.org.uk/consultations-and-statements/category-2/review-of-regulatory-conditions>.

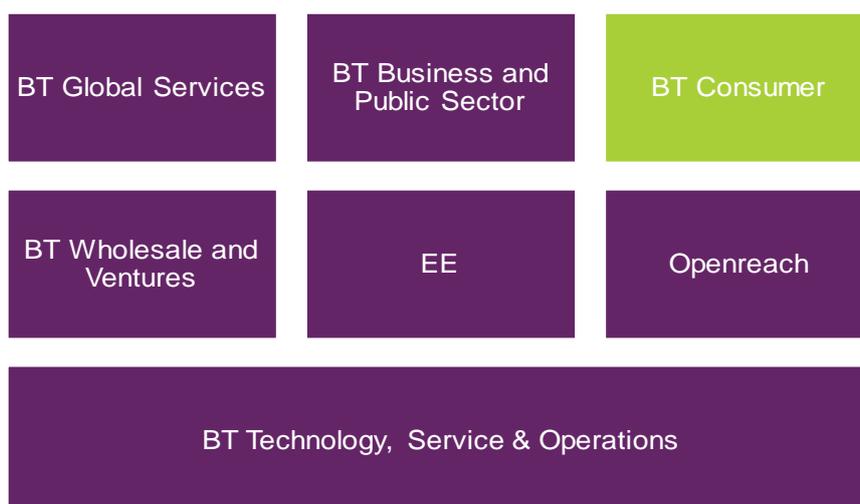
Valuing a robust RAB

- A5.16 Accounting capital employed based on physical assets may understate the true economic value of the assets invested in by the company due to material unrecognised intangible assets, resulting in an undervalued RAB. In a company such as BT Group, the type of intangible assets in which investment has been made but has not been recognised in the statutory accounts could include:
- the staff training on developing improved customer service delivery; and
 - the marketing investment in developing the brand value of the business.
- A5.17 For accounting purposes these outlays do not satisfy recognition as an 'asset' on a balance sheet but, like those of a traditionally capital-intensive business, a key driver of future profits will be the level and effectiveness of the spending undertaken in them.
- A5.18 A range of techniques could be used to form a value for these 'intangible' assets but there is judgement inherent in each approach that would need to be carefully considered when judging the efficacy of each. Additional complexity occurs because we may not wish to include all of these intangibles in our estimate of BT Consumer's RAB. For instance, it could be argued that part of the source of BT Consumer's market power in the SFV markets is linked to its brand value. We would therefore not wish to capture this brand value in the RAB. We would only wish to capture intangibles in that RAB that an operator in a competitive market would hold.
- A5.19 We do not have a reliable basis on which to calculate the value of BT Consumer's intangibles. We have asked BT Consumer whether they have undertaken any recent valuations of BT Consumer's intangible assets. They have explained that, as far as they have been able to establish BT Consumer does not undertake such valuations or reviews.

Disaggregating the value of the assets and allocation to the relevant services

- A5.20 Using a ROCE approach for the SFV services would require an accurate estimate of the economic value of the capital employed required on a standalone basis. As we set out in Figure A5.1 below, BT Group contains a number of different businesses within its group structure, including BT Consumer which provides the services we are considering regulating, a subset amongst a number of other products.

Figure A5.1: BT Group's lines of businesses



- A5.21 BT has provided a value for the BT Consumer capital employed (absent of an estimate of intangible assets) but, within the business unit, BT does not maintain a balance sheet for SFV services, and a significant proportion of the capital employed is likely to be shared across the many services offered by the division.
- A5.22 Developing an objective and economically meaningful methodology for constructing an asset base for the services we are proposing to regulate from a BT Consumer asset base that has a valuation for both the accounting assets and the intangible assets would be challenging and may not provide a reliable basis for assessing profitability.

Calculating an appropriate WACC

- A5.23 A ROCE approach would also require establishing an appropriate WACC for the SFV services. The BT Group PLC WACC would represent the return required by investors to invest in the Group as a whole, while we would want to determine a WACC for services within the BT Consumer business unit.
- A5.24 Additionally, we would need to be able to calculate an appropriate WACC for other CPs in order to determine the appropriate level of return that is consistent with promoting competition.

Consideration of whether SFV services are asset-light

- A5.25 BT Consumer is the BT Group business unit that provides SFV services. SFV services are only one set of the services sold by BT Consumer which provides five main sets of services – landline, broadband, TV, mobile and sports channels.
- A5.26 SFV services constitute c.[<]%, c. £[<]m of BT Consumer's revenues. Using our formal information gathering powers we have sought to gather data on the value of assets used by BT Consumer specific to providing SFV services. BT was not able to provide us with this data, but it was able to provide us with data on the value of assets used to provide all BT Consumer services. We consider that SFV services at the retail level would be no more capital-intensive (and perhaps considerably less so) than other services sold by BT Consumer. Therefore, we treat the data provided

to us by BT as an upper bound for the value of assets used to provide SFV services.

A5.27 Using the BT Consumer business unit as indicative of the capital-intensiveness of SFV services, we have performed a comparison against business units that might be considered as either asset-light or capital-intensive. Figure A5.2 below sets out selected measures of capital-intensity for BT Consumer and other comparators.

Figure A5.2: Indicators of capital-intensity for BT Consumer and selected comparators

Company/ Business Unit	Capital Expenditure /Revenue 15-16	Operating Expenditure exc. depreciation/ Revenue 15-16	Depreciation/ Operating Expenditure 15-16	Sector
Balfour Beatty	1%	104%	0.0%	Construction & Engineering
Capita	2.5%	89%	0.0%	Support Services
Royal Mail	3%	92%	3%	Industrial Transportation
BT Consumer	4%	77%	6%	Telecoms
Pennon	21%	80%	18%	Utilities
National Grid	23%	63%	15%	Utilities
Openreach	28%	48%	35%	Telecoms
United Utilities	37%	46%	31%	Utilities

A5.28 The indicators above for BT Consumer are nearer to the range for those that may be categorised as asset-light such as Royal Mail. Therefore, on these indicators, in contrast to energy networks or wholesale telecommunication networks where regulated companies are required to invest heavily in physical assets that make up that network, the services sold to SFV customers have more in common with asset-light businesses and services.

The ROS approach

A5.29 Given the above analysis, we do not believe that a ROCE approach provides a reliable way for us to measure profitability. An Earnings Before Interest and Tax (EBIT) margin (as a percentage of revenues) as a measure of ROS is a widely used measure of profitability and is used by companies, investors, analysts and other stakeholders as a measure for comparing performance across companies and profitability performance over time.

A5.30 While there is some judgment involved in setting an appropriate ROS benchmark and it does not have the same conceptual basis as ROCE, we believe that it is a practicable and proportional approach to determining an appropriate level of return. It also enables us to more easily compare profitability between BT and other CPs, which is important when we are considering the level of price and profitability that is consistent with competitive entry developing.

The challenges in using the ROS approach for the services we are considering

- A5.31 The setting of the EBIT margin benchmark requires selection of appropriate comparators that reflect not just the BT Consumer business unit but that of the SFV services. Deciding on the characteristics that reflect the services for which we want to derive an appropriate return and determining the companies or services that most appropriately exhibit those characteristics requires a level of regulatory judgement. Unlike the ROCE approach, where we can compare the return to the WACC to indicate excessive profitability, when using ROS we do not have a specific level that equates to normal profit.
- A5.32 Even though using a ROS approach has some challenges, we believe it provides us with the best method for comparing BT's profitability to the profitability of the competitive benchmarks that we set out in the next section.

Assessing the profitability of SFV services

- A5.33 In this section, we start by estimating how BT's profitability for SFV services has developed over time, using EBIT margins as our measure of BT's return on sales. We then compare this to other measures of profitability that may provide benchmarks for the level of profitability that we would expect to see for SFV services if there was a greater degree of competition.

BT's profitability for SFV services

- A5.34 As discussed below, BT does not hold revenue or cost data on its SFV customers, instead it provided data for all of its fixed voice customers, regardless of whether they also bought fixed broadband. However, for the reasons we explain below in paragraphs A5.43 to A5.52, we consider that the data provided is a good proxy for its SFV customers.

Data and methodology for estimating revenues and costs

- A5.35 To estimate BT's profitability from selling SFV services, we requested data from BT Consumer under our formal s.135 powers.¹² BT provided data on revenues, costs, profits and the number of lines for its fixed voice services and for its fixed broadband services for the financial years 2007/08 to 2015/16.
- A5.36 BT provided the data separately for fixed voice and fixed broadband services from its P&L statements. However, BT was not able to differentiate between different customer groups (e.g. SFV, dual-play) or different voice and broadband products.
- A5.37 The fixed voice data includes all customers that purchase line rental from BT, and the revenues are those from line rental and calls.¹³ The data combines customers

¹² Responses dated 24 June 2016 to questions 2 and 3 of the 10th BT s.135 under the NMR, and 9 December 2016 to questions 5 and 6 of the 2nd BT s.135.

¹³ BT also provided other fixed voice revenue data, relating to services such as connections, network features, paper billing and late payment charges. These revenues were an insignificant proportion of BT's fixed voice revenues, on average approximately [redacted] % from 2007/08 to 2015/16.

on all of BT's fixed voice products: BT Basic, BT Home Phone Saver and BT's standard product.¹⁴

- A5.38 Similarly, the fixed broadband data includes all customers that purchase fixed broadband from BT, and the broadband revenues exclude line rental and calls.¹⁵ The data combines customers on all of BT's fixed broadband products, including products with different download speeds and allowances.
- A5.39 BT provided gross margins separately for fixed voice and fixed broadband services, which were calculated by subtracting direct (wholesale) costs from the reported revenues. However, BT did not allocate all of its retail costs between its fixed voice and fixed broadband services, so we now discuss our approach to estimating these costs. Once we had estimated retail costs, we subtracted them from the reported gross margins to estimate net margins. To calculate EBIT margins, we divided our estimated net margins by the reported revenues (excluding VAT).

Allocation of retail costs

- A5.40 BT provided direct (wholesale) cost data for fixed voice and fixed broadband separately. However, the vast majority of the retail costs were not allocated to fixed voice and fixed broadband services. This is because these costs were incurred across the whole of BT Consumer (covering fixed voice, fixed broadband, mobile, TV and sport services) and BT did not have information available about how all of these costs could be allocated.
- A5.41 Where BT identified a retail cost item that was exclusively related to fixed voice or fixed broadband, we spread the cost fully across the relevant service. To be conservative when estimating BT's SFV profitability, where BT did not provide information about how individual cost items could be allocated, we allocated these retail costs exclusively to fixed voice and fixed broadband services, i.e. we made no allocation to BT Mobile, BT Sport or BT TV.
- A5.42 For these costs, we allocated them to fixed voice and fixed broadband services based on the number of lines in each financial year, i.e. we assumed that the cost was the same for each fixed voice and for each fixed broadband line. Due to the fact that BT had [x] fixed voice lines than fixed broadband lines over the period 2007/08 to 2015/16, we allocated [x] of the retail costs to fixed voice. For 2015/16, approximately [x]% of these costs were allocated to BT's fixed voice services. One implication of this approach is that a customer taking both fixed voice and fixed broadband from BT would have twice the retail costs of a customer taking only fixed voice or only fixed broadband from BT.

¹⁴ BT's fixed voice products are: BT Basic, Home Phone Saver and its standard product. Customers on BT's standard product can pay their line rental annually in advance and receive a 10% discount for doing so (BT call this Line Rental Saver). They can also pay their line rental by means other than direct debit (BT call this Line Rental Plus). To the extent that customers choose to pay in different ways for their line rental, this is reflected in the data provided by BT.

¹⁵ The fixed broadband data excludes BT Sport. BT split out other fixed broadband revenue data for 2013/14 to 2015/16, relating to services such as connections, value added services, postage and packaging and fair usage charges. These revenues were an insignificant proportion of BT's fixed broadband revenues, on average [x]% from 2013/14 to 2015/16.

Adjustments for SFV customers

- A5.43 As discussed in our market definition analysis (Section 3), we are concerned with all of BT's SFV customers except those on BT Basic. The data provided by BT includes all of its fixed voice customers, i.e. SFV customers and customers that also bought fixed broadband, and also customers on all of BT's fixed voice products.¹⁶
- A5.44 We have considered whether we need to adjust the data BT provided in order to analyse BT's SFV customers. For the 2015/16 financial year, we made the following adjustments to the average fixed voice data provided by BT to estimate how the revenues and costs for BT's SFV customers (excluding BT Basic) might differ. We made adjustments to:
- Remove BT Basic customers;
 - Account for the fact that BT's SFV customers made slightly higher volumes of calls than BT's other fixed voice customers; and
 - Account for the fact that BT's SFV revenues will be lower (on a per-line basis) than the average revenues in the data reported, because some of its SFV customers are on Home Phone Saver, a discounted product which is not available to customers also buying fixed broadband from BT.
- A5.45 We start by removing BT Basic customers. In 2015/16, a small proportion (approximately [x]%) of BT's fixed voice lines were BT Basic lines.¹⁷ Using this information along with data from BT on BT Basic customers' average monthly spend on line rental and calls, we estimate that the impact of removing BT Basic customers from the data BT provided would be a minor increase in average revenues by £[x] per line per month (excluding VAT).
- A5.46 We next account for different call volumes. The data we received from BT suggests that, excluding BT Basic customers, its SFV customers made slightly [x] volumes of calls (in minutes) than its average fixed voice customers in 2015/16. Using information on BT's call revenues and volumes, we estimate the impact of BT's SFV customers making [x] calls would be to [x] average revenues by £[x] per line per month (excluding VAT).
- A5.47 Finally, we estimate the impact of some of BT's SFV customers being on Home Phone Saver, using information on the maximum savings customers can make by switching to the product and data from BT on the number of customers on the product.¹⁸ We estimate that, other things being equal, this would cause BT's SFV revenues to be slightly lower, at most £[x] per line per month (excluding VAT), than the average fixed voice revenues in the data BT provided.
- A5.48 We now consider how the costs for BT's SFV customers might differ from the average fixed voice costs reported by BT. The majority of the wholesale costs for BT's fixed voice customers are WLR, which will be the same for all fixed voice customers. However, there will be differences in wholesale call costs due to

¹⁶ See paragraph A5.37 for a description of BT's fixed voice products.

¹⁷ This includes SFV customers on BT Basic and BT Basic customers that also take fixed broadband from BT, because all of these customers are included in the fixed voice data BT provided.

¹⁸ From Table A8.38 in Annex 8, the maximum possible saving for a customer moving to BT's Home Phone Saver product is £13.05 (£10.88 excluding VAT) per month.

different customer groups making different volumes of calls. Using a similar approach to that for call revenues above, we estimate that the impact of SFV customers having higher call volumes in 2015/16 would be to increase the monthly wholesale cost of calls for these customers by £[<] per line per month (excluding VAT).

A5.49 We do not have any evidence to show that BT's retail costs for SFV customers will differ materially from those for average fixed voice customers. As set out in paragraphs A5.40 to A5.42 above, we have made some assumptions in order to allocate BT's retail costs to its fixed voice and fixed broadband services, but do not consider that we have sufficient data to model how these retail costs might differ across BT's different fixed voice customers. That said, we are not aware of any reasons which could cause retail costs for SFV customers to be materially different to those for other fixed voice customers.

A5.50 Based on our analysis for the 2015/16 financial year, we consider that the revenues and costs for BT's SFV customers are immaterially different from BT's average fixed voice customers. While we estimate that the profit from each SFV customer is slightly [<] than for an average fixed voice customer, we estimate the impact to be under £[<] per line per month. In Figure A5.3 below, we set out the various adjustments we have considered along with their estimated impact.

Figure A5.3: Adjustments for SFV customers and estimated impact (per line per month, ex. VAT)

	Revenue adjustments	Cost adjustments
Removing BT Basic customers	£ [<]	
Accounting for SFV customers having higher call volumes	£ [<]	£ [<]
Accounting for SFV customers on Home Phone Saver	£ [<]	
Total	£ [<]	£ [<]

A5.51 Data from BT indicates that the proportion of its SFV customers that are on either BT Basic or Home Phone Saver has been [<] over time. This means that the effect of including these discounted tariffs would be [<] pronounced in earlier years.

A5.52 Therefore, we have performed our profitability analysis on a per-line basis, based on the average fixed voice data BT provided. For the reasons set out above, we consider that adjusting the analysis to capture BT's SFV customers would show very similar, albeit slightly [<], levels of profitability.

Time series of BT's fixed voice profitability

A5.53 As discussed above, we consider that, on a per-line basis, the profitability for BT's SFV customers and BT's average fixed voice customers is likely to be very similar. We therefore discuss BT's revenues, costs and profits on a per-line basis, and then multiply this by the number of BT's SFV lines (excluding BT Basic) to estimate total profits for this customer group.

A5.54 The number of BT's SFV customers, excluding BT Basic, has fallen by between 35% and 55% between 2012/13 to 2015/16.¹⁹ This has contributed to BT's overall revenues and costs for its SFV customers [X] over the period in absolute terms.

Revenues

A5.55 As shown in Figure A5.4 below, BT's revenues per SFV line [X] slightly in real terms from 2007/08 to 2015/16, although there were [X] in the most recent three years. While revenues from [X] and [X] [X], this was outweighed by [X] revenues from [X].

Figure A5.4: BT's SFV revenues (£ per line per month, ex. VAT, CPI adjusted for December 2016 prices)

[X]

Source: Response dated 24 June 2016 to questions 2 and 3 of the 10th BT s.135 under the NMR and 9 December 2016 to questions 5 and 6 of the 2nd BT s.135.

A5.56 We can then multiply these SFV per-line revenue estimates by the number of BT's SFV lines. We estimate that BT's revenues for these customers [X] over the period, by approximately [X]%. Total revenues from line rental, call plans, out-of-plan calls and other revenues all [X] over the period shown in Figure A5.5 below.

Figure A5.5: BT's SFV revenues (£m ex. VAT, CPI adjusted for December 2016 prices)

[X]

Source: s.135 responses from BT.

Costs

A5.57 BT's costs over the same period [X] from approximately £[X] to £[X] per line per month. Retail costs [X] on a per-line basis, due to [X] volumes of lines and per-line wholesale costs fell. Figure A5.6 below shows the wholesale costs which BT reported as well our estimates for BT's retail costs, all on a per-line basis, using the methodology described above in paragraphs A5.40 to A5.42.

Figure A5.6: BT's SFV costs (£ per line per month, CPI adjusted for December 2016 prices)

[X]

Source: Response dated 24 June 2016 to questions 2 and 3 of the 10th BT s.135 under the NMR and 9 December 2016 to questions 5 and 6 of the 2nd BT s.135.

A5.58 Once we account for the fact that the number of BT's SFV lines [X] from 2012/13 to 2015/16, we estimate that BT's total costs [X] over the period, and by a [X] amount than the [X] in revenues shown in Figure A5.5 above. Our estimates are shown below in Figure A5.7.

Figure A5.7: BT's SFV costs (£m, CPI adjusted for December 2016 prices)

[X]

Source: s.135 responses from BT.

¹⁹ See Figure A8.3 in Annex 8.

Profits

A5.59 The [X] in per-line costs was [X] than the [X] in the per-line revenues, resulting in higher profits per line (and therefore EBIT margins) over the period, increasing from [X]% to 34-42%. This equates to net margins increasing from under £[X] to £8-10 per line per month over the period. Figure A5.8 below shows our estimates of BT's profits and wholesale and retail costs, with the height of the stacked graph being the revenue (ex. VAT).

Figure A5.8: BT's SFV profits (£ per line per month, CPI adjusted for December 2016 prices)

[X]

Source: Response dated 24 June 2016 to questions 2 and 3 of the 10th BT s.135 under the NMR and 9 December 2016 to questions 5 and 6 of the 2nd BT s.135.

A5.60 Once we multiply our estimate of BT's profitability per SFV line by the number of BT's SFV lines, we estimate that BT's net margins from SFV services [X] over the period.²⁰ Figure A5.9 below shows our estimates for BT's profits on a per-line basis (left axis) and in £m (right axis).

Figure A5.9: BT's SFV profits (CPI adjusted for December 2016 prices)

[X]

Source: s.135 responses from BT.

A5.61 Our analysis to date has covered the 2007/08 to 2015/16 financial years. We do not yet have sufficient data to run our analysis for the 2016/17 financial year but we are aware of several changes that have taken place since the 2015/16 financial year. BT also provided some information to us about future cost increases for its fixed voice customers. In summary, these changes are:

- BT's line rental price increased from £17.99 to £18.99 per month (inc. VAT) in July 2016, i.e. in the 2016/17 financial year, so this impact was not captured in our 2015/16 analysis;
- BT has announced that from April 2017, the prices for several call plans and some other call prices will be increasing.²¹ BT's Evening and Weekend calls and its Anytime calls plans will be increasing by £0.30/month and £0.49/month (including VAT), respectively. In addition, call set-up fees, calls to landlines, calls to mobiles, international calls, BT's Friends & Family International calls package and BT's International Freedom calls package are all increasing in price; and
- In December 2016, BT provided information which suggests that for the 2017/18 financial year, it will incur additional costs relating to fixing faults faster, UK call centres and BT Call Protect (nuisance call blocking). BT argued that this will increase costs by £[X] per fixed voice line per month.

A5.62 We do not know exactly how these changes would impact our assessment of BT's profitability, particularly the increases in the prices of calls. However, even in the

²⁰ If we were to exclude customers on Home Phone Saver, we estimate that the EBIT margin for 2015/16 would be approximately [X]% higher.

²¹ <https://www.productsandservices.bt.com/products/phone-packages/>

absence of these price increases, the increased costs that BT described are insufficiently large to materially change our view of BT's profitability from SFV services.

Profitability of line rental and calls

- A5.63 Our analysis so far has looked at a combination of line rental and calls. We now attempt to understand the extent to which BT's line rental and calls services drive its SFV profitability.
- A5.64 BT provided revenue data for line rental and calls separately, however, the wholesale (direct) costs were not split between line costs (WLR) and call costs. Using Openreach's price list, which shows the evolution of WLR charges over time, we removed WLR charges from the total wholesale costs that BT provided to leave the wholesale costs associated with calls.²² Subtracting these wholesale line and call costs from the reported revenues provides estimates of the gross margins for these services.
- A5.65 The gross margins we have estimated on a per-line basis are shown in Figure A5.10 below. Over the period shown, combined gross margins per SFV line increased, [X]. The cumulative gross margins earned over the period from [X] were larger than those from [X].

Figure A5.10: Estimated gross margins for line rental and calls (£ per line per month, CPI adjusted for December 2016 prices)

[X]

Source: Response dated 24 June 2016 to questions 2 and 3 of the 10th BT s.135 under the NMR and 9 December 2016 to questions 5 and 6 of the 2nd BT s.135.

- A5.66 In Figure A5.11 below we then show our estimated gross margins in £m across BT's SFV customers. Due to the falling number of BT's SFV customers, we estimate that the gross margins for line rental and calls combined [X] over the period, largely driven by [X] gross margins for [X]. Our estimated gross margins for [X] also [X] over the period but by a smaller amount.

Figure A5.11: Estimated gross margins for line rental and calls (£m, CPI adjusted for December 2016 prices)

[X]

Source: s.135 responses from BT.

- A5.67 We have not identified a clear basis to allocate BT's retail costs between line rental and calls. If we allocated a materially greater proportion of retail costs to either line rental or calls, [X] on a per-line basis over the period shown.
- A5.68 As shown in Figures A5.4 and A5.5, BT's SFV call revenues have been [X], per-line and in total (£m). Call revenue contributes about [X]% less to total revenue than line rental. Therefore, a given percentage increase in monthly line rental prices is sufficient to offset a larger percentage reduction in call prices. It could be argued that BT has increased the price of line rental over time to offset the falling revenues from fixed voice calls. Should call revenues continue to fall at the same rate, we

²² Source: [Openreach price list](#).

consider that, to maintain the same level of profitability, BT would need to increase line rental prices by up to 2.5% per year in nominal terms.

A5.69 As we discuss in Section 3, BT may have a greater pricing constraint on SFV calls than SFV access. In the future, BT may respond to this pricing constraint, and potential further loss of call volumes, by decreasing call prices. However, we would not expect BT to decrease call prices such that the reduction in revenue from reducing prices was greater than the loss in revenue from falling call volumes. Therefore, if BT were to increase its line rental to offset a decrease in call prices, we would not expect this increase to need to be more than the 2.5% calculated above.

Competitive benchmarks for the profitability of SFV services

A5.70 Above, we have estimated that BT's profitability on SFV services has been increasing over time on a per-line basis. We now compare our estimates of BT's profitability to other measures of profitability that may provide benchmarks for the level of profitability that we would expect to see for SFV services. We have considered:

- The profitability of other CPs from selling fixed voice services;
- BT's profitability of dual play, i.e. across fixed voice and fixed broadband services combined;
- BT's profitability from selling fixed voice services when we deregulated the retail line rental and calls markets in 2009; and
- Other industries.

Other CPs' profitability from selling fixed voice services

A5.71 As with BT Consumer, we also requested revenues, costs and profit data from other CPs under our formal s.135 powers.²³ Some of the CPs were able to provide data relating specifically to their SFV customers, but some CPs provided data for all of their fixed voice customers, as BT did.²⁴ The data suggests that some other CPs are making reasonably high profits from their fixed voice customers, though none are as profitable as BT. Data from [X], [X] and [X] indicates that these CPs earn a profit of £[X] to £[X] per year, or [X]% to [X]% EBIT margins, from each fixed voice customer. While these EBIT margins are similar to those for BT, this is a result of other CPs having lower revenues and lower profits than BT.

A5.72 One feature of CPs' data on profitability is that it indicates the average profitability of their existing fixed voice customers, but is not directed at how profitable it might be for them to acquire new SFV customers. For these reasons, we produced a discounted cash flow model to estimate the marginal profitability of acquiring new SFV customers, under several scenarios, i.e. only considering the incremental revenues and costs that a CP would incur.

²³ The s.135 notices were sent to the Phone Co-op, Post Office, Sky, SSE, TalkTalk and Virgin Media in November 2016.

²⁴ As is the case for BT, we do not have any information to suggest that SFV revenues and average fixed voice revenues are materially different for other CPs.

- A5.73 Our model is structured to account for the initial acquisition costs involved in persuading a customer to switch, and then considers the incremental revenues and costs associated with serving that marginal customer in each given year. The incremental revenues are those from line rental, calls and other ancillary services, and the costs are wholesale costs and retail costs, including customer retention costs. The model discounts future revenues and costs over the assumed customer lifetime (in years), and determines whether the NPV (net present value) is positive in each of three scenarios:
- The first scenario models the current market conditions, with current market prices and high acquisition costs;
 - The second scenario assumes that, as a result of highly successful engagement remedies, acquisition costs fall, and that CPs have to spend more on customer retention; and
 - The third scenario assumes partially successful engagement remedies, with smaller reductions in acquisition costs and a smaller increase in customer retention costs.
- A5.74 Our model has several global assumptions. Firstly, we assume that CPs would need to price their line rental at a discount of at least 10% compared to BT in order to attract customers away from BT.²⁵ For our incremental costs, we use the wholesale costs from the data BT reported to us, which includes line costs (WLR) as well as the wholesale cost of calls. Future revenues and costs are discounted at a rate of 10% in all three scenarios.
- A5.75 Figure A5.12 below sets out the assumptions used in our three scenarios along with the estimated NPV of a CP acquiring a marginal customer. There is inevitably a degree of uncertainty around the assumptions we have used in our modelling, e.g. it is not possible to perfectly understand how long future SFV customers might remain with a CP after switching to them.

²⁵ We assume that other prices for calls and ancillary services would be equal to those of BT.

Figure A5.12: List of assumptions for discounted cash flow model

Variable	Current market conditions	Highly successful engagement remedies	Partly successful engagement remedies
Incremental revenue (£ per customer per year)	25% discount on line rental compared to BT	10% discount on line rental compared to BT after £5 adjustment to BT	10% discount on line rental compared to BT after £7 adjustment to BT
Customer lifetime (years)	8	8	8
Acquisition costs (per customer)	£360	£180	£270
Incremental wholesale costs (£ per customer per year)	£[>]	Same as under current market conditions	Same as under current market conditions
Incremental retail costs (£ per customer per year)	£[>]	Same as under current market conditions	Same as under current market conditions
Incremental customer retention costs (£ per customer per year)	£0	40% of ongoing retail costs	20% of ongoing retail costs
NPV of marginal customer	Significant and positive	Larger than under current market conditions	Small but positive

A5.76 Our modelling suggests that currently, even though the acquisition costs of SFV customers may be substantial, they appear to be highly profitable to acquire under current market conditions. If acquisition costs were lower than this, or if customer lifetimes were longer, then these customers would appear even more profitable on an incremental basis.

A5.77 In our second scenario, even in the event that a £5 reduction was made to BT's line rental, we still consider that CPs would find marginal customers profitable, if they were to charge 10% less than BT for line rental. This is due to the likely impact of falling acquisition costs if there were highly successful engagement remedies.

A5.78 In our third scenario, where a larger adjustment was made to BT's line rental, we estimate that customers would still be marginally profitable. While revenues would be lower and acquisition costs higher than in our second scenario, lower customer retention costs mean that the NPV is small, but still positive.

BT's profits from dual-play: fixed voice and fixed broadband services combined

A5.79 Another useful analysis is to compare BT's profits for SFV services to those earned by BT from dual-play services, including both a fixed voice and a fixed broadband service from BT. Doing so means that we need to account for the costs of BT Sport,

as we did in the VULA margin squeeze.²⁶ Our approach to estimate BT's dual-play profitability, on a per-customer basis, was to:

- Start with our per-line estimates of BT's fixed voice revenues and profits;
- Estimate per-line revenues and profits for BT's fixed broadband services and add these to the fixed voice estimates; and
- Subtract the costs of BT Sport from the combined fixed voice and fixed broadband profits (on a per-line basis), then divide these combined profits by the combined fixed voice and fixed broadband revenues (on a per-line basis) to estimate EBIT margins.

A5.80 To estimate BT's fixed broadband profits, we used the same methodology as with BT's fixed voice services. BT provided total fixed broadband revenues which we divided by the number of fixed broadband lines to calculate per-line revenues. To estimate net margins, we started with the reported gross margins and then subtracted our estimates of retail costs.²⁷

A5.81 Once the fixed voice and fixed broadband revenues and profits are combined, and we subtracted the costs of BT Sport, we estimate that BT made a dual-play EBIT margin of approximately [x] % to [x] %.

BT's profits when we deregulated the retail line rental and calls markets

A5.82 In our 2009 Fixed Narrowband Retail Services Markets statement, we showed that BT's revenues from fixed voice services (line rental and calls) had been falling consistently from 2003/04 to 2008/09.²⁸ However, as BT's costs had been falling by more than its revenues, its gross margins grew from 16% in 2007/08 to 21% 2008/09. The analysis did not include estimates for BT's retail costs, which would result in lower net margins if included.

A5.83 Our recent analysis based on the latest data from BT Consumer suggests net margins of approximately [x] % and [x] % for 2007/08 and 2008/09, respectively.

Other industries

A5.84 As discussed in paragraphs A5.25 to A5.28, we consider that the selling of SFV services could be considered as relatively asset-light. We now look at recent regulatory decisions made for returns of asset-light activities in other industries.

A5.85 EBIT margins have been set as part of the regulatory decisions made by Ofwat, the Northern Ireland Utility Regulator (NIAUR), the Office of Rail Regulation (ORR), and Ofcom. As shown in Figure A5.13 below, other regulators have set returns between 1% and 7% of turnover for asset-light businesses. We set out that an EBIT margin range between 5% to 10% represented a reasonable commercial rate of return for Royal Mail's Reported Business.

²⁶ Ofcom, *Fixed Access Market Reviews: Approach to the VULA margin*, https://www.ofcom.org.uk/_data/assets/pdf_file/0015/72420/vula_margin_final_statement.pdf

²⁷ See paragraphs A5.40 to A5.42 for an explanation of how we allocated retail costs between BT's fixed voice and fixed broadband services.

²⁸ See Figure 5.4, https://www.ofcom.org.uk/_data/assets/pdf_file/0023/51836/statement.pdf

Figure A5.13: Recent regulatory decisions on returns for asset-light markets

Regulator	Profit Margin	Decision	Coverage
Ofwat	1%	Price Control 2015-20	Household retail
Ofwat	2.5%	Price Control 2015-20	Non-household retail
NIAUR	2.2%	Price Control 2015-2016	Retail electricity
ORR	7.3%	2014	Network Rail High Speed
Ofcom	5-10%	2012 Decision	Royal Mail's 'Reported Business'

BT's profitability (EBIT margins) with various adjustments to line rental

A5.86 In Figure A5.14 below we have estimated how BT's profitability from SFV services would be affected based on different line rental prices from BT. We have shown a range of adjustments that could be made to BT's line rental that would result in similar EBIT margins to those we have discussed above.

Figure A5.14: BT's estimated EBIT margins for SFV services

Line rental (£/month inc. VAT)	Estimated EBIT margins in 2016/17 financial year	Comment
£18.99	BT: ~ 34-42% Other CPs: ~ [30-35]%	BT's current price
£13.99 (£5 adjustment)	BT: ~ [30-35] % Other CPs: ~ [30-35] %	Lower estimate consistent with promoting competition
£11.99 (£7 adjustment)	BT: ~ [30-35] % Other CPs: ~ [30-35] %	Upper estimate consistent with promoting competition
£10.99 (£8 adjustment)	BT: ~ [30-35] % Other CPs: ~ [30-35] %	Similar to BT's estimated EBIT margin for fixed voice and fixed broadband combined
£8.99 (£10 adjustment)	BT: ~ [30-35] % Other CPs: ~ [30-35] %	

Annex 6

Consumer engagement

Introduction

A6.1 This Annex sets out a framework for assessing barriers to engagement, and considers the markets for SFV services in terms of that framework. We cross-refer to this annex when discussing SMP in access and calls, and remedies to promote competition.

Consumer engagement in the markets for SFV services is low

A6.2 Annex 8 sets out the evidence we currently have on low consumer engagement in the SFV markets. Survey results suggest a very low level of switching by SFV customers. Only 3% report having switched in the last year and only 30% report ever switching. This contrasts with 12% of bundle customers who have switched their landline provider in the last 12 months.²⁹ Survey results suggest that engagement is lower for BT SFV customers, as only 16% report ever switching, compared to 64% of non-BT customers. We note that some customers may engage without switching provider, such as by changing their call plan, and this may not be captured in our survey data.

