Response to Ofcom’s consultation on mobile handset tariffs

Report prepared for Telefonica UK Limited

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1 Executive Summary

1 On 22 July 2019 Ofcom set out several decisions and proposed regulatory actions in relation to bundled contracts and 'split' contracts for mobile services (we refer to this as the '**mobile handsets consultation**' or simply the 'Ofcom consultation').[1] Telefonica has asked us to consider Ofcom's proposal to restrict the duration of 'linked' split contracts (LSCs). We have not been asked to consider Ofcom's proposals relating to bundled contracts.

2 In a split contract, customers enter into two separate contracts with a mobile operator, one in which they purchase an airtime tariff (an airtime contract) and another in which they finance the cost of a mobile handset through a consumer credit agreement (a handset contract[2]). Ofcom recognises that split contracts provide a useful option for customers that extends choice and ensures handset and airtime prices are transparent. However, it is concerned about the fact that the split contracts offered by O2, Sky Mobile and Tesco Mobile contain terms that require customers to pay off the remaining handset loan as a lump-sum if they terminate their airtime contract.

3 Ofcom argues that such a requirement will deter customers from switching, preventing them from obtaining the best airtime deal to meet their needs, and undermining competition to the detriment of all mobile customers.[3] Ofcom therefore proposes to limit the duration of LSCs to 24 months. This rule will apply to consumers, microenterprises, small businesses and not for profit organisations.[4]

4 This report provides an economic analysis of Ofcom's proposed regulation of split contracts.

Ofcom's concerns are not plausible given the intensity of competition in the UK mobile market

5 The UK retail mobile market, which comprises four significant mobile network operators (MNOs) and several virtual mobile network operators (MVNOs), is highly competitive. Mobile operators are strongly incentivised to develop and offer deals that meet customer requirements to gain a competitive advantage over rivals. This has driven the development of new split contracts and SIM-only contracts to meet customers' changing demands, in particular as handset innovation has slowed and the cost of handsets has risen.

6 We consider that Ofcom's concerns are implausible given the intensity of competition between operators. Economic analysis shows that competitive markets can be expected to maximise consumer welfare as firms are able to create new products and services that meet customers'

1 Ofcom, July 2019: *Helping consumers to get better deals in communications markets: mobile handsets.*

2 We use the term handset contract throughout this document for ease. However, it is important to recognise that, in fact, consumers have entered into a consumer credit agreement.

3 Ofcom states that its concerns would also apply to other types of contractual terms that result in 'financially linked or interdependent' airtime and handset contracts that have a deterrent effect on termination of the airtime contract within the period of the handset contract (Ofcom consultation, §5.20-5.21).

4 Ofcom states that this rule will be implemented by a modification to General Condition 1.4 which essentially extends the existing cap on the duration of airtime service agreements to 24 months to handsets. We understand that this requirement will apply to all new split contracts going forward but not to existing split contacts.

needs. Consequently, a regulatory ban such as that proposed by Ofcom will limit customer choice and reduce welfare, absent clear evidence of a market failure (which Ofcom does not provide).

7 We also consider that the strength of demand for LSCs casts serious doubt on Ofcom's claim that these contracts are harmful to customers. Customers would not be expected to purchase these contracts instead of one of the many alternatives that are available if they were concerned about the potential acceleration of their repayments of the handset cost in the event they chose to switch airtime provider before the expiry of the handset contract. As Ofcom recognises, a significant number of customers have shown a preference for a handset contract longer than 24 months to spread the handset payments and reduce monthly costs. In our view, this shows they are willing to accept the terms and conditions of LSCs.[5] This suggests that LSCs either do not significantly constrain customers from switching, or that they offer offsetting benefits that compensate for the requirement to pay off the handset loan if the airtime contract is terminated.

Ofcom's theory of harm does not consider appropriately how operators compete or how consumers behave and is not supported by evidence

8 Ofcom's concerns about LSCs are based on a 'theory of harm' that emphasises the importance of LSC customers to switch airtime provider during the period of the handset contract. Ofcom contends that LSCs deter this type of switching, harming customers directly and weakening competition.

Ofcom places undue importance on switching rather than competition

9 In our view customers' ability to switch airtime provider during the period of the handset contract is not critical to secure customer benefits, given the competitive nature of the retail mobile market. Provided customers are well-informed about the need to pay off the handset loan, they can be expected to consider the potential loss of flexibility to switch airtime provider in an LSC and will only choose this option if there are enough benefits in terms of price, quality, or flexibility. Moreover, customers can be expected to consider their options particularly carefully before purchasing a LSC longer than 24 months.

Ofcom provides limited evidence that LSCs deter switching

10 Ofcom argues that customers who switch may have to make a lump-sum payment of the order of £150-£250 and states it is 'self-evident' that this is likely to deter switching. It is plausible that some LSC customers may decide not to switch (e.g. if funds are not readily available), meaning that they remain with their current airtime provider for longer than might otherwise have been the case. However, this is ultimately an empirical question, and Ofcom does not present any evidence on the size of any deterrent effect – which would need to be weighed against the potential benefits (i.e. lower airtime costs) on offer for those customers who would have switched sooner.

11 We also note that Ofcom has not considered the options available to consumers to enable them to switch provider, if desired. In particular, customers can sell their handset, for example through one of the handset purchase schemes offered by operators. Our analysis suggests that this could

5 On the assumption that customers are well-informed and understand the contract terms at the point of purchase.

allow LSC customers to cover a very significant part of the handset loan payment (up to 90%) and could therefore materially reduce any deterrent effect on customer switching.

Competition will ensure that any benefits to operators from LSCs will be reflected in more attractive terms for consumers

12 Ofcom argues that LSC customers will be harmed directly, since they cannot switch to a better airtime deal during the period of the handset contract, but no evidence is provided to support this claim. However, Ofcom does not consider that many LSC deals allow customers to alter their airtime contract periodically (e.g. once every 30 days in the case of O2). In our view, this can be expected to limit any potential gain from switching airtime provider.

13 Ofcom also fails to consider the impact of competitive pricing interactions that will ensure that any benefits to operators from LSCs will be reflected in more attractive terms for customers:

(a) If LSCs lead to customers staying with mobile operators for longer, as Ofcom argues, this will increase customers' expected lifetime profitability (since the operator will expect to earn revenues from the customer for longer). This will result in more intense competition for LSC customers, which can be expected to lead to lower prices and or other preferential terms being offered to them (such as cheaper airtime packages, lower handset prices, or lower cost handset credit).

(b) In addition, LSC providers have an incentive to reduce handset prices to increase airtime sales (and vice versa). This effect, known as the Cournot effect, means that LSCs may enable firms to profitably offer lower tariffs with lower total monthly payments.[6]

Competition will lead to better offerings and greater consumer benefits as more providers start to offer split contracts

14 We consider that Ofcom's analysis of the wider competitive effects of LSCs is unduly narrow and static. As Ofcom notes, EE and Three have both confirmed that they intend to introduce split contracts. These are established MNOs that can be expected to offer strong competition to O2 and the MVNOs that currently offer LSCs. Contrary to Ofcom's view, this can be expected to intensify competition as these new LSC providers seek to win customers, driving future tariff innovations.

15 We also consider it unlikely that any reduction in switching due to longer-term LSCs would have a material impact on the overall level of competition in mobile markets. First, according to Ofcom there are around one million customers with LSCs longer than 24 months, which is only a small proportion of the 66 million post-pay mobile subscriptions. Second, there is no reason why a reduction in switching amongst customers who purchase LSCs, even if this occurs, would result in a reduction in competition in relation to bundled contracts and SIM-only contracts.

The available evidence does not support Ofcom's concern

16 Telefonica have provided us with information that explains the historical development of LSCs and the introduction of longer-than-24-month contracts, including its internal commercial analysis of its Custom Plans tariffs (its most recent LSC offering, launched in August 2018) prior to and

[6] This would come at the expense of the sales of providers that sell unbundled airtime or handsets.

following launch, as well as market data relating to prices and sales. This evidence shows the following:

(a) The introduction of the first split tariff offer by O2 in 2013 (through its Refresh tariff) initiated a period of competitive innovation as numerous MVNOs developed their own split tariffs, incorporating further innovations. This has provided important benefits for consumers, which Ofcom itself acknowledges.

(b) O2 responded to these developments by launching an enhanced Refresh offer via the O2 Custom Plans in August 2018. This was designed to better meet customers' needs and improve O2's competitive position, directly responding to innovations by other operators. O2's decision to include handset contracts of up to 36 months was driven by a perceived customer need and informed by research in the form of consumer surveys.

(c) There has been strong customer demand for the longer-term split contracts offered by O2 which demonstrates customers are happy to accept the requirement to maintain an airtime contract. It is also important to recognise that in O2's Custom Plans tariffs, consumers can freely choose the number of months over which they wish to spread handset repayments (from 3 to 36 months). That a large proportion of customers have chosen more than 24 months is clear evidence of consumers' preferences.

(d) Customers can significantly mitigate the potential competitive harms identified by Ofcom by taking advantage of the flexibility to adjust their airtime tariffs up or down in some LSC deals (including O2's). Also, customers can trade in their old handsets to fund the handset loan repayment thus reducing the financial impact of switching.

(e) The post-contract churn rate for O2's LSC customers [redacted] and do not suggest a high level of customer dissatisfaction.

(f) Analysis of O2's SIM-only contracts shows that O2 is able to offer better prices on longer-term contracts. This is consistent with O2 being able to offer better terms to LSC customers reflecting longer expected effective customer lifetime. Our analysis also shows that O2's Custom Plans, by effectively bundling a handset contract and an airtime contract, offer lower prices to its customers compared to them purchasing handset contract and airtime contract separately from O2.

(g) LSCs enable operators to lower their costs, which benefits customers. In LSCs, Telefonica pays the VAT on handset sales over the period of the contract instead of at the time the contract is sold. This potentially helps O2 to offer zero upfront handset payment options to customers. Removing the link between the handset contract and the airtime contract may lead to Telefonica being required to pay VAT on the handset upfront. This would increase its's working capital, which would increase its costs. Removing the link between handset and airtime contracts may also increase Telefonica's bad debt.

(h) Ofcom's proposed ban will weaken O2's ability to compete with Virgin Media (and other combined fixed and mobile operators) and hence risks undermining competition.

Ofcom's proposed ban on longer term LSCs will harm customers

17 We consider that Ofcom's impact assessment is flawed and unreliable, for the following reasons:

(a) Ofcom's assertion that its ban on LSCs will benefit customers is inconsistent with basic economic principles. These suggest that a regulatory restriction of products and services in the UK mobile market, which is characterised by strong competition, is likely to reduce choice and welfare.

(b) Ofcom places undue emphasis on the ability of customers to switch airtime provider during the handset contract, without quantifying this supposed benefit and without considering the options already available to consumers to mitigate Ofcom's claimed harm. Ofcom also fails to appropriately consider the wider impact of banning LSCs longer than 24 months on competition and choice.

(c) Critically, Ofcom effectively assumes that LSC providers will continue to offer non-linked split contracts (NLSCs) longer than 24 months at similar prices after the proposed ban is imposed. Because Ofcom recognises the benefits that split contracts provide of spreading expensive handset costs, the assumption that similar terms will be available to consumers is important for its analysis. However, Ofcom does not reflect the impact that banning LSCs will have on providers' costs and pricing incentives and hence effectively ignores the material adverse effects that are very likely to arise from the ban, and which would outweigh the limited benefits of increased ease of switching. In addition, Ofcom does not consider the fact that O2 would not be able to offer NLSCs without costly and time-consuming systems changes.

