

Vodafone response to Ofcom's consultation 'Helping consumers to get better deals in communications markets; mobile handsets'.

The market is changing and delivering for customers with different needs

- The telecoms mobile market is highly competitive, delivering choice and good consumer outcomes. Competition and market changes are already delivering outcomes that make intrusive regulation in this area unnecessary.
- Ofcom's consultation includes very little evidence and no impact assessment. Its publication appears to be driven by media headlines, rather than evidence and analysis.
- Regulatory intervention as proposed by Ofcom is likely to result in unintended consequences such as higher prices and lower levels of engagement.

We agree on the importance of transparency and are transparent with our customers

- We agree that consumers need to have clear information to enable them to make their transaction decisions.
- Whilst we already display the handset value in our contracts, we will also start offering our customers split contracts, based on research we carried out.

Ofcom's ability to introduce new interventions

- The new European Electronic Communications Code ('EECC'), taking effect in 2020, is a
 maximum harmonisation one. This means that national regulators cannot go beyond the
 provisions of the Code. Some of the interventions proposed by Ofcom are not in the EECC and
 therefore cannot be introduced.
- Ofcom should not have two consultations running in parallel, partly addressing the same issue. It undermines the integrity of the regulatory process.

Next steps

- Ofcom should continue to work to enhance transparency requirements where operators have not already delivered transparent information.
- Ofcom should allow the market the deliver split contracts and enhanced transparency. They should assess their impact before regulating further.

1. Summary

Vodafone UK ('Vodafone') welcomes the opportunity to respond to Ofcom's Consultation on mobile handsets. Whilst we agree with Ofcom on the importance of



informed consumers who can take advantage of the choice available to them in the market, we strongly disagree with Ofcom's approach and the proposed interventions.

The mobile market is highly competitive, innovative and delivers a great deal of choice to consumers. Based on consumer preferences, new contract types are being introduced and adopted by consumers; there has been a strong increase in SIM Only contracts over the past few years and contracts separating out the device from the airtime, so called split contracts, are becoming increasingly popular.

Vodafone is fully transparent about the details of the contract customers enter into; our Pay Monthly contracts include the value of the handset. In addition, we send customers who have reached the end of their contract a notification, making them aware of their options, including moving to a SIM Only contract.

Ofcom's consultation hardly includes any evidence, and completely lacks an impact assessment. As an evidence based regulator, we would have expected Ofcom to collect and analyse the evidence first before formulating potential interventions. The publication of this consultation is premature. We are also concerned about Ofcom running this consultation partly in parallel with its consultation on End and Out of Contract notifications. Both consultations aim to increase customers' engagement and should either have been combined into one or properly separated in time.

We are very concerned about the unintended consequences of Ofcom's proposals, in particular the automatic drop down to a SIM Only tariff. This option is likely to result in increased prices and a reduction in consumer engagement, which is contrary to Ofcom's objectives in this area. Providers will be less likely to compete for certain groups of customers, since they will become commercially less attractive, which could lead to higher prices. Ofcom barely touches on these consequences. We urge Ofcom to collect evidence and carry out an impact assessment which assesses the implications on the wider market, instead of narrowly focusing on the group that may benefit from the automatic move to SIM Only tariffs. We have commissioned Frontier Economics to comment on the potential impact of Ofcom's proposals on the wider mobile market. Their report is attached to our response in Annex 1.

The EU has published its new regulatory framework, the European Electronic Communications Code ('EECC'). The EECC is a maximum harmonisation directive, which means that national regulators cannot go below or beyond the provisions set out in the code, except in a number of clearly defined areas. Some of the interventions proposed by Ofcom (for instance the automatic drop down to SIM Only)



are beyond the provisions in the EECC, and are not included in the exceptions. We therefore question whether Ofcom can introduce such measures.

2. The mobile market is highly competitive – intervention is unnecessary

We recently responded to Ofcom's consultation on End and Out of Contract notifications. We reiterate some of the points we made in that response, because they are equally relevant in the context of this consultation. Ofcom's consumer engagement work and interventions should be seen in the context of the highly competitive telecoms market. The market delivers a huge amount of choice for consumers and low prices. This is acknowledged by Ofcom. Sharon White's speech in 2015 included the following paragraph on the competitiveness of the UK telecoms markets:

'There's no doubting the strength of competition in the UK: we have the most competitive fixed and mobile markets in the EU.

That has been good for consumers and business customers. For example, we've seen the cost of a "basket" of mobile services in this country fall from about £40 in 2003 to £13 in 2012. Today, UK customers can pay as little as £7 for a monthly mobile service.'