A6.3 The main reason for not considering changing provider amongst SFV customers is that they prefer to stay with a trusted provider (62%*).³⁰ Other reasons stated by SFV customers were hassle (15%*), no cost benefit (7%*) and provider satisfaction (9%*). However, we do not have detailed evidence of customers' knowledge of their SFV services or others available on the market, their perception of the switching process, or their perception of other providers of SFV services. For this reason, we intend to conduct market research into these issues. We will use the framework set out below as a guide to areas for questioning / topics in this research.

We use the UKRN framework to assess barriers to engagement

A6.4 We have assessed consumers' ability to engage effectively and drive competition using the UK Regulators Network (UKRN)³¹ framework.³² This framework was developed by the UK's economic regulators (including Ofcom) as part of a report organising previous work by these regulators on consumer engagement. It provides a common basis for considering the barriers to this. When considering a change of provider, consumers typically move through three stages:

- **Engage:** An engaged consumer is aware that they have a choice of product, service and provider and is willing to consider the alternatives available.

²⁹ This difference is statistically significant (at the 95% confidence level). Unless otherwise stated, the differences in all comparisons of survey evidence between customer groups in this annex are statistically significant.

³⁰ * Caution: base under 100 (87)

³¹ The UK Regulators Network is a member organisation formed of 13 of the UK's sectoral regulators (<http://www.ukrn.org.uk/>)

³² UKRN (2014) 'Consumer engagement and switching', 17 December 2014

<http://www.ukrn.org.uk/wp-content/uploads/2016/07/20141217ConsumerEngSwitch.pdf>

- **Assess:** To make informed decisions, a consumer must be able to assess which product, service or provider best satisfies their needs. For this they need access to trusted and comprehensive information, an understanding of their own likely consumption pattern, and the ability to make comparisons.
- **Act:** To exercise their choice, a consumer must be able to purchase the product or service which they have assessed as best satisfying their needs.

A6.5 The UKRN report identifies a number of issues in general terms which can make it difficult for consumers to engage, to make an effective assessment and to act to change their service or provider. These barriers can be grouped around the following areas:

6.5.1 **Awareness of choice:** If consumers are not aware that they are even able to choose an alternative provider, then they are highly unlikely to be engaged.

6.5.2 **Attitude – perceptions of the market:** This could include perceptions that:

- the level of choice available in the market is too limited to warrant engagement – such as that options are limited or lack differentiation;
- making choices between products or providers is expected to be too difficult, such as navigating a large volume of complex tariffs; or
- providers or available information may not be trustworthy, meaning consumers anticipate not being able to rely on the information they could access.

6.5.3 **Attitude – perceptions of the outcome:** Consumers may not engage if they anticipate low benefits or high costs of switching. Consumers may perceive limited difference between prices or quality of service from current and alternative providers. Consumers may also anticipate financial costs (e.g. early termination charges) or non-financial costs (e.g. time or energy needed to seek out a better deal and switch) from switching.

6.5.4 **Ability – access to information:** This could include the absence of triggers to prompt engagement. Common triggers include:

- exposure to marketing materials;
- the end of an existing fixed-term contract period;
- an event leading to dissatisfaction with current product or provider; or
- desire for a new product or service.

6.5.5 Separately, consumers could face difficulties in accessing information about current arrangements, usage patterns or alternatives. If consumers cannot easily access this information, they may be deterred from continuing their assessment, or make assumptions that may lead to a sub-optimal choice. In many sectors, price comparison websites are important in accessing this information.

- 6.5.6 **Ability – assessment of information:** Consumers may face difficulties in understanding information, making them less likely to engage. This could be due to low levels of familiarity or understanding of the products, services or providers available to them. Complexity and lack of transparency around products can also hamper consumer understanding. A lack of standardised comparison information or tools to address this complexity may also be a contributing factor.
- 6.5.7 **Ability – ability to effect change:** There may be a range of barriers and problems with switching processes that prevent consumers from acting to effect change. These could include:
- contractual barriers, such as early termination charges;
 - operational issues, such as contact with current provider or lack of portability;
 - transitional issues, such as loss of service during the switching process; or
 - eligibility issues, such as credit ratings.
- 6.5.8 **Consumer characteristics:** Internet users tend to be more likely to be engaged, as they have access to a wider range of information and so are more easily able to assess their options. In addition, factors such as age, affluence or numeracy can affect engagement levels.
- 6.5.9 Consumers may also exhibit a range of behavioural biases,³³ which may play a role in the barriers outlined above. Common behavioural biases, as set out in the UKRN report, which may be particularly relevant in the market for SFV services include:
- **Reference dependence and loss aversion:** People may underweight gains and overweight losses relative to a reference point.
 - **Status quo bias:** People prefer their current option.
 - **Projection bias:** People may expect their current preferences to continue in the future and underestimate the possibility of change.
 - **Framing, salience and limited attention:** Consumers may make different choices depending on how information or a decision is framed. Consumers may also not pay attention to important information if it is not presented prominently.
 - **Decision-making rules of thumb:** Consumers may simplify complex decisions by adopting heuristics.

³³ By which we mean specific ways in which normal human thought systemically departs from being fully rational.

Potential barriers to consumer engagement in the SFV markets

A6.6 The following paragraphs set out our current view of the barriers under the UKRN framework as they might apply to SFV customers. However, as noted in A6.3 above, we recognise that at present we have limited information on the different aspects of consumer engagement in this market, and will consider them further in our research programme.

Awareness

A6.7 The extent to which SFV customers are aware of the possibility of switching provider is not clear from our survey evidence. While dual-play or other offers tend to be widely advertised, it is possible that SFV customers have limited information on other SFV providers or offers.

Attitude: Perceptions of the market or outcome

A6.8 Gains from switching SFV services are currently relatively low of the order £2/month in terms of standard line rental price. Historically, they have been higher (as much as £4/month). In response to consumer research, “no cost benefit”, “no benefit/incentive”, “hassle” or “clarity of information” are cited as a reason for not being interested in changing provider by 23% of SFV customers.³⁴ This may indicate that perceptions of the market or outcome could play an important role for those who do not engage in switching. These perceptions could be broken into two areas: the hassle or complexity of finding a better offer and switching to it, and the potential gains to be made from switching.

A6.9 “Stay with trusted provider” is by far the biggest main reason given for not being interested in changing provider (62% of SFV customers). This differential in trust could be a reflection of brand loyalty, especially to BT as the “household name” provider of fixed line services. It could reflect a degree of mistrust of other providers (though this may be less likely in the case of well-known firms such as Post Office). It may also be a post-rationalisation given by respondents who have not thought about switching.

Ability: Access to information

Few triggers prompting engagement

A6.10 The UKRN framework identifies a lack of triggers prompting engagement as a barrier to consumers taking steps to access information. There are reasons to believe that all of the potential triggers identified above may be lacking in the markets for SFV services.

A6.11 The markets for SFV services are declining, and several of the larger telecoms operators have little interest in marketing to these customers. This means many consumers have little exposure to information on competing offers.

A6.12 75% of SFV customers have been with their current provider for more than 4 years (88% of BT customers). These customers are highly likely to be outside a minimum contract period, and so will not be prompted to engage by the end of an initial term. Although moving home could act as a trigger for some, most of these customers are

³⁴ See Annex 8 for detailed discussion of this evidence

not likely to be frequently presented with a decision as to whether they should switch tariff or provider.

- A6.13 Desire for a new product or service is unlikely to act as a prompt. Broadband has been widely available for many years, so we anticipate the vast majority of customers who want broadband will be taking it. In addition, evidence suggests that 61% of voice-only customers would not be prepared to give up their landline. It appears that many in this market would be unlikely to be prompted to replace their landline with a different service.

Difficulties accessing information

- A6.14 Call plans are typically standardised between providers (weekend, evening and weekend, and anytime), and consumers are likely to have a general awareness of when they make calls and whether or not they have called mobiles often. For these reasons, we think an awareness and understanding of their usage of SFV services is not likely to be a significant barrier to accessing information for many consumers in this market. However, some consumers may find it more challenging to access this information.
- A6.15 SFV customers are less likely to have internet access – by definition voice-only customers do not have broadband access at home.³⁵ This would act as a barrier to accessing information on alternatives (such as through price comparison websites).

Ability: Assessment of information

- A6.16 Our current view is that alternative SFV services in the market are likely to be broadly comparable from the perspective of customers, but there are some potential caveats:
- The best value plan may depend on details of how much and when the customer uses their landline. This may make comparisons more complex for some customers (and indeed some may not be on the best plan with their current providers).
 - In considering the ability of customers to assess information, we need to take account of the fact that many customers are older (43% are aged 75 years or older), and some may struggle to assess different offers, particularly those who do not have access to a support network.

Ability: Ability to effect change

- A6.17 Switching between providers within the Openreach or KCOM copper networks can be done through a gaining provider led process. This means that consumers can switch their broadband and/or phone services within these networks simply by agreeing terms with their new provider. The gaining provider then manages the switch. This means that consumers only need to contact the provider they want to switch to, unless they are switching between different network infrastructure (e.g. to or from Virgin's cable network). In addition, number portability arrangements enable

³⁵ By definition, the 60% of SFV customers who are voice-only do not have internet access at home. See paragraph 4.7.3.

customers (who are not moving home) to change their service provider whilst keeping their existing telephone number.³⁶

- A6.18 As noted above, 75% of SFV customers have been with their current provider for more than 4 years. This suggests that many standalone voice customers are highly likely to be outside a minimum contract period, and so are less likely to face significant contractual barriers to switching.
- A6.19 Some consumers may not be aware of these features, or the steps they need to take. They may, for example, be concerned that switching would mean changing their phone number or contacting BT, when for many consumers this would not be the case.

Consumer characteristics

- A6.20 We provide the distribution of SFV customers by age and evidence on other customer characteristics in Annex 8 (paragraphs A8.141-A8.145). As noted above, 43% of SFV customers are aged 75 years or older. While some older customers may be engaged and well-informed, others may not, and generally the demographics of this customer base may make them less likely than average to be able to engage effectively.³⁷ In addition, many SFV customers do not have fixed broadband access at home, which may mean they may lack access to the widest range of information.

³⁶ Consumers that are moving home at the same time as they switch provider may be able to take their number with them if they are staying within the same exchange area.

³⁷ 34% of those aged 75 or over are classified as 'inactive' and just 8% are 'engaged' in our latest Switching Tracker research, compared to 28% and 18% respectively among all UK adults.

Annex 7

General analytical approach to market definition, SMP assessment and remedies

Introduction

A7.1 This Annex sets out in general terms the processes that we have followed in defining the markets within this review, how and on what basis we assess whether any operator has SMP in a given market, whether SMP conditions should be imposed in a relevant market, and in what form. Sections 3, 4 and 5 (market definition, the three-criteria test and SMP analysis respectively) set out in more detail how we have applied our analytical approach in each of the markets we are considering.

Overview of approach

A7.2 The market review procedure requires us to analyse markets in order to determine whether they are effectively competitive, and then to decide on appropriate remedies if necessary. Before an assessment of competitive conditions is possible it is necessary to define the relevant market.

A7.3 The definition of the relevant market does not simply entail identifying services that resemble each other in some way, but the set of services (and geographical areas) that exercise some competitive constraint on each other. It therefore has two dimensions:

- the relevant products or services to be included within the market; and
- the geographic extent of the market.

A7.4 It is often practical to define the relevant product market before exploring the geographic dimension of the market.

A7.5 The market definition exercise is not an end in itself, but a means to assessing whether there is effective competition and thus whether there is a need for *ex ante* regulation. It is in this light that we have conducted our market definitions in this review.

2014 EC Recommendation and the three-criteria test

A7.6 In defining markets for market review purposes, we are required to define relevant markets appropriate to national circumstances in accordance with the principles of competition law. In doing so we have taken due account of the 2014 EC Recommendation, the accompanying Explanatory Note and the EC SMP Guidelines.

A7.7 In the 2014 EC Recommendation identifies a set of product and service markets within the electronic communications sector in which *ex ante* regulation may be warranted. NRAs may also identify markets that differ from those in the 2014 EC Recommendation which may be susceptible to *ex ante* regulation having regard to the three-criteria test.

A7.8 The three-criteria test is related to the assessment of SMP and involves the assessment of similar evidence, but is analytically distinct. The three-criteria test focuses on overall market characteristics and structure, for the sole purpose of identifying those markets that are susceptible to *ex ante* regulation. In contrast, assessment of SMP involves determining whether an operator active in a market that has been identified as being susceptible to *ex ante* regulation should be made subject to *ex ante* regulation.³⁸

The time period under review

A7.9 Rather than just looking at the current position, market reviews look ahead to how competitive conditions may change in future. Our evaluation of the current market takes into account past developments and evidence, before then considering the foreseeable market changes that we expect to affect its development.

A7.10 The forward look period that we have used does not preclude us reviewing the market before that point should the market develop in a way we have not foreseen, to the extent that it is likely to affect the competitive conditions that are operating.

Market review process

A7.11 The market review process begins with defining a relevant retail market. We then assess market power and, where appropriate, propose remedies to address the competition concerns.

A7.12 These steps are explained further in the following sub-sections.

Market definition

Demand-side and supply-side substitution

A7.13 The boundaries between markets are determined by identifying competitive constraints on the price setting behaviour of firms. There are two main constraints to consider:³⁹

- to what extent it is possible for a customer to substitute other services for those in question in response to a relative price increase (demand-side substitution); and
- to what extent suppliers can switch, or increase, production to supply the relevant products or services in response to a relative price increase (supply-side substitution).

A7.14 The hypothetical monopolist test (HMT) is a useful tool often used to identify close demand-side and supply-side substitutes. In this test, a product is considered to constitute a separate market if the hypothetical monopolist supplier could impose a small but significant non-transitory increase in price (SSNIP) above the competitive level without losing sales to such a degree as to make this price rise unprofitable. If such a price rise would be unprofitable, because consumers would switch to other products or because suppliers of other products would begin to compete with the

³⁸ See the Commission Explanatory Note accompanying the 2014 EC Recommendation.

³⁹ See paragraph 38 of the SMP Guidelines, which also notes that potential competition also acts as a third source of competitive constraint on an operator's behaviour, but is taken into account in the SMP assessment.

hypothetical monopolist, then the market definition should be expanded to include the substitute products.

- A7.15 We must first therefore address the issue of which product(s) should form the starting point for the application of the HMT. We refer to this starting point as the ‘focal product’⁴⁰, and start from the narrowest potential market definition.⁴¹ Paragraph 41 of the SMP Guidelines states that “*As a starting point, an NRA should apply this test firstly to an electronic communications service or product offered in a given geographical area, the characteristics of which may be such as to justify the imposition of regulatory obligations...*”.
- A7.16 Having considered demand-side substitution we then, where relevant, assess supply-side substitution possibilities to consider whether they provide any additional constraints on the pricing behaviour of the hypothetical monopolist which have not been captured by the demand-side analysis. In this assessment, supply-side substitution is considered to be a low-cost form of entry which can take place within a reasonable timeframe (e.g. up to 12 months).
- A7.17 For supply-side substitution to be relevant not only must suppliers be able, in theory, to enter the market quickly and at low cost by virtue of their existing position in the supply of other products or geographic areas, but there must also be an additional competitive constraint arising from such entry into the supply of the service in question.
- A7.18 Therefore, in identifying potential supply-side substitutes, it is important that providers of these services have not already been taken into consideration. There might be suppliers who provide other services but who might also be materially present in the provision of demand-side substitutes to the service for which the hypothetical monopolist has raised its price. Such suppliers are not relevant to supply-side substitution since they supply services already identified as demand-side substitutes. As such, their entry has already been taken into account and so supply-side substitution from these suppliers cannot provide an additional competitive constraint on the hypothetical monopolist. However, the impact of expansion by such suppliers can be taken into account in the assessment of market power.

Relevance of existing regulation – the modified Greenfield approach

- A7.19 When we conduct our analysis we use the modified Greenfield approach.⁴² This requires us to assess whether markets are effectively competitive from a forward-looking perspective in the absence of any regulation that would result from a finding of SMP. To do otherwise would be circular.
- A7.20 However, it remains appropriate to take into account *ex ante* regulation arising from SMP findings in markets either upstream from, or horizontally related to, the services of interest.

⁴⁰ This reflects the terminology used by the OFT (OFT, *Market definition*, December 2004, OFT403, www.of.gov.uk/shared_of/business_leaflets/ca98_guidelines/of403.pdf).

⁴¹ Paragraph 3.2 of the OFT Market Definition Guidelines explains that ‘previous experience and common sense will normally indicate the narrowest potential market definition, which will be taken as the starting point for the analysis’.

⁴² See also Section 2.5 of the Explanatory Note to the 2014 EC Recommendation.

Bundling

- A7.21 A common feature of the telecoms sector is the supply of bundles of different services. However, the Explanatory Note explains that the fact that bundling is a trend observed at the retail level does not require the definition of retail market(s) for bundles. This is because evidence to date has not indicated that there is a need for *ex ante* regulation of bundles, which may contain a previously regulated input.⁴³
- A7.22 The Explanatory Note goes on to explain that what matters in this regard is *“that NRAs are able to ensure that the vertically integrated SMP operator’s regulated elements of the bundle can be effectively replicated (in terms of both technical and economic replicability) at the retail level, without an implicit extension of regulation to other components which are available under competitive conditions”*.

Aggregating markets

- A7.23 In certain circumstances, it may also be appropriate to define a product or geographic market by grouping together services despite the absence of demand- and supply-side substitutability.

Homogeneity of competitive conditions

- A7.24 Aggregating markets on the basis of the homogeneity of competitive conditions can help streamline the subsequent market power analysis by reducing the need to review multiple markets for products, the provision of which is subject to homogeneous competitive conditions.
- A7.25 However, combining products and services based on homogenous competitive conditions, is – by definition – only appropriate where this would not substantively alter any subsequent findings of SMP (relative to defining those markets separately).
- A7.26 Our approach also takes into account the SMP Guidelines. In particular, in the context of geographic market analysis, paragraph 56 of the SMP Guidelines states that:

“According to established case-law, the relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different...”

- A7.27 Hence, subject to the relevant caveats above, where there are products (or geographic areas) where competitive conditions are sufficiently homogeneous, the definition of the relevant market will include all of those products (or geographic areas) within one market.

⁴³ See Section 3.2 of the Explanatory Note to the 2014 EC Recommendation.

Common pricing constraints

- A7.28 Another factor that is sometimes considered in setting market boundaries is whether there exist common pricing constraints across customers, services or geographic areas (for example, areas in which a firm voluntarily offers its services at a uniform price). Where common pricing constraints exist, the products or geographic areas in which they apply could be included within the same relevant market even if demand-side and supply-side substitution is limited (or absent). Failure to consider the existence of a common pricing constraint could lead to unduly narrow markets being defined.

Geographic market

- A7.29 In addition to the product(s) to be included within a market, market definition requires us to specify the geographic extent of the market. The geographic market is the area within which demand side and/or supply side substitution can take place and is defined using a similar approach to that used to define the product market. We have considered the geographic extent of each product market covered in this market review.
- A7.30 There are a number of possible approaches to geographic market definition. One approach would be to begin with a narrowly defined area and then consider whether a price increase by a hypothetical monopolist in that narrowly defined area would encourage customers to switch to suppliers located outside the area (demand-side substitution) or CPs outside the area to begin to offer services in the area (supply-side substitution). If demand- and/or supply-side substitution is sufficient to constrain prices, then it is appropriate to expand the geographic market boundary.
- A7.31 We recognise that in certain communications (product) markets in the UK, there may be different competitive pressures in different geographic areas. In this case, we therefore have to consider whether it is appropriate to identify separate geographic markets for some services. Defining separate markets by geographic area may be problematic because, due to the dynamic nature of communications markets, the boundary between areas where there are different competitive pressures may be unstable and change over time, rendering the market definition obsolete.
- A7.32 An alternative approach is to define geographic markets in a broader sense. This involves defining a single geographic market but recognising that this single market has local geographic characteristics. That is to say, recognising that within the single market there are geographic areas where competition is more developed than in other geographic areas. This avoids the difficulties of defining and remedying large numbers of markets and instability in the definition over time. Such an approach may also include the aggregation of markets as discussed above.

Market power assessment

- A7.33 Having identified the relevant product and geographic market(s) and, where relevant having identified the market as susceptible to *ex ante* regulation, we go on to analyse each market in order to assess whether any person or persons have SMP as defined in section 78 of the Act (construed in accordance with Article 14 of the Framework Directive). Section 78 of the Act provides that SMP is defined as being equivalent to the competition law concept of dominance in accordance with Article 14(2) of the Framework Directive which provides:

“An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.”

A7.34 Further, Article 14(3) of the Framework Directive states that:

“Where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking.”

A7.35 Therefore, in the relevant market, one or more undertakings may be designated as having SMP where that undertaking or undertakings enjoy a position of dominance. Also, an undertaking may be designated as having SMP where it could lever its market power from a closely related market into the relevant market, thereby strengthening its market power.

A7.36 In assessing whether an undertaking has SMP, we take due account of the SMP Guidelines as we are required to do under section 79 of the Act.

The criteria for assessing SMP

A7.37 The SMP Guidelines require NRAs to assess whether competition in a market is effective. This assessment is undertaken through a forward-looking evaluation of the market (i.e. determining whether the market is prospectively competitive), taking into account foreseeable developments and a number of relevant criteria.⁴⁴

Market shares

A7.38 In the SMP Guidelines, the EC discusses market shares as being an indicator of (although not sufficient to establish) market power:

“...Market shares are often used as a proxy for market power. Although a high market share alone is not sufficient to establish the possession of significant market power (dominance), it is unlikely that a firm without a significant share of the relevant market would be in a dominant position. Thus, undertakings with market shares of no more than 25% are not likely to enjoy a (single) dominant position on the market concerned. In the Commission's decision making practice, single dominance concerns normally arise in the case of undertakings with market shares of over 40%, although the Commission may in some cases have concerns about dominance even with lower market shares, as dominance may occur without the existence of a large market share. According to established case-law, very large market shares — in excess of 50% — are in

⁴⁴ See, for example, paragraphs 19 and 20, and the opening words of paragraph 75, of the SMP Guidelines.

themselves, save in exceptional circumstances, evidence of the existence of a dominant position...”⁴⁵

A7.39 Market shares and market share trends provide an indication of how competitive a market has been in the past. If a firm has a persistently high market share, then that in itself gives rise to a presumption of SMP. However, changes in market share are also relevant to our assessment of prospects for competition. For example, a market share trend which shows a decline may suggest that competition will provide an effective constraint within the time period over which the SMP assessment is being conducted, although it does not preclude the finding of SMP.⁴⁶

Other factors affecting competitive constraints

A7.40 In addition to market shares, the SMP Guidelines set out a number of criteria that can be used by NRAs to measure the power of an undertaking to behave to an appreciable extent independently of its competitors, customers and consumers, including:⁴⁷

- the overall size of the undertaking;
- control of infrastructure not easily duplicated;
- technological advantages or superiority;
- easy or privileged access to capital markets/financial resources;
- product/services diversification (e.g. bundled products or services);
- economies of scale;
- economies of scope;
- vertical integration;
- highly developed distribution and sales network;
- absence of potential competition; and
- barriers to expansion.

A7.41 A dominant position can derive from a combination of these criteria, which when taken separately may not necessarily be determinative.

A7.42 An SMP analysis may also take into account the extent to which products or services within the market are differentiated. The constraint from products or services outside the relevant market may also be a relevant factor.

⁴⁵ Paragraph 75 of the SMP Guidelines.

⁴⁶ See, for example, paragraph 75 of the SMP Guidelines.

⁴⁷ SMP Guidelines, paragraph 78.

Pricing and profitability

- A7.43 In a competitive market, individual firms should not be able to persistently raise prices above costs and sustain excess profits. As costs fall, we would generally expect prices to fall too if competition is effective.
- A7.44 The ability, therefore, to price at a level that keeps profits persistently and significantly above the competitive level is an important indicator of market power. The SMP Guidelines refer to the importance, when assessing market power on an *ex ante* basis, of considering the power of undertakings to raise prices without incurring a significant loss of sales or revenue (factors that may explain excess profits in the short term, such as greater innovation and efficiency, or unexpected changes in demand, should however be considered in interpreting high profit figures).⁴⁸
- A7.45 The reverse is not true: consistently low profits, i.e. profits at or below the cost of capital, cannot be taken as evidence of an absence of market power. It may simply be evidence of inefficiency or other factors such as predatory pricing. For example, if a firm with SMP were to have inefficiently high costs, it may charge a price above the level we would expect to see in a competitive market but this would not result in high profits. In addition, price regulation exists in many of wholesale markets in the communications sector, and therefore low profits may simply be the result of existing regulation rather than a reflection of the underlying competitive conditions.

Barriers to entry and expansion

- A7.46 Entry barriers are important in the assessment of potential competition.⁴⁹ The lower entry barriers are, the more likely it is that potential competition will prevent undertakings already within a market from profitably sustaining prices above competitive levels. Moreover, the competitive constraint imposed by potential entrants is not simply about introducing a new product to the market. To be an effective competitive constraint, a new entrant must be able to attain a large enough scale to have a competitive impact on undertakings already in the market. This may entail entry on a small scale, followed by growth. Accordingly, whether there are barriers to expansion is also relevant to an SMP assessment. Many of the factors that may make entry harder might also make it harder for undertakings that have recently entered the market to expand their market shares and hence their competitive impact.
- A7.47 A related factor is the growth in demand in the market. In general, CPs are more willing to invest in a growing market (and less willing in a declining market). As a result, barriers to entry and expansion tend to be less of an impediment to competition in rapidly growing markets.

Countervailing buyer power

- A7.48 A concentrated market need not lead to harmful outcomes if buyers have sufficient countervailing buyer power to curtail the exercise of market power. In general, purchasers may have a degree of buyer power where they purchase large volumes and can make a credible threat to switch supplier or to meet their requirements through self-supply to a significant degree. It is important to note, however, that the

⁴⁸ Paragraph 73 of the SMP Guidelines.

⁴⁹ Paragraph 80 of the SMP Guidelines.

volumes involved must be large enough to make a material difference to the profitability of the current supplier

Remedies

- A7.49 Where we find SMP in a retail market, we must impose appropriate *ex ante* remedies which may range from pricing regulation to non-discrimination obligations.⁵⁰
- A7.50 Any remedies imposed shall be based on the nature of the problem identified and be proportionate and justified in light of the objectives laid down in Article 8 of the Framework Directive.⁵¹ The Act also specifically requires us to ensure that any condition imposed is:
- objectively justifiable in relation to the networks, services, facilities to which it relates;
 - not such as to discriminate unduly against particular persons or against a particular description of persons;
 - proportionate to what the condition or modification is intended to achieve; and
 - transparent in relation to what is intended to be achieved.⁵²
- A7.51 In addition, retail level remedies shall only be imposed by Ofcom where it considers that it is unable to perform, or fully perform, its duties by means of conditions at the wholesale level.⁵³
- A7.52 According to Section 91(6) of the Act, where Ofcom imposes regulatory control on tariffs, or other matters to which costs are relevant, it shall also set, and apply, an SMP condition which requires, to the extent that Ofcom considers appropriate, the use of cost accounting systems, the publication of an annual statement about compliance with this obligation and the annual auditing of such accounting systems by a qualifying auditor.

⁵⁰ Section 91 of the Act and Article 17(2) of the Universal Service Directive.

⁵¹ Article 16(2) of the Universal Service Directive.

⁵² Section 47 of the Act.

⁵³ Section 91(2) of the Act.

Annex 8

Supporting evidence

A8.1 This Annex sets out evidence relating to the provision of residential standalone fixed voice (SFV) services in the UK (excluding Hull). We refer to the evidence in this annex in various sections in the main document, including Sections 3, 4 and 5 on market definition and SMP in SFV access and calls.

Summary

- A8.2 Around 2.9 million⁵⁴ fixed voice lines are purchased on a standalone basis by residential customers, which accounts for 11%⁵⁵ of total residential fixed voice lines.⁵⁶ We estimate that approximately 60% of these customers are voice-only customers, who do not have fixed broadband.⁵⁷ The remaining 40% are split purchase customers, who purchase voice and fixed broadband as separate services on a standalone basis, i.e. they do not purchase a bundle.⁵⁸ The large majority of split purchase customers are split-supplier customers, who purchase fixed broadband and fixed voice from separate suppliers. A minority of split purchase customers purchase fixed broadband and fixed voice from the same supplier, but as separate services, i.e. unbundled. The total number of SFV customers has been declining, due in part to the increasing take-up of bundled services.⁵⁹
- A8.3 BT supplies the majority of SFV lines and its market share is 79%. Other suppliers of SFV include Post Office, SSE, TalkTalk, Virgin Media and Sky. TalkTalk does not make these services available to new customers. However, Post Office, SSE and some smaller suppliers actively seek to acquire new SFV customers, with some offering promotional price discounts to the line rental price.
- A8.4 Retail line rental prices have increased significantly above the level of inflation since 2009, despite decreasing wholesale costs. Line rental prices have increased by between 25% and 49% in real (CPI-adjusted) terms from December 2009 to December 2016 (an average of between 3% to 6% a year). BT's line rental price is typically the most expensive in the market.⁶⁰ In recent years, other CPs' price increases have typically followed and matched BT's line rental price increases. Some SFV suppliers offer prices which are significantly lower than the rest of the market, but these suppliers have a limited number of customers.
- A8.5 The prices of call plans and out-of-plan calls increased significantly above inflation between 2012 and 2016. For instance, the average price of evening and weekend call plans increased by a CPI-adjusted average of 11% a year between 2012 and

⁵⁴ S135 response data.

⁵⁵ The total volume of residential fixed voice lines is presented in paragraph A8.14 below.

⁵⁶ Throughout this annex, when we refer to fixed voice lines, we are referring exclusively to residential fixed voice lines. We exclude lines supplied to BT Basic customers from SFV lines, for reasons outlined in paragraphs A8.111 – A8.113, throughout this annex unless stated otherwise.

⁵⁷ S135 response data.

⁵⁸ S135 response data.

⁵⁹ For more detail see paragraph A8.13.

⁶⁰ In some cases, joint most expensive with another provider. See paragraph A8.59 for more detail.

2016, while the average price of UK geographic (out-of-plan) calls increased by an average of 6.5% per year over the same period.

- A8.6 The potential gains available to voice-only customers from switching are relatively limited, particularly if they want to switch to a major CP. However, split purchasers could potentially make savings by bundling their fixed voice and fixed broadband services into a single package with their existing, or a different, provider. Standard dual-play prices offer savings relative to purchasing these services separately, and promotional discounts offered to new customers make the potential savings even greater.
- A8.7 SFV customers⁶¹ have some different characteristics from dual-play customers. SFV customers are older (43% are aged 75 years old or over) than dual-play customers (4% are aged 75 years old or over). The proportion of SFV customers living in DE socioeconomics group households (35%) is substantially higher than the equivalent proportion of dual-play customers (20%). The proportion of SFV customers who are not working (71%) is more than twice the proportion of dual-play customers who are not working (35%), as it is also the case for the proportion of customers with an income under £11.5k per annum (23% for SFV customers and 10% for dual-play customers).⁶²
- A8.8 Only 70% of SFV customers have access to a mobile phone, compared to 96% of dual-play customers.⁶³ Engagement levels amongst SFV customers are lower than dual-play; only 9% of SFV customers are classified as engaged, compared to 20% of dual-play customers.⁶⁴ Moreover, 63% of SFV customers have been with their current landline provider for more than 10 years. Annual switching rates appear to be lower for SFV customers compared to dual-play customers; 3% of SFV customers reported switching within the past 12 months compared to 12% of dual-play customers.⁶⁵ Further, 70% of SFV customers reported that they have never switched their landline provider, compared to 45% of dual-play customers.⁶⁶ In fact, on average, SFV had been with their current landline provider for 22 years in Q2 2016.⁶⁷
- A8.9 These characteristics are generally more pronounced for voice-only customers. For example, only 58% of voice-only customers have access to a mobile phone, compared to an overall 94% of split-supplier customers and 96% of dual-play customers. Further, a lower proportion are classified as engaged (6%), a higher proportion reported that they have never switched their landline provider (78%),

⁶¹ When referring to SFV customers in the context of survey evidence from the Ofcom Technology Tracker, the Ofcom Switching Tracker and the 2015 Jigsaw residential survey, we are referring to the combination of voice-only and split-supplier customers. We excluded split-service customers from these surveys' evidence due to the base size being inconsistent with S135 data. We are of the view that excluding split-service customers does not invalidate the evidence from these surveys given that split-service customers only account for approximately 8% of SFV lines (See paragraph A8.29).

⁶² See paragraphs A8.142 to A8.146 (Age, socioeconomics, working status and income levels of SFV customers).

⁶³ This difference is statistically significant (at the 95% confidence level). Unless otherwise stated, all comparisons of survey evidence between customer groups in this annex are statistically significant.

⁶⁴ Ofcom, *Switching Tracker*, 2016.

⁶⁵ Ofcom, *Switching Tracker*, 2016.

⁶⁶ Ofcom, *Switching Tracker*, 2016.

⁶⁷ Ofcom / operators. Data as of Q2 2016; weighted average tenure calculated using number of customers and average tenure for different providers.

compared to 15% and 56% of split-supplier customers and 20% and 45% of dual-play customers.

- A8.10 However, split-supplier⁶⁸ customers have some characteristics which are similar to dual-play customers. For example, 94% of split-supplier customers have access to a mobile phone, compared to 96% of dual-play customers. 15% of split-supplier customers are classified as engaged, compared to 20% of dual-play customers.⁶⁹ 56% of split-supplier customers reported they have never switched compared to 45% of dual-play customers.