18 Ofcom's proposed ban on longer-term LSCs is a highly intrusive form of intervention that interferes directly in operators' commercial freedom to offer products with proven demand. In our view, this could only be justified if there were strong supporting evidence that LSCs were harmful. In fact, Ofcom advances no evidence relating to the actual effects of LSCs on consumers and competition, and instead relies on an implausible theory of harm that is not supported by economic principles.

19 We also note that banning longer term LSCs at this stage would be premature given their relatively recent introduction, the lack of actual evidence of harm, and because Three and EE have both indicated that they plan to introduce their own split contract offerings. In these circumstances, there is a risk that the proposed ban will have a chilling effect on competition and reduce choice to the detriment of customers.

2 Introduction

20 Retail markets for mobile, broadband and financial services have come under increasing regulatory scrutiny in recent years as regulators have sought to respond to concerns that competition is not delivering good outcomes for everyone. Regulators have considered a range of issues in these markets, including the transparency of pricing and contractual conditions and the treatment of 'disengaged' customers. In the latter part of 2018, the Competition and Markets Authority investigated the impact of loyalty rebates in broadband and other energy markets.

21 Ofcom's 2019/20 Annual Plan highlights fairness for customers as a key priority and sets out a programme of work to ensure that customers can secure the best deals for their needs in telecoms markets. In the mobile sector, Ofcom has expressed concerns about the treatment of some customers on bundled handset and airtime contracts, including the fairness of pricing after the end of the minimum contract period.

22 On 22 July 2019 Ofcom set out several decisions and proposed regulatory actions in relation to bundled contracts and 'split' contracts for mobile services.[7] Telefonica has asked us to consider Ofcom's proposal to regulate the terms in split contracts. We have not been asked to consider bundled contracts.

23 In split contracts, customers have an airtime contract and, with the same mobile provider, a separate consumer credit agreement to finance the cost of the handset.[8] At present, split contracts are offered by O2 (a Telefonica brand), Virgin Mobile, Sky Mobile, and Tesco Mobile, giffgaff and VOXI.[9] O2 is currently the only MNO that offers a split contract. Ofcom states that two other MNOS, EE and Three, have confirmed that they intend to launch split contracts.[10]

24 O2 started to offer split contacts to direct customers in 2013 in its Refresh tariff and is currently the largest provider of this type of contract.[11] Until last year O2 offered handset contracts of up to 24 months in its Refresh tariff. In August 2018 it launched its new Custom Plans which give customers the option of a handset contract of up to 36 months alongside a 30-day airtime contract. Virgin Mobile, Sky Mobile, and Tesco Mobile have also introduced 36-month handset contract in their split contract tariffs. These longer-term split contracts are intended to allow customers to spread the cost of expensive handsets over a longer period than previously possible to reduce monthly payment levels.

25 As Ofcom notes, split contracts are popular, accounting for 15% of pay-monthly mobile customers (5.9 million people).[12] Demand for longer-term split contracts with handset contracts of more than 24 months has been strong since their introduction last year, reflecting their popularity with some customers.

7 Ofcom, July 2019: *Helping consumers to get better deals in communications markets: mobile handsets.*

8 We use the term 'handset contract' to refer to this consumer credit agreement below.

9 giffgaff and VOXI, fully owned by Telefonica and Vodafone respectively, differ from the other split contract providers mentioned since they only provide airtime contracts and their handset contracts are provided by Ratesetter (for giffgaff) and PayPal (for VOXI).

10 Ofcom consultation, §3.19.

11 O2 offers the Refresh tariff through its direct sales channels and bundled contracts through indirect channels, such as Carphone Warehouse.

12 Ofcom consultation, §3.15.

Ofcom's proposal to restrict the duration of 'linked' split contracts

26 Ofcom acknowledges that split contracts are a valuable additional option in a competitive mobile market that help customers to choose the contract type that works best for them. In particular, Ofcom recognises that split contracts provide *"benefits in terms of clearer pricing structures, as well as longer handset agreements which allow people to spread the cost of more expensive devices"*.[13] However, it is concerned that the split contracts offered by O2, Sky Mobile and Tesco Mobile all contain terms that may deter customer switching during the period of the handset contract.

27 Customers with these contracts are required to pay off the remaining handset contract as a lump sum if they terminate their airtime contract. Ofcom argues that this will deter customers with these contracts from switching, preventing them from obtaining the best airtime deal to meet their needs, and undermining competition to the detriment of all mobile customers.[14]

28 Contracts with these terms are referred to by Ofcom as 'linked' split contracts (LSCs). Ofcom estimates over 5 million of the 5.9 million customers with split contracts have chosen to purchase an LSC, with at least a million on handset contracts longer than 24 months.[15]

29 Ofcom proposes to address its concern about the impact of LSCs on customer switching by implementing a new rule limiting the duration of LSCs to 24 months. This rule will apply to consumers, microenterprises, small businesses and not for profit organisations.[16]

30 Mobile providers will continue to be able to offer LSCs with handset contracts of up to 24 months duration. Providers will also continue to be able to offer NLSCs with handset contracts of any duration, as is currently the case (provided the airtime contract duration does not exceed 24 months). However, Ofcom states that it will monitor the operation of these contracts and will take enforcement action under General Condition C1.3 if appropriate to ensure that customer switching is not discouraged.[17]

31 Ofcom argues that its proposed rule to limit LSCs to 24 months is in line with Articles 105 and 107 of the new European Electronic Communications Code (EECC), which must be implemented by December 2020. It intends to bring its proposed rule into force as soon as possible before this date. However, we understand that Telefonica does not accept Ofcom's interpretation of the EECC, based on legal advice it has received, and will set this out in its submission to Ofcom.

Structure of this report

32 This report provides an economic analysis of Ofcom's proposal to restrict the use of LSCs to 24 months. It is structured as follows:

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13 Ofcom consultation, §3.64.

14 Ofcom also states that its concerns would also apply to other types of contractual terms that result in 'financially linked or interdependent' airtime and handset contracts that have a deterrent effect on termination of the airtime contract within the period of the handset contract (Ofcom, §§5.20-5.21).

15 Ofcom consultation, §5.11.

16 Ofcom states that this rule will be implemented by a modification to General Condition 1.4 which essentially extends the existing cap on the duration of airtime service agreements to 24 months to handsets. We understand that this requirement will apply to all new split contracts going forward but not to existing split contacts.

17 Ofcom expresses particular concern about the potential adverse impact on switching of 'non-coterminous' LSCs of up to 24 months (i.e. LSCs with different end dates for the airtime and handset agreements).

- **Section 3** explains that Ofcom's concerns about the effects of LSCs are not supported by economic principles.
- **Section 4** shows that evidence from the UK mobile market also does not support Ofcom's concerns.
- **Section 5** explains that the proposed ban on LSCs longer than 24 months is likely to lead to harm to customers.

3 Ofcom's concerns are not supported by economic principles

33 In this section we consider whether Ofcom's concern that LSCs are harmful is supported by economic principles and reasoning.

(a) We first set out the economic logic that underpins Ofcom's concerns about the effects of LSCs (i.e. Ofcom's 'theory of harm').

(b) Next, we explain that Ofcom's concerns are not consistent with the economic analysis of competitive markets, and do not reflect the nature of competition in the UK mobile market.

(c) Finally, we comment on each of the elements of Ofcom's theory of harm.

Ofcom's theory of harm

34 As explained in section 2, Ofcom's key concern is that LSCs will deter customers from switching airtime provider. This concern relates primarily to terms in the LSCs currently offered by O2 and other providers requiring customers to pay off the remaining balance on their handset contract as a lump sum if they terminate their airtime contract. However, Ofcom says that it would have similar concerns about split contracts that are linked or interdependent in other ways that would result in termination of the airtime contract having an adverse impact on the handset contract.[18]

35 Ofcom's analysis of the effects of LSCs in the mobile handset consultation is largely theoretical and there is a striking lack of evidence in relation to Ofcom's assumptions or the claimed effects of LSCs.

36 The economic logic of Ofcom's 'theory of harm' comprises several steps as follows:

(a) **Customer switching is important to competition:** Ofcom argues the ability to switch providers is an important aspect of well-functioning competitive markets that enables customers to engage with the market and get a good deal, and incentivises providers to offer a range of high-quality, good-value services.[19]

(b) **The requirement in LSCs to pay off the handset contract as a lump sum will tie customers to their current provider:** Ofcom asserts that the requirement to pay off the handset contract as a lump sum if the airtime contract is terminated will 'self-evidently' deter switching and effectively tie customers to their current provider as an airtime provider.[20] Moreover, customers with handset contracts longer than 24 months are effectively tied to their current provider for longer than the 24-month period permitted by General Condition C1.4.[21]

(c) **LSC customers will be harmed directly:** Ofcom argues that LSC customers will be harmed because they are not able to switch to a better airtime deal during the period of the handset contract. Moreover, the level of harm will be higher with more expensive

18 Such as the loss of a handset discount or changes to the way the device may be used.
19 Ofcom consultation, §5.7.
20 Ibid, §5.16.
21 Ibid, §5.17.

handsets and longer-term handset contracts, since these factors increase the size of the lump-sum handset payment the customer must pay to switch airtime provider.[22]

(d) **LSCs weaken competition:** finally, Ofcom argues that the reduction in switching due to LSCs will result in a weakening of competition in retail mobile markets to the detriment of all mobile customers.[23] It also argues that the extent of harm will increase as more providers offer LSCs and more customers sign up to them.[24]

37 Ofcom states that its concerns about LSCs apply:

(a) To both individual customers and other groups of customers with a similarly weak bargaining position when negotiating contract terms, such as small businesses, microenterprises, and not for profit organisations.[25]

(b) Even if customers are fully informed about the contractual terms at the point or sale, since transparency alone does not prevent the subsequent deterrent effect on switching.[26]

38 Finally, we note that Ofcom's theory of harm is based on the underlying assumption that LSCs do not result in any material improvements in the terms of the airtime contract or handset contract.[27] This counterfactual assumption forms a key part of Ofcom's impact analysis as it implies that there are no material benefits from LSCs that offset any adverse impact on customer switching and that would be foregone under Ofcom's proposed ban on longer term LSCs.

Ofcom's theory of harm is inconsistent with the economic analysis of competitive markets

39 We do not consider that Ofcom's theory of harm is plausible because:

(a) Competitive markets can be expected to maximise consumer welfare as firms are able to create new products and services that meet customers' needs. Without clear evidence of a market failure, a regulatory ban on certain products or services will limit customer choice and reduce welfare; and

(b) As Ofcom itself recognizes, competition is strong in the UK mobile market.

Competitive markets drive innovation and maximise welfare

40 The benefits of competitive markets are well-established in economic theory and widely accepted by regulators and policymakers. This consensus is grounded in accepted economic analysis demonstrating that consumer welfare is maximised when well-informed customers can purchase goods and services in competitive markets.

41 In these circumstances, customers can choose the product or service that best meets their needs (sometimes referred to as 'consumer sovereignty'). This makes sense since customers are well-placed to assess the available options against their own subjective preferences and consider how

22 Ibid, §5.18.
23 Ibid, §5.47.
24 Ibid, §5.18.
25 Ibid, §5.19.
26 Ibid, §5.24.
27 This is implicit in the last sentence of Ofcom consultation, §5.16, and set out explicitly in §5.50.

to trade-off different considerations (e.g. price vs quality). Moreover, customers have a strong incentive to choose the option that gives them the most benefit (or utility).

42 Unfettered customer choice is also a powerful driver of welfare in competitive markets, since it ensures that suppliers have a strong incentive to offer products and services that meet customer demand. Suppliers that offer attractive products and services will gain sales and market share, while those who fail to do so will lose sales and ultimately may be forced to exit the market. This results in a dynamic process of rivalry that drives price competition, cost efficiency, and innovation as suppliers compete for sales. In markets in which customers have different preferences and requirements (as is the case for mobile customers), competition and choice will typically result in a range of differentiated products and services from which customers can choose their preferred option.