Ofcom's latest publication on this subject shows that mobile and triple play services performed particularly well compared against five other countries.² In terms of mobile offers, there is a large number of providers offering a huge amount of choice to customers. There are Pay Monthly deals with bundled airtime and device plans, or split handset and device plans ('split contracts'). In addition, there are SIM Only deals with different contract durations, and there are many Pay-as-you-go offers, all catering for different customer needs. Providers are competing by making innovative offers, allowing customers to choose the best plan for their needs and the market is

¹ https://www.ofcom.org.uk/about-ofcom/latest/media/speeches/2015/competition-telecoms

² https://www.ofcom.org.uk/__data/assets/pdf_file/0021/108903/icmr-2017-international-price-benchmarking.pdf



clearly delivering. Vodafone are doing this by segmenting customers and catering for the needs of these segments. Examples are the youth segment under the VOXI brand or Vodafone's Pay-as-you-go 1 proposition where customers with limited budgets and wanting peace of mind are never charged more than £1 a day. Other segments include our family and high value customer cohorts. Clearly customers have such very different needs from one another that prescriptive regulation will not provide anything above the lowest common denominator, suitable only for a minority of customers.

Split contracts were launched by O2 in 2013. Since then, a number of providers followed (Virgin Mobile, Tesco Mobile and Sky Mobile). Research carried out by Citizen Advice Bureau³ shows that currently, around 37% of customers on a Pay Monthly plan are on a split contract. This proves the increasing popularity of this type of contract, and demonstrates that the market is delivering for those customers who are interested in this type of proposition. Our consumer research has indicated that our consumers are interested in split contracts, and we therefore intend to launch our version of split contracts in the near future, continuing to provide our customers with transparency and choice.

We agree that handset customers who are out of contract could potentially be better off with a SIM Only plan. The strong growth in SIM Only customers demonstrates that the market is working in this respect as well. The trend of devices becoming increasingly powerful and expensive has resulted in consumers keeping their device longer, and moving to a SIM Only contract at the end of their handset contract. Providers have expanded their SIM Only offerings to cater for these consumers. The growth of our SIM Only customer base demonstrates consumers' awareness. Over the past two years, SIMO as a percentage of our total customer base has grown from %% to %%. In addition, recent analysis indicates that almost %%% of new Vodafone SIMO contracts were taken out by customers who were on a handset contract before.

Both the increase in customers taking out a split contract and the growth in SIM Only contracts show that the market is working. Intrusive regulatory intervention in this market is therefore unnecessary, and is likely to lead to unintended consequences, which are discussed in Section 4 below.

Page 4 of 12

³ https://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/consumer-policy-research/consumer-policy-research/reviewing-bundled-handsets/



3. The need for transparent information

We agree with Ofcom on the importance of informed consumers who can take advantage of the choice available to them in the market. In order to do so, the relevant information needs to be made available in a clear, easily understandable way.

Vodafone informs its customers in many different ways; our shops provide an overview of available devices and plans and our shop staff are well trained to advise customers, and make them aware of the best plan depending on their needs. Our online channel makes consumers and business customers aware of the different type of plans and devices, with equal prominence for Pay Monthly, Pay-as-you-go and SIM Only deals. Consumers can also call us, and our advisors again will help consumers establish what would be the best plan according to their needs. Web chat can be used to interact with our advisors as well.

In each of our channels, all relevant information is made available to our customers and we are fully transparent about price, contract duration and device costs. In the context of Ofcom's consultation, our Pay Monthly contracts already include the total value of the device. This provides our customers with full transparency about the costs of their device, which enables customers to compare this against other providers and offers.

The availability of both SIM Only and bundled contracts makes it easy for consumers to compare the two. On our website, clear information is provided for both types of plan. Comparing the monthly cost of plans, based on a customer's requirements in terms of voice, SMS and data allowances, is easy. In addition, there are plenty of price comparison websites, some accredited by Ofcom, facilitating the comparison and often helping customers to switch.

Customers can also log into our app or website to check their contract details, price and contract duration, which can be accessed anytime by customers.

More generally, engagement with mobile customers is very frequent, compared to other industries such as utilities. Mobile customers will receive messages and notifications on a regular basis throughout their contract; e.g. when they roam they will get roaming notifications; when they reach the end of their allowance, they will



receive a message. Towards the end of their contract, the vast majority will be contacted with offers and customers will be made aware of new services and features throughout their lifetime.