Evidence topics in this annex

A8.11 This annex includes the following:

8.11.1 An overview of fixed voice services, covering:

- a) Trends in the bundling of retail services (paragraphs A8.12 to A8.13);
- b) Trends in the volume of lines and calls (paragraphs A8.14 to A8.20);
- c) An account of the different types of SFV customers (paragraphs A8.21 to A8.29);

8.11.2 Our estimates of market share in the relevant markets (paragraphs A8.30 to A8.54);

8.11.3 An account of CPs' views of the market (paragraphs A8.55 to A8.56);

8.11.4 Retail pricing, covering:

- a) Retail line rental prices (paragraphs A8.57 to A8.60);
- b) Timing of line rental price increases (paragraphs A8.61 to A8.65);
- c) Discussion of line rental increases in CPs' internal documents (paragraphs A8.66 to A8.79);
- d) Retail call prices (paragraphs A8.80 to A8.108);

8.11.5 A description of current market offers (paragraphs A8.109 to A8.118);

8.11.6 Estimates of revenue per line (paragraphs A8.119 to A8.123);

8.11.7 Evidence on wholesale market prices (paragraphs A8.124 to A8.128);

8.11.8 Comparisons of SFV prices with dual play prices, covering:

- a) Voice-only customers (paragraph A8.130);
- b) Split purchasers (paragraphs A8.131 to A8.134);

⁶⁸ As explained in paragraph A8.139, in the context of survey evidence, we do not have data for split-service customers, and therefore use split-supplier customers in place of split purchasers (who account for the majority (80%) of this segment).

⁶⁹ Neither of these differences are statistically significant (at the 95% confidence level).

c) Average dual-play prices over time (paragraphs A8.135 to A8.137);

8.11.9 SFV consumer characteristics, covering:

a) Survey evidence introduction (paragraphs A8.138 to A8.141);

b) Age, socioeconomics, working status and income levels of SFV customers (paragraphs A8.142 to A8.146);

c) Landline and mobile use, engagement, switching and satisfaction levels of SFV customers (paragraphs A8.147 to A8.176);

8.11.10 Our estimates of consumer detriment experienced by SFV customers, covering:

a) Current consumer detriment (paragraphs A8.177 to A8.181); and

b) Forecast consumer detriment (paragraphs A8.182 to A8.184).

An overview of fixed voice services

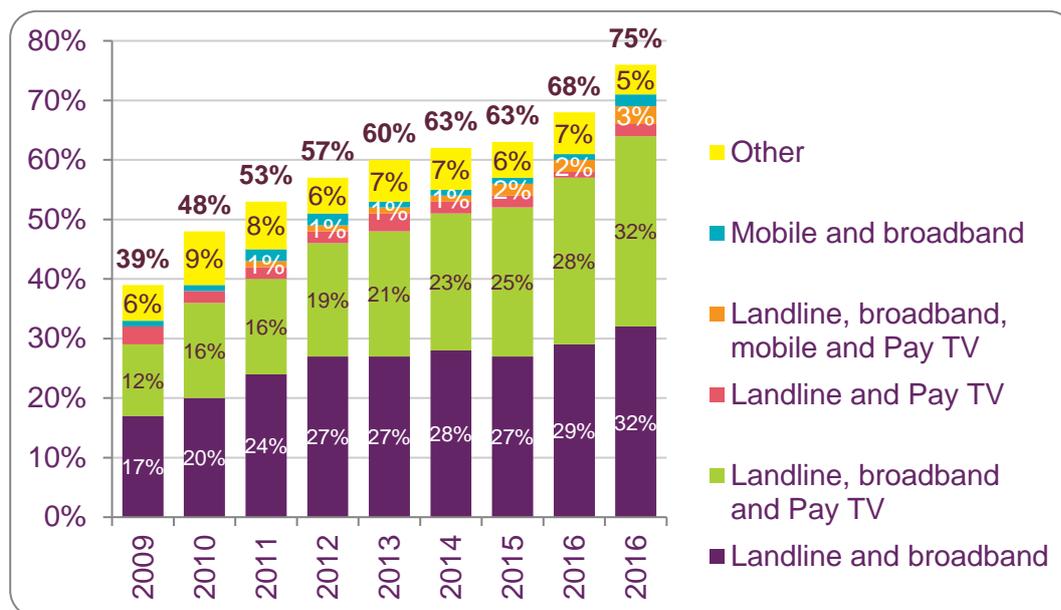
Trends in the bundling of retail services

A8.12 Consumers are increasingly shifting away from purchasing their communications services separately and towards bundling their services. Bundling describes the process of combining multiple telecommunications services as a single package from one supplier.

A8.13 Figure A8.1 shows the proportion of households that take bundled services, with the 2016 proportion measured by two different means (as explained in the chart notes). The take-up of bundling has grown since 2009. In 2016, 67% households reported that they purchased at least landline and fixed broadband from the same provider.⁷⁰ Under the old methodology, 59% of households reported taking a bundle of at least landline and fixed broadband in 2016. Dual-play bundles of fixed voice and broadband, or triple-play bundles of fixed voice, broadband and TV, are the most common services to bundle, accounting for the large majority of retail bundling.

⁷⁰ The remaining households are made up of those who purchase their landline on a standalone basis and those who do not have a landline, some of whom live in a mobile-only home.

Figure A8.1: Take-up of bundled services: 2009 – 2016 ⁷¹



Source: Ofcom, *Technology Tracker*. Data from Q1 of each year 2009 – 2014, then H1 2015 – 2016.
Notes: Revised methodology for 2016 data (to the right of the dotted line) as outlined in footnote 71.

Trends in the volume of lines and calls

Line volumes

A8.14 According to Ofcom’s Quarterly Telecoms data updates, the number of residential lines in the UK has increased by 13% since Q4 2009, from 23.4 million in Q4 2009 to 26.4 million in Q3 2016.⁷² These figures refer to the total number of residential lines, i.e. including those within and outside the scope of this review. The increase in the total number of residential lines partially reflects the increase in the number of households in the UK, which is why the take-up of fixed telephony among households shows a more stable trend (the take-up of fixed telephony ranged between 84% and 87% of households from 2009 to 2016).⁷³ While the number of

⁷¹ Methodology revised in 2016 to report the proportion of UK adults purchasing multiple services from a single provider, based on the main provider used for each service. Previously, data related to the proportion of customers self-reporting a bundle of services. Analysis for 2016 now includes those who pay line rental in addition to their broadband service as a bundle. This revised definition classifies a small proportion of customers defined as ‘split-service customers’ i.e. taking multiple services from one provider but not as a package, as bundle customers. While this does not precisely fit our definition, this methodology more accurately measures the proportion of consumers who bundle their services. Further, it is not possible to accurately identify ‘split-service’ customers in the research.

⁷² We estimate that approximately 1.2 million residential lines in the UK are purchased by SMEs. This estimate is based on the fact that around 30% of SMEs reported not having a business-specific contract in 2016 (31% for those with 1-9 employees and 10% for those with 10-49 employees and 5% for those with 50-249 employees. See Figure 103 from the Jigsaw report on *SME experience of communications services*, available here:

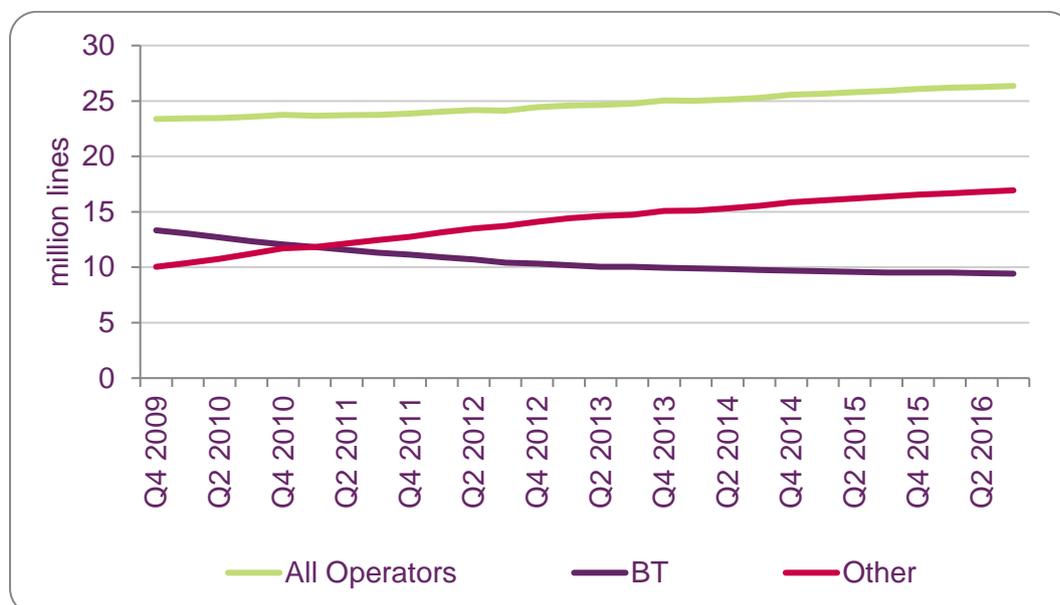
https://www.ofcom.org.uk/_data/assets/pdf_file/0030/96348/Ofcom-SME-consumer-experience-research-2016-Report.pdf) and that there were approximately 5.4 million SMEs in the UK in 2016 (See Paragraph 4.16 from Ofcom’s *Connected Nations Report 2015*, available here: https://www.ofcom.org.uk/_data/assets/pdf_file/0018/72432/fixed_broadband_services.pdf).

⁷³ Ofcom *Technology Tracker*. Data from Q1 for 2009-2014, then H1 for 2015-16. See Figure 4.35 of *CMR 2016*, available here:

https://www.ofcom.org.uk/_data/assets/pdf_file/0026/26648/uk_telecoms.pdf.

BT residential lines has decreased, this has been more than offset by an increase in the number of residential lines supplied by other operators. This has translated into a decrease in BT's share of residential lines from 57% in Q4 2009 to 36% in Q3 2016. Figure A8.2, below, presents the number of residential lines in the UK.

Figure A8.2: Number of residential lines in the UK



Source: Ofcom/operators⁷⁴

A8.15 In Q3 2016, out of the 26.4 million residential lines, approximately 2.9 million (i.e. 11%) were SFV lines.⁷⁵ The number of SFV lines has consistently decreased since Q1 2013, from 6.1 million in Q1 2013 to 2.9 million in Q3 2016 (a 52% fall).⁷⁶ Figure A8.3, below, presents the number of SFV lines in the UK.⁷⁷

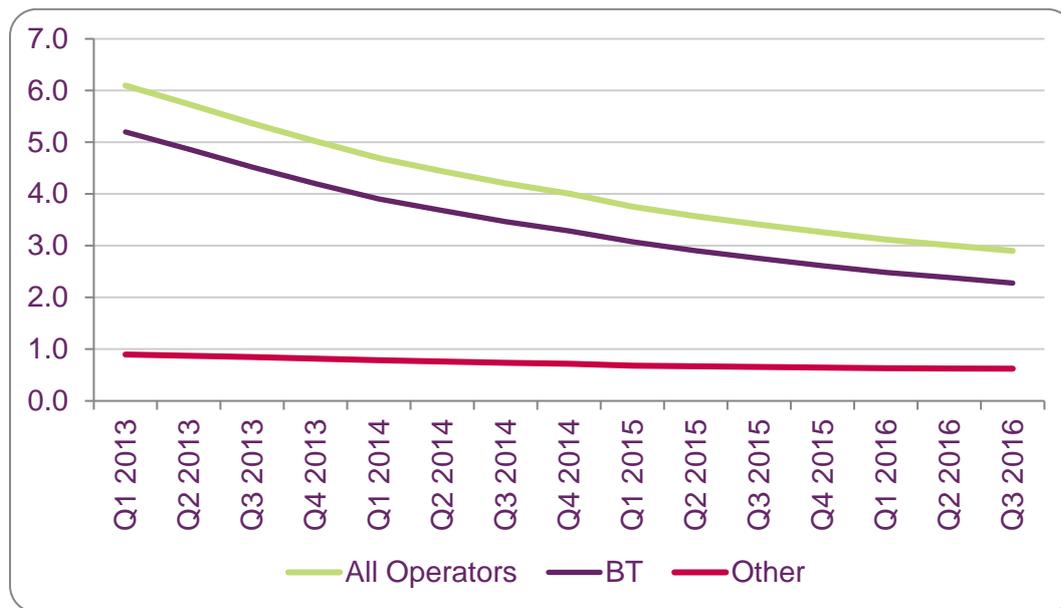
⁷⁴ See Ofcom's Telecoms data updates here: <https://www.ofcom.org.uk/research-and-data/telecoms-research/data-updates>

⁷⁵ In total, 9% of SMEs purchase a (residential) SFV service. With 5.4 million SMEs in the UK, this would suggest around 490,000 out of 2.9 million SFV customers are SMEs – around 17%. Based on data provided to Ofcom by Jigsaw as part of *The SME experience of communications services: Research Report*. Note that this statistic does not appear in the report. https://www.ofcom.org.uk/_data/assets/pdf_file/0030/96348/Ofcom-SME-consumer-experience-research-2016-Report.pdf

⁷⁶ We have estimated that, on average, each SFV customer has a single fixed line. Therefore, the line figures presented here can also be interpreted as customer figures.

⁷⁷The figures exclude BT Basic lines. BT Basic is a social telephony scheme for customers who are recipients of specific means-tested Government benefits. See <http://btplc.com/inclusion/ProductsAndServices/BTBasic/index.htm>

Figure A8.3: Number of SFV lines in the UK (million lines)

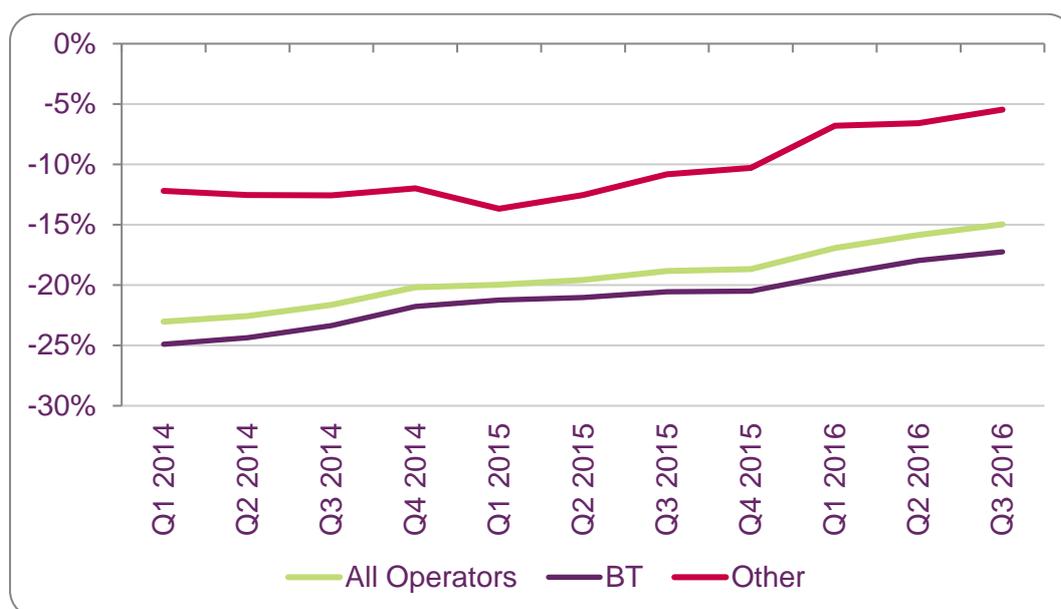


Source: S135 responses

A8.16 The fall in SFV lines has generally been experienced by all providers although BT, which provides the large majority of SFV lines, has seen a faster rate of decline.

A8.17 Figure A8.4 below presents the annual percentage rates of decline in the number of SFV lines. The rate of decline has slowed from around 23% in the year up to Q4 2014, to around 15% in the year up to Q3 2016. However, the rate of decline has slowed less for BT (from 25% in the year up to Q1 2014 to 17% in the year up to Q3 2016) than for other CPs (from 12% in the year up to Q1 2014 to 5% in the year up to Q3 2016). BT's rate of decline is, on average, 11 percentage points faster than for other CPs.

Figure A8.4: Rate of decline in the number of SFV lines (% change against same quarter in previous year)

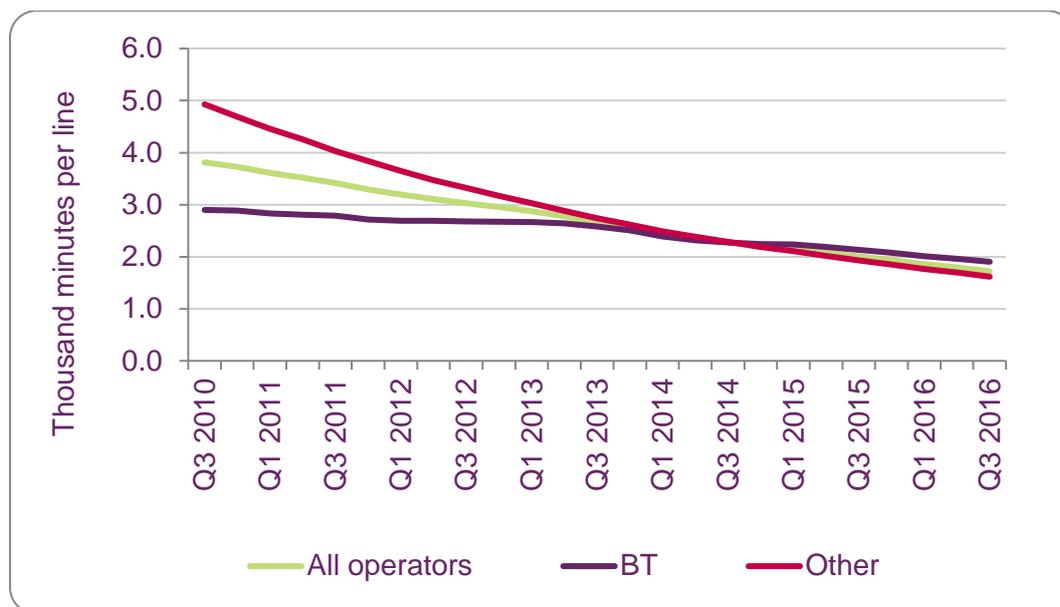


Source: s.135 responses

Call volumes

A8.18 Call minutes per residential line – i.e. including both bundled and SFV lines – have decreased since Q3 2010, from 3.8 thousand minutes per line in the year up to Q3 2010 to 1.7 thousand minutes per line in the year up to Q3 2016 (a 55% fall). Figure A8.5, below, presents call minutes per residential line in the UK. BT customers historically made fewer call minutes on average than customers of other CPs, but now make slightly more calls on average.

Figure A8.5: Call minutes per residential line per year in the UK



Source: Ofcom/operators⁷⁸

A8.19 Call minutes from SFV lines have also decreased. Annual SFV call minutes for all operators fell from 2.5 thousand minutes per line in the year up to Q4 2013 to 2.3 thousand minutes in the year up to Q3 2016 (i.e. a 9.3% fall). In comparison with the same quarter in the previous year, the average rate of decline in BT's SFV call volumes has been [X]. Figure A8.6, below, presents the call minutes per SFV line.

Figure A8.6: Call minutes per SFV line per year in the UK (thousand minutes per line in the last year)

[X]

Source: s. 135 responses.

A8.20 Call minutes generated from BT's lines have [X]. Within these, call volumes from BT SFV lines have [X]. Figure A8.7, below, presents the change in call volumes per line for all residential lines and SFV lines.

⁷⁸ See Ofcom's Telecoms data updates here: <https://www.ofcom.org.uk/research-and-data/telecoms-research/data-updates>

Figure A8.7: Rates of change in call volumes per line in the UK (% change against same quarter in previous year)

[X]

Source: Ofcom/operators⁷⁹ for all residential lines and s135 responses for SFV lines.

An account of the different types of SFV customers

A8.21 Customers who purchase SFV services can be divided into three distinct customer segments:

- Voice-only customers: these customers purchase a SFV service but do not take fixed broadband from any supplier;
- Split-supplier customers: these customers purchase a SFV service and a standalone fixed broadband service from two separate suppliers; and
- Split-service customers: these customers purchase a SFV service and a standalone fixed broadband service from the same supplier, i.e. they do not bundle these services.

A8.22 When we refer to SFV customers, we are describing any customer who purchases a SFV service, i.e. all of the segments above. When we refer to split purchasers, we are describing split-supplier customers and split-service customers, i.e. any customer who purchases both a SFV service and a standalone fixed broadband service, from either the same or different suppliers.

A8.23 We collected data from BT, the Phone Co-op, Post Office, Sky, SSE, TalkTalk and Virgin Media on:

- the number of fixed voice lines purchased on a standalone basis (excluding lines purchased by split-service customers);
- The number of fixed voice lines purchased by split-service customers, if any; and
- The number of customers who purchase a standalone fixed broadband service.⁸⁰

A8.24 A retailer of SFV lines does not necessarily know whether a customer takes standalone fixed broadband from another CP (i.e. whether this is a voice-only customer or a split-supplier customer). Therefore, we need to estimate how SFV lines are split between voice-only customers and split-supplier customers (excluding those sold to split-service customers).

A8.25 BT provided us with estimates of the number of its SFV customers who purchase a separate standalone fixed broadband service from other CPs.⁸¹

⁷⁹ See Ofcom's Telecoms data updates here: <https://www.ofcom.org.uk/research-and-data/telecoms-research/data-updates>

⁸⁰ This data is based on the volume of customers not lines (for October 2016). We assume that each split-supplier customer purchases one SFV line.

⁸¹ Our estimates of the number of split-supplier lines include [X] BT standalone fixed broadband customers, who take a voice line from a non-BT supplier. However, we do not have S135 data that would allow us to identify split purchase customers who take *neither* their voice nor broadband service from BT. We assume that the number of split purchasers who take neither voice nor broadband service from BT is not material. One piece of evidence that goes against this is the 2015 Jigsaw

- A8.26 Approximately [§<] customers buy standalone fixed broadband from BT, the Phone Co-op, Sky or TalkTalk (s. 135 response data). These customers are necessarily split purchasers since they must pay a separate line rental to receive a standalone fixed broadband service.
- A8.27 Approximately [§<] customers take standalone fixed broadband from Virgin Media (s. 135 response data). However, Virgin Media standalone fixed broadband customers do not necessarily take line rental from another CP.
- A8.28 Using a combination of the above data, we have estimated the total number of voice-only and split-supplier lines, and providers' shares of provision of SFV lines to voice-only and split-supplier customers.⁸²
- A8.29 As Figure A8.8 shows, we estimate that of the 2.9 million SFV lines in September 2016, approximately 1.7 million (60%) were supplied to voice-only customers, with split-supplier customers accounting for around 0.9 million lines (32%). We have actual lines data, which indicates that split-service customers account for 0.2⁸³ million lines (8%).⁸⁴ We estimate that there are a total of 1.2 million split purchasers.⁸⁵ Having conducted sensitivity checks around the assumptions made in our estimation of the number of split-supplier customers, we estimate the number of lines purchased by voice-only customers could range from between 1.6 million and 1.9 million. The number of split supplier customers could range from between 0.7 million and 1.1 million. This does not have a substantial effect on the shares within each customer segment.

survey (wave 1), which indicates that up to 24% of total split-supplier customers' fixed voice line could be supplied by a non-BT supplier. However, we have some concerns about the reliability of this survey data as a basis for calculating market shares. As discussed in paragraph A8.40, if we assumed that this 24% figure was in fact accurate, this would not change BT's market shares for SFV lines overall, and would not have substantive implications for its share of lines within each segment.

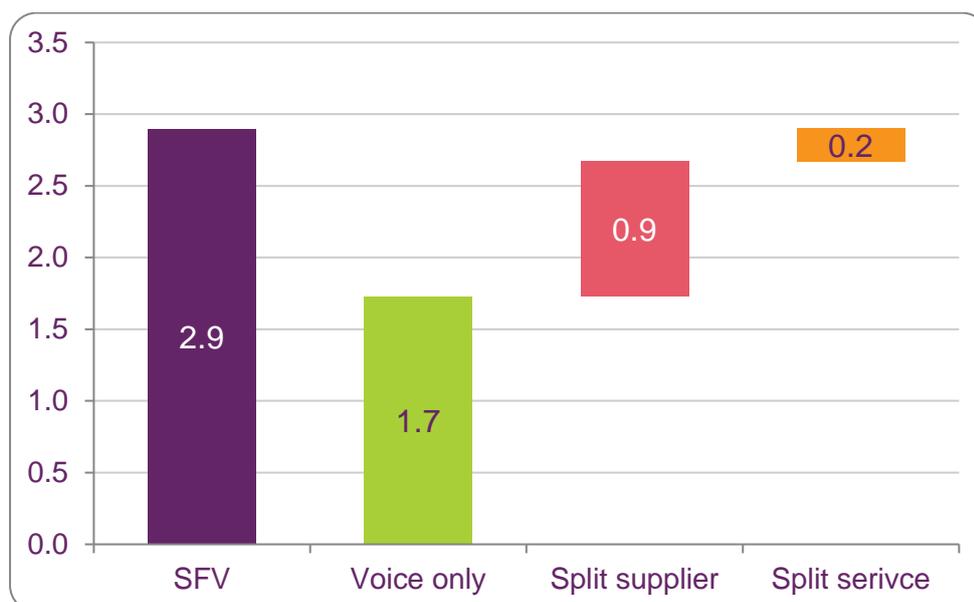
⁸² We primarily rely on standalone broadband customer numbers provided by suppliers for our estimates of split-supplier customers, and make adjustments based on BT estimates (a) to reflect that Virgin Media standalone broadband customers do not necessarily have a voice line from another provider; and (b) where BT has identified another CP as providing standalone broadband to a BT SFV customer, but we do not have data directly from that CP, or BT has not specified the CP.

⁸³ This figure includes a small number of customers ([§<]), who take an SFV line in addition to a bundle of services (including voice). We have used customer volumes as a proxy for SFV lines for this group, since the lines data may include the voice line from the bundle of services.

⁸⁴ The segments presented do not sum to 2.9 million due to rounding.

⁸⁵ The split-supplier and split-service segments presented do not sum to 1.2 million due to rounding.

Figure A8.8: Volume of lines in September 2016 for each customer segment (millions)



Source: s. 135 response data

Our estimates of market share in the relevant markets

A8.30 This section sets out the market shares for the main CPs in the SFV access market and SFV calls market; BT, Post Office, SSE, TalkTalk, Virgin Media, Sky and the Phone Co-op. For all of BT's market shares, we exclude SFV lines sold to BT Basic customers and calls originated on these lines. We also exclude BT Basic from access and calls revenue market shares. We received data for September 2016 from Direct Save Telecom, Plusnet (BT's value brand) and Utility Warehouse on the number of SFV lines, which imply each of these CPs has a market share of <1%. In the absence of time series data, these suppliers have been excluded from the analysis.

A8.31 Below we present market shares (a) in the SFV access market, for lines and revenues and (b) in the SFV calls market, for call minutes and revenues. Further, we estimate the shares of SFV lines each CP has across the three customer segments in the SFV access market.

SFV access

A8.32 We calculate market shares based on the average monthly volume of SFV lines for each year. In 2016, the average is calculated from January – September. BT's 2013 and 2014 market shares contain a lower-bound estimate of split-supplier lines sold.⁸⁶ We have estimated Virgin Media's SFV line volumes for January –

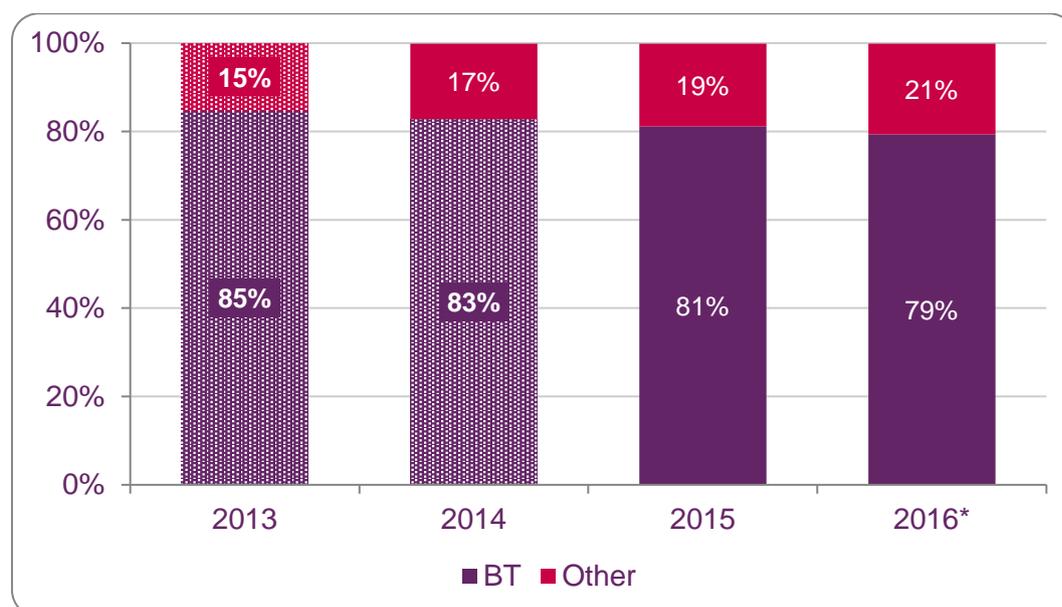
⁸⁶ We did not receive total data for volumes of split-service lines customers with BT. We use lines sold to split-service customers with an SFV line and a separate contract without voice, as a proxy for total split service lines (i.e. excluding SFV lines sold in addition to a bundle (including voice services)), which could not be accurately provided for the period October 2012 – October 2014).

December 2013, since Virgin Media were only able to provide SFV lines data from January 2014 to September 2016.⁸⁷

A8.33 Figure A8.9 below shows that BT is by far the largest supplier of SFV lines. BT’s market share of SFV lines has been at least 79% over the four years for which we have been able to collect data. BT’s market share has declined by six percentage points since 2013.

A8.34 To the extent that market shares have been changing over the past four years, the evidence indicates this is mainly due to providers’ customer bases declining at differing rates, rather than customers switching between suppliers, as discussed below.

Figure A8.9: Market shares of SFV lines by BT and Other CPs



Source: s135 response data

Notes: *Market shares for 2016 are averaged across January – September. Pattern fill indicates market share contains estimated volumes of lines, as described in paragraph A8.32.

A8.35 As shown in Figure A8.10, Post Office has a market share of 5% - 15%. SSE, TalkTalk and Virgin Media have each had a market share of 5% or less. However, TalkTalk only supplies SFV services to legacy customers, rather than making them available (or competing) for new customers. Sky and the Phone Co-op supply a small number of SFV lines (<1%).

Figure A8.10: Market shares of SFV lines by CP (in ranges)

	BT	Post Office	SSE	TalkTalk	Virgin Media	Sky	Phone Co-op
2013	85%	5% - 15%	< 5%	< 5%	< 5%	< 1%	< 1%

⁸⁷ We estimated Virgin Media’s volume of lines, using the average monthly growth rate calculated from the data provided.

2014	83%	5% - 15%	< 5%	< 5%	< 5%	< 1%	< 1%
2015	81%	5% - 15%	< 5%	< 5%	< 5%	< 1%	< 1%
2016*	79%	5% - 15%	< 5%	< 5%	< 5%	< 1%	< 1%

Source: s. 135 response data

Figure A8.11: Market shares of SFV lines by CP

[X]

Source: s. 135 response data

Notes: *Market shares for 2016 are averaged across January – September. Pattern fill indicates market share contains estimated volumes of lines, as described in paragraph A8.32.

A8.36 We collected information on the number of customers as well as the number of lines. However, the number of customers and lines for each CP is very similar, such that there is essentially no difference in the market shares of SFV access between customers and lines.

A8.37 All major CPs' SFV line volumes have been in decline since November 2012, with the exception of SSE, which has experienced an increase in the volume of lines between November 2015 and September 2016.⁸⁸ The rates of decline vary between CPs. For example, BT's volume of SFV lines declined by approximately 17% between September 2015 and September 2016, whereas [X] experienced a somewhat smaller [X]% decline in SFV lines across the same period.

A8.38 Meanwhile, switching appears to have had a limited effect on market shares. For example, gross customer additions reported by other CPs suggest that switching could account for at most a small proportion of gross customer losses reported by BT. For example, from November 2014 to September 2016, BT's gross customer losses (for voice-only and split-supplier customers) was [X] customers per month. The next two largest suppliers can account for only a small proportion of BT's losses. [X].⁸⁹ [X].⁹⁰

Voice-only access

A8.39 Using the customer segment estimates discussed in paragraph A8.29, we have estimated shares for each customer segment in September 2016. Figure A8.12 below outlines the estimated share of voice-only lines. BT has an estimated share of voice-only access in excess of 66%. Post Office and SSE have an estimated share of voice-only access between 5% - 15%. TalkTalk and Virgin Media have an estimated share of below 5%; Sky and the Phone Co-op have a supply a small number of voice-only customers (< 1%). Using sensitivity checks, BT's share of voice-only customers remains in excess of 60%.⁹¹ Other suppliers' shares for voice-only customers are generally unaffected by these sensitivities.

⁸⁸ SSE's volume of lines increased by around [X] lines between April 2015 and September 2016, though overall its volume of lines is lower in September 2016 than in in November 2012.

⁸⁹ [X].

⁹⁰ [X].

⁹¹ While we have collected data on the number of SFV lines in the UK, there is some uncertainty about how many of these are split-supplier customers, as this is not necessarily known to the SFV

Figure A8.12: Shares of voice-only lines by CPs (in ranges)

	BT	Post Office	SSE	TalkTalk	Virgin Media	Sky	Phone Co-op
Sep-16	66%	5% - 15%	5% - 15%	< 5%	< 5%	< 1%	< 1%

Source: s. 135 data

Figure A8.13: Shares of voice-only lines by CPs

[X]

Source: s. 135 data

Split-supplier access

A8.40 We estimate that BT supplies almost all SFV lines (97%) to split-supplier customers. There is a small proportion of split-supplier customers who purchase standalone broadband from BT and an SFV line from other CPs. As outlined in footnote 81, we have no clear evidence of split-supplier customers who purchase neither their SFV service nor standalone fixed broadband services from BT, and we have assumed that the number of such split-supplier customers is not material. We conducted sensitivity checks regarding the total number of split-supplier customers, and the proportion that take a SFV line from BT. Altering this assumption would affect BT's market shares within different segments, though under a range of sensitivities, BT's market share across segments remains high (>60%).

Split-service access

A8.41 From the data provided in s. 135 responses, it appears BT supplies essentially all SFV lines to split-service customers. [X].