43 Economic analysis also indicates that, without clear evidence of market failure, a ban or a regulatory restriction on certain products and services is likely to reduce welfare in a competitive market with well-informed customers. This is because such a ban is liable to reduce choice and hence prevent some customers from meeting their needs as well as would otherwise be possible.[28] This could be because some products that consumers value are no longer available to them, or because these products are only available on worse terms.

The competitive nature of the UK mobile market means that operators have a strong incentive to offer deals that reflect customer requirements.

44 In recent years, Ofcom, the CMA and the European Commission have all analysed the retail mobile market and found it to be competitive. For example:

(a) The CMA, in the BT/EE merger, found that "*the retail mobile market is currently competitive…*", and that *"Consumers appear engaged with levels of switching that compare favourably with some other sectors…"*[29]

(b) Similarly, Ofcom found that *"The UK mobile market is currently working well for consumers and businesses, with strong competition between mobile network operators (MNOs). The UK enjoys relatively low prices, whilst at the same time seeing significant levels of investment in new products and services."*[30]

45 The strength of competition between mobile operators is reflected in the profit margins of the UK's MNOs,[31] as well as the price levels of UK mobile services compared to other similar markets.[32]

46 Ofcom acknowledges the competitive nature of the retail mobile market in the mobile handsets consultation, stating for example that *"the mobile sector is fast-moving, with pricing and packages changing frequently in response to technological and commercial developments in the market."*[33]

28 This is not to say that all product regulation is necessarily undesirable in competitive markets. For example, customers may benefit from regulations to ensure product safety, or accurate labelling and information.

29 CMA, BT/EE merger final report, §10.81.

30 Ofcom, Award of the 2.3 and 3.4 GHz spectrum bands, consultation, 21 November 2016, §1.13.

31 Mobile EBITDA margin in the UK was on average 23% in UK in 2013, the lowest among 10 of the largest European markets. See CMA, BT/EE merger final report, appendix F, figure 3.

32 For example, Ofcom's International Communications Market Report 2014 finds that mobile pricing in the UK is significantly lower than pricing in Germany, Italy, Spain and the USA. See Figure 2.5.

33 Ofcom consultation, §3.5.

This reflects the competitive structure of the market, with several large providers and many smaller providers competing for customers.

47 Mobile customers choose between providers' retail offers based on their preferences and the relative value that they perceive that the different tariff options offer, perhaps with a greater focus on certain elements of the bundles, such as, for example, the monthly charges, the handset and the number of call minutes and/or GB of data included in the package.

48 Mobile operators compete to attract or retain mobile subscribers by offering them bundles of different services and setting prices that seek to maximise the expected profitability of customers over the customer lifetime. The strength of competition for customers means that operators are strongly incentivised to develop and offer deals that meet customer requirements. In this context, the emergence of new split contracts and the proliferation of SIM-only contracts reflect the efforts of operators to develop new tariff options that meet the changing demands of customers and the impact of a decline in the rate of handset innovation and increase in the cost of handsets.

49 The growth of LSCs in recent years suggests that these are attractive deals that meet evolving customer needs well. The fact that many customers choose one of the currently available LSCs instead of one of the range of alternatives available (including a bundled contract, SIM-only contract, or NLSC) may indicate that customers are willing to accept the terms and conditions of LSCs and that they meet customer needs effectively.[34] Similarly, the recent growth in LSCs with handset contracts longer than 24 months relative to shorter LSCs also shows the value of longer handset contracts in helping customers spread handset payments to reduce monthly costs.

50 The demand for LSCs casts serious doubt on Ofcom's claim that these contracts are harmful to customers. Customers would not be expected to purchase these contracts if they were concerned about the potential loss of flexibility. This suggests either that these contracts do not significantly constrain customers from switching, or that they offer offsetting benefits that compensate for giving up the option to switch airtime provider without having to pay off the handset contract immediately

For these reasons, we consider that Ofcom's concerns are not supported by economic analysis

51 Our analysis indicates Ofcom's theory of harm fails to adequately consider the implications of the highly competitive nature of the UK mobile market. Ofcom's implicit contention that customers are choosing to purchase LSCs that are detrimental to their interests is based on an implausible assumption that well-informed customers are unable to effectively choose which tariff best meets their needs. Moreover, competition ensures that operators have a strong incentive to offer tariffs that are attractive to customers.

The key elements of Ofcom's theory of harm

52 Below we comment in detail on each of the key elements in Ofcom's theory of harm, as set out in §36.

[34] If customers are well-informed and understand the contract terms at the point of purchase, which the evidence seems to show, this will be the case.

Ofcom places undue emphasis on switching

53 Ofcom argues that the ability to switch provider is important to competition. While the ability of customers to choose between suppliers is clearly important, we consider that Ofcom places undue emphasis on switching and fails to recognise that it is the effectiveness of competition between mobile providers that ensures good outcomes for customers, rather than switching per se.

54 In part, this is because the level of switching is not a reliable metric for gauging the level of competition. For example, relatively low levels of switching can occur in competitive markets if most customers are content with their current provider. Equally, switching rates over a short time period (for example 1 month) are also likely to be relatively low where customers buy contracts that span a longer period (e.g. 24 months), even if competition is strong.

55 Ofcom stresses the importance of LSC customers being able to switch airtime provider <u>during</u> the period of the handset contract. In our view this is not critical to secure customer benefits given the competitive nature of the retail mobile market. Provided customers are well-informed about the requirement to pay off the handset in order to switch airtime provider there is no reason a priori to expect LSCs to result in harm to customers.[35]

56 Customers can be expected to consider the option value of any potential loss of flexibility to switch airtime provider over the course of the handset contract in relation to an LSC. A customer will choose an LSC tariff over other alternatives only if this offers enough benefits (for example in terms of price, quality, or flexibility) to outweigh this option value. We note that this logic applies equally to the decision to purchase a 36-month LSC rather than a 24-month LSC.

57 We also note that customers can be expected to consider their options carefully before purchasing an LSC longer than 24 months. For example, customers may expend more effort in choosing provider before buying an expensive handset via an LSC, if they anticipate that they are likely to purchase airtime from the provider for longer. If this is the case, there would be greater pressure on providers to offer attractive tariffs.

Ofcom provides limited evidence on the significance of any reduction in switching due to LSCs

58 Ofcom asserts that the requirement to pay off the handset contract as a lump sum will deter LSC customers from switching airtime provider, and that this will effectively tie customers to their current airtime provider - potentially for longer than 24 months in the case of LSCs with handset contracts longer than 24 months.

59 Ofcom carries out a limited assessment of the potential size of the lump-sum payment in relation to a customer with an iPhone XR who wishes to terminate his airtime contract after 24 months in either: (a) a 30 month LSC with Sky Mobile, or (b) a 36 month LSC with O2.[36] The lump-sum handset repayment in these two examples is around £150-£250.[37] Ofcom argues that it is 'self-evident' that a requirement to pay such a substantial sum is likely to deter switching.

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35 We note that Ofcom does not present any arguments or evidence to suggest that customers do not understand LSCs at the point of sale. The requirement to maintain an airtime contract, and the obligation to pay off the handset contract otherwise is clearly set out by O2 and other providers on their websites and we have seen no evidence to suggest that customers are not aware of this.

36 See Ofcom consultation, §§5.14-5.15.

37 More generally, the lump-sum repayment due will depend on the cost of the phone and the proportion of the handset contract remaining when the customer decides to terminate his airtime contract.

60 Customers who purchase LSCs, particularly those with a handset contract longer than 24 months, are likely to prefer spreading handset costs over longer periods and may find it difficult to pay off the contract as a lump sum (e.g. if they have some form of liquidity constraint due to a lack of readily available funds or access to credit). Given this, we consider that it is plausible that at least some LSC customers may not wish to switch within the period of the handset contract. This implies that LSCs could in practice result in an increase in effective customer lifetime.

61 The magnitude of any reduction in switching and the consequent increase in effective customer lifetime amongst LSC customers is ultimately an empirical question. The two examples mentioned by Ofcom (cited above) do not consider the possibility that customers may be able to significantly reduce the financial impact on them of having to pay off for their handset as a lump-sum payment by selling the handset. For example, several mobile providers have handset purchase schemes for new customers (this is discussed further in §§108-113 below). These schemes can help LSC customers reduce the lump-sum payment due when they switch provider (with the potential reduction depending on the amount realised for the old handset relative to the size of the lump-sum payment due under his existing handset contract).

62 Ofcom does not, however, provide any evidence of actual harm to consumers as a result of not being able to switch airtime provider to obtain a better deal (e.g. consumer complaints related to the inability to switch airtime provider without paying off the handset). In practice, any harm will depend on the potential gain from switching airtime provider to get a better deal and evidence that LSC customers are less likely to switch airtime provider (than they would be under NLSCs). We note that O2's Custom Plans allow customers to alter their airtime contract once every 30 days to meet their needs, and this flexibility can be expected to limit any potential gain from switching airtime provider. Sky Mobile and Tesco Mobile also allow customers with LSCs to alter their airtime contract periodically.

Competition will ensure that any benefits to operators from LSCs will be reflected in more attractive terms for consumers

63 Ofcom argues that LSC customers will be harmed directly because they are not able to switch to a better airtime deal during the period of the handset contract.

64 As previously explained, provided customers are well-informed about the requirement to pay off the handset in order to switch airtime provider there is no reason a priori to expect LSCs to result in harm to consumers given the competitive nature of the market and the range of alternatives readily available to customers.

65 In addition, if LSCs give rise to an increase in effective customer lifetime this can be expected to be reflected in more attractive terms for LSCs. This is because an increase in the effective customer lifetime of LSC customers would lead to an increase in their expected lifetime profitability (since the operator will expect to earn revenues from the customer for longer). Other things equal, this would increase operators' incentives to acquire and retain these customers. This will result in more intense competition between operators for LSC customers which can be expected to lead to lower prices and/or other preferential terms being offered to them (such as cheaper airtime packages, lower handset prices, or lower cost handset credit).

66 Ofcom's theory of harm fails to consider these competitive pricing interactions. This is surprising since Ofcom has recognised their existence and importance previously. For example, in the tiered termination dispute concerning the impact of BT's imposition of 'ladder charges' on non-geographic call termination, Ofcom recognised that the pricing and profitability of one 'bottleneck'

service (non-geographic calls) would have an impact on the pricing of other mobile services provided to consumers, giving rise to a 'Mobile Tariff Package Effect' (MTPE), since *"...each MNO would face competition on the other mobile services that it offers and profits earned on the bottleneck service would be competed away in lower prices for the competitive services."*[38]

67 The basic intuition behind the MTPE is similar to the effect of an increase in the customer lifetime from LSCs. In particular, the MTPE considers how a reduction in customer lifetime value on some non-geographic calls due to an increase in the cost of the relevant wholesale input leads to a change in prices for other retail mobile services. The process is mediated via the competitive interaction between operators as they compete to win or retain customers, in a similar way as for LSCs. The same competitive process would be expected to lead to analogous effects for LSCs.

68 In general, the extent to which an increase in customer lifetime value is passed through to customers in more attractive offers will depend on the intensity of competition. Given competition in the UK mobile market is strong, this can be expected to be significant.

69 If LSCs enable operators to more efficiently price handsets and airtime, this will also lead to more benefits for providers. This benefit is additional to increased customer lifetime.