Vodafone currently sends End of Contract notifications to Pay Monthly and SIM Only customers when they reach the end of their minimum contract term. Customers are not only made aware they have reached the end of their minimum term, but are also given options. These options include upgrading to a new handset contract or moving to a SIM Only plan with equal prominence, acknowledging that some consumers may be interested in getting the latest handset, whilst others may be happy to continue using their current handset, or to buy a device separately. In addition, from early October, customers who do nothing following the End of Contract notification, will get extra data to reward them for their loyalty. In our recent response to Ofcom's End and Out of Contract consultation, we supported the principle of sending one-off notifications to customers who are already out of contract as well, thus providing transparency to all our Pay Monthly and SIM Only customers, whether they are in or out of contract.

4. Impact of Ofcom's propositions on competition

Ofcom proposes two options to address a situation where customers continue to pay the same monthly charge when their minimum contract term has ended. Ofcom focuses on the potential benefits for the 6% of customers who are currently out of contract, according to Ofcom's research, but does not address the wider impact of such interventions. We are very concerned about the lack of and narrow character of Ofcom's impact assessment. The Frontier Economics report contains a framework for a cost benefit analysis and a qualitative analysis of potential unintended consequences. We have summarised their main findings below:

• The group of customers who are out of contract is made up of customers with different types of behaviour, and different levels of engagement. There will be customers who are fully aware they are out of contract and who are waiting for a new device to come out. For other customers, finding a new deal may not be a priority at that point in time, or the perceived search costs are higher than the benefits they expect to get from a new deal. Whilst there may be a small group of customers who are truly disengaged, the vast majority will have



taken out a contract fairly recently in most cases, and were engaged when they did so. It is unlikely engagement levels of this group would suddenly drop.

There may be a group of customers who have been on the same contract for a very long time, or customers whose vulnerability impacts their ability to engage with the market. However, Ofcom has not presented any further analysis of the group of customers who are out of contract. In the absence of this information, we consider a blanket measure to be disproportionate. Ofcom should carry out further research, and put in place targeted measures for customers who are truly disengaged. The risk of a blanket approach is that those customers who are 'actively inactive' are likely to benefit most from the interventions proposed by Ofcom.

Research from Ofcom (further details are included in the Frontier Economics report) shows that there is a significantly higher prevalence of bundled contracts in younger customers, customers on higher incomes and customers in social group AB. In addition, Ofcom research demonstrates that customers in social group AB are more likely to be out of contract. These customers are unlikely to be disengaged from the market, and tend to have higher incomes. Any intervention is therefore likely to disproportionately benefit customers who are engaged, who are aware of their options, and who have decided for other reasons not to take any action. We therefore urge Ofcom to carry out further research into this group.

• Intervention is likely to impact on price levels or investment. In a competitive market, providers will set their prices in such a way that the cost of serving the customer is fully covered by the revenues generated by the customer over the lifetime of a customer. Ofcom's option to move customers automatically to SIM Only tariffs could have a number of consequences. The revenues per customer will decrease over a customer's life time. In order to absorb the same level of costs, the provider will have to increase prices for all customers impacted by the intervention. Alternatively, the provider will have to reduce costs and investments. This will have a direct impact on the level of service provided and on the investments the provider is able to carry out. Mobile networks are capital intensive. Over the past few years, there has been an exponential growth in data and mobile providers have to invest heavily in network capacity. In addition, we are continuously improving our mobile coverage and



customer service and all providers have spent considerable amounts of money on spectrum which will be used for 5G services, among other things. Recent regulatory changes, such as bill capping and mobile switching, required substantial changes to systems and processes, and have been expensive. A decrease in the pot of money available for investment will have an impact on customers, in terms of coverage and availability of new services.

Intervention may result in a decrease in consumer engagement. Through a number of initiatives, Ofcom is aiming to increase customer engagement, either by customers switching to another provider, or upgrading to another deal with their current provider. The objective of Ofcom's new switching rules, which take effect in July 2019, is, among other things, to make it easier for customers to switch provider. Ofcom's recent consultation on End and Out of Contract notifications aims to increase customers' awareness of their options when their minimum contract term expires. Of com's option in this consultation to require providers to automatically drop down to a SIM Only deal or provide some sort of discount runs counter to Ofcom's general objective to increase engagement and risks undermining Ofcom's flagship reforms on mobile switching; customers may end up engaging less with the market if they are automatically moved to a cheaper contract, and may not get the best deal for them based on their needs. They will not shop around for the best deal according to their needs, but instead they will be moved to a SIM Only plan, which mirrors as closely as possible the plan they took out 24 months ago, based on the requirements they then had. These may have changed over time and the plan they are being moved to may not be the best plan for them. Ofcom should take these effects into account in its impact assessment and quantify their impact.