Split-purchaser access

A8.42 We estimate that BT supplies almost all SFV lines (97%) to split purchasers. We estimate that there is a small proportion of split purchasers who take a line from other CPs.

A8.43 While split purchase customers largely receive SFV services from BT, they receive standalone fixed broadband service from a variety of CPs. We estimate that each CP has a share of less than 30% of total standalone fixed broadband services supplied to split-purchase customers.

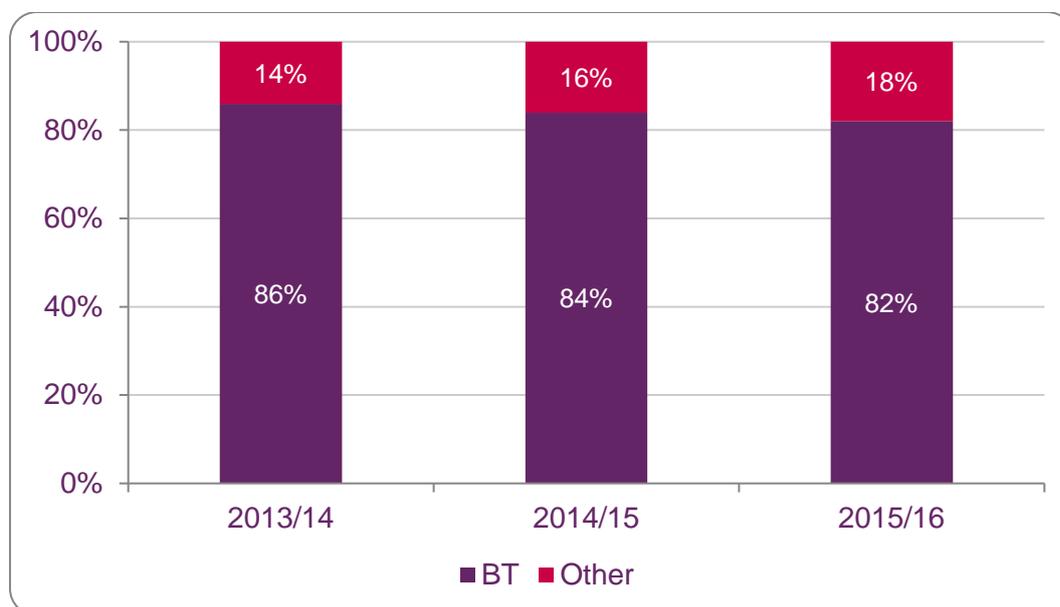
SFV access revenue

A8.44 We have estimated SFV access revenue for BT, Post Office, SSE, TalkTalk, Virgin Media and Sky for three financial years (2013/14, 2014/15 and 2015/16) by multiplying each CP's average line rental by the average number of SFV lines in the

access provider. These sensitivities calculate voice-only shares based on different assumptions of the number of split-supplier customers (the remaining being voice-only customers, along with a limited number of split-service customers on which we have data).

months within each financial year.⁹² We have then calculated each CPs' market share of total SFV access revenues. BT's and Other CPs' (aggregated) market shares of SFV access revenue are set out in Figure A8.14, below.

Figure A8.14: Market shares of SFV access revenue by BT and Other CPs



Source: Ofcom estimate based on S135 responses and Pure Pricing UK Broadband Updates

A8.45 BT had by far the largest market share of SFV access revenue (over 80%) in the financial year 2015/16. BT's market share has been decreasing since 2013/14 at approximately two percentage points per year. Figure A8.15, below, presents the market shares of SFV access revenue by CP.

Figure A8.15: Market Shares of SFV access revenue by CP

[X]

Source: Ofcom estimate based on S135 responses and Pure Pricing UK Broadband Updates

A8.46 [X].

SFV calls

A8.47 We calculate market shares based on the average monthly volume of SFV call minutes in each year. In 2016, the average is calculated from January – September. We estimated: BT split-service call volumes for January 2013 – October 2014⁹³; Post Office SFV call volumes for January 2013 – October 2014; TalkTalk from

⁹² This methodology overestimates access revenue because some CPs include a call allowance with the line rental (e.g. BT includes weekend calls). We are of the view, however, that this is unlikely to materially affect our access revenue estimates.

⁹³ We estimated BT's volume of split-supplier calls by applying the average minutes per line from voice-only and split-supplier lines for each month between January 2013 – October 2014. We applied this average to our lower bound estimate of split-service lines between January 2013 and October 2014 to estimate the total volume of minutes originated on split-service lines.

January 2013 – July 2015; and Virgin Media for 2013.⁹⁴ For the periods for which we have data from CPs, we did not estimate any call minutes.

A8.48 [X]. BT's market share has been in excess of 76% over the past four years. [X].

Figure A8.16: Market shares of SFV call minutes by BT and other CPs

[X]

Source: s. 135 response data.

Notes: *Market shares for 2016 are averaged across January – September. Pattern fill indicates market share contains estimated volumes of call minutes, as described in paragraph A8.47.

A8.49 As shown in Figure A8.17, Post Office has a market share of 5% - 15%. SSE, TalkTalk and Virgin Media have each had a market share of 5% or less. Sky and Phone Co-op supply a small number of SFV calls (<1%).

Figure A8.17: Market shares of SFV call minutes by CPs (in ranges)

[X]

Source: S135 response data

Notes: *Market shares for 2016 are averaged across January – September.

Figure A8.18: Market shares of SFV call minutes by CPs

[X]

Source: s. 135 response data

Notes: *Market shares for 2016 are averaged across January – September. Pattern fill indicates market share contains estimated volumes of call minutes, as described in paragraph A8.47.

SFV non-access revenue

A8.50 As a proxy for SFV calls revenue we have estimated SFV non-access revenue for BT, Post Office, SSE, TalkTalk, Virgin Media and Sky for three financial years (2013/14, 2014/15 and 2015/16). We have done so by subtracting our estimate of SFV access revenue from the SFV total revenue within each financial year. We are aware that SFV non-access revenue is an overestimate of SFV calls revenue given that some revenues which are neither from access nor calls (e.g. charges for paper billing and ancillary services) would be included. However, in our view non-access revenue is a reasonable proxy for actual calls revenue for the purpose of calculating each CP's market share of SFV calls revenue. Figure A8.19, below, sets out BT's and Other CP's market shares of SFV non-access revenue.

Figure A8.19: Market shares of SFV non-access revenue by BT and other CPs

[X]

Source: Ofcom estimate based on S135 responses and Pure Pricing UK Broadband Updates

⁹⁴ We estimated Post Office, TalkTalk and Virgin media's call volumes by calculating a weighted average minutes per line, from Phone Co-op, Sky and SSE data, for each month. We then applied this to the relevant months for Post Office, TalkTalk and Virgin media, to estimate the volume of total SFV lines.

A8.51 [redacted] Figure A8.20, below, sets out the market shares of SFV non-access revenue by CP.

Figure A8.20: Market shares of SFV non-access revenue by CP

[redacted]

Source: Ofcom estimate based on S135 responses and Pure Pricing UK Broadband Updates

A8.52 [redacted].

SFV total revenue shares

A8.53 Figure A8.21 below shows that BT has the largest share of SFV total revenues.⁹⁵ [redacted].⁹⁶ [redacted].

A8.54 [redacted].

Figure A8.21: Market shares of SFV total revenues by CPs (in ranges)

[redacted]

Note: asterisk indicates that the average revenue was calculated using SFV revenue. Other suppliers' average revenue was calculated using total voice revenue

Figure A8.22: Market shares of SFV total revenues by CPs

[redacted]

Note: asterisk indicates that the average revenue was calculated using SFV revenue. Other suppliers' average revenue was calculated using total voice revenue.

An account of CPs' views of the market

A8.55 BT provided internal documents with information about its SFV customer base in the context of meetings with Ofcom and in response to s.135 notices. These documents include results from market research conducted or commissioned by BT over the past three years. The following points summarise the content of BT's internal documents with information about its SFV customer base:

- [redacted],⁹⁷ [redacted].⁹⁸
- [redacted].⁹⁹
- [redacted].¹⁰⁰

⁹⁵ We applied each suppliers' average revenue generated through voice services, from both line rental and calls, to the average volume of SFV lines for each financial year, to estimate each suppliers' total annual revenue generated through SFV lines.

⁹⁶ BT's average revenue includes revenue from BT Basic customers, since we were unable to calculate average revenue excluding basic. Excluding BT Basic revenue in 2015/16 led to an increase in the average revenue of approximately [redacted]. BT Basic customers are still excluded from BT's volume of lines used to calculate these shares.

⁹⁷ [redacted] (response dated 18 November 2016 to question 1 of the 1st BT s.135).

⁹⁸ BT presentation to Ofcom 30 November 2016, slide 3.

⁹⁹ BT presentation to Ofcom 30 November 2016, slides 10.

¹⁰⁰ BT presentation to Ofcom 8 February 2017, slide 5.

- [redacted].¹⁰¹
- [redacted];¹⁰² [redacted].¹⁰³
- [redacted].¹⁰⁴
- [redacted].¹⁰⁵ [redacted]¹⁰⁶ [redacted].¹⁰⁷
- [redacted].¹⁰⁸

A8.56 Other CPs also provided internal documents with information about their SFV customer base in response to s.135 notices, and/or verbally expressed their view of the SFV market in meetings with Ofcom. The documents provided include results from market research conducted or commissioned by these CPs over the past three years. The following points summarise the content of the internal documents provided by CPs other than BT and the views they expressed verbally in meetings with Ofcom:

- Post Office mentioned that it has three acquisition channels for voice-only customers: online (20%), call centre (40%) and in-branch (40%). It described customers as inert and noted that despite regular contact (in Post Office branches) Post Office struggles to gain much traction. It considered that inertia seems to come from concerns about the switching process even though the potential savings from switching are significant for some customers. However, it said it had successfully reached some of BT's SFV customers by launching various marketing campaigns.¹⁰⁹
- Post Office recently launched an introductory offer to incentivise BT's SFV customers to switch. The offer entails paying a 12-month contract at a price of £14.99 a month instead of the full monthly price of £16.99. At the end of the contract, the customer will pay the full monthly price. Post Office marketing material also shows that they try to alleviate customer's concerns about the switching process. For example, in the marketing material for the new offer, the Post Office notes that the end user will keep the same phone line so no engineer will need to visit their home, they can keep the same phone number that everyone knows and there will be no break in service as the switch takes place.
- [redacted].¹¹⁰
- [redacted].¹¹¹
- TalkTalk no longer offers SFV access services to new customers [redacted].¹¹²

¹⁰¹ Response dated 18 November 2016 to question 1 of the 1st BT s.135.

¹⁰² [redacted] (response dated 18 November 2016 to question 1 of the 1st BT s.135)

¹⁰³ BT presentation to Ofcom 30 November 2016, slide 4.

¹⁰⁴ BT presentation to Ofcom 30 November 2016, slide 4.

¹⁰⁵ [redacted]. See BT presentation to Ofcom 30 November 2016, slide 6.

¹⁰⁶ BT presentation to Ofcom 30 November 2016, slides 5-9.

¹⁰⁷ BT presentation to Ofcom 8 February 2017, slide 4.

¹⁰⁸ Response dated 18 November 2016 to question 1 of the 1st BT s.135.

¹⁰⁹ Notes of phone conversation with Post Office on 20 October 2016.

¹¹⁰ Response dated 29 November 2016 to question 1 of the 1st Post Office s.135.

¹¹¹ Notes of phone conversation with SSE on 1 December 2016.

- [redacted].¹¹³
- [redacted].¹¹⁴
- [redacted].¹¹⁵
- [redacted].¹¹⁶
- [redacted].¹¹⁷
- [redacted].¹¹⁸
- [redacted].¹¹⁹

Retail pricing

Retail line rental prices

- A8.57 This section analyses price data collected by PurePricing, which monitors the line rental prices of the main suppliers of broadband services. We analyse BT, Virgin Media, TalkTalk, Sky and Post Office’s line rental prices.¹²⁰ Line rental charges are paid by all SFV customers for access to a fixed voice line.¹²¹ Some calls may be included in the price of line rental, however these inclusions vary across suppliers.¹²²
- A8.58 Up until 2006, BT was subject to retail price regulation. In 2006, Ofcom¹²³ decided to allow retail price controls to lapse, though the market remained regulated until 2009.¹²⁴ As Figure A8.23 below shows, line rental prices were generally decreasing in real (i.e. inflation adjusted) terms across this period. All line rental prices fell by between 4% and 9%, in real terms, from December 2006 to December 2009, with the exception of Post Office, which increased its line rental prices by 9%, in real terms.

¹¹² TalkTalk email to Ofcom, November 2016.

¹¹³ Notes of phone conversation with Virgin Media on 1 November 2016.

¹¹⁴ Notes of phone conversation with Sky on 15 November 2016.

¹¹⁵ Notes of phone conversation with Sky on 15 November 2016.

¹¹⁶ Notes of phone conversation with Sky on 15 November 2016.

¹¹⁷ Notes of phone conversation with Direct Save on 21 November 2016.

¹¹⁸ Notes of phone conversation with Direct Save on 21 November 2016.

¹¹⁹ Notes of phone conversation with Direct Save on 21 November 2016.

¹²⁰ The prices of other suppliers in the SFV market, including SSE, have not been tracked by PurePricing. A more exhaustive list of current SFV prices is in Figure A8.37 below.

¹²¹ The line rental component of a dual-play service is no longer advertised as a distinct price, following the ASA’s ruling. Some CPs now state that they do not charge a price for line rental, however the overall bundled price will still provide fixed voice access.

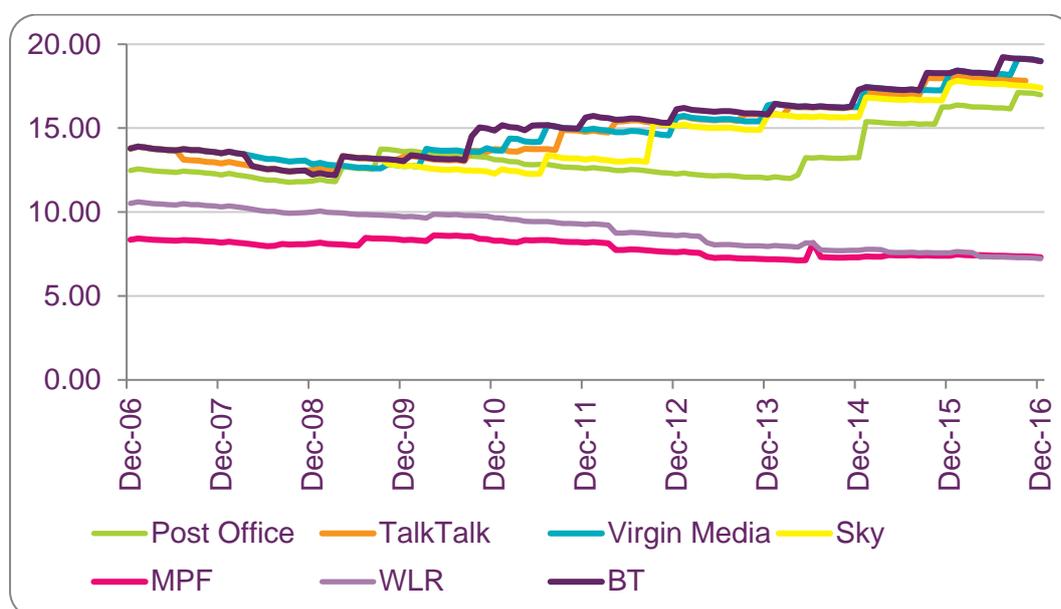
¹²² For example, some suppliers such as BT include free weekend calls with their line rental. Due to restricted available data, these differences are not reflected in the analysis. A detailed list of current market offerings is provided in Figure A8.37 below. We take into account that some CPs include some free calls with their line rental when we estimate the shares of SFV non-access revenue as a proxy for the shares of SFV calls revenue, see paragraph A8.50.

¹²³ Ofcom replaced Oftel as the regulator with responsibility for electronic communications markets from 29 December 2003.

¹²⁴ Ofcom, *Retail Price Controls*, Statement of 19 July 2006 (“2006 Retail Price Control Statement”), https://www.ofcom.org.uk/_data/assets/pdf_file/0012/42114/rpcstatement.pdf

A8.59 However, since deregulation of the retail narrowband market in 2009, line rental prices have generally been increasing, in real terms, despite decreasing wholesale access prices as discussed in paragraph A8.126. Line rental prices have increased, by between 25% and 49% depending on the provider, in real (i.e. inflation-adjusted) terms between December 2009 and December 2016. This is an average of between 3% and 6% per year. Since December 2009, BT has offered the single most expensive line rental price in the market for 40 out of the 85 months, and for a further 31 months it was jointly most expensive with Virgin Media. Since September 2016, Virgin Media's line rental price has been the most expensive in the market at £19.00 per month, although this is only one penny more expensive than BT. Line rental prices have converged to some degree in recent years, having diverged after 2009, due mainly to significant increases in price by Sky and Post Office.¹²⁵

Figure A8.23: Wholesale and retail line rental price movements (£/month in December 2016 prices)



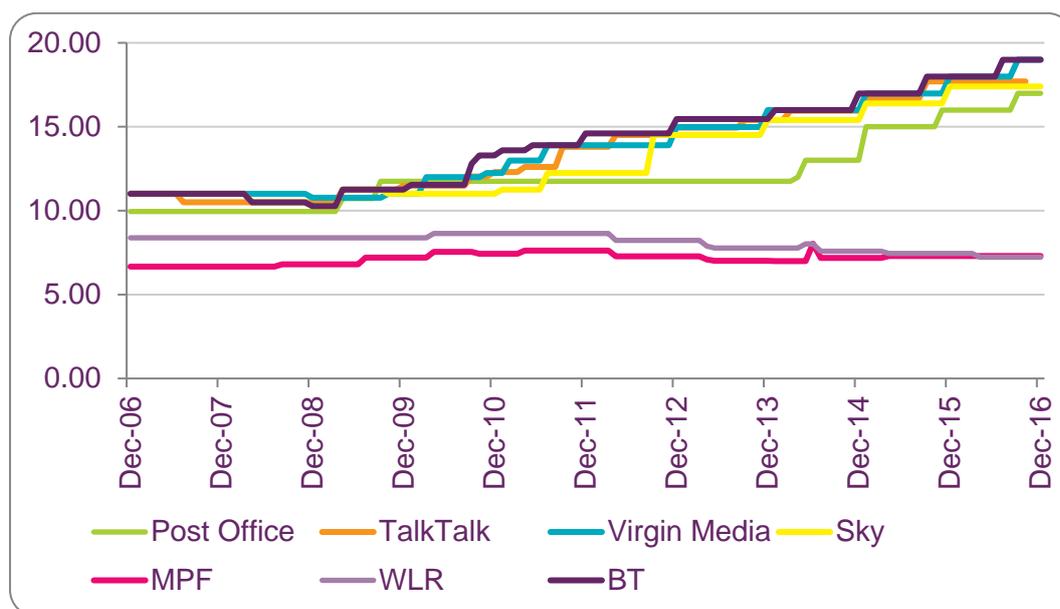
Source: Ofcom/Pure Pricing UK Broadband Updates

Notes: Adjusted for CPI; excludes line rental saver pre-payment tariffs

A8.60 Figure A8.24 below shows the line rental prices in nominal terms, i.e. without adjusting for inflation, since December 2006. These are the line rental prices and changes that would have been visible to consumers in the market.

¹²⁵ For the CPs behind the data we have on average call plan prices (i.e. BT, Sky, TalkTalk and Virgin Media) as discussed in paragraphs A8.80–A8.102 (Call plan prices), monthly line rental prices have increased, on average, 17% in real terms between the end of 2012 and the end of 2016 (or an annual average increase of 4%). This is equivalent to an average increase of £2.70 in real terms between the end of 2012 and the end of 2016.

Figure A8.24: Wholesale and retail line rental price movements (£/month)



Source: Ofcom/Pure Pricing UK Broadband Updates

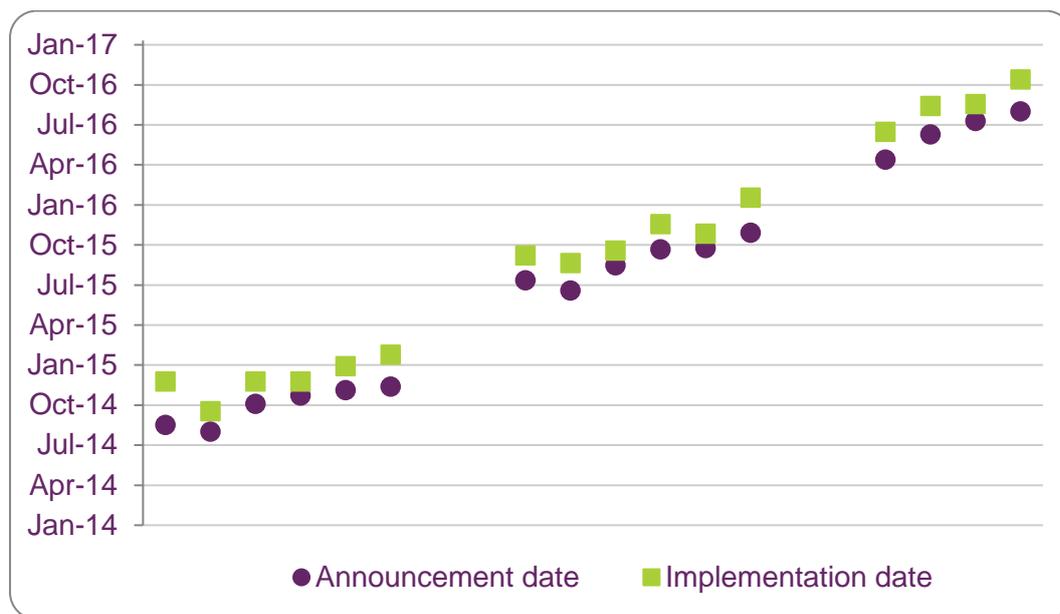
Notes: excludes line rental saver pre-payment tariffs

Timing of line rental price increases

- A8.61 Next we outline the timings of CPs' announcements, and implementation, of line rental price increases. The price increases discussed here relate to prices charged to CPs existing customer bases, rather than prices offered to new customers.¹²⁶ The announcement and implementation dates were collected from ispreview.co.uk, an independent internet service provider review website which publishes articles informing readers of telecoms price increases. Where the announcement date of the price increase is not stated in the article, we have used the publication date of the article as a proxy for the announcement date. Where possible, we have checked these dates and/or months against (a) internal pricing documents we received from BT, Sky and TalkTalk and (b) other press sources of price increases. Information from these sources is consistent with the price increases and dates from ispreview.co.uk.
- A8.62 Figure A8.25 below shows the announcement and implementation dates of line rental price increases across the main CPs, with each pair of data points for announcement and implementation dates relating to a supplier. In the past three years, price increase announcements have typically clustered within a four to five-month period, followed by at least a five-month period of no price increases (with implementation following within months of the announcement).

¹²⁶ In a small number of instances, suppliers implement the price increases to new customers 2-3 months prior to the price increase for existing customers. Therefore, the timings of these increases do not necessarily correspond to the price increase dates in Figure A8.24

Figure A8.25: Line rental price increase announcement and implementation dates, 2014 - 2017



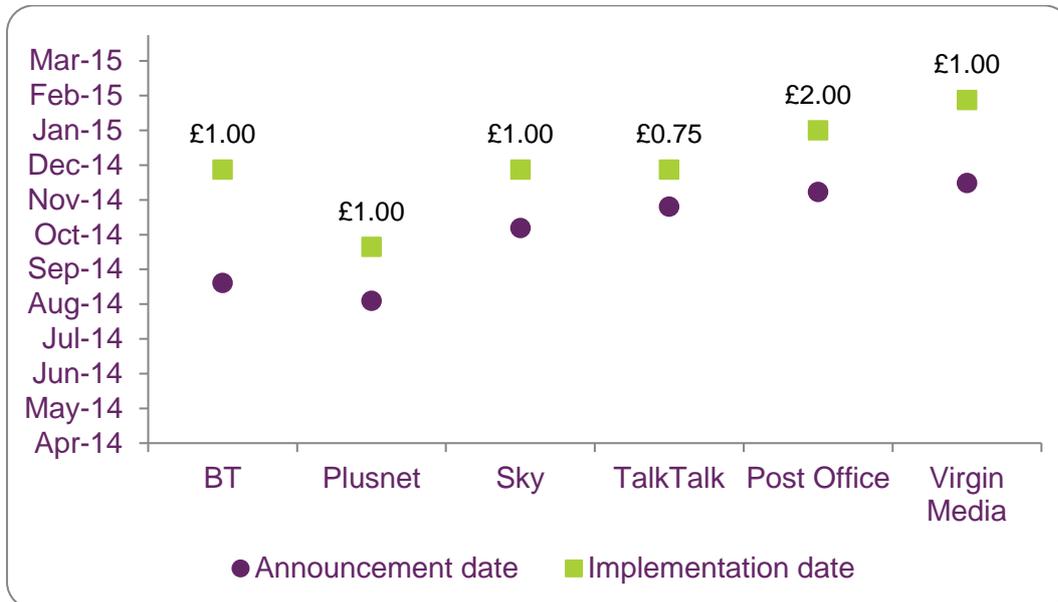
Source: ispreview.co.uk, <https://www.lovemoney.com/> (TalkTalk 2015 source) <http://www.moneysavingexpert.com> (Plusnet 2014 source)

A8.63 As Figures A8.26, A8.27 and A8.28 show below, BT has typically announced and implemented its line rental price increases before any other supplier over the past three years. Other suppliers then appear to follow BT in the subsequent months.¹²⁷ CPs typically increase their line rental by the same amount (usually by £1.00 per month) on an annual basis. The data labels represent the size of the line rental price increase.

¹²⁷ The exception to this is Plusnet's announcement and implementation in 2015. However, BT Group has owned Plusnet since 2007.

Line rental price increases in 2014/15

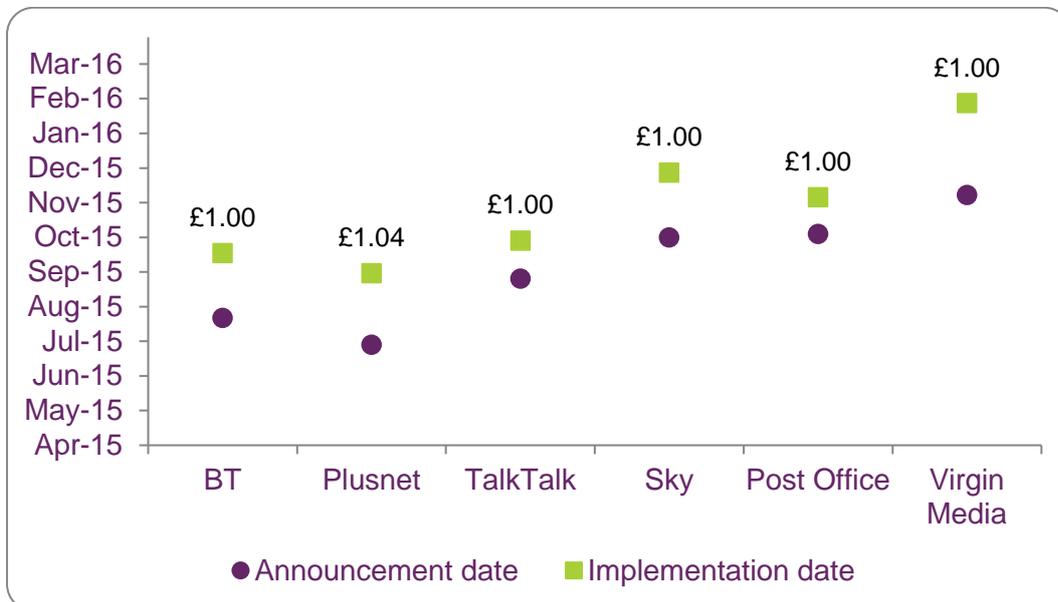
Figure A8.26: Line rental price increase announcement and implementation dates, 2014/15



Source: *ispreview.co.uk*

Line rental price increases in 2015/16

Figure A8.27: Line rental price increase announcement and implementation dates, 2015/16



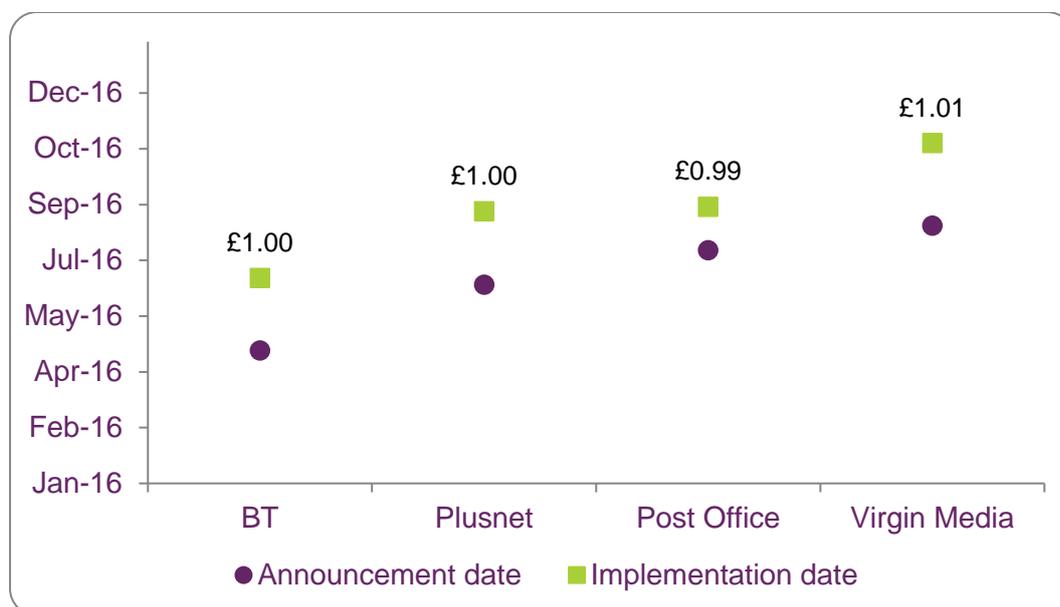
Source: *ispreview.co.uk*, *www.lovemoney.com* (TalkTalk source)

Line rental price increases in 2016/17

A8.64 In January 2017 Sky announced it is increasing the line rental price by £1.59 to £18.99. This price will not affect SFV customers, who will pay a price of £17.40. This is the case for both existing and new SFV customers with Sky.

A8.65 TalkTalk did not increase line rental in 2016 and stopped advertising line rental as a distinct price, following the ASA ruling (see Section 2, paragraph 2.3).

Figure A8.28: Line rental price increase announcement and implementation dates, 2016



Source: *ispreview.co.uk*

Notes: Following the ASA ruling outlined in Section 2, paragraph 2.3, TalkTalk stopped advertising a distinct line rental price in November 2016. For this reason, TalkTalk are excluded.

Discussion of line rental increases in CPs' internal documents

A8.66 Our 1st s.135 request to CPs included the request:

A8.67 *“Please provide any documents submitted to your internal governance body responsible for approving the prices for Residential Analogue Voice-Only Retail Lines or Residential Analogue Voice Retail Lines Sold Under a Separate Contract, over the last three years, and any documents recording the final decision of that body, relating to the setting of prices for these lines.”*

A8.68 In the following section, we discuss the information which CPs provided to us in response to this request.

BT line rental pricing decisions

A8.69 [redacted].¹²⁸

A8.70 [redacted].

A8.71 [redacted].¹²⁹ [redacted].

A8.72 [redacted].

¹²⁸ [redacted].

¹²⁹ Some parts of the documents were redacted.

A8.73 [redacted].¹³⁰ [redacted].¹³¹ [redacted],¹³² [redacted].¹³³ 134

A8.74 [redacted].¹³⁵ [redacted]¹³⁶

Other suppliers' line rental pricing decisions

A8.75 [redacted].

A8.76 [redacted]. [redacted]. [redacted].¹³⁷ [redacted].¹³⁸ [redacted]. [redacted].¹³⁹

A8.77 [redacted]. [redacted].¹⁴⁰ [redacted].¹⁴¹ [redacted]. [redacted]. [redacted].¹⁴² [redacted].¹⁴³

A8.78 [redacted].¹⁴⁴ [redacted]. [redacted].¹⁴⁵ [redacted].¹⁴⁶ [redacted]. [redacted].¹⁴⁷

A8.79 [redacted]. [redacted].¹⁴⁸

Retail call prices

A8.80 SFV customers typically buy a package which includes line rental and a call plan. The line allows customers to make and receive calls, while the call plan provides customers with an allowance to make calls to fixed lines at no additional cost.

A8.81 The package specifies what is included in the call allowance. This is usually set in terms of the times of the day and/or the week when calls be made (e.g. evenings and weekends) rather than specifying a limit on the total number of call minutes. The package also specifies the prices (a set-up fee per call and a price per minute) of calls outside the call plan for fixed lines and mobiles, respectively.

A8.82 For a given supplier – including BT – the stated line rental price is the same across different packages, as are the unit costs of out-of-plan calls.

A8.83 Given the different ways in which consumers are charged for calls, examining overall price changes can be difficult. We first set out how the prices of different types of calls have changed over time for call plans and out-of-plan calls separately, before looking at changes in both in summary and finally, trying to get a sense of overall changes for calls both in and out-of-plans using a proxy measure of non-

¹³⁰ Response dated 18 November 2016 to question 3 of the 1st BT s.135, 3(a).

¹³¹ Response dated 18 November 2016 to question 3 of the 1st BT s.135, 3(b).

¹³² Response dated 18 November 2016 to question 3 of the 1st BT s.135, 3(c).

¹³³ Response dated 18 November 2016 to question 3 of the 1st BT s.135, 3(a).

¹³⁴ [redacted].

¹³⁵ Response dated 18 November 2016 to question 3 of the 1st BT s.135, 3(b).

¹³⁶ Response dated 18 November 2016 to question 3 of the 1st BT s.135, 3(b).

¹³⁷ Response dated 29 November 2016 to question 3 of the 1st Post Office s.135.

¹³⁸ Response dated 29 November 2016 to question 3 of the 1st Post Office s.135.

¹³⁹ Response dated 29 November 2016 to question 3 of the 1st Post Office s.135.