70 Where products are complements (as airtime and handsets are) there are typically efficiencies from offering the two products together. This is because for complementary goods, if the price for one product (e.g. handsets) is reduced this will lead to increased sales not just of that product, but also the complementary product (e.g. airtime). Offering both products together, and pricing them jointly (rather than pricing them independently) allows the provider to take this effect into account. This has the effect of leading to lower prices overall – due to the additional profits made on the sales of the complementary product (if the consumer purchases it from the same provider, rather than another one) creating a strong incentive to price the first product lower. In contrast, where individual products are priced separately, other providers benefit from a reduced price of the first product. Bundling allows the firm to internalise this benefit and is more profitable for the firm than only offering each component separately because the firm can increase the overall level of sales and profits. This is a very well phenomena known as the Cournot effect.[39]

71 We consider that the Cournot effect is very relevant here. There are profits to be made on both airtime and handset sales.[40] If LSCs allow operators to sell more airtime or handsets, through the lower pricing that it enables, profits for the firm can be higher, while the aggregate price that consumers pay for both airtime and handsets can be lower.[41] Prohibiting LSCs would be akin to

38 Ofcom, Determination to resolve disputes concerning BT's tiered termination charges in NCCNs 1101, 1107 and 1046, 4 April 2013, §3.46.

39 See the European Commission Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings (2008/C 265/07) *"...when producers of complementary goods are pricing independently, they will not take into account the positive effect of a drop in the price of their product on the sales of the other product. Depending on the market conditions, a merged firm may internalize this effect and may have a certain incentive to lower margins if this leads to higher overall profits (this incentive is often referred to as the 'Cournot effect')."* While the context of the EC Guidelines is that of mergers, the effect considered there is the same in this case.

40 Here, handsets and airtime services are close to perfect complements (consumers consume one handset with one airtime contract). Further, data allowance and quality of handsets can be considered as complementary products, as the incremental utility of higher data allowances could be expected to increase with a better handset.

41 This would come at the expense of sales of unbundled airtime or handsets.

prohibiting joint pricing. This would force the operator to price two complementary products independently, which would lead to higher prices.

Competition will lead to better offerings and greater consumer benefits as more providers start to offer split contracts

72 Ofcom argues that the impact of LSCs on customer switching will undermine competition in retail mobile markets, and that the extent of harm to customers will increase as more providers offer LSCs and more customers sign up to them.[42]

73 Ofcom's analysis of the wider competitive effects of LSCs is unduly narrow and static. Its claim that an increase in the number of providers offering LSCs will result in an increase in customer harm fails to recognise that this is likely to intensify competition as new LSC providers seek to win customers who currently purchase an LSC from O2 or one of the current MVNO providers.

74 As Ofcom notes, EE and Three have both confirmed that they intend to introduce split contracts. These are established MNOs that can be expected to offer strong competition to O2 and the MVNO operators who currently offer LSCs. The strength of demand for split contracts, including LSCs, that offer longer handset periods, combined with the absence of significant barriers to entry and expansion suggests that EE, Three (and potentially other providers) have the ability and incentive to develop their own split contract tariffs. This will intensify competition and ensure that any expected increase in the lifetime value of LSC customers will be passed on to customers in lower prices (as explained above).

75 Moreover, competition between operators can be expected to continue to drive tariff innovations in future to meet evolving customer needs. In this context, the availability and demand for LSCs is only likely to increase if they continue to meet customer requirements better than alternative tariff options.

76 Finally, we note that Ofcom does not carry out any assessment to support the claim that the reduction in switching due to LSCs is sufficiently material to result in a reduction in the overall level of competition in mobile markets. Ofcom states that there are around one million customers with LSCs longer than 24 months. While this figure may grow, it represents only a small proportion of the 66 million post-pay mobile subscriptions, suggesting that any wider impact on competition is only likely to be modest.[43] Moreover, it is unclear why Ofcom considers that a reduction in switching amongst customers who purchase LSCs, even if this occurs, would result in a reduction in competition in relation to bundled contracts and SIM-only contracts.

42 Ofcom consultation, §5.18.

43 Ofcom, 2019. Communications Market Report.

4 The available evidence does not support Ofcom's concern

77 As previously noted, the mobile handsets consultation is largely hypothetical, and Ofcom provides very little empirical evidence to support its contention that LSCs are harmful or that its proposed ban on LSCs longer than 24 months will benefit customers.

78 Telefonica has provided us with information that explains the historical development of LSCs and the introduction of longer-than-24-month contracts, including its internal commercial analysis of its Custom Plans tariffs (its most recent LSC offering, launched in August 2018) prior to and following launch, as well as market data relating to prices and sales. In practice, the scope for Telefonica to collect reliable information on the impact of LSCs longer than 24 months is somewhat constrained, given that they have only been available under the O2 brand since August 2018.

79 Based on our understanding of the evidence provided by Telefonica, in this section we:

(a) Explain how the introduction of the first split tariff offer by O2 in 2013 through its Refresh tariff initiated a period of competitive innovation as numerous MVNOs developed their own split tariffs, incorporating further innovations.

(b) Discuss how O2 enhanced its Refresh offer via the O2 Custom Plans to better meet customers' needs and improve O2's competitive position, directly responding to innovations by other operators.

(c) Set out evidence of the strong customer demand for the longer-term contracts offered by O2 and explain how this appears to demonstrate customers are happy to accept the requirement to maintain an airtime contract.

(d) Describe how the potential competitive harms identified by Ofcom appear to be significantly mitigated in practice by options that are currently available to consumers.

(e) Discuss customer switching evidence that indicates that LSCs do not result in high levels of customer dissatisfaction.

(f) Set out pricing evidence that shows that O2 is able to offer better terms on LSCs as expected if these contracts result in longer effective customer lifetimes and enable O2 to reflect the benefits from selling complementary goods together (i.e. the Cournot effect).

(g) Explain why the proposed ban on split contracts will weaken O2's ability to compete against Virgin Media (and other combined fixed and mobile operators) for customers who want longer term contracts, to the detriment of competition in the mobile market.

O2 was the first major mobile provider to introduce split contracts

80 As explained in §24, O2 first introduced a split contract offer in April 2013, with the introduction of the new 'Refresh' tariff. This was offered to customers via its online, phone and retail stores (these are referred to by O2 as its 'direct' channels) alongside SIM-only contracts. O2 continued to offer traditionally bundled handset and airtime contracts through Carphone Warehouse.

81 The Refresh tariff was the first split contract offer available in the market which involved a 0% APR handset contracts and a separate airtime contract. This contract structure was developed by O2 to meet customer demand for greater transparency on handset and airtime costs, and to allow

customers to upgrade more easily and thus get the latest phone more rapidly than allowed by the traditional 24-month bundled contract.[44] This was achieved by allowing customers to pay off the outstanding handset loan at any time and end the airtime contract without incurring any early termination charges.[45]

82 The Refresh tariff offered customers a choice of three airtime plans (this could not be changed during the contract period). Customers could also opt to make an upfront payment for the handset to reduce the monthly handset payment.

Competitors responded to the Refresh tariff by developing their own split contract offers

83 The introduction of the Refresh tariff by O2 initiated a period of competitive tariff innovation as rival operators developed their own split contract offers. As explained below, this resulted in a proliferation of new split contract offers that built on and enhanced the key features of the Refresh tariff. In August 2018 O2 also enhanced its Refresh tariff, as discussed in the next subsection.

84 Table 1 summarises the split contract offers that were available in late August 2019. This shows that O2 is the only MNO with a split contract offer, with the other split contract offers in the market all offered by an MVNO. As noted by Ofcom, EE and Three have both said they will launch their own split contract offers.[46] At this stage the nature and timing of these offers is unknown. However, given the strong market position of these operators we would expect new split contracts offers by them to materially enhance competition and choice.

Table 1 Currently available split contract offers

Provider	Split contract type	Handset contract durations (months)	Airtime contract durations (months)
O2	Linked	3-36	1
Virgin Mobile	Non-linked	24/36	12
Sky Mobile	Linked	24/36	12
Tesco Mobile	Linked	12/18/24/30/36	12/24/30[a]
giffgaff	Non-linked	12/24	1
VOXI	Non-linked	30	1

Source: Websites of providers, August 2019.

Notes: For Tesco Mobile, the choice of airtime contract duration depends on the customer's choice of handset contract duration.

85 The development of competing split contract offers since the introduction of the Refresh tariff in 2013 is as follows:

44 Telefonica – "Refresh Evolution: The Insight Story" (February 2018), pp. 22-23.

45 https://news.o2.co.uk/press-release/o2-launches-new-tariff-allowing-customers-to-get-the-latest-phone-whenever-they-want/

46 Ofcom consultation §3.19.

(a) **giffgaff** started selling handsets with contracts of 6-24 months alongside its existing cheap SIM-only deals in November 2013:[47] Handset finance was provided separately by Ratesetter (a peer to peer lender) and not linked to giffgaff's SIM contract in any way.[48]

(b) **Virgin Mobile** introduced its NLSC Freestyle tariff in November 2014. This comprised a 24-month handset contract at 0% APR and a 30-day airtime contract that could be changed once per month.

(c) **Sky** introduced its SWAP 12/24 tariff with 30-month handset contracts in March 2017.

(d) **Tesco Mobile** introduced its 30 month Anytime Upgrade tariff in September 2017.

(e) **Virgin Mobile** introduced the first 36-month handset contract in September 2017 alongside its existing 24-month handset contract.

(f) **Tesco Mobile** introduced Anytime Upgrade Flex with handset contracts up to 36 months in March 2018. **Sky** also started offering 36-month handset contracts in early 2018.

(g) **O2** launched Custom Plans in August 2018 (see below for details).

(h) **VOXI**, an MVNO owned by Vodafone, launched a split contact with 30-month handset contracts in October 2018.

86 As can be seen, competition between operators resulted in the progressive introduction of longer handset contracts and greater choice and flexibility in relation to the airtime contract than in the initial Refresh tariff.

O2 responded by enhancing its Refresh offer

87 In August 2018, O2 responded to these competitive developments by launching a more flexible split contract that it refers to as the O2 'Custom Plans'. This built on and enhanced the initial Refresh tariff by giving customers much more scope to customise the tariff to best meet their needs, including increasing the handset contract to up to 36 months.

88 Custom Plans tariffs comprise a handset contract of between 3 and 36 months, and a separate 30-day airtime contract. Customers can pay off the handset at any time and terminate the airtime contract without incurring any early termination charges. However, the contracts are linked by the requirement to maintain an airtime contract for the duration of the handset contract, which means that customers must pay off the remaining handset loan as a lump-sum if the airtime contract is terminated.

89 Custom Plans are highly customisable, as follows:[49]

(a) Customers can select the handset contract between 3 to 36 months.

(b) Customers can determine the amount of any upfront handset payment.

[47] giffgaff is an MVNO that operates on the Telefonica network, and is owned by Telefonica.

[48] https://www.theinquirer.net/inquirer/news/2308123/giffgaff-starts-selling-mobile-phones

[49] Ibid.

(c) Customers have a choice of several airtime tariffs with different data allowances and can change this once a month by moving within the set of data allowances and prices offered by O2 when the handset contract was taken out.[50]

90 It is important to recognise that O2 has not imposed handset contracts with longer time periods on consumers. The potential loss of flexibility due to handset contracts greater than 24 months is chosen by customers, in the context of them having a free choice of the number of months over which they wish to spread the handset cost (i.e. they can choose any number of months between 3 and 36).

91 In addition, Custom Plans are designed to ensure that customers can readily understand the pricing of the handset and airtime contracts:

(a) Handset costs are clearly specified and do not depend on the handset contract length or airtime tariff.

(b) Monthly payments are given, separately, for both the handset contract and the airtime contract, along with the total monthly payment.

(c) The total payment for the handset over the contract is clearly stated.

92 In addition, the contractual terms are readily available online, including a pro-forma handset contract (i.e. the consumer credit agreement), and O2's airtime contract. Moreover, the requirement to maintain an airtime contract and the need to pay off the handset contract otherwise is clearly stated.

O2 designed the Custom Plan to meet customer needs

93 Internal O2 documents indicate that the Custom Plans were developed to address customers' concerns about the existing Refresh offer and other alternative ways of purchasing handsets that were available at the time. The intent was to provide transparency to consumers and to enhance consumer trust of the O2 brand. [redacted][51]

94 The final structure of O2's Custom Plans family of tariffs reflects the finding that customers placed particular importance on choice and flexibility. [redacted][52]

95 O2's decision to extend the handset contract length beyond 24 months (to a maximum of 36 months) was driven by a perceived customer need.

50 See also https://www.o2.co.uk/refresh/flexible-tariffs.

51 [redacted]

52 [redacted]

(a) [redacted][53] [redacted][54]

(b) [redacted][55] [redacted][56] [redacted][57]

(c) [redacted][58]

96 [redacted][59] [redacted]

Table 2 O2 customer survey on benefits of Custom Plans

[redacted]

53 [redacted]

54 [redacted]

55 [redacted]

56 [redacted]

57 [redacted]

58 [redacted]

59 [redacted]

O2 expected that Custom Plans would strengthen its competitive position

97 Internal O2 documents also indicate that Custom Plans were intended to improve O2's offer to match and improve upon some of the tariff features introduced by rivals. [redacted][60]

(a) [redacted]

(b) [redacted]

(c) [redacted]

98 As explained above, O2 designed Custom Plans to offer significant benefits to customers by giving more flexibility and longer handset contracts than its previous Refresh offer. [redacted][61] [redacted]

99 [redacted].

Figure 1 Evolution of O2's market share in handsets sold via direct channels

[redacted]

[redacted]

60 [redacted]

61 [redacted]

100 [redacted][62]

(a) [redacted]

(b) [redacted]

(c) [redacted]

(d) [redacted]

Figure 2 Vodafone's price response to O2's launch of Custom plans

[redacted]

O2's customers demonstrate a strong preference for longer-term contracts

101 O2 data indicates that the demand for contracts longer than 24 months was significantly stronger than expected. [redacted][63] [redacted]

62 [redacted]

63 [redacted]

Figure 3 O2 Custom Plans sales volumes by duration

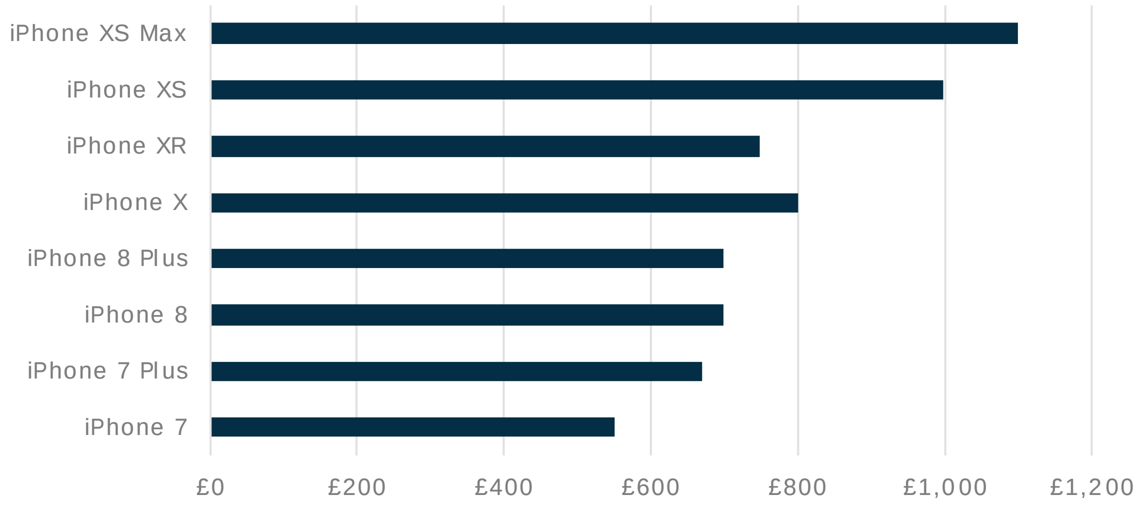
[redacted]

Longer-term contracts help customers afford new handsets and more data

102 As discussed above, O2's customer research suggests that customers value the ability to reduce monthly payments to an affordable level by spreading the cost of handsets over a longer period. This has become increasingly important in recent years due to the increasing cost of handsets, as Ofcom has previously recognised.[64] The extent of recent handset price inflation is illustrated in Figure 4, which shows Apple's launch price for successive generations of iPhones from the iPhone 7 in September 2016 to the iPhone XR, XS and XS Max in September 2018. [redacted]

[64] Ofcom: "Communications Market Report" (2 August 2018), p. 58.

Figure 4 Launch prices of successive generations of iPhone handsets



Source: https://www.bbc.co.uk/news/newsbeat-47056309, https://www.thesun.co.uk/tech/7244805/apple-iphone-uk-price-xs-max-xr/, and AlixPartners.

Notes: Figure shows starting prices.

103 O2 sales data indicates that customers who chose a 36-month contract are more likely to have purchased a recent handset than those with a 24-month contract. [redacted][65] [redacted]

65 [redacted]

Figure 5 Distribution of iPhone models by contract duration (Custom Plans)

[redacted]

104 [redacted]

Figure 6 Distribution of data allowance by contract duration (Custom Plans)

[redacted]

105 [redacted]

Figure 7 Customer feedback on benefits of Custom Plans

[redacted]

The strength of demand for Custom Plans strongly suggests that customers accept the requirement to maintain an airtime contract

106 As recognised by Ofcom, O2 is the leading supplier of split contracts, with many customers choosing to purchase O2's Custom Plans in preference to a bundled contract (either indirectly from O2, or from a rival MNO), or a SIM-only contract. The strength of demand for Custom Plans shows that customers accept the requirement to maintain an airtime contract throughout the handset contract when they take up a Custom Plans offer.

107 In this regard, O2 has told us that the terms of the contract are clearly set out, and the requirement to maintain an airtime contract is explained and made transparent before purchase. From our review of O2's website, and the script provided to O2's voice customer service agents when selling a tariff under Custom Plans, that does seem to be the case. Accordingly, customers can be expected to be aware of this requirement when they decide to purchase a Custom Plan tariff, and Ofcom does not suggest otherwise. An implication of this is that those customers who choose a longer-term contract of 36 months are willing to commit to continue to purchase airtime from O2 over this period, in return for lower monthly handset payments.

Customers can take steps to mitigate the harm identified by Ofcom

108 Ofcom argues that longer-term LSCs cause harm by preventing some customers from switching to a better deal during the term of the handset contract. A notable feature of O2's Custom Plans (and that of some of the LSCs offered by MVNOs) is that customers can move to a different data allowance and price point within the options available when they purchased the Custom Plan once a month. This flexibility allows customers or decrease their data allowance and monthly airtime payment as their needs and circumstances change. This flexibility can be expected to reduce the

incentive and benefit of switching provider, and hence mitigate the type of harm that Ofcom suggests.

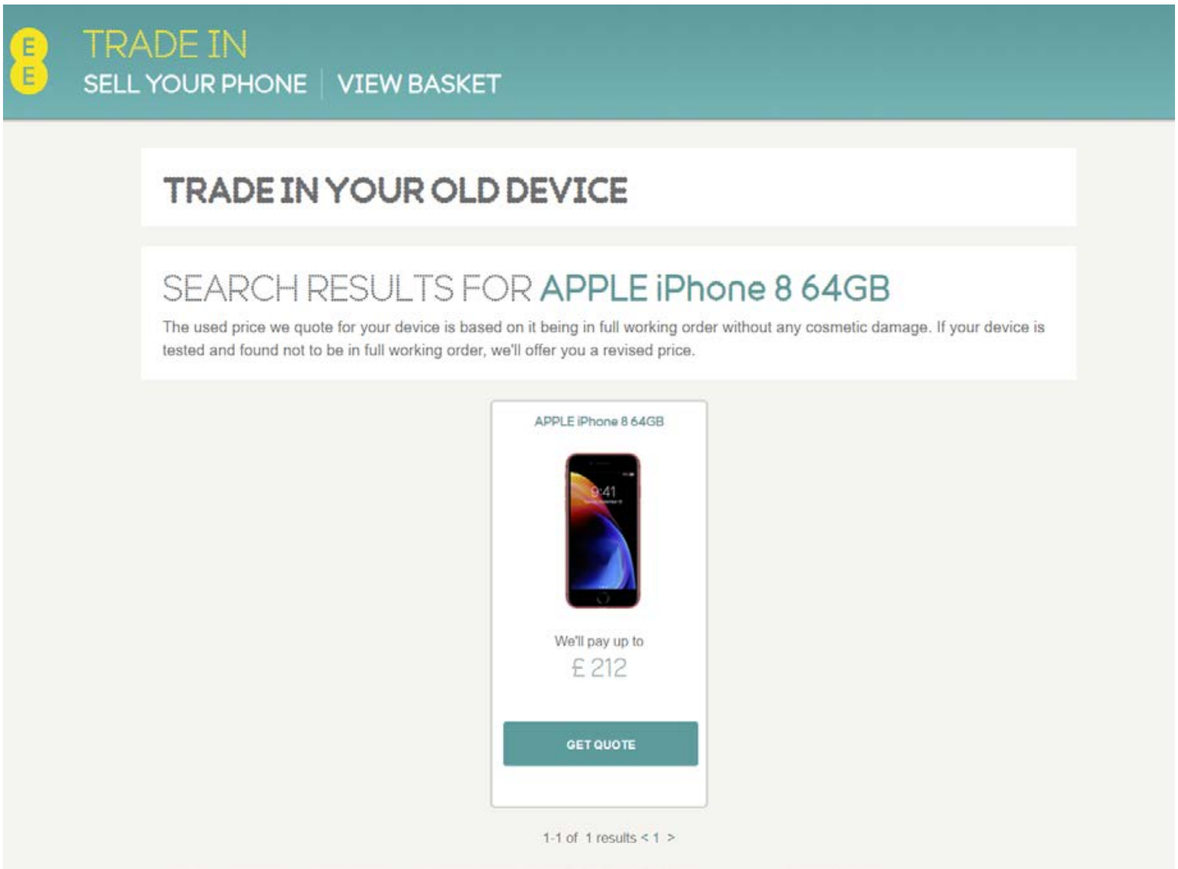
109 Customers who want to switch can also sell their existing handset to offset the cost of having to pay off their handset contract as a lump sum. This can be done in several ways, including using an online marketplace such as eBay or Facebook marketplace, or through one of the handset trade-in schemes offered by mobile providers (including, for example, O2's Recycle scheme). Telefonica has told us that there is no published source of trade-in or used device sales, but their research indicates that [redacted]

110 Ofcom does not consider the trade-in value of handsets in its analysis of the impact of LSCs on switching costs. We consider that this is an important factor that should be considered, since it is likely that in many cases the trade-in price would cover a large proportion of the lump-sum payment that falls due if a customer switches within the handset contract.

111 For example, consider a customer who purchased an iPhone 8 64GB from O2 for £699 in August 2017.[66] For the purpose of this example, we assume that this was purchased under a 36-month contract with the same terms and conditions as O2's Custom Plans, and so the customer would have made 24 monthly payments by August 2019. Under these assumptions, the outstanding handset loan would be £233 pounds. This is only £21 more than EE's trade-in price of £212 on 26 August 2019 for an iPhone 64 GB in good condition was £212 (see Figure 8). In this example, selling the handset therefore allows the customer to recoup 90% of the outstanding handset loan.

66 At § 5.15 Ofcom refers to a consumer on an O2 36-month contract that purchases an iPhone XR having to pay £256 after 24 months. The intention here is to provide a comparable example to show the trade in value. However, the iPhone XR was not available in August 2017. The latest Apple handset at August 2017 was an iPhone 8. This is the version which is closest in price to the example provided by Ofcom. Note that, in any case, this is a hypothetical example as 36-month contracts were not introduced until August 2018.