¹⁴⁰ Response dated 8 December 2016 to question 3 of the 1st Sky s.135.

¹⁴¹ Response dated 8 December 2016 to question 3 of the 1st Sky s.135.

¹⁴² Response dated 8 December 2016 to question 3 of the 1st Sky s.135.

¹⁴³ Response dated 8 December 2016 to question 3 of the 1st Sky s.135

¹⁴⁴ Response dated 13 January 2017 to question 6 of the 1st SSE s.135.

¹⁴⁵ Response dated 13 January 2017 to question 6 of the 1st SSE s.135.

¹⁴⁶ Response dated 13 January 2017 to question 6 of the 1st SSE s.135.

¹⁴⁷ Response dated 13 January 2017 to question 6 of the 1st SSE s.135.

¹⁴⁸ Response dated 8 December 2016 to question 3 of the 1st TalkTalk s.135.

access revenue per minute. We set out below further detail on call price changes across all fixed voice customers:

- 8.83.1 First, we set out changes in the prices of different call plans from different providers. This covers call plans offering weekend and evening calls and free international calls, as well as plans offering discounted international and mobile calls. We consider overall average price changes, as well as those for particular CPs. This data comes from Simplify Digital.
- 8.83.2 Second, we consider out-of-bundle calls. This includes pricing data from Simplify Digital for particular calls types. Again, this considers both average prices in the market and prices for individual CPs. We also set out changes in revenue per minute for out-of-plan calls for different providers to give an indication in overall out-of-bundle call price changes. This is based on Ofcom telecoms market data updates.¹⁴⁹
- 8.83.3 Finally, we set out data on non-access revenue per minute as a proxy for changes in call prices overall. This is based on data received from BT, Post Office, SSE, Sky, TalkTalk and Virgin Media in response to s.135 information requests.

Call plan prices

- A8.84 Regarding call plans, Figure A8.35 shows that the average price of evening and weekend plans increased by 52% in real terms between the end of 2012 and the end of 2016 (an annual average increase of 11%), while the average price of anytime call plans increased 32% for the same period (an annual average increase of 7.3%).
- A8.85 These figures suggest that call plan prices have increased significantly more, in relative terms, than line rental prices.¹⁵⁰ However, the increase in call plan prices is less significant in absolute terms (monthly call plan prices were, on average, £1.70 more expensive in real terms by the end of 2016 than they were by the end of 2012 (compared to £2.70 for line rental).
- A8.86 We have examined further the prices for four call plans from a number of different CPs. This is based on data from Simplify Digital, whose data allows an analysis of overall trends in tariffs, as well as specific types of call plans. We note that this analysis only covers certain CPs, and only certain call plans for which we have data and so is indicative only.
- A8.87 Figure A8.29 shows the prices for Weekend & Evening call plans from BT, Sky and Virgin. BT has increased its per month prices for these plans by approximately £1.45 (71%) over the last three years, compared to an increase of £0.29 (6%) by Virgin over the same period and a £0.06 (2%) decrease by Sky between 2015 and 2016 in real terms.¹⁵¹ However, over the whole period shown, BT's monthly prices have only increased by 6%, compared to 52% across the market. Further, BT's monthly prices are still below those of these other providers by £0.50-£1.50 (12.5%-

¹⁴⁹ <https://www.ofcom.org.uk/research-and-data/telecoms-research/data-updates>

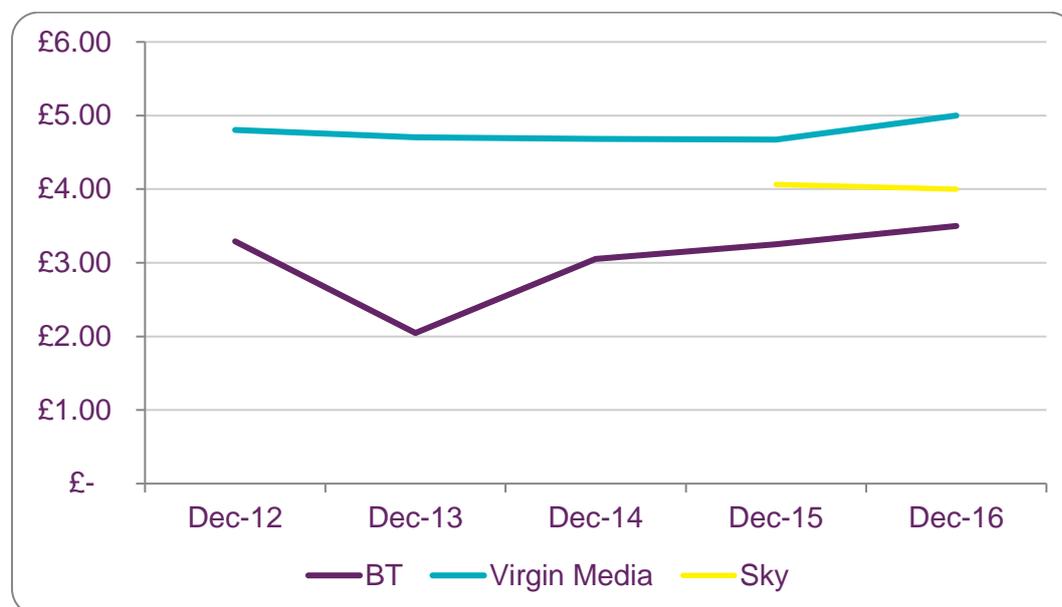
¹⁵⁰ As mentioned in footnote 125 to paragraph A8.59, the monthly line rental prices of BT, Sky, TalkTalk and Virgin Media increased, on average, 17% in real terms between the end of 2012 and the end of 2016 (or an average annual increase of 4%). This is equivalent to an average increase of £2.70 in real terms between the end of 2012 and the end of 2016.

¹⁵¹ Sky's prices were constant in nominal terms.

30%), and below the average across the market shown in Figure A8.35 below (£3.50 vs. £4.17 in December 2016 prices).

A8.88 As noted above, this does not include all CPs, such as Post Office. We note that such providers do offer similar packages,¹⁵² but we do not have data on how these have changed over time.

Figure A8.29: Weekend & Evening call plan prices (£/month), December 2016 prices



Source: Simplify Digital. Data as at end of the year

A8.89 “Free international calls” packages allow subscribers to make international calls at no extra charge above the package price. Figure A8.30 shows the prices for free international calls packages for BT, Sky, Plusnet (which is owned by BT and used as a ‘value brand’) and TalkTalk between 2013 and 2016. We note that Virgin had also introduced a similar plan by the end of 2016, priced at £15. The figure shows that BT and Plusnet’s prices have been below those of Sky over this period, while TalkTalk’s prices were the lowest among these providers throughout the period.

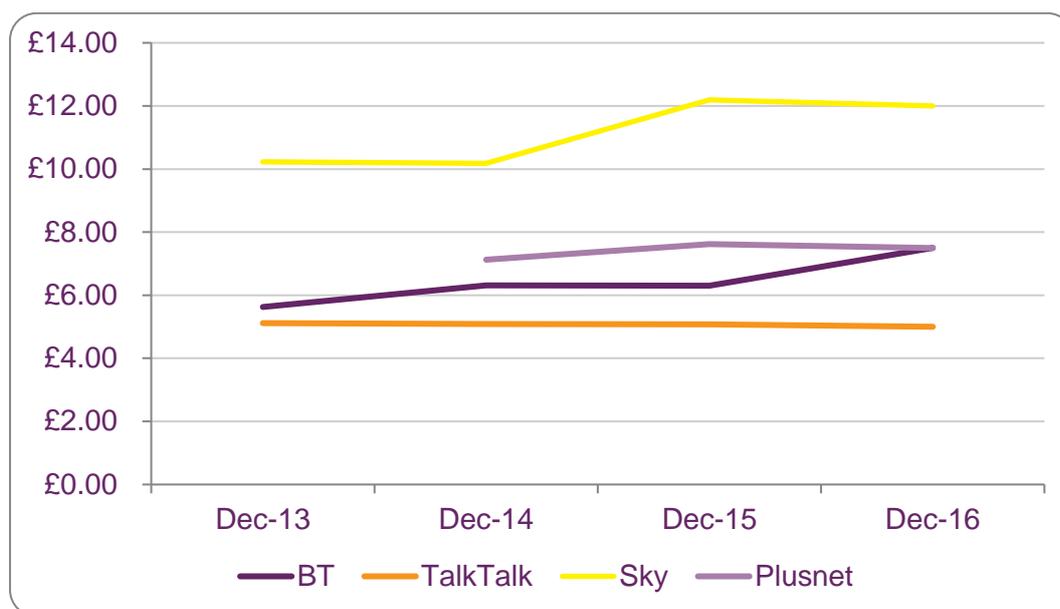
A8.90 All of these providers except TalkTalk have raised prices since the end of 2014. Sky had the largest real terms price increase in absolute terms (an increase of £1.82 on the per month price, or 18%) although it was similar in percentage terms to that of BT (£1.19, or 19%). Plusnet increased its prices by a much lower amount, both in absolute and percentage terms (£0.37, or 5%). TalkTalk’s prices have been constant in nominal terms, and so have decreased in real terms due to inflation (by 2%).

A8.91 Again, we note that this does not cover every CP in the market due to data limitations.¹⁵³

¹⁵² For example, Post Office offers an evening and weekend plan for £2.50 per month, which also includes calls made during these times to certain international destinations. See <http://www.postoffice.co.uk/broadband-phone/home-phone> (accessed 13 February 2017).

¹⁵³ For example, Post Office offers an International Saver tariff for £4 per month. See <http://www.postoffice.co.uk/broadband-phone/home-phone> (accessed 13 February 2017).

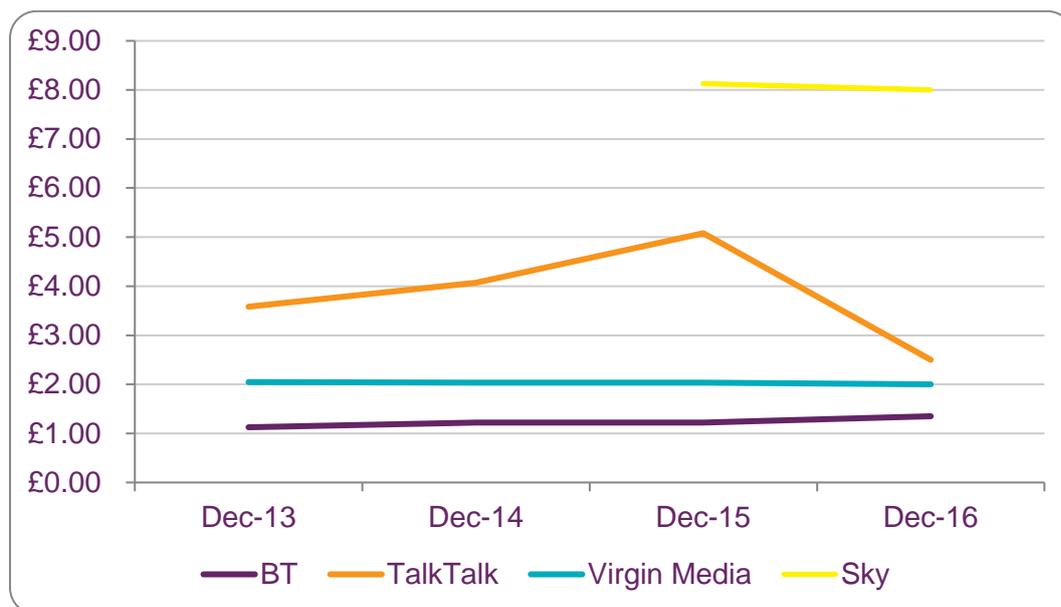
Figure A8.30: Free International call plan prices, December 2016 prices



Source: Simplify Digital. Data as at end of the year

- A8.92 “Discounted international calls” packages give subscribers a lower per minute cost for international calls. BT’s prices are the lowest of the providers shown at £1.35 by the end of 2016, compared to £2 and £2.50 for Virgin and TalkTalk respectively. Sky’s price for this plan is significantly higher than the other providers shown at £8 in 2016.
- A8.93 BT prices increased slightly between December 2013 and December 2016 in real terms (by £0.22 or 20%). Prices for Virgin and Sky have fallen by a small amount (Virgin reduced its price by £0.05 or 2% over this period, while Sky’s price fell by £0.13, a reduction of 2% between December 2015 and December 2016). TalkTalk increased its prices substantially between December 2013 and December 2015 (by £1.50 or roughly 40%), before more than halving them during 2016 to £2.50.
- A8.94 Evidence on these two call plans indicates BT is not particularly highly priced for international calls.

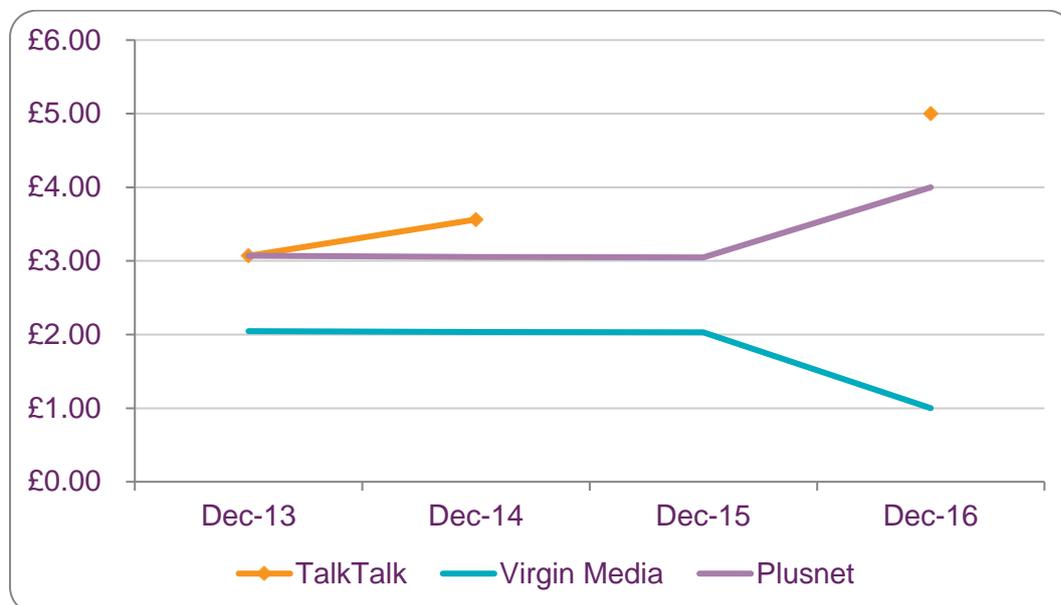
Figure A8.31: Discounted International call plan prices, December 2016 prices



Source: Simplify Digital. Data as at end of the year

A8.95 Finally, we have information on plans for discounted calls to mobiles. As for the other plans, this only covers a small number of CPs. In particular, our data on these plans do not include BT. However, it does include Plusnet, which is owned by BT. This data is set out in Figure A8.32.

Figure A8.32: Discounted Mobile call plan prices, December 2016



Source: Simplify Digital. Data as at end of the year

A8.96 TalkTalk’s prices for this call plan were higher than those of Plusnet and Virgin over this period. There is no price data for TalkTalk in December 2015. However, by December 2016 TalkTalk’s price had increased to £5, compared to £4 for Plusnet and £1 for Virgin. Plusnet’s 2016 price represented an increase of more than 30% on previous years, where prices were stable at £3 in nominal terms (therefore falling

slightly in real terms due to inflation). Virgin meanwhile reduced its prices in 2016 by £1, or roughly half.

Out-of-plan calls

A8.97 Regarding out-of-plan calls, Figure A8.35 shows that the average price of UK geographic calls¹⁵⁴ increased 29% in real terms between 2012 and 2016 (an annual average increase of 6.5%). That is quite similar to the increase in the average price of set-up fees (30% in real terms between 2012 and 2016, or an average annual increase of 6.7%). Call to mobile charges have been largely steady in real terms.

A8.98 Figure A8.33 sets out the prices for different out-of-plan call types by different providers, and the increase in prices between 2013 and 2016.

Figure A8.33: Out-of-plan call prices

Call Plan	BT		Sky		Plusnet		TalkTalk		Virgin Media	
	Dec 2016 price	% (2013 - 2016)	Dec 2016 price	% (2013 - 2016)	Dec 2016 price	% (2013 - 2016)	Dec 2016 price	% (2013 - 2016)	Dec 2016 price	% (2013 - 2016)
0845 numbers	£0.11	166.8%	£0.12	69.5%	£0.10	11.3%	£0.08	-18.5%	£0.11	7.6%
UK geographic day time	£0.11	33.2%	£0.12	26.3%	£0.13	45.7%	£0.13	35.8%	£0.12	18.0%
UK geographic evening	£0.11	166.8%	£0.12	26.3%	£0.13	45.7%	£0.13	35.8%	£0.12	92.3%
Mobile day time	£0.15	26.7%	£0.12	-12.0%	£0.13	2.1%	£0.13	1.8%	£0.19	-2.3%
Mobile evenings	£0.15	126.6%	£0.12	46.7%	£0.13	2.1%	£0.13	1.8%	£0.14	-2.3%
Call connection fee	£0.19	33.9%	£0.17	19.1%	£0.19	33.9%	£0.18	17.3%	£0.19	16.5%
NTS access fee	£0.11	-	£0.12	-	£0.10	-	£0.08	-	£0.11	-

Source: Simplify Digital

A8.99 We note the following from this data:

- BT's prices for 0845 numbers are in line with the market average shown in Figure A8.35, and similar to those of other providers shown above (within £0.01-£0.03 of all other providers shown). BT has seen a larger increase in these prices, as its prices were below the market average in 2013.
- BT's prices for UK geographic calls (£0.11) are broadly in line with the market average shown in Figure A8.35, and is similar (but £0.01 to £0.02 lower) than those of the other providers shown. Plusnet (which is owned by BT) by contrast has similar but slightly higher prices than others at £0.13. BT's price increases are among the highest of the providers shown, particularly for evening calls.¹⁵⁵

¹⁵⁴ This refers to calls to UK fixed-line telephone numbers that begin with '01' and '02'.

¹⁵⁵ Comparison against changes the market averages shown in Figure A8.35 is more difficult as in previous years, because charges differed between daytime and evening calls.

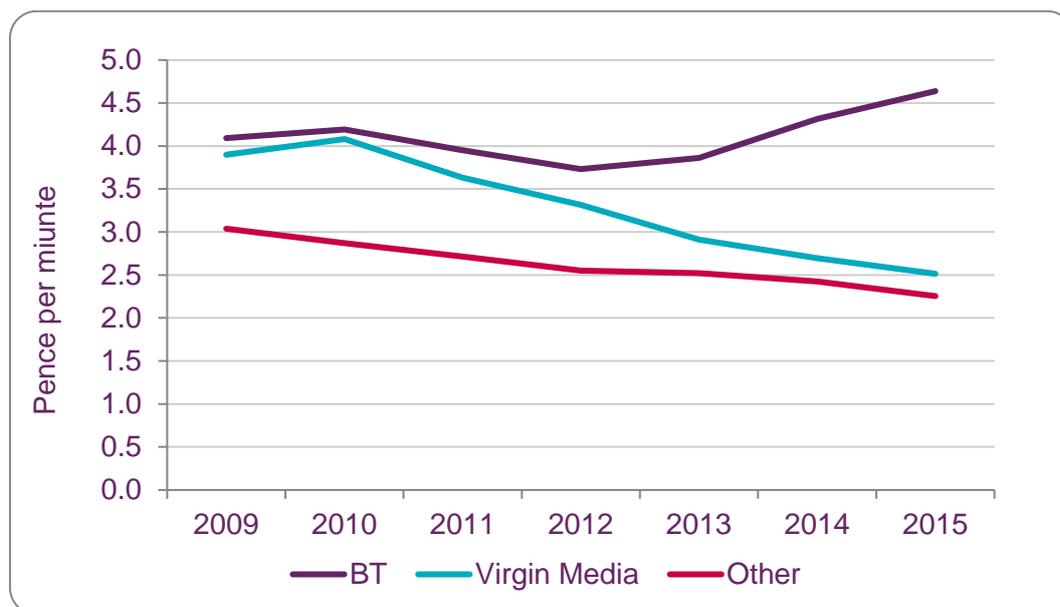
- BT's prices for calls to mobiles are among the highest of the providers shown (lower only than Virgin's price for day time calls), but broadly in line with the average price shown in Figure A8.35. BT's price increases have also been higher than those of the other providers shown in Figure A8.33 above.
- BT's call connection fee is £0.19, the same as Plusnet and Virgin and slightly (£0.01-0.02) higher than TalkTalk and Sky. BT and Plusnet have seen the greatest increase in these prices at 33% between the end of 2013 and the end of 2016, where others have increased this price by between 10-20%. BT's price is also similar but slightly higher (by £0.01) than the average price shown in Figure A8.35, with a similar (but again slightly higher) increase (33% vs 28%).
- BT's NTS access fee is £0.11, £0.01 lower than that of Sky and £0.03 higher than TalkTalk. Separate NTS access fees were generally introduced in 2015, and so we do not have a comparison across time in the same way as for other call types.

A8.100 In addition to comparing call tariffs over time, we have calculated changes to revenue per minute (RPM) in real terms across residential out-of-plan calls as a proxy for price. This is based on data from Ofcom's telecoms market updates, and so covers volumes and revenues across all fixed voice customers and all call types.

A8.101 The revenue figures used in these calculations only cover calls made out-of-plan;¹⁵⁶ volumes include calls made both in and out-of-plans. This is shown in Figure A8.34. Revenue per minute could differ from equivalent call prices (as set out in Figure A8.35) if usage patterns change over time, either in response to price changes or due to other factors.

¹⁵⁶ This includes calls where a consumer did not purchase a call plan, even where a plan is available (e.g. daytime calls made by consumers not purchasing an 'anytime' call plan). This is based on the same data source as our analysis set out in Figure 3.13 in the 2016 NMR (available: https://www.ofcom.org.uk/data/assets/pdf_file/0016/95011/Narrowband-Market-Review.pdf), but includes additional types of calls (such as special services, premium rate and directory enquiries).

Figure A8.34: Residential out-of-plan call revenues per minute (Dec 2016 prices)



Source: Ofcom/operators¹⁵⁷

A8.102 This shows that BT's out-of-plan revenue per minute has been higher than that of other CPs across the period shown. It has particularly diverged since 2012. BT's out-of-plan revenue per minute increased by 24% between 2012 and 2015, while those for Virgin and other CPs declined by 24% and 12% respectively. There could be a number of reasons for this, such as BT increasing prices, changes in the types of calls made or changes in calling patterns between in- and out-of-plan calls.

Summary of market call prices for call plans and out-of-plan calls

A8.103 Figure A8.35 below presents the average retail call prices for a group of call plans and out-of-plan calls. The call prices data available to us (i.e. average call prices collected by Simplify Digital for BT, Sky, TalkTalk and Virgin Media customers) suggest that, between 2012 and 2015, most call prices have increased significantly above inflation. We do not have comparable pricing data for the period between deregulation (in 2009) and 2012.

A8.104 Call plans have increased well above inflation, with 11% year-on-year increases for Evenings and Weekends and over 7% for Anytime. Calls to UK numbers have also increased well above inflation, except for calls to mobiles which have been largely steady in real terms. This data does not include information on international calls.

A8.105 The pricing documents we received from suppliers¹⁵⁸ [X].

¹⁵⁷ See Ofcom's Telecoms data updates here: <https://www.ofcom.org.uk/research-and-data/telecoms-research/data-updates>

¹⁵⁸ See paragraphs A8.69-A8.74 (BT) and A8.75-A8.79 (Other suppliers) for a discussion of the pricing documents.

Figure A8.35: Average retail call prices (in December 2016 prices)

	2012	2013	2014	2015	2016	CAGR
Call plan prices						
Evening & weekend call plan (£/month)	£2.75	£3.38	£3.36	£4.00	£4.17	11.0%
Anytime call plan (£/month)	£6.04	£6.52	£7.00	£7.87	£8.00	7.3%
Out-of-plan call prices						
Call set-up fee (pence/call)	13.8p	14.0p	15.1p	17.4p	18.0p	6.7%
UK geographic call (pence/minute)	8.9p	9.4p	10.3p	11.3p	11.5p	6.5%
0845 0870 call (pence/minute)	9.3p	9.6p	7.3p	10.0p	10.3p	2.7%
Non-Three UK mobile call (pence/minute)	14.5p	14.2p	14.1p	14.2p	14.3p	-0.3%
Three UK mobile call (pence/minute)	17.7p	17.3p	17.3p	14.2p	14.3p	-5.2%

Source: Simplify Digital

Notes: Call plan prices do not include line rental. Data as at end of each year; figures are the CPI-adjusted average of the prices offered by BT, Sky, TalkTalk and Virgin Media.

Non-access revenues per minute

A8.106 The above analysis is limited to only certain call types or plans due to data availability. We have also considered changes in revenues across all call types, using non-access revenue as a proxy.¹⁵⁹ Figure A8.36, below, presents the annual non-access revenues per minute by operator for the past three financial years.

Figure A8.36: Non-access revenues per minute (£/minute, December 2016 prices)

[X].

Source: s.135 responses

A8.107 [X].

A8.108 [X].

A description of current market offers

A8.109 This section summarises the current market prices for SFV services. This lists line rental and call plan prices offered by active suppliers of SFV services. We also provide details on BT Basic, BT Home Phone Saver 2019 and Virgin Media Talk Protected.

¹⁵⁹ As stated in paragraphs A8.50, non-access revenue is an overestimate of call revenue because non-access includes revenues which are neither from calls nor access (e.g. charges for paper billing and ancillary services).

Current standard line rental and call plan prices

A8.110 Figure A8.37 summarises the current prices for SFV services: monthly line rental (including annual pre-payment) and call plans.

Figure A8.37: Prices for SFV services: line rental and call plans (per month)

	Monthly line rental	Annual line rental pre-payment	Weekend calls (in addition to line rental)	Evening and weekend calls (in addition to line rental)	Anytime calls (in addition to line rental)
BT ¹⁶⁰	£18.99	£17.09	Inclusive	£3.50	£8.50
Phone Co-op	£17.00	£15.00	-	£3.00	£7.00
Direct Save Telecom	£15.95	£13.50	-	£2.95	£6.75
Fuel	£17.60	-	-	-	£3.00
Post Office ¹⁶¹	£14.99*	-	Inclusive	£2.50	£7.00
Sky ¹⁶²	£17.40	-	-	£4.00	£8.00
SSE ¹⁶³	£13.50*	-	-	Inclusive	£2.25
Utility Warehouse	£17.35	-	-	Inclusive	£6.00
Virgin Media	£19.00	-	£1.00	£5.00	£8.00

Source: Operator websites (accessed 1 February 2017).

Notes: asterisk indicates a promotional price.

BT Basic

A8.111 BT offers a SFV service called BT Basic, which is a tariff for vulnerable consumers. BT offers a separate service called BT Basic + Broadband, which is a dual-play variant of the SFV BT Basic service. To qualify for BT Basic, a customer must be receiving one of the following benefits:

- Income Support;
- Income-based Job Seekers Allowance;
- Pension Credit (Guaranteed Credit);
- Employment and Support Allowance (income related); and
- Universal Credit (and are on zero earnings)

¹⁶⁰ BT has announced a series of changes to its voice service prices, due to come into effect from 2 April 2017. The price of Unlimited Anytime Calls will rise by 49 pence to £8.99 and Evening and weekend calls will rise by 30 pence to £3.80. BT has held the price of line rental and Line Rental Saver at £18.99 per month and £205.09 per annum, respectively.

¹⁶¹ The price currently offered by Post Office is a promotional price, and is being offered until 2 April 2017. This promotional price applies to a 12-month contract, after which customers will pay the standard price for line rental with inclusive weekend calls of £16.99.

¹⁶² All Sky customers, except SFV customers, pay the new line rental price of £18.99.

¹⁶³ The price currently offered by SSE is a promotional price, and is being offered until 29 June 2017. The standard price for line rental with inclusive evening and weekend calls is £18/month. The standard price of its anytime calls package is £3.00.

A8.112 The line rental price for BT Basic customers is £5.10 per month (27% of BT's standard monthly line rental of £18.99), which includes a call allowance of £1.50 which would allow a customer to make around ten one-minute calls or one thirteen-minute call in a month.¹⁶⁴ Calls beyond this allowance can be made at an additional cost, which has a monthly cap of £10, subject to a Fair Use policy.¹⁶⁵

A8.113 There are around [X] SFV lines supplied to BT Basic customers.^{166 167}

Home Phone Saver 2019

A8.114 BT offers a product called Home Phone Saver 2019, which bundles line rental, calls and additional features together in a package.¹⁶⁸ This is a standalone service, i.e. it is not offered as part of any bundle with broadband from BT. This product is offered at a price of £21.99 per month, which is fixed until 2019.¹⁶⁹ Figure A8.38 below compares Home Phone Saver 2019 with the individual prices of the products and features included in Home Phone Saver 2019.

A8.115 In September 2016, there were around [X] lines supplied to Home Phone Saver customers, accounting for [X]% of BT's SFV lines (excluding BT Basic).¹⁷⁰ The number of BT customers on Home Phone Saver in September 2016 has increased by [X]% compared to September 2015.

A8.116 A customer purchasing these SFV services at standard prices could make substantial savings by taking up Home Phone Saver 2019. A customer who purchases standard line rental and unlimited anytime calls from BT could save £5.50/month by switching to Home Phone Saver 2019. After the price of Unlimited Anytime Calls increases on 2 April 2017, this saving would increase to £5.99. A customer who purchases all of the products included with Home Phone Saver 2019, on an individual basis at standard prices could save up to £13.05/month by switching to Home Phone Saver 2019. This potential saving would increase following BT's price increase would increase the potential saving to £13.54/month. However, for customers purchasing line rental and weekend calls, Home Phone Saver 2019 is more expensive than their current plan, while for those purchasing line rental, evening and weekend calls, Home Phone Saver is 50p cheaper per month (assuming no out-of-plan calls).

¹⁶⁴ BT Basic line rental does not include free weekend calls.

¹⁶⁵ If a customer exceeds the call allowance, they are charged 11.3 pence per minute (plus 3.3 pence for each phone call) for all normal UK calls.

¹⁶⁶ BT estimated that there are around a further [X] BT Basic + Broadband customers (*source: BT presentation to Ofcom, 30 October 2016*).

¹⁶⁷ Source: s. 135 response data.

¹⁶⁸ There are a number of iterations of Home Phone Saver, signalled by the associated date.

¹⁶⁹ Source: Operator website (accessed 31 January 2017).

¹⁷⁰ Source: s. 135 response data.

Figure A8.38: Comparison of Home Phone Saver 2019 with individual product prices

	BT Home Phone Saver 2019	Individual standard prices
Line rental	Included	£18.99/month
Unlimited Anytime Calls ¹⁷¹	Included (for up to an hour)	£8.50/month ¹⁷²
Inclusive calls to 0845 and 0870 numbers at any time	Included (for up to an hour)	Included
1471 call returns	Included	26.5p charge plus the cost of the call
BT Privacy with Caller Display	Included (when you opt-in)	£1.75/month
Anonymous Call Reject	Included (when you opt-in)	£5.80/month
Total	£21.99	£35.04/month

Source: Operator website (accessed 1 February 2017).

BT Line Rental Saver

A8.117 BT offer an SFV product called Line Rental Saver, which offers BT customers 10% off the price of 12 months of standard line rental when paying up front. Therefore, instead of paying the monthly rate of £18.99 for 12 months (£227.88 per annum) Line Rental Saver customers pay a single (non-refundable) instalment of £205.08 (which equates to £17.09 per month). Line Rental Saver is not compatible with Home Phone Saver are unable to receive, i.e. the annual price of Home Phone Saver cannot be paid up front in order to receive a 10% discount.

Virgin Media Talk Protected

A8.118 Virgin Media has launched a new product called Talk Protected, which freezes the line rental price at £17.99, for elderly and disabled customers. In addition, customers will receive additional benefits, such as inclusive evening and weekend calls to UK landlines and mobiles and inclusive voicemail and caller display, among other benefits. Customers who are identified as being eligible for this plan will have been automatically upgraded to Talk Protected after 10 January 2017. To qualify for Talk Protected a customer must be identified as being over 65, or have additional accessibility needs including limited hearing, sight, speech and mobility.

Estimates of revenue per line

A8.119 In this section we estimate the revenue per line, across CPs.

A8.120 Figure A8.39 presents SFV total revenue per line figures, calculated by dividing SFV total revenues by the number of SFV lines for BT, Post Office, SSE, TalkTalk, Virgin Media, Sky and the Phone Co-op.

Figure A8.39: SFV total revenue per line (in December 2016 prices)

[X]

Source: s.135 responses

¹⁷¹ Calls to non-BT phone mobile numbers incur a charge of 7.5 pence per minute in the Unlimited Anytime Calls package, compared with 15 pence per minute under Home Phone Saver 2019.

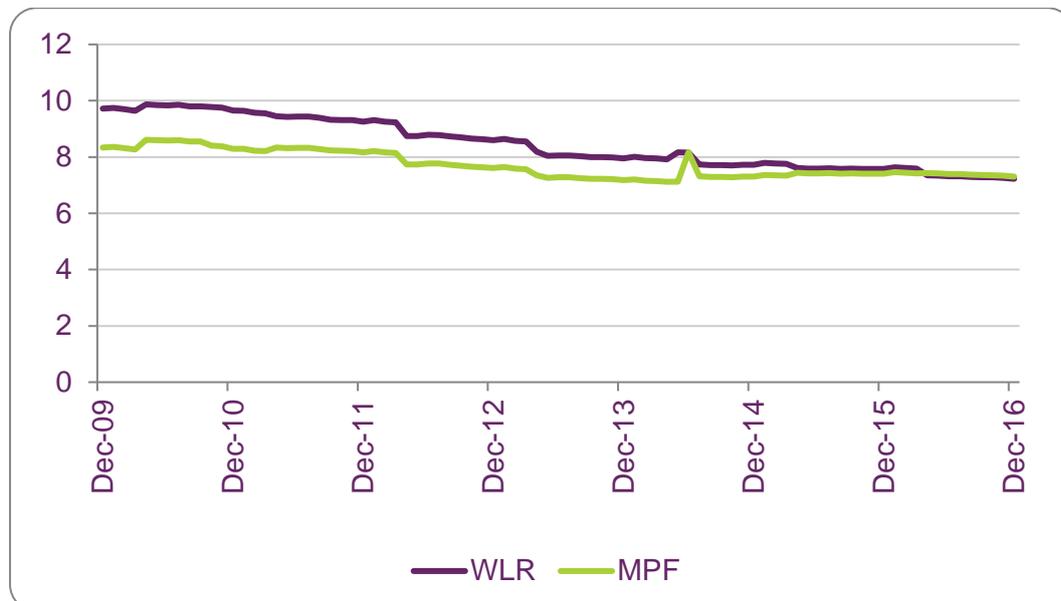
¹⁷² This price will increase to £8.99 on 2 April 2017.