Figure 8 EE quote on used iPhone 8 64GB (good condition)



Source: https://recycle.ee.co.uk/search.aspx?d=dosearch&s=Apple%20iPhone%208%2064GB (screenshot captured at 26 August 2019 – 07:29).

112 More generally, the proportion of the outstanding handset loan that can be recouped by selling the handset will depend on several factors, including the size of the original handset loan, the proportion of the contract that has elapsed when the customer wants to switch provider, and the trade-in price for the handset.

113 We believe that the flexibility to switch airtime tariff and the option of trading in an existing handset are important factors that Ofcom should have considered in its analysis. They seem likely to significantly mitigate the potential competitive harms that Ofcom identified.

Churn rates for 24-month LSCs do not suggest a high level of dissatisfaction

114 Table 3 shows data relating to the proportion of O2 customers who switched to an alternative provider in the period immediately before and immediately after the handset contract expiration date. [redacted]

115 As can be seen in Table 3, the churn rate of customers in the direct sales channel [redacted] which does not suggest a high level of dissatisfaction due to a supposed inability to switch within contract. [redacted]

[redacted]

Table 3 Churn rates for O2's direct channels

[redacted]

116 Telefonica has also told us that the number of complaints made by Custom Plans customers is small (see Table 4). [redacted] The handset termination payment was specifically identified in [redacted] This suggests that this was not a material source of customer dissatisfaction.

Table 4 Volume of complaints by Custom Plans customers

[redacted]

Linking the handset and airtime contracts allows O2 to offer better terms

117 As explained above, in practice O2 customers who choose a handset contract that is longer than the 30-day airtime contract in O2's Custom Plans tariffs are likely to continue to purchase airtime from O2 for longer than might otherwise be the case. Accordingly, for airtime sales, the effective customer lifetime of LSC customers for longer-term LSCs can be expected to be higher.

118 Longer-term handset contracts allow customers to reduce their monthly handset payment. In addition, O2 can offer better terms to its LSC customers than would be possible without linking because the expected increase in the effective customer lifetime of these customers for airtime also means they are more attractive to O2. Competition between providers ensures that O2 has an incentive to reflect these longer customer lifetimes in better terms for LSCs to increase demand.

119 The impact of increased customer lifetime on O2's pricing behaviour is illustrated in Table 5 for 15 GB and 40 GB SIM-only contracts. We use SIM-only contracts because these are the simplest

contracts that enable one to see how the benefits to mobile operators of a longer-term commitment by consumers can be reflected in lower monthly charges. As can be seen, the monthly payments are lower for the 12-month and 18-month SIM contracts, reflecting the fact that customers who purchase a longer-term SIM contract are contractually committed to remain with O2 over a longer period (or to pay in full in the event of early termination) and hence are more valuable to O2.[67]

Table 5 O2 SIM-only tariffs

Data allowance	30-day contract	12-month contract	18-month contract
15 GB	£25	£23	£18
40 GB	£40	£38	£22

Source: O2 website, prices are valid as of 6 September 2019.

120 Customers who purchase an O2 Custom Plans tariff have a 30-day airtime contract and so are not contractually committed to remain with O2 in the same way as those with 12-month and 18-month SIM contracts. However, as explained above, an increase in the effective customer lifetime of LSC customers creates a similar incentive to offer better terms to customers who purchase longer-term handset contracts.

121 We also investigated the existence of a Cournot effect when linking handset contract and airtime contract in an LSC. We did that by comparing O2's prices for an LSC and for equivalent unbundled offers.

122 O2 provides consumer credit at 0% APR for all handset contracts in its Custom Plans tariffs. This means that the monthly payment is simply the airtime monthly payment plus a monthly handset payment that is equal to the credit divided by the handset contract duration.[68] For example, at the time of writing, O2 offers iPhone XR handsets in a 12-month Custom Plan with 15 GB data allowance for a monthly payment of £80.09. This comprises £28 per month for airtime and a handset payment of £52.09 per month for 12 months – the device cost is currently listed by O2 as £655, and we assume that a customer pays the minimum required upfront payment of £30.

123 Customers could alternatively purchase the handset outright from O2 along with a separate SIM contract with the same data allowance. According to O2's website, a customer can purchase an iPhone XR outright from O2 for £830.[69,70] In addition, a customer can purchase a 12-month 15GB SIM-only deal for between £23 per month.

124 To compare the relative cost of these alternatives we convert the cost of buying the handset outright into a series of monthly payments based on a 12-month handset contract and add this

67 These data allowances have been chosen since O2 offers SIM only contracts at all three contract durations.

68 The handset credit is given by the handset cost less any upfront payment made by the customer. Note that the first monthly payment will be higher than subsequent payments by an amount equal to the upfront payment (if any).

69 Technically, O2 does not sell phones standalone. Rather, O2 sells a phone along with a free pre-paid SIM card. However, the customer is able to use the phone with any other SIM card, so in practice it is equivalent to a standalone handset sale.

70 We note that O2 has offered a steep discount on the iPhone XR in the Custom Plans tariffs that has not been offered when selling the iPhone XR standalone. The discount on the iPhone XR is likely related to the forthcoming launch of the iPhone 11. Nonetheless, O2 applies the discount only to the Custom Plans LSC and not to the standalone sales.

to the monthly airtime payment in the SIM contract to calculate the total monthly payment. We make this comparison for two possible scenarios based on different assumptions about the interest rate that O2 would charge on the handset loan if this is purchased separately (i.e. not in a Custom Plans tariff):

(a) **O2 provides consumer credit at 0% APR** – if O2 were to provide consumer credit at 0% APR for the handset the monthly handset payment would be £66.67 (assuming a £30 upfront payment for the handset). Including the £23 per month for the 12-month 15 GB SIM-only airtime contract, this would give a total monthly payment of £89.67, which is higher than the current monthly payment of £80.09 in the Custom Plans tariff.

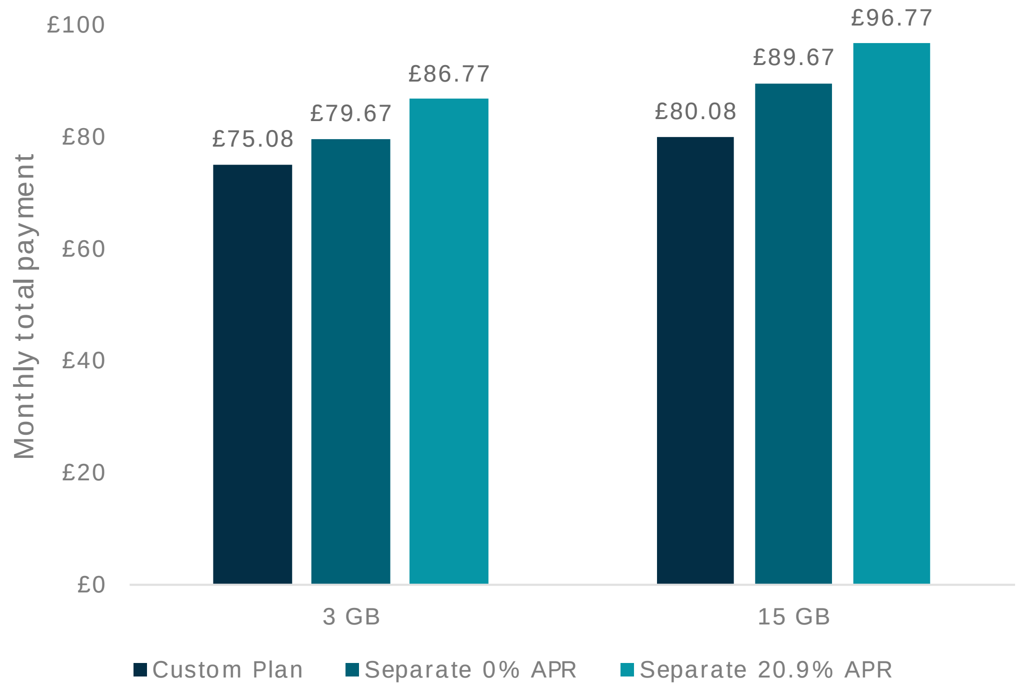
(b) **O2 provides consumer credit at 20.9% APR**– [redacted] For the purpose of this calculation we assume that O2 would apply an APR at the same level as giffgaff, which is currently 20.9% for a 12-month handset contract in the context of its NLSC.[71] If O2 decided to impose an APR at this level this would increase the handset payment from £66.67 per month to £73.77 per month (assuming a £30 upfront handset payment). Including the £23 per month for the 12-month 15 GB SIM-only contract this would give a total monthly payment of £96.77.

125 Figure 9 shows the monthly payment for O2's LSC along with the monthly payments in the notional NLSC for the 0% and 20.9% APR scenarios. The three columns on the right refer to a 15 GB data allowance, and the three columns on the left to a 3 GB allowance (calculated using the approach set out in the preceding paragraph).[72] As can be seen, the monthly payment for the Custom Plans tariff for each data allowance is significantly cheaper than the alternative of buying the handset and airtime separately with a 0% APR. And the difference is larger if O2 were to increase its APR to 20.9%.

[71] As noted earlier, Ratesetter provides the consumer credit for handsets to giffgaff customers.

[72] The calculation for the 15 GB data allowance is based on a monthly airtime payment of £28 in the Custom Plans tariff. The notional NLSC use a monthly airtime payment of £20 for a 25 GB 12-month SIM-only contract, since this is currently cheaper than O2's price of £23 per month for a 15 GB 12-month SIM-only contract.

Figure 9 Comparison of monthly payments for iPhone XR 64 GB (considering a 12-month SIM-only contract)



Source: AlixPartners analysis. Prices from O2 website on 16 September 2019.

Notes: Figures are based on a 12-month handset contract with £30 upfront payment. According to our calculations the monthly charge for the 15GB contract under Custom Plans should be £80.08 compared to £80.09 on O2's website. We have retained our calculation result in the above chart so that we use the same methodology to compare all tariff options.

126 This pattern of lower relative prices of the Custom Plans tariffs is consistent with the Cournot effect, given that handsets and airtime are complements. As explained earlier, economic theory indicates that in these circumstances, selling the products together as a bundle in an LSC allows O2 to offer a lower monthly price to customers compared to the option of setting the price of the handset and airtime separately, as in the notional NLSC options.