- A8.121 BT's revenue per line from access and calls is the highest in the market, and has [X] per month in 2015/16, in December 2016 prices. This represents an [X]% increase above inflation over two years. During the same period, BT's access revenue has increased its share of revenue per line from [X]% to [X]%.
- A8.122 In Annex 5 (Figure A5.4), we show the breakdown of BT's revenues per line between line rental and calls. This indicates that, [X].
- A8.123 [X]. Revenue per line is lower for all other CPs than BT by between £[X] and £[X] per line per month.] We do not have sufficiently granular data on other CPs' revenues to tell whether these changes are due to changes in access or call revenues, or a combination of both.

Evidence on wholesale market prices

- A8.124 Suppliers use different access and call services at the wholesale level in order to provide access and calls to SFV customers at the retail level. When they buy these inputs they pay wholesale market prices.
- A8.125 Regarding access inputs, suppliers that rely on BT's copper network pay Openreach (BT's wholesale access division) for Wholesale Line Rental (WLR) or Metallic Path Facility (MPF). WLR allows only the provision of voice services, while MPF allows both voice and broadband services to be provided. Suppliers, such as Virgin Media, that have their own network may use it to provide access to its SFV customers.¹⁷³
- A8.126 Between 2009 and 2016 BT's WLR and MPF prices decreased significantly. WLR prices fell 26% in real terms between 2009 and 2016 (MPF prices fell 12%). Figure A8.40, below, presents WLR and MPF prices.

Figure A8.40: BT's WLR and MPF prices (£/month in December 2016 prices)



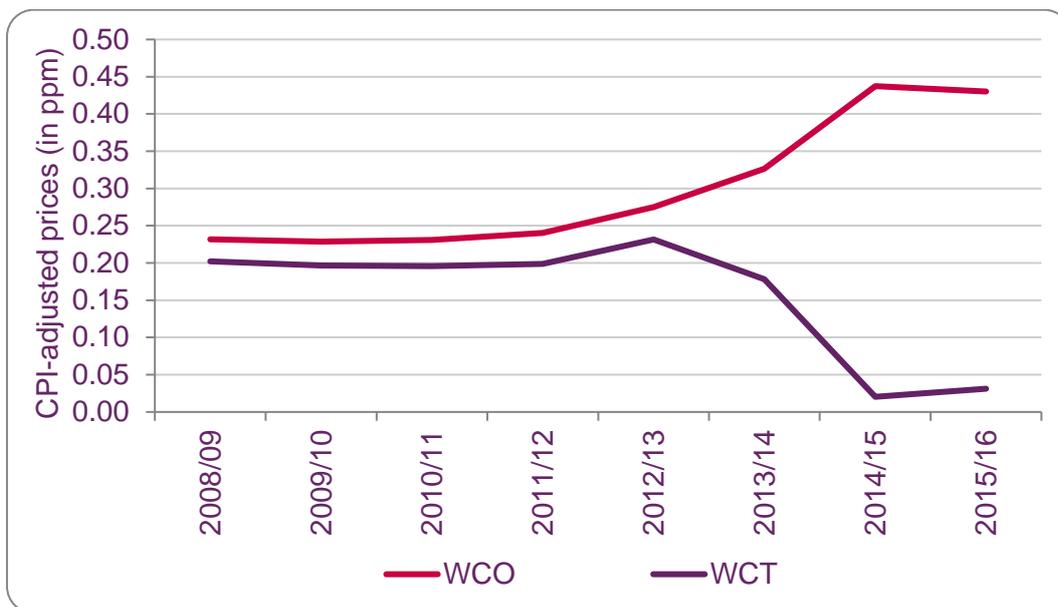
¹⁷³ We are also aware that generally CPs that have their own network may still rely on BT's copper network to provide voice - it is common, some CPs rarely use their own LLU network to provide voice-only services.

Source: BT Openreach

A8.127 Regarding call inputs, suppliers most commonly purchase Wholesale Call Origination (WCO) from BT, and Wholesale Call Termination (WCT) from either BT or other fixed telecoms suppliers. WCO is a service that enables SFV customers to make calls over their lines, while WCT enables these customers to terminate their calls to UK geographic numbers (a number starting 01 or 02).

A8.128 Between 2008/09 and 2015/16 BT's WCO and WCT prices have changed significantly in real terms. BT's WCO increased 86% in real terms between 2008/09 and 2015/16, while BT's WCT fell 84% in real terms. Figure A8.41, below, presents WCO and WCT prices.

Figure A8.41: BT's WCO and WCT prices (March 2016 prices)



Source: BT Regulatory Financial Statements

Comparisons of SFV prices with dual-play prices

A8.129 In this section we compare the prices voice-only customers and split purchasers are paying for their services with the prices of dual-play services.

Voice-only customers

A8.130 Figure A8.42 below compares the SFV access price (line rental) with the cheapest available dual-play price. In comparison to the price of SFV access, the price of a dual-play service with ADSL broadband sold at a promotional price is on average £6.18 (35%) more expensive per month, while dual-play with ADSL sold at a standard (non-promotional) price is £13.98 (79%) more expensive.

Figure A8.42: Line rental and promotional and standard dual-play prices (£/month)

	(1) Monthly line rental	(2) Cheapest promotional dual-play price	(3) Cheapest standard dual-play price	(2) – (1) Difference to promotional dual-play price	(3) – (1) Difference to standard dual-play price
BT	18.99	24.99	33.99	6.00	15.00
Phone Co-op	17.00	22.00	27.00	5.00	10.00
Post Office	14.99*	20.99	26.99	6.00	12.00
Sky	17.40	18.99	28.99	1.59	11.59
SSE	13.50*	19.50	26.00	6.00	12.50
TalkTalk	17.70	£22.95	£22.95	£5.25	£5.25
Virgin Media	19.00	32.00	40.00	13.00	21.00
Weighted average	17.80	23.99	31.78	6.18	13.98

Source: Operator websites (accessed 20 February 2017). TalkTalk price based on latest available data.¹⁷⁴

Notes: *asterisk indicated promotional line rental price. Price differences are weighted by the estimated number of voice-only customers with each CP. All promotional prices apply to a 12-month period. All dual-play prices are for speed of 17Mb, i.e. ADSL, except for Virgin Media (50Mb – the lowest speed offered).

Split purchasers

A8.131 As outlined in paragraph A8.26, we received s.135 data for [§<] standalone fixed broadband customers from BT, Sky and TalkTalk. This contained information on the broadband speed, usage allowances and prices provided to these customers.¹⁷⁵

A8.132 [§<]. [§<].^{176, 177} In total, around 93% of standalone fixed broadband customers, supplied by BT, Sky and TalkTalk, receive a standalone fixed broadband with a speed of 17Mb.¹⁷⁸ Figure A8.43 below shows the price for each standalone broadband service (in terms of speed and usage limit) provided by BT, Sky and TalkTalk. We present average price, weighted by the number of customers on each speed, usage and price combination, for each standalone fixed broadband service. In some instances, customers receiving the same service are paying different prices. In addition, this Figure shows the prices of dual-play bundles from the standalone broadband supplier, which includes broadband with equivalent speed and usage and line rental to the standalone broadband service in the same row.

A8.133 Figure A8.43 shows that on average standalone fixed broadband customers pay around £20 for a fixed broadband service and a further £18.99 for line rental.¹⁷⁹

¹⁷⁴ PurePricing

¹⁷⁵ However, we exclude around [§<] of these customers, for reasons explained in footnotes 176 - 177. To receive standalone fixed broadband from these CP's a customer must be taking an SFV line, and are by definition a split purchaser.

¹⁷⁶ We exclude customers who receive a standalone fixed broadband service from BT (a) free of charge, (b) which has a speed of 100Mb+ and (c) where the price and service combinations are provided to fewer than 100 customers.

¹⁷⁷ We exclude around [§<] Sky customers who take a 17Mb/2Gb service and a 6Mb/Unlimited service, since there is no closely comparable dual play product, in terms of speed/usage combinations.

¹⁷⁸ Approximately 85% of these customers had unlimited usage, whilst 15% have a capped usage.

¹⁷⁹ We use a line rental price of £18.99, since we estimate that the majority of split purchasers take their line from BT.

Compared to the average dual-play prices which split purchasers would pay if they bundled these services, they are paying an average of just over £14.50 more per month (compared to promotional dual-play prices) or £8 more per month (compared to standard dual-play prices) by buying them as standalone services.

Figure A8.43: Standalone fixed broadband and dual-play prices (£/month): BT, Sky and TalkTalk

	(1) Standalone fixed broadband weighted average price (31/10/2016)	(2) Standalone fixed broadband plus line rental (£18.99)	(3) Dual-play: promotional price (per month)	(4) Dual- play: standard price (per month)	(5) = (2)–(3) Price difference for split purchaser compared to promotional dual-play price	(6) = (2)–(4) Price difference for split purchaser compared to standard dual-play price
BT						
17Mb/12Gb	24.80	43.79	24.99*	33.99	18.80	9.80
17Mb/25Gb ¹⁸⁰	24.00	42.99	24.99*	33.99	18.00	9.00
17Mb/Unlimited	30.77	49.76	32.99*	40.99	16.77	8.77
52Mb/Unlimited	28.58	47.57	39.99*	47.49	7.58	0.08
76Mb/Unlimited	36.26	55.25	49.99*	53.99	5.26	1.26
Sky						
17Mb/Unlimited ¹⁸¹	13.00	31.99	18.99*	28.99	13.00	3.00
38Mb/Unlimited ¹⁸²	20.00	38.99		38.99		0.00
TalkTalk						
17Mb/Unlimited ¹⁸³	20.31	39.30	22.95*	22.95*	16.35	16.35
Weighted average ¹⁸⁴	20.16	39.15	24.58	31.14	14.57	8.01

Source: s. 135 response data; dual-play promotional and standard prices from operator websites (accessed 1 February 2017).

Notes: asterisk indicates the promotional price applies to a 12-month period. This table excludes a small number of Phone Co-op standalone fixed broadband customers (<1000).

A8.134 We received data for approximately [X] customers who take standalone fixed broadband from Virgin Media, though some proportion of these customers will not purchase a separate line rental.¹⁸⁵ This means that only a proportion are split-purchase customers, with the remainder taking only a standalone fixed broadband service, with no separate line rental, given Virgin Media's network capabilities. [X]. For this reason, we cannot robustly estimate the average prices paid by split purchasers with a standalone fixed broadband service supplied by Virgin Media.

¹⁸⁰ We use the promotional and standard price of a 17Mb/12Gb service as a proxy for 17Mb/25Gb, since this usage limit is no longer available.

¹⁸¹ Around 5% of these customers receive Unlimited Broadband Pro, which includes ancillary services.

¹⁸² There is currently no promotional price for this service. The price applies to an 18-month contract.

¹⁸³ There is currently no promotional price for this service.

¹⁸⁴ Dual-play prices are weighted by the number of customers with a standalone fixed broadband service of equivalent speed and usage.

¹⁸⁵ This is because Virgin Media has its own network, which allows it to provide broadband services without the need to use Openreach's network.

Average dual-play prices over time

A8.135 Below we compare the average price of SFV services against dual-play prices, using data from Simplify Digital from Q1 2013 to Q3 2016. We use the price of line rental and calls, which we refer to as SFV services, averaged across BT, Post Office, SSE and Fuel.¹⁸⁶ ADSL dual-play refers to a dual-play bundle with a standard broadband with headline speeds of <30Mbit/s. We use average standard (non-promotional) ADSL dual-play prices and average prices including promotions.¹⁸⁷ These prices include an average call subscription fee. The average prices for ADSL dual-play are based on prices offered by BT, Sky and TalkTalk, the three largest providers in the ADSL market.

A8.136 Figure A8.44 below compares the price of SFV services with ADSL dual-play prices in real (inflation-adjusted) terms, between Q1 2013 and Q3 2016. The price of SFV services increased by 17% (£3.20). Across the same period, the standard (non-promotional) price of ADSL dual-play increased by 15% (£4.92), while the price including promotions decreased by 7% (£2.10).

A8.137 Figure A8.44 also compares the price difference between SFV services and ADSL prices. The average price difference between SFV services and standard ADSL services has increased by 12% (£1.72) between Q1 2013 and Q3 2016. However, the average price difference between SFV services and ADSL prices including promotions has decreased by 53% (£5.30) across the same period.

Figure A8.44: Prices for SFV services and ADSL dual-play bundles (£/month, September 2016 prices)

	Q1 2013	Q3 2016	Percentage change	Change
(1) SFV services (line rental + calls)	18.64	21.84	17%	3.20
(2) ADSL dual-play price: standard	33.29	38.21	15%	4.92
(3) ADSL dual-play price: including promotions	28.63	26.53	-7%	-2.10
Difference to line rental + calls				
(2) – (1) ADSL standard prices	14.65	16.37	12%	1.72
(3) – (1) Promotional prices	9.99	4.69	-53%	-5.30

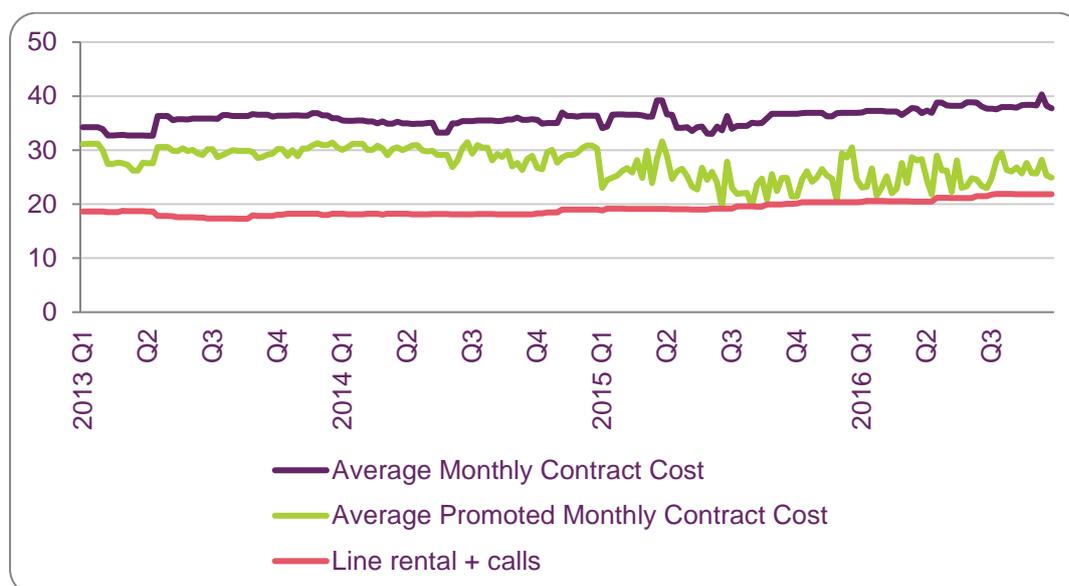
Source: Simplify Digital

Notes: CPI adjusted.

¹⁸⁶ And “other packages”. These are prices advertised to new SFV customers.

¹⁸⁷ This price is averaged across all tariff types, i.e. standard and promotional, not exclusively across promotional tariffs.

Figure A8.45: Prices for SFV services and ADSL dual-play bundles (£/month, September 2016 prices)



Source: Simplify Digital

Notes: CPI adjusted.

SFV consumer characteristics

Survey evidence introduction

A8.138 This section presents some of the characteristics of SFV customers based on three consumer research studies (the Ofcom Technology Tracker study, 2016 H2;¹⁸⁸ the Ofcom Switching Tracker, July to August;¹⁸⁹ and the 2015 Jigsaw residential survey¹⁹⁰). We rely primarily on Switching Tracker for survey evidence, however, in some cases we also present figures for equivalent questions from the Jigsaw survey where possible. Where we do not have evidence available from Switching Tracker, we use results from the Jigsaw survey.

A8.139 Figure A8.46 below outlines the groups we have defined for our analysis of consumer survey evidence. In the context of consumers surveys, isolating the split-service customer segment is problematic. The number of customers who reported that they do not bundle landline and broadband was unreligably high, and therefore not comparable with more reliable s.135 data. This may be due to respondents either (a) not realising that the line rental component of a dual-play bundle equates to bundling voice services with fixed broadband or (b) not acknowledging that they bundle landline and fixed broadband when they pay the same supplier for both of

¹⁸⁸ Run by Saville Rossiter-Base on behalf of Ofcom to track the attitudes and behaviour of the general public with respect to the residential telecommunications market as well as broadcasting more generally.

¹⁸⁹ Run by Saville Rossiter-Base on behalf of Ofcom to monitor the general public's switching and engagement behaviour with communications services.

¹⁹⁰ Run by Jigsaw Research on behalf of Ofcom to understand the choices that residential consumers, SME and larger businesses make regarding their use of fixed telecoms services, and to explore how they might react to hypothetical changes in the prices of their services.

these services. For this reason, we have defined the following groups in the context of our analysis of survey evidence.

Figure A8.46: Groups used for consumer survey evidence

	Group name	Definition
(1)	Voice only	Landline, no fixed broadband
(2)	Split supplier	Landline and fixed broadband, with different suppliers ¹⁹¹
(3) = (1) + (2)	SFV	Landline, without fixed broadband bundled ¹⁹²
(4)	Dual-play	Landline and fixed broadband with the same supplier ¹⁹³

A8.140 There may be some small differences in the voice-only figures reported from the 2015 Jigsaw residential survey throughout this document compared to those reported in the 2016 NMR. This is due to a revised approach to isolating this group of customers; we placed an additional filter on the data which excluded a small number of respondents who provided inconsistent answers about bundling their services.

A8.141 In the following sections we present data on (a) age, socioeconomics, working status and income levels and (b) landline and mobile use, engagement, switching and satisfaction levels.

Age, socioeconomics, working status and income levels of SFV customers

A8.142 This section presents evidence on SFV customer characteristics in terms of age, socioeconomics, working status and income. Where possible, it also provides the breakdown of SFV customers into voice-only and split-supplier customers. The source of this data are S135 responses and the Ofcom Technology Tracker study (2016 H2).

A8.143 The main takeaways from this section are the following:

- S135 responses indicate that 43% of SFV customers are aged 75 years old or over (12% are aged between 75 and 79, 15% are aged between 80 and 84, and 16% are aged 85 or over). This is substantially higher than the equivalent proportion for dual-play customers (4% according to the Ofcom Technology Tracker, 2016 H2) and for the UK population over 15 years old (10% according to the ONS).
- The Ofcom Technology Tracker (2016 H2) study suggests that:

¹⁹¹ We estimate that split-supplier customers account for around 80% of split purchasers, with the remaining 20% being split-service customers. Split-supplier figures used from the Jigsaw survey only reflect split-supplier customers with a BT voice line (though as explained in paragraph A8.40, we estimate this is the case for almost all split-supplier customers).

¹⁹² This group is comprised of voice-only and split-supplier customers (92% of SFV customers). The remaining 8% are split-service customers.

¹⁹³ This group will include an immaterial number of split-service customers, which does not affect our analysis of this group within our analysis of survey evidence.

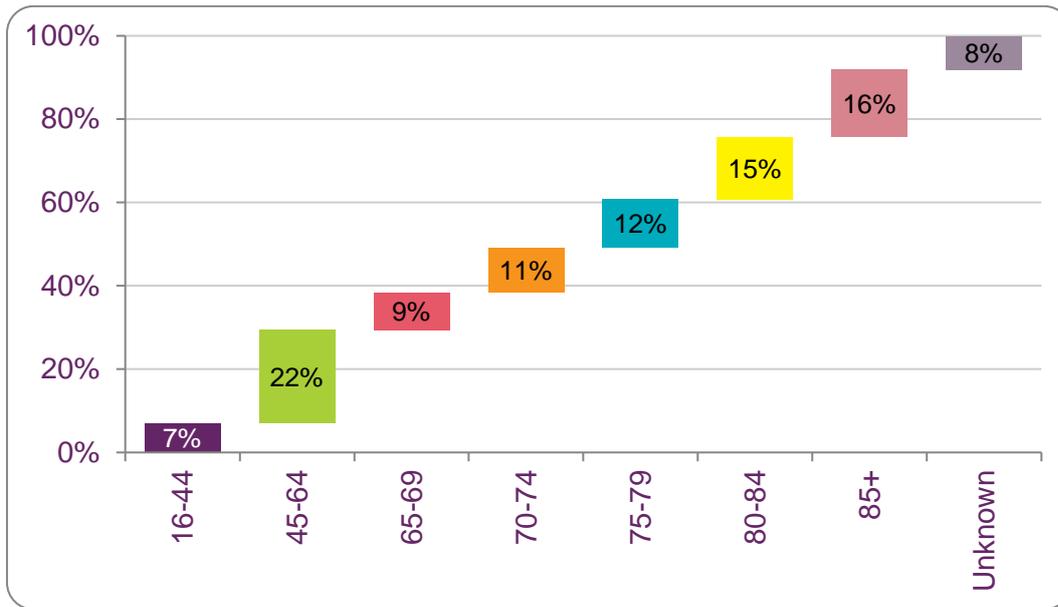
- 34% of SFV customers are aged 75 years old or over. This is lower than the 43% figure based on S135 responses. We rely on the 43% figure as it is based on actual customer information held by CPs, rather than on survey responses. The Technology Tracker also suggests that voice-only customers tend to be older (47% are aged 75 or over) than split-supplier customers (4% are aged 75 or over, as is the case for dual-play customers).¹⁹⁴
- 35% of SFV customers live in DE socioeconomic group households, which is substantially higher than the equivalent proportion for dual-play customers (20%). In terms of customer segments, the proportion of voice-only customers who live in DE socioeconomic group households (41%) is materially higher than the equivalent proportion of split-supplier customers (21%). The high proportion of DE is partially explained by the fact that pensioners are automatically classified as living in E socioeconomic group households under the National Readership Survey's classification system.
- 71% of SFV customers indicated they are not working, which is materially higher than the equivalent proportion for dual-play customers (35%). In terms of customer segments, 81% of voice-only customers indicated they are not working which is markedly higher than the equivalent proportion for split-supplier customers (45%).
- 23% of SFV customers said they have an income under £11.5k, which is significantly higher than the equivalent proportion for dual-play customers (10%). In terms of customer segments, the proportion of voice-only customers with an income under £11.5k (28%) is notably higher than the equivalent proportion for split-supplier customers (10%). All of these income figures should be interpreted with caution given the high proportion of non-responses (48% for SFV customers, 49% for voice-only customers, 50% for split-supplier customers, and 37% for dual-play customers).

Evidence on age and socioeconomics of SFV customers

A8.144 The two figures below present the distribution by age groups of SFV customers (Figure A8.47) and of the overall UK population over 15 years old (Figure A8.48).

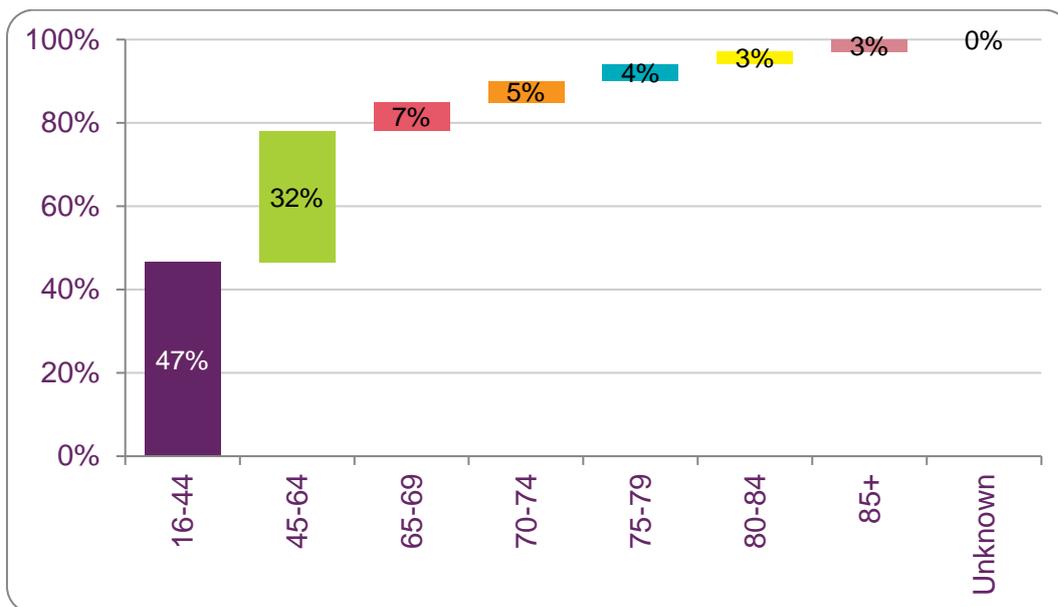
¹⁹⁴ The December 2016 Narrowband Market Review (See Figure 1.3, available here: https://www.ofcom.org.uk/_data/assets/pdf_file/0016/95011/Narrowband-Market-Review.pdf), estimated that 38% of voice-only customers were 75 years old or over, which is nine percentage points lower than our current estimate of 47%.

Figure A8.47: Distribution of SFV customers by age groups



Source: s.135 responses

Figure A8.48: Distribution of the UK population over 15 years old by age groups



Source: ONS

A8.145 At a more granular level, the Technology Tracker study collected age and socioeconomic information about SFV, voice-only, split-supplier, and dual-play customers. Figure A8.49 (below) summarises this information.

Figure A8.49: Age and socioeconomic information

	SFV customers	Voice-only customers	Split-supplier customers	Dual-play customers
Unweighted base	535	407	149	2007
% of all fixed line at home	17%	12%	5%	82%
Age				
16-24	9%	3%	25%	14%
25-34	5%	2%	10%	18%
35-54	17%	9%	36%	38%
55-64	13%	12%	15%	15%
65-74	22%	27%	11%	10%
75+	34%	47%	4%	4%
Socio-economic-grade				
AB	19%	13%	32%	31%
C1	21%	18%	29%	29%
C2	25%	28%	18%	21%
DE	35%	41%	21%	20%

Source: Ofcom technology tracker H2 2016.

Evidence on working status and income levels of SFV customers

A8.146 The Technology Tracker study also collected information about working status and income levels. Figure A8.50 (below) summarises this information.

Figure A8.50: Working status and income information on SFV customer segments and all residential customers

	SFV customers	Voice-only customers	Split-supplier customers	Dual-play customers
Unweighted base	535	407	149	2007
% of all fixed line at home	17%	12%	5%	82%
Working status				
Working	29%	18%	55%	65%
Not working	71%	81%	45%	35%
Income				
Under £11.5k	23%	28%	10%	10%
11.5 – 17.49k	12%	15%	4%	9%
17.5 – 29.9k	9%	6%	15%	13%
30k +	9%	2%	21%	31%
Non-response	48%	49%	50%	37%

Source: Ofcom technology tracker H2 2016.

Landline and mobile use, engagement, switching and satisfaction levels of SFV customers

Summary of survey evidence

- A8.147 The following evidence suggests that, in general, SFV customers have lower levels of engagement (9%) and lower annual switching rates (3%), compared to dual-play customers (20% and 12%, respectively). Further, a higher proportion of SFV customers reported that they have never switched their landline supplier (70%) compared to dual-play customers (45%). The main reason reported by SFV customers for not being interested in changing their landline provider is that they want to stay with a trusted brand (62%*), compared to (46%) of dual-play customers. Other key reasons were hassle and there being no cost benefit. A higher proportion of SFV customers (69%*) are very satisfied with the overall service provided by their landline provider, compared to dual-play customers (54%*).
- A8.148 These characteristics are generally more pronounced for voice-only customers. For example, only 58% of voice-only customers have access to a mobile phone, compared to an overall 70% of SFV customers and 96% of dual-play customers. Further, a lower proportion are classified as engaged (6%), a higher proportion reported that they have never switched their landline provider (78%), compared to 15% and 54% of split-supplier customers and 20% and 45% of dual-play customers.
- A8.149 However, split-supplier customers have some characteristics which are similar to dual-play customers. For example, 94% of split-supplier customers have access to a mobile phone, compared to 96% of dual-play customers. 15% of split-supplier

customers are classified as engaged, compared to 20% of dual-play customers.¹⁹⁵ 56% of split-supplier customers reported they have never switched compared to 45% of dual-play customers.

Landline and mobile usage

- A8.150 A considerably lower proportion of SFV customers (70%) have access to a mobile phone, compared to 96% of dual-play customers.¹⁹⁶ This is even lower for voice-only customers compared to dual-play customers; just 58% of voice-only customers have access to a mobile phone.¹⁹⁷ However, a similar proportion (94%) of split-purchase customers have access to a mobile phone.¹⁹⁸
- A8.151 The Jigsaw survey suggests that SFV customers have a stronger attachment to their landline. 61% of SFV customers slightly or strongly disagreed that they would be willing to give up their landline under certain circumstances, compared to 41% of dual play customers.¹⁹⁹ Across the customer segments, 63% of voice-only customers and 54%* split-supplier customers, slightly or strongly disagreed that they would be willing to give up their landline.²⁰⁰
- A8.152 The Jigsaw survey also suggests that 4% of voice-only customers have access to mobile broadband (despite not having access to fixed broadband, by definition). Approximately 9% of split-supplier customers who have access to mobile broadband (in addition to access to fixed broadband, by definition).

Engagement levels

- A8.153 The Ofcom Switching Tracker uses an engagement index which measures past and current switching behaviour and interest in the market through survey questions. Those who are “inactive” may have had some past involvement, but have a low interest in the market. Those who are “passive” are more likely to have participated in the past and indicate some interest in the market. Those who are “interested” are similar to those who are passive, but are more likely to keep an eye on the market and look out for better deals. Those who are “engaged” are the most active group in terms of past and current behaviour. The index scores associated with the consumer’s behaviour categorises the consumer.
- A8.154 Figure A8.51 below suggests that SFV customers are less engaged than dual-play customers. Only 9% of SFV customers were classified as engaged compared to 20% of dual-play customers.
- A8.155 Only 6% of voice only customers are classified as engaged, compared to 20% of dual play customers. Split-supplier customers have a higher level of engagement, with 15% classified as engaged, and are relatively similar to dual-play customers (the difference between split-supplier and dual-play is not statistically significant).

¹⁹⁵ Neither of these differences are statistically significant (at the 95% confidence level).

¹⁹⁶ Ofcom, *Technology Tracker, H2 2016*.

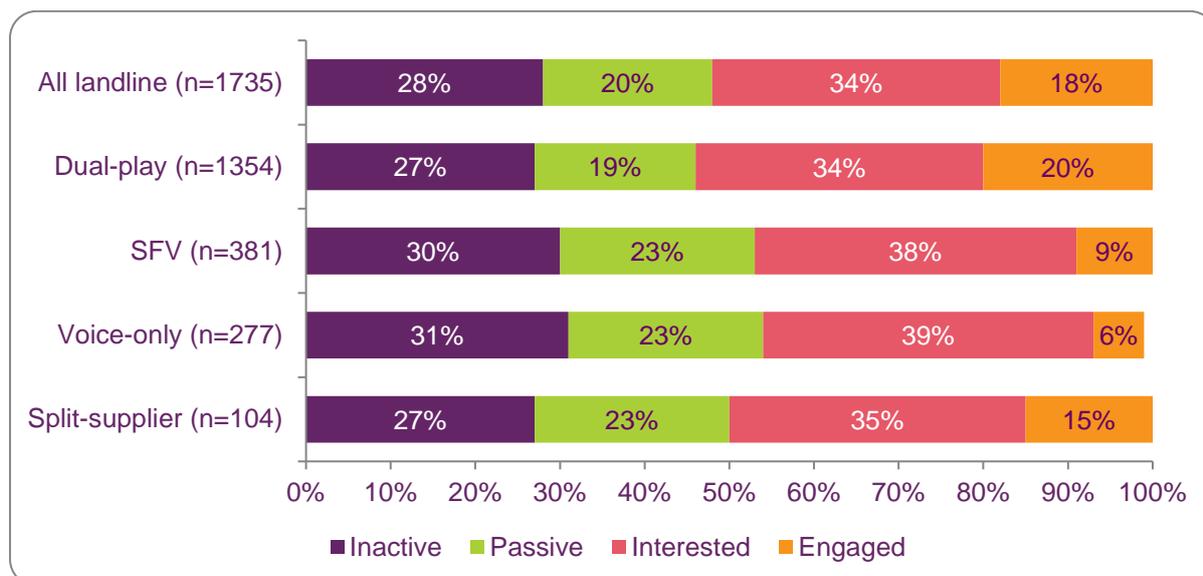
¹⁹⁷ Ofcom, *Technology Tracker, H2 2016*.

¹⁹⁸ Ofcom, *Technology Tracker, H2 2016*. The difference is not statistically significant (at the 95% confidence level).

¹⁹⁹ 2015 Jigsaw residential survey (wave 1).

²⁰⁰ 2015 Jigsaw residential survey (wave 1). The difference is not statistically significant (at the 95% confidence level).

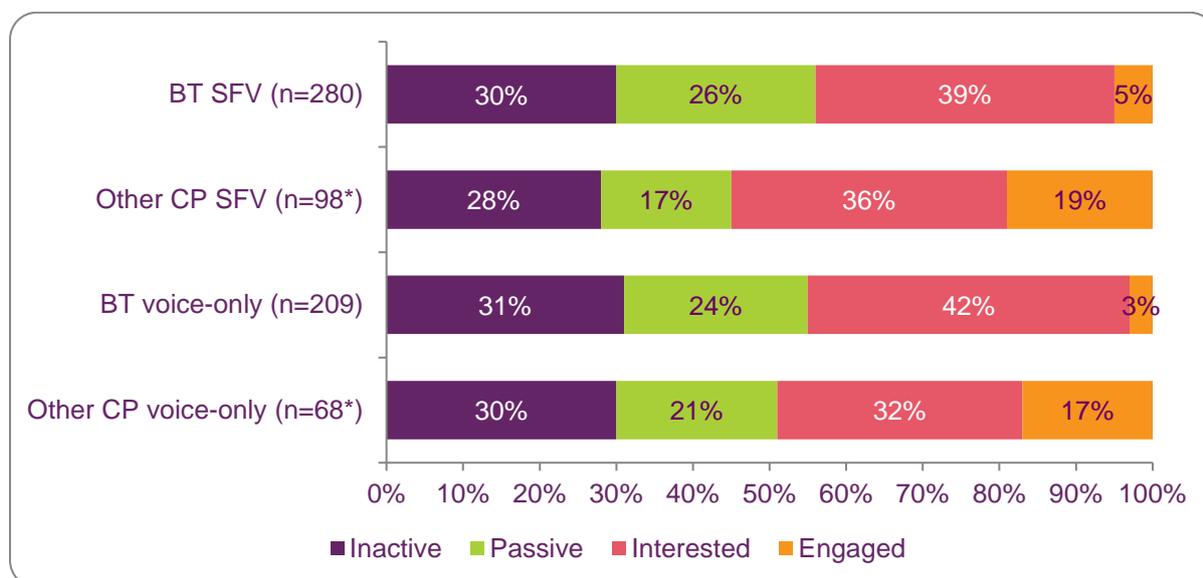
Figure A8.51: Engagement levels in relation to fixed line services



Source: Ofcom switching tracker, July – August 2016

A8.156 Figure A8.52 below indicates that BT SFV and BT voice-only customers are less engaged compared to customers of other CPs. Only 5% of BT SFV customers are classified as engaged, compared to 19% of other CP SFV customers. Further, only 3% of voice-only customers are classified as engaged compared to 17% of other CP voice-only customers. We do not have a sufficient base to present figures for split-supplier customers with BT and other CPs.

Figure A8.52: Engagement levels in relation to fixed line services: BT versus Other CPs



Source: Ofcom switching tracker, July – August 2016

Notes: *Caution: base under 100.

Length of time with current provider

A8.157 Figure A8.53 below indicates that a high proportion of SFV customers have been with their current landline provider for more than 10 years. In total, 63% of SFV customers reported that they have been with the same provider for more than 10 years, and 12% have been with their current provider for 5-10 years. 74% voice-only customers and 43%* of split-service customers reported that they have been with their current landline provider for more than 10 years.

Figure A8.53: Length of time with current landline provider

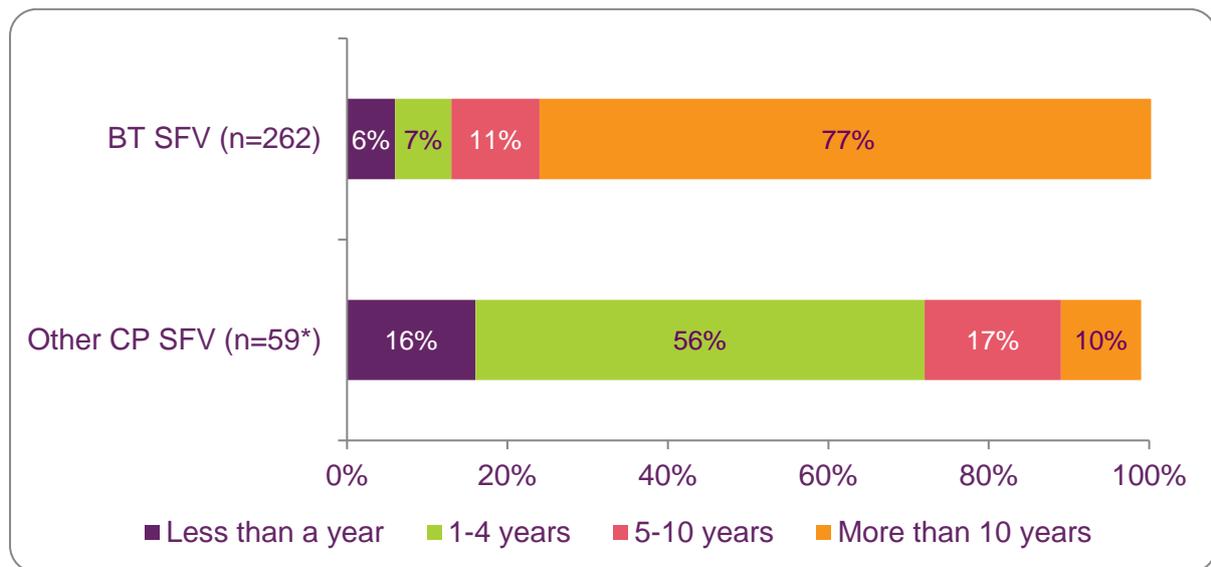


Source: Ofcom switching tracker, July – August 2016

Notes: *Caution: base under 100

A8.158 Figure A8.54 below shows that a substantially higher proportion of BT SFV customers have been supplied by BT for more than 10 years as compared to SFV customers with other CPs. In total, 77% of BT SFV customers reported they had been supplied by BT for more than 10 years, compared to 10%* of SFV customers with other CPs who reported they have been supplied by their current provider for more than 10 years. We do not have a sufficient base to present figures for split-supplier and voice-only customers with BT and other CPs.

Figure A8.54: Length of time with current landline provider: BT versus other CPs



Source: Ofcom, Switching Tracker, July to August 2016.

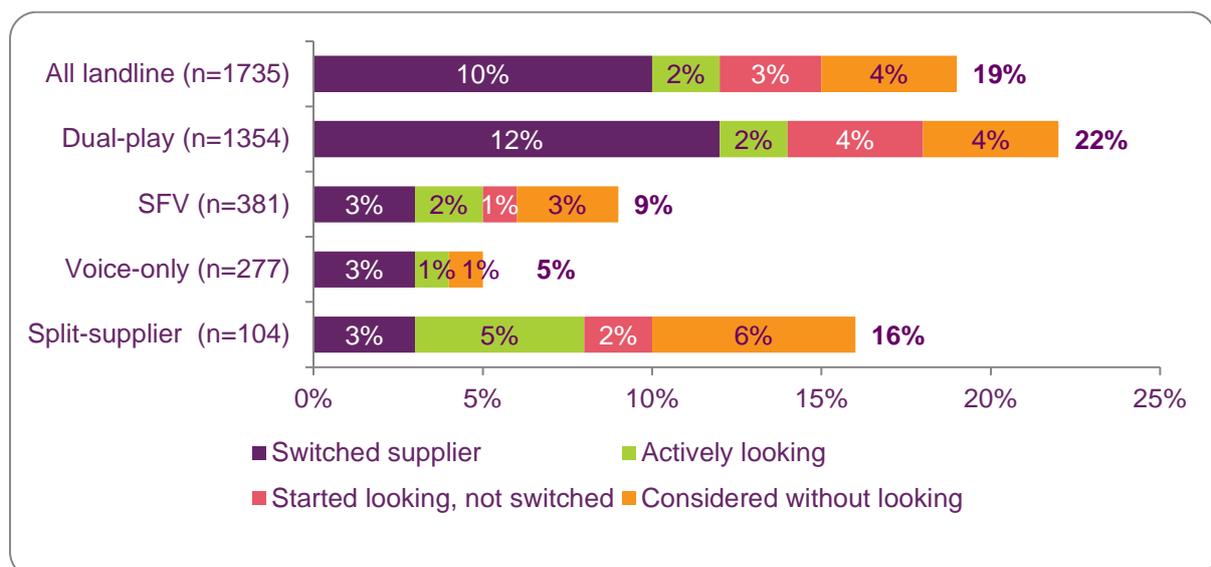
Notes: *Caution: base under 100

Switching activity levels

A8.159 Figure A8.55 below shows that SFV customers reported rates of switching are lower than for dual-play customers. Only 3% of SFV customers reported switching within the last 12 months, compared to 12% of dual-play customers.

A8.160 SFV customers have a relatively low rate of switching; only 3% of SFV customers reported having switched within the past 12 months. Reported switching rates is 3% for both voice-only and split-supplier customers (the difference is not statistically significant).

Figure A8.55: Switching activity in the past 12 months



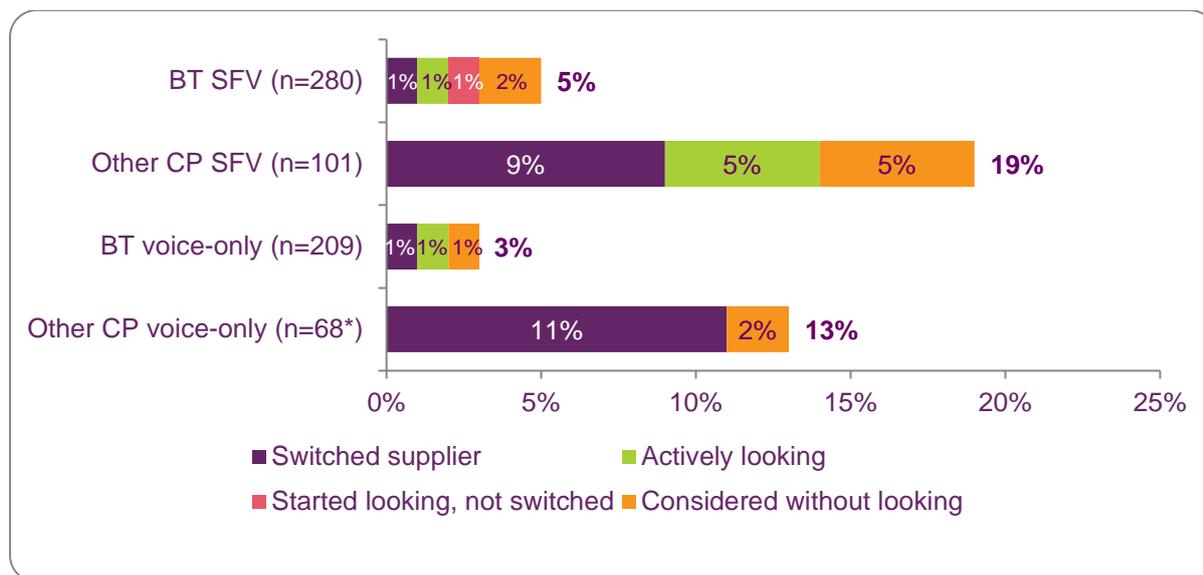
Source: Ofcom, Switching Tracker, July to August 2016.

Notes: *Caution: base under 100

A8.161 Results from the Jigsaw survey also show low levels of switching among SFV customers. 4% of SFV customers reported having switched in the past 12 months, lower than the reported 10% of dual-play customers.²⁰¹ A further breakdown shows that 5% of voice-only customers, and 3%* of split-supplier customers, reported switching in the past 12 months.²⁰²

A8.162 Figure A8.56 below indicates that BT SFV and BT voice-only customers have lower reported switching rates compared to other CP's customers. Only 1% of BT SFV customers reported switching within the past 12 months, compared to 9% of SFV customers with other CPs. Further, only 1% of BT voice-only customers reported switching within the past 12 months, compared to 11%* of voice-only customers with other CPs.

Figure A8.56: Switching activity in the past 12 months: BT versus other CPs



Source: Ofcom, Switching Tracker, July to August 2016.

Notes: *Caution: base under 100

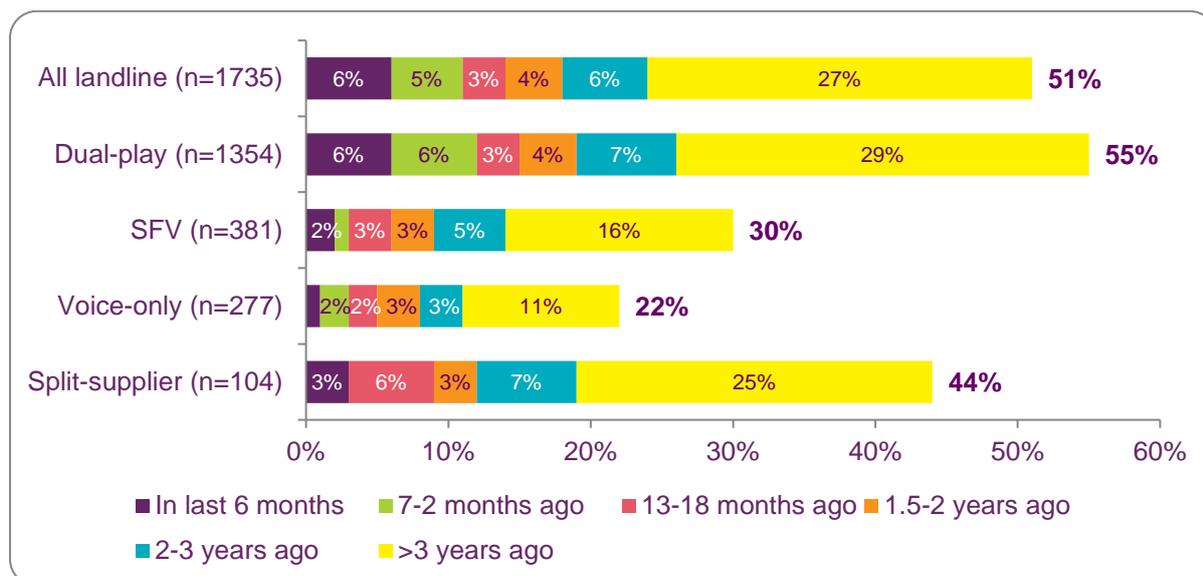
A8.163 Figure A8.57 below shows that 30% of SFV customers reported having ever switched their landline provider, i.e. 70% of SFV customers reported that they have never switched their landline provider. 78% of voice-only customers and 56%* of split-supplier customers, reported that they have never switched their landline provider.

A8.164 SFV customers are less likely to have ever switched their landline (70%) than dual-play customers, with only 45% of dual-play customers reporting that they have never switched their landline provider.

²⁰¹ 2015 Jigsaw residential survey (wave 1).

²⁰² 2015 Jigsaw residential survey (wave 1).

Figure A8.57: Whether switched landline provider

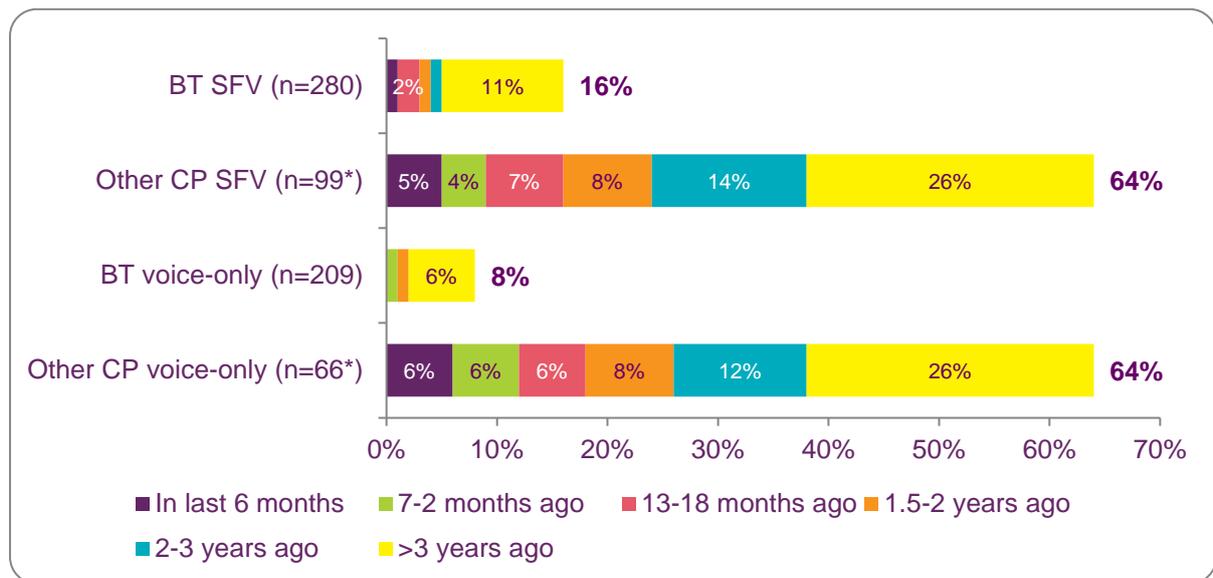


Source: Ofcom, Switching Tracker, July to August 2016.

A8.165 We also have slightly different evidence on the proportions of customers that have never switched supplier from a different source, the Jigsaw survey. Evidence from the Jigsaw survey suggests that 83% of SFV customers have never switched their landline provider, which is considerably higher than dual-play customers (61%). This proportion is the same for both voice-only and split-supplier customers.

A8.166 Figure A8.58 (based on the Switching Tracker) shows that a considerably lower number of BT SFV and voice-only customers reported having ever switched suppliers compared to customers with other CPs. Only 16% of BT SFV customers reported having ever switched their landline provider compared to 64%* of SFV customers with other CPs. Further, only 8%* of BT voice-only customers reported having ever switched their landline provider compared to 64%* of voice-only customers with other CPs. We do not have a sufficient base to present figures for split-supplier customers with BT and other CPs.

Figure A8.58: Whether switched landline provider: BT versus other CPs



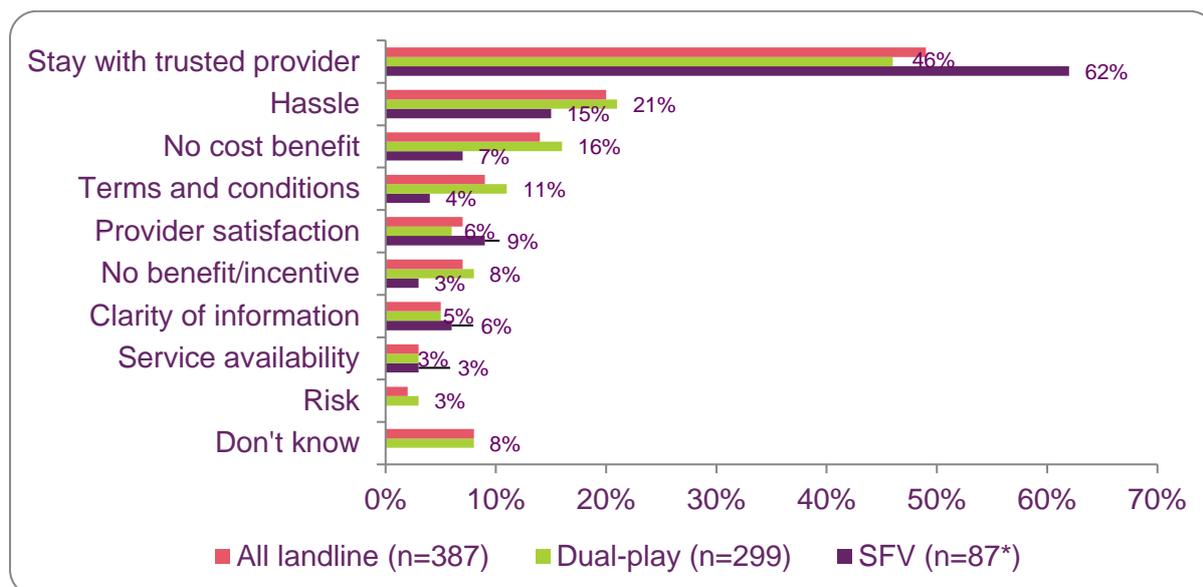
Source: Ofcom, Switching Tracker, July to August 2016.

Notes: *Caution: base under 100

Reasons for not being interested in switching

A8.167 Figure A8.59 describes the reported reasons for being interested in switching their provider. The main reason for not considering changing provider amongst SFV customers is that they prefer to stay with a trusted provider. 62%* of SFV customers state this as a reason for not being interested in changing providers, compared to 46% of dual-play customers. Other reasons stated by SFV customers were hassle (15%*), no cost benefit (7%*) and provider satisfaction (9%*). The 2015 Jigsaw survey shows 30% of BT voice-only customers cited “Trusted brand” compared to only 6% for non-BT as the reasons for choosing their current supplier. In addition, 42% of BT voice-only customers cited ‘Always been my landline provider’ as the reason compared to 8% for non-BT.

Figure A8.59: Reasons why not interested in changing provider



Source: Ofcom, Switching Tracker, July to August 2016.

Notes: *Caution: base under 100. Base too low for split-supplier segment. Voice-only responses are not plotted, since they are equivalent to standalone voice. The voice-only segment is not included, since this is virtually the same as SFV, given the low base of split-supplier customers. The base is of those who have not switched or considered switching; not looking for a new provider; do not agree their landline provider is the best.

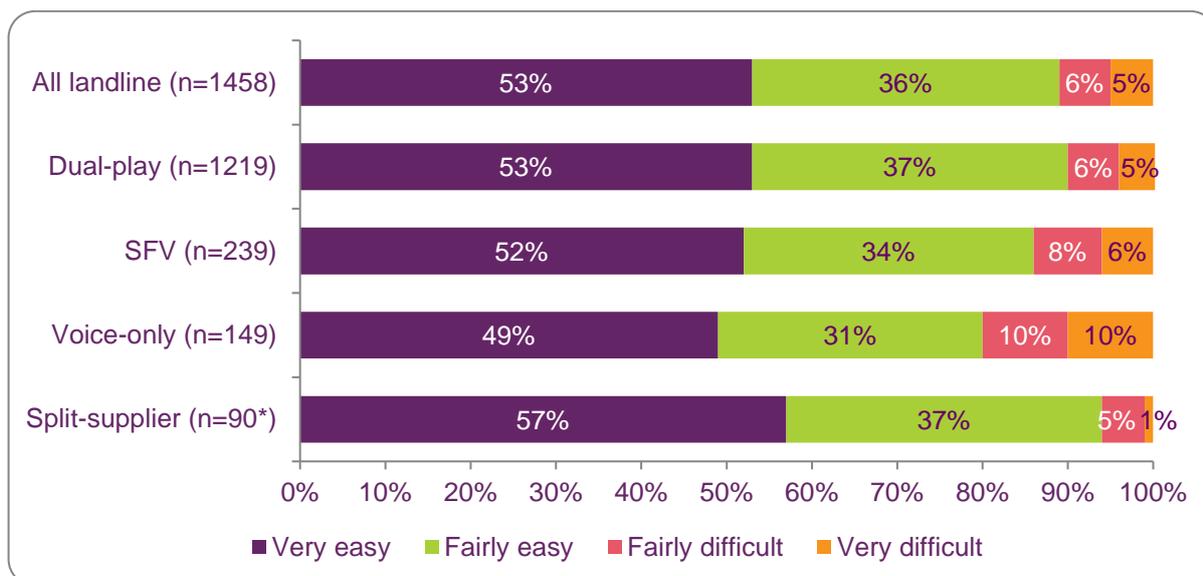
Perceptions of switching

A8.168 Figure A8.60 below indicates that 14% of SFV customers found or perceived the switching process to be very difficult (6%) or fairly difficult (8%). 20% of voice-only customers found or perceived the switching process to be very difficult (10%) or fairly difficult (10%), compared to 6%* of split-supplier customers.

A8.169 A similar proportion of SFV customers (14%) found or perceived the switching process to be very difficult or fairly difficult compared to dual-play customers. In total, 11% of dual-play customers found or perceived the switching process to be very difficult (5%) or fairly difficult (6%).²⁰³

²⁰³ The difference between these two groups is not statistically significant (at the 95% confidence level).

Figure A8.60: Ease of switching providers



Source: Ofcom, *Switching Tracker*, July to August 2016.

Notes: *Caution: base under 100

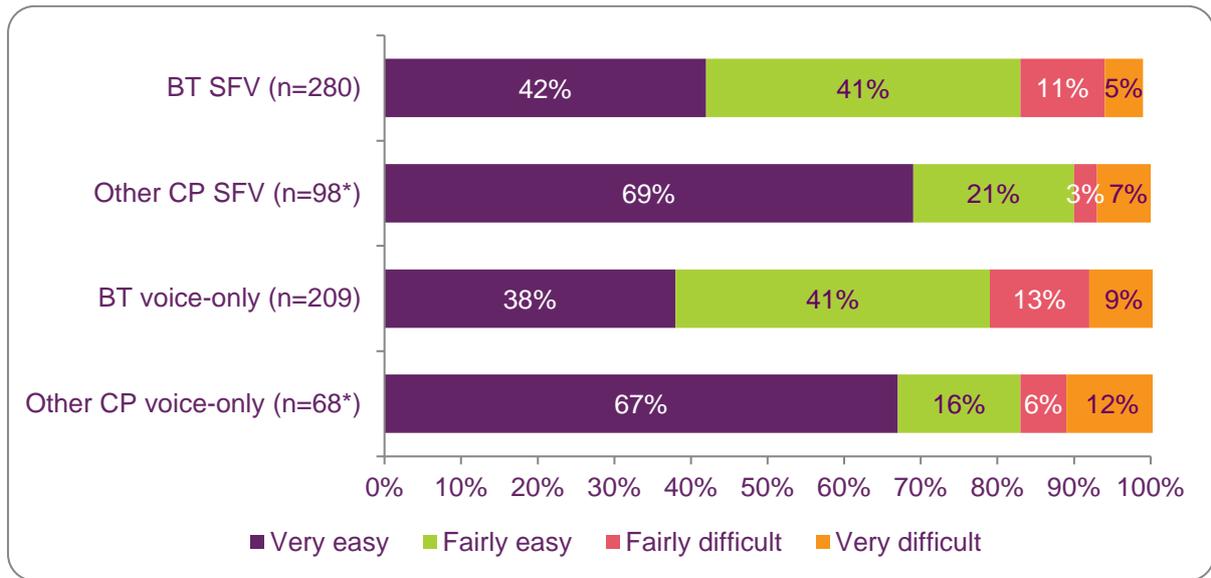
A8.170 Figure A8.61 below indicates that a similar proportion of BT SFV and voice-only customers found or perceived the switching process to be difficult, compared to customers with other CPs. In total, 16% of BT SFV customers found or perceived the switching process to be very difficult or fairly difficult compared to 10%* of SFV customers with other CPs.²⁰⁴ We do not have a sufficient base to present figures for split-supplier customers with BT and other CPs.

A8.171 The same comparisons appear also to apply to BT voice-only customers and other CP voice only customers. In total, a similar proportion of BT voice-only customers (22%) found or perceived the switching process to be fairly or very difficult, compared to other CP voice-only customers (18%*²⁰⁵).

²⁰⁴ This difference is not statistically significant (at the 95% confidence level).

²⁰⁵ This difference is not statistically significant (at the 95% confidence level).

Figure A8.61: Ease of switching providers: BT versus other CPs



Source: Ofcom, Switching Tracker, July to August 2016.

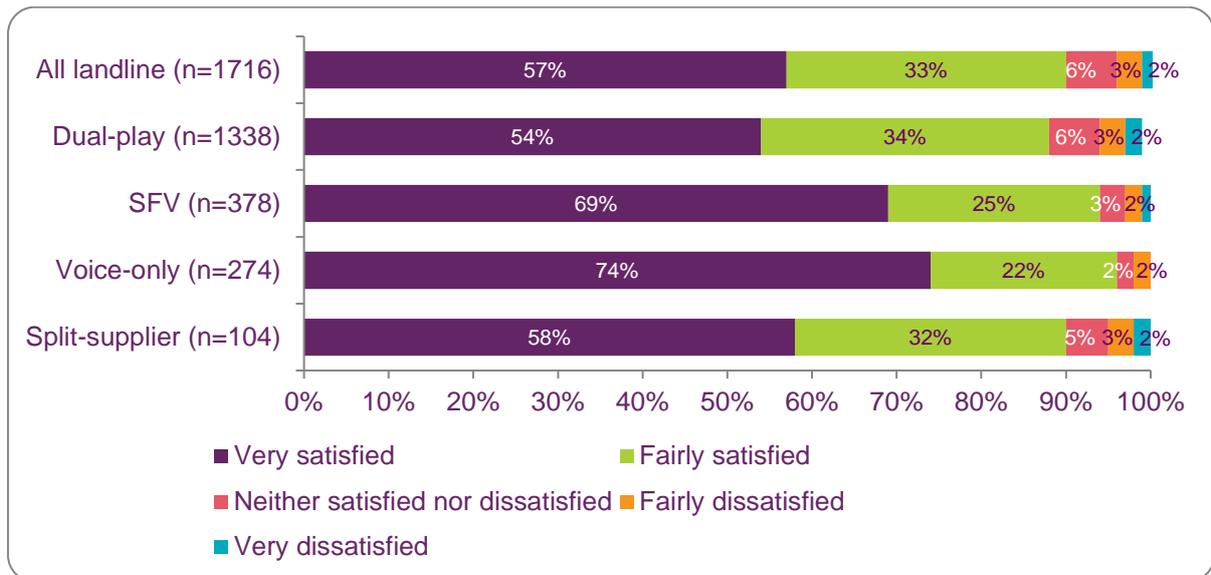
Notes: *Caution: base under 100

Satisfaction

A8.172 Figure A8.62 below shows that 69% of SFV customers are very satisfied with the service provided by their landline provider. 74% of voice-only customers are very satisfied, compared to a lower proportion (58%) of split-supplier customers.

A8.173 A higher proportion of SFV customers (69%) are very satisfied with the overall service provided by their landline provider, compared to 54% of dual-play customers.

Figure A8.62: Satisfaction with overall service provided by landline provider

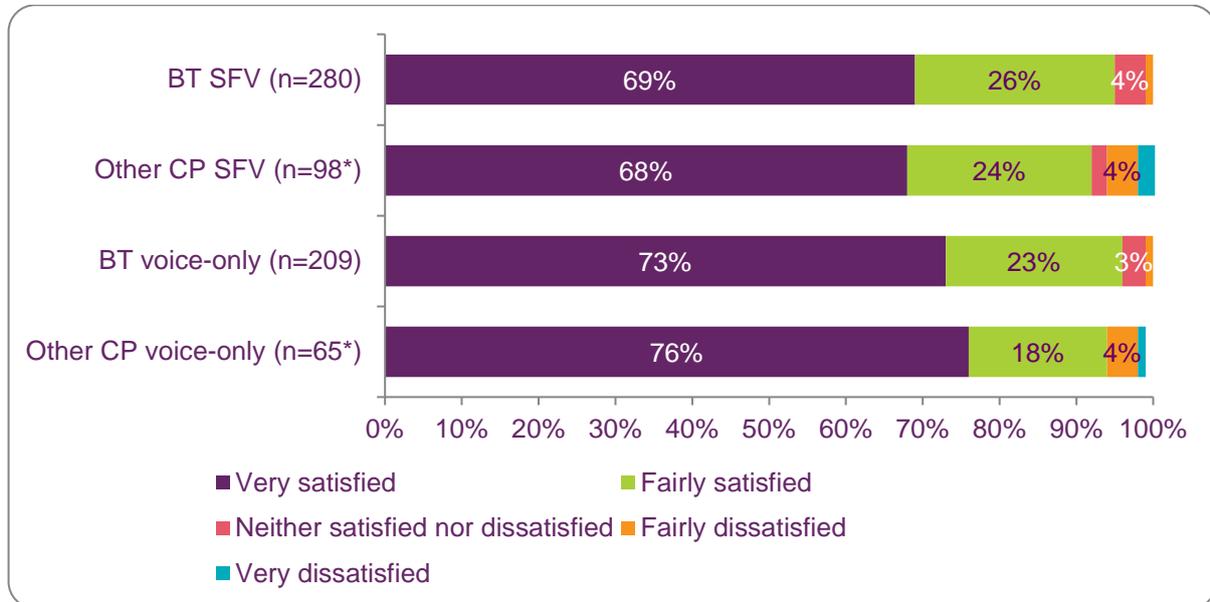


Source: Ofcom, Switching Tracker, July to August 2016.

Notes: *Caution: base under 100

A8.174 Figure A8.63 indicates that there is no material difference in terms of satisfaction with service between BT and other CP customers within the SFV market. In addition, satisfaction levels are similar within the voice-only segment.²⁰⁶ We do not have a sufficient base to present figures for split-supplier customers with BT and other CPs.

Figure A8.63: Satisfaction with overall service provided by landline provider: BT versus other CPs



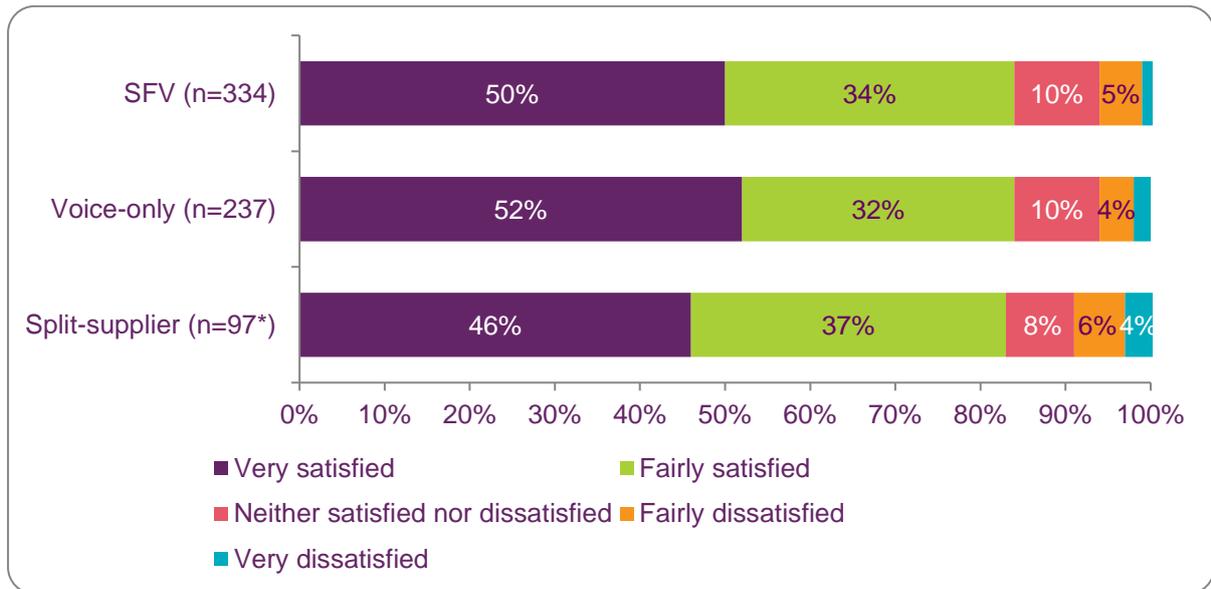
Source: Ofcom switching tracker, July – August 2016

A8.175 Figure A8.64 below shows that 50% of SFV customers reported that they were very satisfied with value for money provided by their landline provider. A further 34% of SFV customers reported they were fairly satisfied with the value for money provided by their landline provider. Voice-only customers are broadly similar to split-supplier customers, with 52% reporting that they were very satisfied compared to 46%* of split-supplier customers.²⁰⁷

²⁰⁶ Differences are not statistically significant (at 95% confidence level).