127 Also note that the price increase under the two considered scenarios vis-à-vis Custom Plans would be higher for the 15 GB data allowance, compared to the 3 GB data allowance. This observation is consistent with the iPhone XR 64 GB handset being a stronger complement with a 15 GB SIM-only tariff and, consequently exhibiting a larger Cournot effect. In general, it seems likely that more premium handsets will be stronger complements with SIM-only tariffs of larger data allowances.[73]

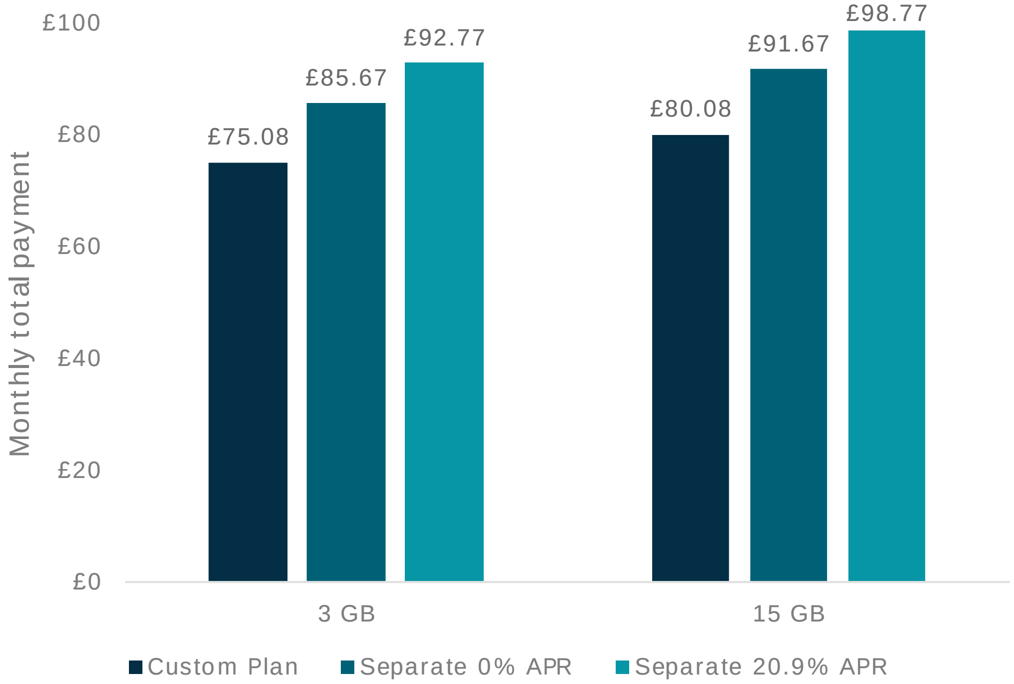
128 The Annex extends this analysis to a wider range of iPhone and Samsung handsets offered by O2. This confirms that O2's LSCs tend to be cheaper than the alternative of purchasing the handset and airtime separately for more expensive handsets, but not for some older less expensive handsets. In part, this reflects the fact that O2 can only offer a smaller reduction in monthly handset payments on less expensive handsets. Also, it suggests that O2 is pricing its Custom

73 This would be the case if the level of data usage is correlated with how premium a handset is. Exploring this issue is beyond the scope of this report, but it seems a reasonable assumption that such a relationship is likely to hold.

Plans to meet customer demand to acquire more expensive handsets at an affordable monthly price.[74]

129 As a reflection of the total benefits to consumers from LSCs, encompassing both longer customer lifetime and the Cournot effect, Figure 10 below compares a 12-month Custom Plans tariff for the iPhone XR 64GB to the equivalent total monthly payment when purchasing an O2 30-day SIM-only contract combined with a standalone handset under either 0% APR or 20.9% APR. As can be seen, the Custom Plans tariff, which retains similar flexibility to the 30-day airtime contract since consumers can switch airtime contract up to once a month, is relatively even cheaper than the standalone options.

Figure 10 Comparison of monthly payments for iPhone XR 64 GB (considering a 30-day SIM-only contract)



Source: AlixPartners analysis. Prices from O2 website on 16 September 2019.
Notes: Figures are based on a 12-month handset contract with £30 upfront payment.

O2 has also indicated that there are other cost savings related to linking

Linking has a potential benefit in terms of VAT payments by O2

130 We understand that HMRC ruled in 2014 that the link between the handset and airtime contracts in O2's Refresh tariff meant that the handset was ancillary to the supply of airtime services and could therefore be regarded as a continuous supply of services. This means that Telefonica is permitted to pay the VAT on handset sales when it gets paid by consumers.

74 This is reflected in the structure of Custom Plans as customers are offered 0% APRs on the handset contract but pay a premium for the linked SIM-only tariff (compared to the standalone SIM-only tariff options). The same linked SIM-only tariff applies to all handsets.

131 O2 considers that there is a risk that Ofcom's ban on linked contracts longer than 24 months could mean that HMRC might treat longer-term Custom Plans tariffs as a dual supply rather than a continuous supply of services, with the handset being considered goods and airtime being considered services for VAT purposes. This would mean that Telefonica might have to pay the VAT on handset sales in full at the time the contract is sold.

132 The effect of this would be to effectively accelerate the payment of VAT on the handset element. For example, consider a 12-month split contract with a handset costing £360, no upfront gross payment, and a monthly gross airtime payment of £24. The total VAT payment by Telefonica over the contract is £108 with both single supply and dual supply VAT accounting, comprising £60 VAT on the handset and £48 on the airtime. However, in the former case the handset VAT is payable to HMRC in 12 monthly payments of £5, whereas in the latter it must be paid in full at the beginning of the contract.

133 Telefonica estimates that this change could have a material adverse effect on Telefonica's cash flow position. If this were to arise, O2 can be expected to seek to pass some of the cost on to customers. For example, O2 could potentially require customers to make an upfront handset payment that allows it to recover the cost of VAT on the handset immediately.

134 Evidence from internal Telefonica documents show that customers care about upfront costs and prefer not paying too much. [redacted] The following chart shows the results from that survey.

Figure 11 Results from pre-launch O2 survey: what upfront cost feels too much?

[redacted]

[redacted]

Removing the link could increase Telefonica's bad debt

135 We understand that Telefonica's finance agreement that allows it to finance loans for consumers to purchase handsets includes a condition that requires the handset and airtime contracts to be linked. Telefonica told us that this reflects the fact that its lenders consider that linking the contracts provides a somewhat higher incentive for customers to make repayment on the handset loan, thus reducing the risk of default. [redacted]

136 This suggests that a potential benefit of LSC is that it may reduce the risk that customers fail to pay off their handset loan, thus reducing O2's costs. However, it is unclear how material this impact might be.

Removing the link might impose additional investment costs on O2

137 [redacted][75]

138 [redacted]

The proposed ban will weaken O2's ability to compete with Virgin Media

139 Ofcom notes that customers who want longer term contracts would have the option of purchasing from Virgin Media through its Freestyle flex tariff if other operators decided to withdraw their longer-term contracts following the introduction of Ofcom's proposed ban.[76]

140 It is unclear whether such a scenario is realistic. We understand from O2 that Virgin Media has only a relatively small share of split contract sales, despite having lower prices. There may be reason for this. For example, Virgin Media may not wish to sell large volumes of these products if they have low profitability.

141 Ofcom's proposed ban may also impact on the ability of some operators to compete. The terms offered by Virgin Media may not be able to be replicated by other providers who have different strategies. Unlike O2, Virgin Media is a quad play operator supplying fixed broadband, landline, and pay-TV alongside mobile services. In this context, Virgin's strategy is to exploit cross-selling synergies across its product portfolio by selling more services to existing and potential customers. Virgin explains this as follows.

"*Our consumer strategy focuses primarily on marketing bundled offerings of products and services across our "quad-play" portfolio to existing and potential customers. (...) We believe that customers who subscribe to multiple services from us are less likely to churn. We also actively pursue opportunities to cross-sell complementary services across our product range (...)*"[77]

142 Figure 12 shows that Virgin's cable churn rates is lower for customers than take multiple services. This provides an important incentive to cross-sell as a way of boosting customer retention and average customer lifetimes.[78]

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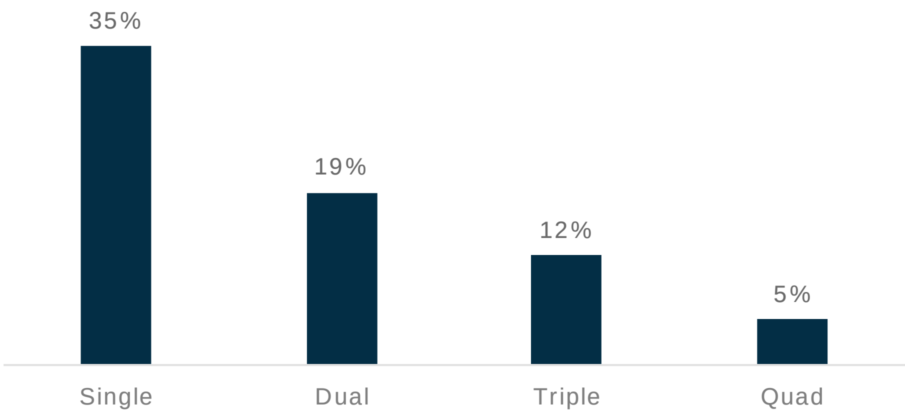
75 [redacted]

76 Ofcom – "Helping consumers to get better deals in communications markets: mobile handsets – Statement and Consultation" (16 September 2019), §5.50 d).

77 Virgin Media Annual Report 2011, p. 12.

78 For further evidence of this effect, see Prince, J. and Greenstein, S. (2014): Does service bundling reduce churn? *Journal of Economics & Management Strategy*, 23(4), pp. 839-875.

Figure 12 Virgin Media's cable churn rates for single to quad bundles (FY 2011)[79]



Source: (http://media.tefficient.com/2013/07/tefficient-public-industry-analysis-9-2013-Multi-play.pdf) and AlixPartners.

143 One manifestation of Virgin's efforts to cross-sell and its perception of churn benefits can be seen in the fact that Virgin only offers its unlimited data plans ('Truly Unlimited') to current Virgin Media broadband or TV customers. Table 6shows the monthly payments for an iPhone XR purchased with a 24-month or 36-month contract with the Truly Unlimited tariff. For comparison, the table also shows the payments under the alternative option of purchasing the handset outright with a 12-month SIM contract from Virgin.[80]

144 Based on these figures, it is evident that the total amount payable over both a 24-month and a 36-month Truly Unlimited tariff is equal to the sum of the handset cost and the monthly SIM contract payment over the same periods. This means that Virgin is effectively providing handset credit at an implicit APR of 0%.[81] The provision of free credit in this way is consistent with a cross-selling strategy based on the expectation of a benefit from a reduction in customer churn rates in relation to broadband and TV customers who purchase the Truly Unlimited mobile plan.

145 Pure mobile operators such as O2 cannot replicate Virgin Media's quad play cross-selling strategy. However, O2 has developed an attractive consumer offering with Custom Plans that has given it a competitive advantage.

146 If the proposed ban weakens the ability of O2 to compete effectively with Virgin Media, by preventing it from using LSCs to compete for customers who are willing to accept a higher level of commitment to continue to purchase airtime from O2 in return for lower monthly handset payments, this may lead to an overall reduction of competitive intensity, which would not be in consumers' interests.

79 Note that Virgin stopped providing cable churn rates separately in the recent years.

80 Virgin does not offer a monthly rolling sim only plan.

81 Virgin does not separate out the total monthly payment for its Freestyle tariffs into a handset and an airtime payment and does not state the effective APR.

Table 6 Comparison of Virgin's Truly Unlimited Freestyle tariff (iPhone XR 64GB)

	Freestyle tariff	Purchase handset and airtime separately
Upfront handset payment	£0	£828
Monthly payment	£66.50	£32
Data allowance	Truly unlimited	Truly unlimited
Contract length	24 Months	12 Months
Implied APR	**0%**	
Upfront	£0	£828
Monthly payment	£55.00	£32
Data allowance	Truly unlimited	Truly unlimited
Contract length	36 Months	12 Months
Implied APR	**0%**	

Source: https://www.virginmedia.com/mobile/pay-monthly/apple/iphone-xr (prices were valid on 16 September 2019) and AlixPartners calculations.

5 The proposed restriction on linked split contracts will harm consumers

147 In this section we assess the likely impact of Ofcom's proposed ban on LSCs longer than 24 months, given the analysis and evidence in sections 3 and 4. We also comment briefly on the possibility that Ofcom might subsequently seek to extend the ban to LSCs of any duration, including shorter term LSCs of up to 24 months.

148 As explained below, we consider that Ofcom's impact assessment is flawed and unreliable, for the following reasons:

(a) Ofcom's assertion that its ban on LSCs will benefit customers is inconsistent with basic economic principles. These suggest that a regulatory restriction of products and services in the UK mobile market, which is characterised by strong competition, is likely to reduce choice and welfare.

(b) Ofcom places undue emphasis on the ability of customers to switch airtime provider during the handset contract and fails to adequately consider the wider impact on competition and choice.