²⁰⁷ This difference is not statistically significant (at the 95% confidence level).

Figure A8.64: Satisfaction with value for money provided by landline provider

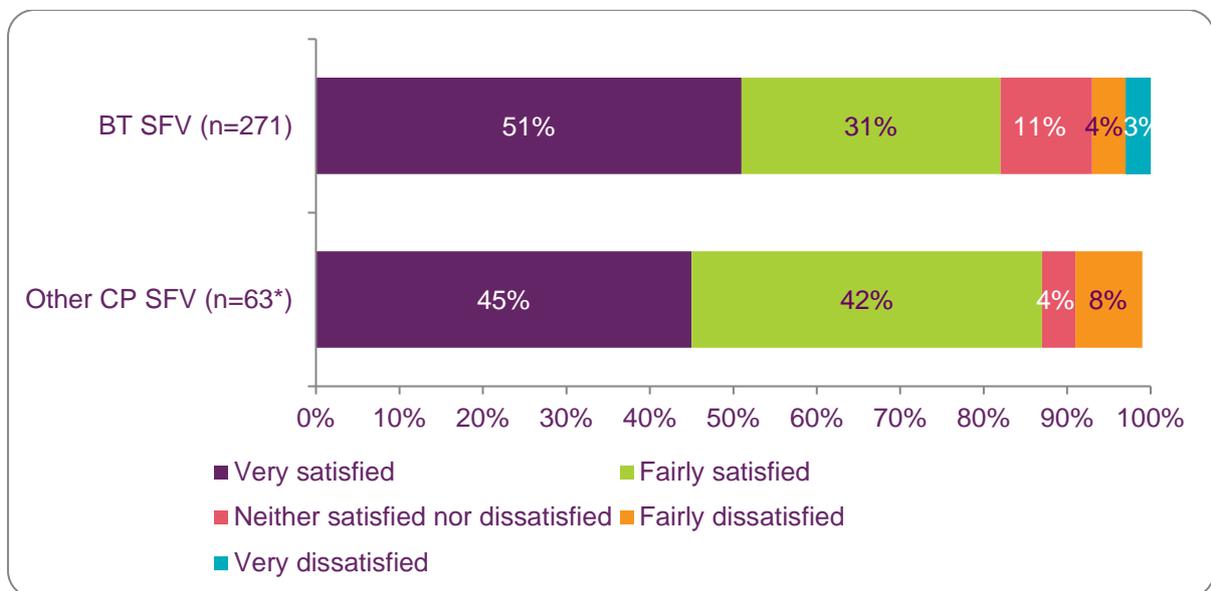


Source: Ofcom, Switching Tracker, July to August 2016.

Notes: *Caution: base under 100. This question was only asked to SFV customers.

A8.176 Figure A8.65 shows that a similar proportion of BT SFV customers (52%) and SFV customers with other CPs (45%) reported they were very satisfied with the value for money provided by their current provider.²⁰⁸ We do not have a sufficient base to present figures for split-supplier and voice-only customers with BT and other CPs.

Figure A8.65: Satisfaction with value for money provided by landline provider: BT versus other CPs



Source: Ofcom switching tracker, July – August 2016. This question was only asked to SFV customers.

²⁰⁸ This difference is not statistically significant (at the 95% confidence level).

Our estimates of consumer detriment experienced by SFV customers

Current consumer detriment

- A8.177 In Section 6 we set out our estimate of current consumer detriment of £150 million to £340 million per annum. This reflects the difference between what customers currently pay for SFV services, and our view of what they would pay in a competitive market.
- A8.178 At September 2016, there were 2.9 million SFV lines in total in the UK. When calculating consumer detriment, we adjust for the impact of discounted tariffs,²⁰⁹ consistent with their potential treatment under the price control as set out in Section 8, paragraph 8.63.
- A8.179 We take £5 - £7 per line per month as a lower-bound estimate of this consumer detriment. As set out in Annex 5, this is our estimate of the reduction in BT's line rental at which rivals could compete for new customers. On this basis, our estimate of the detriment from consumers paying higher prices is £60 - £84 per line per annum. However, if our proposed measures to promote competition are effective, part of their effect should be to lower acquisition costs, and in consequence reduce the price at which other CPs can profitably compete against BT, which could in turn lead to prevailing prices of more than £5 to £7 below current levels.
- A8.180 On this first basis, we estimate a lower-bound for current total market detriment of around £150m-£240m per annum. This estimate includes non-BT SFV lines because we consider that, while the competition problems in the market arise from BT's SMP, the detriment is not limited to BT's customers. We estimate a lower-bound detriment of around £110m-£190m for BT SFV lines alone.
- A8.181 We take £8 - 10 per line per month (including VAT) as an upper-bound estimate of consumer detriment. This is our estimate of the reduction in BT's line rental price at which prices would cover BT's costs, plus a normal return. On this second basis, we estimate the detriment from consumers paying higher prices at £96-120 per line per annum. This equates to an upper-bound for current total market detriment of around £260m-£340m per annum (£200m-£260m for BT SFV lines alone). However, we note this is based on prices which might be too low to be sustainable in a competitive market, if such a market involved higher costs than BT currently faces, such as arising from greater consumer switching.

Forecast consumer detriment

- A8.182 Since customer numbers have been declining, we recognise that the overall detriment is likely to fall year on year. We have forecast detriment over the potential price control period, based on a projection of total market SFV lines (adjusting for the impact of discounted tariffs, which we also forecast).
- A8.183 We assume that the month on month rate of decline in lines remains constant at the average for the last 12 months of data we hold (1.31% per month for October 2015 – September 2016). On this basis, we estimate total consumer detriment for a three-year price control period across the whole market to be around £250m - £525m, in net present value terms.²¹⁰ Applying the same approach only to BT's

²⁰⁹ Such as Home Phone Saver.

²¹⁰ Using the HMT Green Book Social Time Preference Rate of 3.5%.

customer base (using the average rate of decline for BT's SFV lines of 1.54% per month) suggests a detriment of £175m-£350m for BT customers.²¹¹

A8.184 For the first two years of a price-control period, the corresponding estimates are £200m - £425m across the whole market and £150m-£275m for BT customers.

²¹¹ If we took an alternative approach of extrapolating the historical decelerating trend in the rate of decline in the market, this would imply an annualised rate of decline of 14% for 2016, 11% for 2017, 8% for 2018, 5% for 2019 and 2% for 2020. This would give an NPV for market-wide detriment of £300m-£625m.

Annex 9

Draft legal instruments

Proposals for SMP services conditions

NOTIFICATION OF PROPOSALS UNDER SECTIONS 48A AND 80A OF THE COMMUNICATIONS ACT 2003

Proposals for identifying markets, making market power determinations and setting SMP services conditions in relation to BT under section 45 of the Communications Act 2003

Background

1. On 15 September 2009 Ofcom published a statement entitled “*Fixed Narrowband Retail Services Markets - Identification of markets and determination of market power*”. In that statement Ofcom analysed a number of fixed narrowband markets for the UK and Hull and concluded that, with the exception of Hull, the relevant markets did not warrant *ex ante* regulation.²¹²
2. On 1 December 2016, Ofcom launched a new review into residential standalone landline telephone services. This Notification sets out Ofcom’s proposals for this review.
3. In parallel to this review, Ofcom launched a public consultation on the regulation of wholesale narrowband services which underpin landline telephone services. Ofcom’s proposals in this respect were set out in a document entitled “*Narrowband Market Review - Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access markets.*”

Proposals in relation to the United Kingdom excluding the Hull Area

Proposals for market identifications and market power determinations

4. Ofcom is proposing to identify the following markets listed in Column 1 of **Table A** below for the purpose of making a determination that the person specified in the corresponding row in Column 2 of that Table has significant market power in that identified services market.

Table A: Market identifications and market power determinations in the United Kingdom excluding the Hull Area

²¹² In a Statement entitled “*Review of the fixed narrowband services markets, Statement on the proposed markets, market power determinations and remedies*” dated 26 September 2016, Ofcom removed all remaining *ex ante* regulation in the Hull area.

Column 1: Market identification	Column 2: Market power determination
Residential Standalone Fixed Voice access services	BT
Residential Standalone Fixed Voice call services	BT

Proposals to set and apply, modify and revoke SMP services conditions

- Ofcom is proposing to set, in relation to each of the services markets in which Ofcom is proposing to make the market power determinations as listed in **Table A** above, the SMP conditions as set out in the **Schedule** to this Notification, which SMP conditions shall, unless otherwise is stated in that Schedule, take effect from the date of any notification under sections 48(1) and 79(4) of the Act adopting the proposals set out in this Notification.

Ofcom's duties and legal tests

- The effect of, and Ofcom's reasons for making, the proposals for identifying the markets, making the market power determinations and determinations in relation to SMP conditions referred to in this Notification are set out in the consultation document accompanying this Notification.
- In identifying and analysing the markets referred to in this Notification, and in considering whether to make the corresponding proposals set out in this Notification, Ofcom has, in accordance with section 79 of the Act, taken due account of all applicable guidelines and recommendations which have been issued or made by the European Commission in pursuance of an EU instrument, and which relate to market identification and analysis or the determination of what constitutes SMP. In so doing, pursuant to Article 3(3) of Regulation (EC) No 1211/2009, Ofcom has also taken the utmost account of any relevant opinion, recommendation, guidelines, advice or regulatory practice adopted by the Body of European Regulators for Electronic Communications (BEREC).
- Ofcom considers that the proposed SMP conditions comply with the requirements of sections 45 to 47 and 91 of the Act, as appropriate and relevant to each such SMP condition.
- In making all of the proposals referred to in this Notification, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act and the six Community requirements in section 4 of the Act. In accordance with section 4A of the Act, Ofcom has also taken due account of all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive.

Making representations

- Representations may be made to Ofcom about any of the proposals set out in this Notification and the accompanying consultation document by no later than 9 May 2017.
- Copies of this Notification and the accompanying consultation document will be sent to the Secretary of State in accordance with sections 48C(1) and 81(1) of the Act.

Interpretation

12. For the purpose of interpreting this Notification (which for the avoidance of doubt includes the Schedules):

- (a) except in so far as the context otherwise requires, words or expressions have the meaning assigned to them in paragraph 13 below, and otherwise any word or expression has the same meaning as it has in the Act;
- (b) headings and titles shall be disregarded;
- (c) expressions cognate with those referred to in this Notification shall be construed accordingly; and
- (d) the Interpretation Act 1978 (c. 30) shall apply as if this Notification were an Act of Parliament.

13. In this Notification:

- (a) “**BT**” means British Telecommunications plc, whose registered company number is 1800000, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006;
- (b) “**Hull Area**” means the area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communication (Hull) plc, (now known as KCOM);
- (c) “**Ofcom**” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002;
- (d) “**United Kingdom**” has the meaning given to it in the Interpretation Act 1978 (1978 c30).

The Schedules to this Notification shall form part of this Notification.

Signed



Marina Gibbs
Director Competition Policy Ofcom

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

28 February 2017

SCHEDULE: Proposed SMP Conditions (BT)

Part 1: Interpretation

1. In addition to the definitions set out above in this Notification and in each condition below (where relevant), in this Schedule—
 - i. **Broadband Service** means a service that allows for the transfer of high volumes of data at high speeds;
 - ii. **BT Business Service** means all BT products and/or services that are only available to entities with a company registration number;
 - iii. **Customer** means any natural or legal entity who or which is party to a contract with the Dominant Provider for the provision of:
 - (a) one or more Services where such entity does not receive a Broadband Service over the Exchange Line used for the provision of the Service(s); and
 - (b) one or more Services, where such Service/Services is/are provided over the same Exchange Line as a Broadband Service, insofar as such Broadband Service is provided by the Dominant Provider or a third party under separate contractual arrangements.
 - iv. **Dominant Provider** means BT;
 - v. **Exchange Line** means an access connection between a Customer's premises and a local exchange;
 - vi. **Exchange Line Service** means a service consisting in the provision by the Dominant Provider of an Exchange Line to a Customer, to the exclusion of services provided as part of a BT Business Service;
 - vii. **Service** means any of the products and/or services listed in the Annex to this Schedule, or any future services and/or products offered by the Dominant Provider which have the same features to the ones listed in the Annex to this Schedule.

Part 2: Conditions

Condition 1 – Communication Requirements

- 1.1** The Dominant Provider must comply with any Communication Requirement which Ofcom may from time to time direct.
- 1.2A** The Dominant Provider must cooperate with Ofcom in the development and evaluation of Communication Requirements and must provide Ofcom with such information as Ofcom may require for the purposes of evaluating the effectiveness of any Communication Requirement.
- 1.2B** In complying with its obligations under Condition 1.2A, the Dominant Provider must comply with any directions made by Ofcom.
- 1.3** For the purposes of Conditions 1.1 and 1.2A, Communication Requirement means any direction issued by Ofcom which requires the Dominant Provider to produce, provide or distribute information, or make specific communications to, its Customers, in a specified manner and form.
- 1.3A** A Communication Requirement may include, but is not limited to, requirements as to:
- (a) the content of the information or communication;
 - (b) the format of the information or communication;
 - (c) the frequency of the provision of information or the making of communications to Customers;
 - (d) the identity of the sender of the information or communication;
 - (e) the Customer group to which the Communication Requirement applies;
 - (f) the geographic area to which the Communication Requirement applies;
 - (g) the sending of details of prices and services offered by the Dominant Provider or other providers of Electronic Communications Services;
 - (h) the provision of response card or tear-off slips to the Customer; and
 - (i) the provision of addressed envelopes to the Customer.

Condition 2 – Price Control

2.1 The Dominant Provider must ensure that in each Relevant Period the Line Rental Charge does not exceed the Line Rental Charge Ceiling for that Period.

2.2 The Line Rental Charge Ceiling is:

- (a) [£111.99 – £13.99] for the First Relevant Period;
- (b) for each subsequent Relevant Period, an amount calculated by employing the following formula:

$$CC_t = CC_{t-1} * (1 + CPI_t + 0-2.5\%)$$

Where:

CC_t means the Line Rental Charge Ceiling for the Relevant Period;

CC_{t-1} means the Line Rental Charge Ceiling for the Prior Relevant Period;

CPI_t means the change in the Consumer Prices Index in the year of 12 months ending three months immediately before the beginning of the Relevant Period expressed as a percentage, rounded to two decimal places.

2.3 The Dominant Provider must ensure that in the First Relevant Period the Line Rental Saver Charge does not exceed [£129.49 – £151.09].

2.4 Where a Customer has paid a Line Rental Saver Charge for a Line Rental Saver Charge Year which has started, but not ended on, [date of publication of final statement], the Dominant Provider must ensure that the Nominal Line Rental Saver Charge does not exceed the Controlling Line Rental Saver Charge for each full calendar month remaining until the completion of that Line Rental Saver Charge Year, where:

Line Rental Saver Charge Year means the 12-month period covered by the Line Rental Saver Charge paid by the Customer;

Nominal Line Rental Saver Charge means the Line Rental Saver Charge paid by the Customer, divided by 12;

Controlling Line Rental Saver Charge means the Line Rental Saver Charge Ceiling divided by the number of the remaining full calendar months until completion of the Line Rental Saver Charge Year;

Price Control for Services in Basket

2.5 The Dominant Provider must take all reasonable steps to secure that, at the end of each Relevant Period, the Percentage Change, C_t (determined in accordance with paragraph 2.6A) in the aggregate of charges for all of the Services in the Basket is not more than the Controlling Percentage, CP_t (as determined in accordance with Condition 2.6B).

2.6A For the purposes of complying with Condition 2.5, the Percentage Change, C_t , shall be specified by employing the following formula:

$$C_t = \frac{\sum_{i=1}^n \left[R_i \frac{(\bar{p}_{i,t} - \bar{p}_{i,t-1})}{\bar{p}_{i,t-1}} \right]}{\sum_{i=1}^n R_i}$$

C_t is the Percentage Change in the aggregate of charges for the Services in the Basket for Relevant Period t ;

n is the number of individual Services in the Basket;

i is a number from 1 to n for each of the n individual Services in the Basket;

R_i is the Total Revenue accrued during the Prior Period in respect of the individual Service i that forms part of the Basket;

t refers to the Relevant Period;

$t-1$ refers to the Prior Period;

$\bar{p}_{i,t}$ is the Relevant Period Weighted Average Charge made by the Dominant Provider for the individual Service i that forms part of the Basket during the Relevant Period, excluding any discounts offered by the Dominant Provider:

Where such Relevant Period Weighted Average Charge shall be calculated by employing the following formula:

$$\bar{p}_{i,t} = \sum_{j=1}^m (w_{i,j,t} p_{i,j,t})$$

Where:

m is the number of time periods for which there are distinct charges during the Relevant Period;

j is a number from 1 to m for each of the m time periods during which a distinct charge is in effect;

$w_{i,j,t}$ is the proportion of the Relevant Period in which each charge, $p_{i,j,t}$ is in effect, calculated by the number of days during which the charge is in effect and dividing by the number of days in each Relevant Period.

$p_{i,j,t}$ is the charge for the specified period, j , during the Relevant Period t for the individual Service, i ;

$\bar{p}_{i,t-1}$ is, for the purposes of calculating the Percentage Change for the First Relevant Period, the Initial Charge for the individual Service i that forms part of the Basket during the Prior Period, excluding any discounts offered by the Dominant Provider. For the purposes of calculating the Percentage Change for the Second Relevant Period and the Third Relevant Period, $\bar{p}_{i,t-1}$ is the Prior Period Weighted Average Charge made by the Dominant Provider for the individual Service i that forms part of the Basket during the Prior Period, excluding any discounts offered by the Dominant Provider;

Where such Prior Period Weighted Average Charge shall be calculated by employing the following formula:

$$\bar{p}_{i,t-1} = \sum_{j=1}^m (w_{i,j,t-1} p_{i,j,t-1})$$

Where:

m is the number of time periods for which there are distinct charges during the Prior Relevant Period;

j is a number from 1 to m for each of the m time periods during which a distinct charge is in effect;

$w_{i,j,t-1}$ is the proportion of the Prior Period in which each charge, $p_{i,j,t-1}$, is in effect, calculated by the number of days during which the charge is in effect and dividing by the number of days in the Relevant Period;

$p_{i,j,t-1}$ is the charge for the individual period, j , during the Prior Year, $t-1$, for the individual Service, i .

2.6B For the purposes of complying with Condition 2.6, the Controlling Percentage, CP_t , shall be calculated by employing the following formula:

$$CP_t = CPI_t + 0$$

Where:

CP_t is the Percentage Change in charges for the specific Service in the single charge category in question for the Relevant Period t ;

CPI_t means the change in the Consumer Prices Index in the year of 12 months ending three months immediately before the beginning of the Relevant Period expressed as a percentage, rounded to two decimal places.

Provision of information to Ofcom

- 2.7** The Dominant Provider must record, maintain and supply to Ofcom in an electronic format, no later than 3 months after the end of each Relevant Period, the data necessary for Ofcom to monitor compliance of the Dominant Provider with this Condition 2. The data must include, as relevant:
- (a) all charges published by the Dominant Provider from time to time during the Relevant Period as well as the Prior Period, including the dates and time period during which they were in force;
 - (b) the calculated Percentage Changes, pursuant to Condition 2.6A for all Services in the Basket;
 - (c) all relevant data the Dominant Provider used in the calculation of the Percentage Changes for the purpose of Condition 2.6A, including data for each Service in the Basket;

- (d) the Relevant Period Weighted Average Charges and the Prior Period Weighted Average Charges pursuant to Condition 2.6A and calculations thereof, including the relevant data for each Service within the Basket;
- (e) other data necessary for monitoring compliance with this Condition 2; and
- (f) without prejudice to Ofcom's statutory information gathering powers, such data as Ofcom may from time to time reasonably require.

All relevant revenues in respect of each of the Services are to be provided to at least the nearest £1,000.

2.7A The Dominant Provider shall publish such information provided to Ofcom pursuant to Condition 2.7 as Ofcom may from time to time direct.

Definitions

2.8 In this Condition 2:

- i. **Basket** means:
 - (a) in relation to the First Relevant Period together all Services listed in Part 1 of the Annex to this Schedule;
 - (b) in relation to the Second Relevant Period and the Third Relevant Period together all Services listed in Part 1 and Part 2 of the Annex to this Schedule;
- ii. **Consumer Prices Index** means the index of consumer prices compiled, from time to time, by an agency or a public body on behalf of Her Majesty's Government or a governmental department (which is the Office of National Statistics at the time of publication of this notification), in respect of all items;
- iii. **Controlling Percentage** is to be determined in accordance with Condition 2.6B;
- iv. **Home Phone Saver 2019 Charge** means the amount charged by the Dominant Provider for the service marketed as "Home Phone Saver 2019";
- v. **Initial Charge** means the charge for a Service which is listed in the BT Consumer Price Guide, effective from 2 April 2017;
- vi. **Line Rental Charge** means any amount charged by the Dominant Provider to a Customer on a monthly basis for Exchange Line Services²¹³, excluding:
 - (a) any incremental charge made for the provision of Voice-call Services by the Dominant Provider;
 - (b) any Exchange Line installation charges;
 - (c) the Home Saver 2019 Charge and any element thereof; and

²¹³ Currently listed as Standard Line Rental or Line Rental in the BT Consumer Price Guide, effective from 10 February 2017.

- (d) the Line Rental Plus Charge and any element thereof;
- vii. **Line Rental Plus Charge** means the amount charged by the Dominant Provider for the service marketed as “Line Rental Plus Charge”;
- viii. **Line Rental Saver Charge** means any amount charged by the Dominant Provider to a Customer for the provision of Exchange Line Services over the period of 12 months (defined in Condition 2.4 as the "**Line Rental Saver Charge Year**"), where such amount is subject to a discount related to the making of an upfront payment for that entire period;
- ix. **Percentage Change** is to be determined in accordance with Condition 2.6A;
- x. **Prior Period** means each of the following three periods:
- (1) In relation to the First Relevant Period, the period beginning on [*12 months before the publication of the statement*] and ending on [*one day before the beginning of the First Relevant Period*];
- (2) In relation to the Second Relevant Period, the First Relevant Period;
- (3) In relation to the Third Relevant Period, the Second Relevant Period.
- xi. **Prior Period Weighted Average Charge** is to be determined in accordance with the relevant formula in Condition 2.6A;
- xii. **Relevant Period** means each of the following three periods:
- (1) The [*X*]-month period beginning on [a minimum of 30 days after the publication of the statement] and ending on [*date*] (the “First Relevant Period”);
- (2) The twelve-month period beginning on [*date*] and ending on [*date*] (the “Second Relevant Period”);
- (3) The twelve-month period beginning on [*date*] and ending on [*3 years after publication of the final statement*] (the “Third Relevant Period”).
- xiii. **Relevant Period Weighted Average Charge** is to be determined in accordance with the relevant formula in Condition 2.6A;
- xiv. **Voice-call Service** means a service that allows a Customer to make voice calls using an Exchange Line.

ANNEX²¹⁴

Part 1

Unlimited Evening & Weekend Calls (not including Line Rental)

Unlimited Weekend Calls (not including Line Rental)

Unlimited Anytime Calls (not including Line Rental)

Calls to BT Mobile Consumer numbers

Calls to all other UK Mobile numbers

Calls to UK National and Local numbers

Calls to 0845 & 0870 Numbers

Calls to Service Numbers 090, 118 and other 084 & 087

Calls to International numbers

Friends & Family International

International Freedom

Calls to 070/076/055/056 number ranges

Choose to Refuse

Anonymous Call Reject

BT Privacy at Home

BT Privacy with Caller Display

Call Barring

Call Diversion

Call Waiting

Part 2

Standard Line Rental or Line Rental

BT Smart Talk

BT Call Protect

²¹⁴ All listed products/services are as per BT Consumer Price Guide, effective from 10 February 2017.

Permanent Withhold Number

Bar Three Way Calling

Block Ring Back

1471

1470

Annex 10

Glossary

2006 Retail Price Control Statement	Ofcom, <i>Retail Price Controls</i> , July 2006. https://www.ofcom.org.uk/_data/assets/pdf_file/0012/42114/rpcstatement.pdf
2007 EC Recommendation	European Commission Recommendation (2007/879/EC) of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services. Published in the Official Journal of the European Union, 28.12.2007, L 344, pages 65-69 at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32007H0879
2009 Retail Narrowband Statement	Ofcom, <i>Fixed Narrowband Retail Services Markets - Identification of markets and determination of market power</i> , September 2009. http://webarchive.nationalarchives.gov.uk/20160702162827/http://stakeholders.ofcom.org.uk/consultations/retail_markets/?a=0
2013 Narrowband Market Review Statement	Ofcom, <i>Review of the fixed narrowband services markets</i> , September 2013. https://www.ofcom.org.uk/_data/assets/pdf_file/0014/50720/final_statement.pdf
2014 EC Recommendation	European Commission Recommendation (2014/7174/EC) of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services. http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2014:295:SOM:EN:HTML
2014 FAMR Statement	Ofcom, <i>Fixed access market review: wholesale local access, wholesale fixed analogue exchange lines, ISDN1 and ISDN30</i> , June 2014. https://www.ofcom.org.uk/_data/assets/pdf_file/0032/78836/volume2.pdf
2016 NMR Consultation	Ofcom, <i>Narrowband market review – Consultation</i> , December 2016. https://www.ofcom.org.uk/_data/assets/pdf_file/0016/95011/Narrowband-Market-Review.pdf
The Act	Communications Act 2003
ASA	Advertising Standards Authority
BEREC	Body of European Regulators for Electronic Communications, a body of the European Union.
BT	British Telecommunications plc.
BT Basic	BT Basic is a social telephony scheme sold by BT for customers who are recipients of specific means-tested Government benefits. See http://btplc.com/inclusion/ProductsAndServices/BTBasic/index.htm
BT retail divisions	Those BT business units that directly serve residential and/or business customers.
Bundle	A bundle refers to the purchase of landline services in addition to other services such as broadband, pay-TV, etc.
Call plan	An add-on to a line rental services which allow customers to make calls to a specified set of number types (UK geographic numbers, or UK mobile etc.) within a given period (weekend, evening, anytime etc.) for a fixed price. They may or may not come with time limitations or fair use policies.
Care Level 1/Care Level 2	Service maintenance levels provided by BT. Care Level 1 provides a target fix time by 23.59 day after next, Monday to Friday, excluding Public and Bank Holidays. For example, report Tuesday, clear Thursday. Care Level 2 provides a target fix time by 23.59 next day, Monday to Saturday, excluding Public and Bank Holidays. For example, report Tuesday, clear Wednesday.
CP (or Communications Provider)	A person who provides an electronic communications network or an electronic communications service.
Consumer Price Index (CPI)	The official measure of inflation of consumer prices in the UK.

Countervailing buyer power	The balancing of the market power of one party or group selling a service by that of another party or group that purchases the service.
Cost-based charge control	A charge control based on a model of the input cost of providing a service including a regulated return.
DCR	Digital Communications Review 2016. See https://www.ofcom.org.uk/_data/assets/pdf_file/0016/50416/dcr-statement.pdf
Dual-play	Where CP offers two services as part of a package of services, for example fixed voice and fixed broadband services.
EBIT	Earnings before interest and tax.
EC	European Commission.
EE	Everything Everywhere Limited, now part of BT plc.
EIA	Equality impact assessment.
Home Phone Saver	Home Phone Saver is a BT telephone only line rental package which provides a number of additional services. The service cannot be taken with another service such as broadband. http://bt.custhelp.com/app/answers/detail/a_id/49402/~home-phone-saver-2017
Hull Area	The area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under Section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc (KCOM).
Inclusive call allowance	The allowance of calls that apply free of charge within a Call plan.
Local Loop Unbundling (LLU)	A process by which a dominant provider's local loops are physically disconnected from its network and connected to a competing provider's networks, enabling other providers to use the local loop to provide services.
Metallic Path Facility (MPF)	The provision of access to the copper wires from the customer premises to a BT 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 using the dominant provider's local loop.
NMR	Narrowband Market Review.
National Regulatory Authority (NRA)	The relevant communications regulatory body for each country in the EU. Ofcom is the NRA for the United Kingdom.
Ofcom	The Office of Communications.
Out-of-plan call	A call which is not included free of charge as part of a Call plan.
Plusnet	Plusnet plc.
Post Office	Post Office Limited.
Price freeze	A situation where the prevailing market price or any other price is then held constant, either in nominal or real terms.
RAB	Regulatory Asset Base.
ROCE	Return on Capital Employed.
ROS	Return on Sales.
S135	Section 135 of the Communications Act.
Shared Metallic Path Facility (SMPF)	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.
Significant Market Power (SMP)	A test set out in European Directives used by NRAs, such as Ofcom, to identify those CPs which must meet additional obligations under the relevant Directives.
Sky	British Sky Broadcasting Ltd.
SMP Guidelines	EC guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C165/03).
Split purchaser	A customer that buys both a standalone fixed voice service and a standalone fixed broadband service, either from the same supplier or different suppliers, i.e. all split-service and split-supplier customers.
Split-service customer	A customer that buys both a standalone fixed voice service and a standalone fixed broadband service from the same supplier, but each service is bought separately (not in a bundle).

Split-supplier customer	A customer that buys both a standalone fixed voice service and a standalone fixed broadband service from two different suppliers.
SSE	SSE Energy Supply Limited.
SSNIP	Small but Significant Non-Transitory Increase in Price.
Standalone fixed broadband service	Fixed broadband services that are not sold as part of a bundle with any other services.
Standalone fixed voice (SFV) call	Voice call made by a customer using a standalone fixed voice service.
Standalone fixed voice (SFV) customers	Customers that buy a fixed voice service from a CP but do not also buy a fixed broadband service from the same CP as part of a bundle.
Standalone Fixed Voice (SFV) services	Landline services that are not sold as part of a bundle with non-voice service. This includes access (i.e. line rental) and calls.
TalkTalk	TalkTalk Telecoms Group plc.
The Phone Co-op	The Phone Co-op Limited.
UK	United Kingdom – when referring to the United Kingdom this excludes Hull except when referring to United Kingdom wide data.
UK Regulators Network (UKRN)	A member organisation formed of 13 of the UK's sectoral regulators: The Civil Aviation Authority (CAA), The Financial Conduct Authority (FCA), the Payment Systems Regulator (PSR), Office of Communications (Ofcom), Office of Gas and Electricity Markets (Ofgem), Water Services Regulation Authority (Ofwat), Office of Rail and Road (ORR), Northern Ireland Authority for Utility Regulation (Utility Regulator), Single Source Regulations Office (SSRO), Financial Reporting Council (FRC), NHS Improvements, Water Industry Commission for Scotland (WICS) and Legal Services Board (LSB).
Universal Service Directive	Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) as amended by Directive 2009/136/EC21140 and Regulation 544/2009.
Virgin Media Limited	Virgin Media plc.
Voice-only customer	A customer that buys a standalone fixed voice service, but do not also buy a fixed broadband service from any CP.
Voice Over Internet Protocol (VoIP)	The traffic method of carrying voice calls on fixed and mobile networks by packetizing speech and carrying it using IP
WCO	Wholesale fixed geographic call origination services
WCT	Wholesale fixed geographic call termination services
Wholesale Fixed Analogue Exchange Lines (WFAEL)	A narrowband analogue access connection between a customer's premises and a local exchange.
Wholesale Line Rental (WLR)	The service offered by BT to other United Kingdom communications providers 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.
Wholesale Local Access (WLA)	Wholesale local access – covers fixed telecommunications infrastructure, specifically the physical connection between end users' premises and a local exchange.
White label access product	A wholesale product bought from another CP (who is buying WLR from Openreach) and rebranded.

Formal S.135 Requests

Communications Provider	A10.1 Formal Information Request	A10.2 Summary of information requested
BT	Section 135 notice dated 3 November 2016	Request market research reports and specific data relating to SFV customers, services and lines from Nov 2014 to September 2016, together with information on profitability.
BT	Section 135 notice dated 9 November 2016	For Residential Analogue Voice-only Retail Lines the number of customers supplied, lines to customers and volume of calls on those lines. The number of customer acquisition and losses over a period together with information about revenues and costs.
BT	Section 135 notice dated 4 January 2017	Clarification of information provided in subsequent information requests relating to estimates on size of relevant customer base and customer numbers on specific BT products.
The Phone Co-op	Section 135 notice dated 18 November 2016	Request market research reports and specific data relating to SFV customers, services and lines from Nov 2014 to September 2016, together with information on profitability.
The Phone Co-op	Section 135 notice dated 29 November 2016	For Residential Analogue Voice-only Retail Lines the number of customers supplied, lines to customers and volume of calls on those lines. The number of customer acquisition and losses over a period.
Post Office	Section 135 notice dated 15 November 2016	Request market research reports and specific data relating to SFV customers, services and lines from Nov 2014 to September 2016, together with information on profitability.
Post Office	Section 135 notice dated 29 November 2016	For Residential Analogue Voice-only Retail Lines the number of customers supplied, lines to customers and volume of calls on those lines. The number of customer acquisition and losses over a period.
Sky	Section 135 notice dated 21 November 2016	Request market research reports and specific data relating to SFV customers, services and lines from Nov 2014 to September 2016, together with information on profitability.
SSE	Section 135 notice dated 12 December 2016	Request market research reports and specific data relating to SFV customers, services and lines from Nov 2014 to September 2016, together with information on profitability.
TalkTalk	Section 135 notice dated 22 November 2016	Request market research reports and specific data relating to SFV customers, services and lines from Nov 2014 to September 2016, together with information on profitability.

Virgin Media Ltd	Section 135 notice dated 25 November 2016	Request market research reports and specific data relating to SFV customers, services and lines from Nov 2014 to September 2016, together with information on profitability.
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