(c) Ofcom's effective assumption that LSC providers will continue to offer NLSC tariffs longer than 24 months at similar prices after the proposed ban is imposed disregards the impact that banning LSCs will have on providers' costs and pricing incentives.[82] Ofcom does not consider the likelihood that the ban will have material adverse effects that outweigh the limited benefits of increased ease of switching due to ban on longer term LSCs.

149 For these reasons, we consider that Ofcom's theory of harm is implausible and that strong supporting evidence of the claimed detrimental effects of LSCs would be required to justify such an intrusive intervention. In fact, Ofcom advances no evidence relating to the actual effects of LSCs on consumers and competition, and instead relies on theoretical arguments and assumptions.

150 We also note that banning longer term LSCs at this stage would be premature given their relatively recent introduction, the lack of actual evidence of harm, and because Three and EE have both indicated that they plan to introduce their own split contract offerings. In these circumstances, there is a risk that the proposed ban will have a chilling effect on competition and reduce choice to the detriment of customers.

Economic principles suggest that Ofcom's ban risks harming customers

151 As explained in section 3, basic economic principles suggest that a regulatory restriction of products and services in a competitive market with well-informed customers is liable to reduce choice. Given the competitive nature of the UK mobile market, this suggests that the theoretical case for Ofcom's ban is weak and that there is a significant risk that it will in fact result in harm to customers that are no longer able to meet their needs as well as otherwise would be possible.

82 Ofcom explains at §§5.48-5.50 why it does not consider that any unintended consequences are likely to be material. This is equivalent to assuming that similar terms will be available to customers.

152 The proposed ban targets LSC tariffs that many customers have freely chosen in preference to the wide range of alternatives that are available in the market. This suggests that these customers consider that longer-term LSC contracts meet their needs better than alternatives, including shorter term LSC contracts of NLSCs, bundled contracts or SIM-only tariffs. Ofcom's proposed ban implicitly rejects the notion that well-informed customers are best placed to choose the products that meet their needs and instead assumes that customers willingly choose products that are not in their best interests.

Ofcom places undue emphasis on the ability of customers to switch airtime provider

153 Ofcom's focus on the ability of customers to switch airtime provider during the handset contract fails to adequately consider the wider impact on competition and choice.

154 Ofcom does not quantify the presumed benefits of switching provider. There will be benefits if: (i) it is easier for customers to switch without LSCs; (ii) and customers do switch more when linking between contracts is removed; (iii) and customers are able to get better prices from their new providers. Ofcom has not set out and considered each of these elements and attempted to quantify the presumed benefits. Moreover, and even more importantly, Ofcom has not appropriately considered if there are any negative offsetting effects that outweigh the presumed benefits.

Ofcom's argument that the unintended consequence of its proposal will be limited is flawed and unreliable

155 Ofcom considers that its proposed ban on LSCs beyond 24 months will reduce the barrier to customer switching and hence reduce the expected time that a customer on an LSC will continue to purchase airtime from the split contract provider. Ofcom reasons that this will reduce the expected profitability of LSC customers and that this could result in providers deciding to stop offering handset contracts longer than 24 months, or alternatively continue to do so but with higher handset and/or airtime prices (and hence a higher total monthly cost to the customer).

156 If providers stop offering handset contracts longer than 24 months, and certain consumers value the ability to spread handset costs over periods longer than 24 months, this will self-evidently be a bad outcome for these consumers. These consumers will be forced to take product offerings that they find less attractive, directly harming them. Similarly, if both handset and airtime prices increase this is very likely to be worse for consumers.

157 Ofcom argues that the risk of the withdrawal of handset contracts longer than 24 months or higher prices is unlikely to be material in practice since:

(a) An increase in airtime or handset prices will make LSCs less attractive relative to the option of purchasing a handset outright and using with a SIM-only deal, or to a bundled contract. Ofcom argues this this will limit providers ability to increase prices in LSCs profitably.

(b) Providers will have a strong incentive to continue to offer handset contracts longer than 24 months even if they cannot do so in an LSC, since there is a clear demand from customers for longer contracts to spread the monthly cost of more expensive handsets, and customers who want to do so can switch to another provider who offers handset contracts longer than 24 months in a NLSC, such as Virgin Mobile or giffgaff currently.

158 We disagree with Ofcom's argument that the proposed ban will not have any material adverse consequences. The fact that many customers purchase LSCs in preference to alternative options amply demonstrates that they meet the needs of these customers more effectively and is not consistent with Ofcom's theory that they harm customers and competition.

159 This is true irrespective of the existence of other constraints. We agree with Ofcom that the option of switching to a SIM-only deal or to a bundled contract will exert a competitive constraint on split contract offers. We also agree that the existence of an option to switch to a NLSC contract longer than 24 months already in the market is relevant. However, this does not alter the fact that consumers will be prohibited from taking up the tariffs that they find more attractive.

160 In addition, Ofcom does not recognise that a restriction on LSCs is likely to have an adverse effect on providers' costs and pricing incentives that will undermine their ability to offer longer term NLSCs on the same terms of LSCs.[83] There are several reasons for this:

(a) If the average expected customer lifetime for airtime purchases falls then this would lead to airtime price increases.

(b) If operators are not able to effectively bundle airtime contracts and handset contracts, this would lead to price increases as operators are not able to price efficiently the two complementary goods (reflecting the Cournot effect).

(c) A ban on LSCs may result in an increased risk of loss related to payment default on the handset contract after the customer has switched airtime provider, thus driving up costs.

(d) A ban on LSCs may mean that providers must pay 20% VAT on the handset cost upfront instead of over the course of the contract as customer payments are made. This will increase working capital funding requirements, and increase the financial loss associated with default on the handset contract.

161 In a competitive market the increase in costs and change in pricing incentives will be expected to lead to higher prices and worse terms for consumers. Moreover, these adverse effects would likely be material, as illustrated by the example discussed in §§122-125 above, which showed that monthly payments could increase significantly.

Banning all non-coterminous linked split contracts is also likely to be harmful

162 Ofcom also has concerns that LSCs of up to 24 months may also deter switching, particularly where the airtime and handset contracts do not end at the same time (e.g. because the airtime contract is shorter than the handset contract). These shorter LSCs fall outside Ofcom's proposed ban, but Ofcom indicates that it will take enforcement action if appropriate to ensure customers with these shorter LSCs can change provider. This suggests that there is a possibility that Ofcom may decide to extend its ban to LSCs of any duration in future.

163 Given our analysis above, we consider that Ofcom should be very cautious in seeking to ban shorter term LSCs in the absence of compelling evidence that these are harmful. The weaknesses we identify in Ofcom's theory of harm do not depend on the duration of the LSC and thus apply with equal force to LSCs up to 24 months. Accordingly, extending the ban to all LSCs would likely increase the negative impact of Ofcom's proposed ban of LSCs longer than 24 months.

[83] Ofcom states explicitly at §5.16 that it assumes that the mobile operator will be no worse off.

164 We also note that LSCs of up to 24 months provide an additional option for customers to purchase a handset with airtime over the same period as is permitted for bundled contracts and airtime contracts. These shorter term LSCs give customers significantly more flexibility than 24-month bundled contracts, for example, since they allow them to alter their airtime tariff or switch provider within the period of the handset contract with no early termination charge (unlike in a bundled contract). Given this, Ofcom's discomfort with shorter term LSCs does not appear to be consistent with its acceptance of 24-month bundled contracts.

O2 would be [redacted]

165 [redacted]

166 [redacted] Ofcom fails to recognise this practical constraint in its impact assessment.[84]

[84] Ofcom states at §5.46 b) that in its view there will be minimal implementation costs.

A1 Further comparison of O2's Custom Plans tariffs.

167 This annex extends the pricing analysis set out in §§122-126 above to a range of iPhone and Samsung handsets offered by O2. The analysis compares the monthly payments in a 12-month Custom Plans tariff for 3 GB and 15 GB data allowances to the monthly payment for purchasing the handset at the PAYG price offered by O2 combined with a 12-month SIM-only contract. As in the main text, the latter is calculated separately assuming either 0% and 20.9% APR on the handset loan. We assume a £30 upfront handset payment in all cases to ensure comparability.

168 Tables A1 and A2 set out this analysis. In both tables handsets increase in cost from top to bottom.

Table A1: Monthly payment comparison for 3 GB data allowance

Model	Monthly payment			% increase for separate (0% APR)	% increase for separate (20.9% APR)
	Custom Plan	Separate 0% APR	Separate 20.9% APR		
Samsung Galaxy J3	£28.50	£22.92	£23.97	-20%	-16%
Samsung Galaxy A10	£31.00	£22.92	£23.97	-26%	-23%
Samsung Galaxy J4 Plus	£33.13	£23.75	£24.90	-28%	-25%
Samsung Galaxy A6	£41.51	£33.75	£35.96	-19%	-13%
iPhone 6s	£42.08	£35.42	£37.81	-16%	-10%
iPhone 7	£52.92	£45.42	£48.87	-14%	-8%
Samsung Galaxy A9	£55.01	£53.75	£58.09	-2%	6%
Samsung Galaxy S9	£58.25	£72.08	£78.38	24%	35%
iPhone 8	£62.08	£60.42	£65.47	-3%	5%
Samsung Galaxy Note8	£66.42	£82.92	£90.37	25%	36%
iPhone XR	£75.08	£79.67	£86.77	6%	16%
Samsung Galaxy S8 Plus	£76.17	£75.42	£82.07	-1%	8%
Samsung Galaxy Note9	£83.08	£87.58	£95.54	5%	15%
iPhone X	£88.67	£93.75	£102.36	6%	15%
iPhone XS	£95.92	£105.08	£114.90	10%	20%
iPhone XS Max	£104.58	£114.58	£125.41	10%	20%

Source: AlixPartners analysis. Prices are taken from O2 website on 16 September 2019.
Notes: Figures are based on a 12-month handset contract with £30 upfront payment.

Table A2: Monthly payment comparison for 15 GB data allowance[85]

Model	Monthly payment			% increase for separate (0% APR)	% increase for separate (20.9% APR)
	Custom Plan	Separate 0% APR	Separate 20.9% APR		
Samsung Galaxy J3	£33.50	£32.92	£33.97	-2%	1%
Samsung Galaxy A10	£36.00	£32.92	£33.97	-9%	-6%
Samsung Galaxy J4 Plus	£38.13	£33.75	£34.90	-11%	-8%
Samsung Galaxy A6	£46.51	£43.75	£45.96	-6%	-1%
iPhone 6s	£47.08	£45.42	£47.81	-4%	2%
iPhone 7	£57.92	£55.42	£58.87	-4%	2%
Samsung Galaxy A9	£60.01	£63.75	£68.09	6%	13%
Samsung Galaxy S9	£63.25	£82.08	£88.38	30%	40%
iPhone 8	£67.08	£70.42	£75.47	5%	13%
Samsung Galaxy S10	£70.08	£89.58	£96.68	28%	38%
Samsung Galaxy Note8	£71.42	£92.92	£100.37	30%	41%
iPhone XR	£80.08	£89.67	£96.77	12%	21%
Samsung Galaxy S8 Plus	£81.17	£85.42	£92.07	5%	13%
Samsung Galaxy Note9	£88.08	£97.58	£105.54	11%	20%
iPhone X	£93.67	£103.75	£112.36	11%	20%
iPhone XS	£100.92	£115.08	£124.90	14%	24%
iPhone XS Max	£109.58	£124.58	£135.41	14%	24%

Source: AlixPartners analysis. Prices are taken from O2 website on 16 September 2019.
Notes: Figures are based on a 12-month handset contract with £30 upfront payment.

85 As noted in the main report, we assume that customers would purchase a 25 GB SIM-only contract since this is currently cheaper than O2's 12-month 15 GB SIM-only contract.