5. Ofcom's consultation questions

Before responding to Ofcom's consultation questions, we would like to comment on Ofcom using the term 'loyalty penalty' in its consultation. Vodafone disagrees with the term 'loyalty penalty' in relation to its customers. Vodafone's customers are not penalised for their loyalty. We try our utmost to retain existing customers by making them aware of services that, based on their usage, would suit their needs. Loyal customers are 'rewarded' through service discounts (for single



services or for taking out multiple services), add-ons and discounted equipment and accessories and can gain value throughout the life of their contract, not just at point of retention.

The mobile market is particularly competitive at point of retention, offering improved value for loyal consumers beyond the headline prices paid by new customers at the point of retention. It is in the interest of service providers to retain and reward a loyal customer. One way to do this is by providing discounts; Vodafone's average discount for new handset and SIM-Only customers is $\times\%$ and $\times\%$ respectively, whereas the average discount for customers at retention is typically %, at %% and %%.

For many years Vodafone's propositions for acquisition and retention have been identical, the difference is the level of discounting made available to retain loyal customers. At point of upgrade, all customers are renewed onto the latest plans. Existing customers are not prevented from accessing new offers and as a policy we do not renew people onto legacy price plans — again this is driven by market competition.

Our main comments on Ofcom's concerns are included in Sections 2, 3 and 4 above. Below we summarise our comments.

Question 1 – Do you agree with the concerns we have identified in relation to bundled mobile airtime and handset contracts?

Our main comments on Ofcom's concerns are included in Sections 2, 3 and 4 above. Below we summarise our comments.

Transparency:

We are transparent with our customers, from the point of sale, when customers take out a contract, up to the end of a customer's contract, where we notify them they have reached the end of their minimum term, and make them aware of their options, with equal prominence for upgrading to a handset contract or taking out a SIM Only deal. Our bundled handset contracts show the value of the handset, and online and through price comparison websites, it is easy to compare the costs of bundled contract, SIM Only and split contracts.



Customers continuing to pay the same amount at the end of their minimum term:

We consider further analysis needs to be carried to gain insight into the different behaviours and different reasons why customers who are out of contract do not take action at the end of their minimum contract term. Ofcom's concern should only be in relation to customers who are truly disengaged, or whose vulnerability impacts on their ability to engage with the market. Customers postponing their upgrade because they are waiting for a new handset, or customers to whom this is not a priority are not disengaged. Any potential remedy should be targeted at the truly disengaged group alone.

Customers being unaware of their options:

The strong increase in the number of SIM Only and split contracts suggests that customers' awareness of these types of contract is high. The market is clearly delivering for customers with different needs. Ofcom are in parallel consulting on requiring providers to send End and Out of Contract notifications to customers. This will further increase customers' awareness of the options. Ofcom should continue with this consultation, intervene if deemed necessary and let the intervention take effect before proposing or introducing further measures in relation to bundled contracts. Running two consultations in parallel which partly address the same issue, undermines the regulatory process.

Question 2 – Do you agree with the options we have outlined as potential remedies for the concerns identified?

Ofcom should carry out further research into the group of customers who are currently out of contract and identify which customers are truly disengaged, instead of suggesting a blanket approach which is likely to disproportionately benefit customers who are engaged, but for some reason have decided not to take any action yet. In addition, Ofcom should widen its impact assessment, and include potential unintended consequences in particular in relation to the automatic drop down option. As set out, potential price increases and a reduction in consumer engagement are likely unintended consequences and should be included in Ofcom's cost benefit analysis.



Apart from the unintended consequences of moving customers to a SIM Only contract at the end of their minimum contract term, there are many operational issues with this solution. Providers will be unable to tell customers what SIM Only contract they will be moved to in two years' time, because those contracts will not be available yet. The only way for providers to do this would be to include a clause in the terms that would set out that customers will be moved to the nearest comparable SIM Only plan then available. This may not be the best option for the customer, since their usage and requirements may have changed. Benefits that came with their original plan may fall away as well, which is something not all customers may be aware of. Providers would have to move customers to a 30-day rolling SIM Only deal, the prices of which may not be advantageous to customers, compared to other types of contracts.

Question 3 – Do you have views on additional solutions we should consider, including on split contracts?

The strong increase in the number of customers taking out a split contract shows the attractiveness of the proposition to customers. Handsets are becoming increasingly expensive, and it is understandable that some customers want to spread the cost of the handset over a longer time period. Vodafone carried out research into customers' preferences and based on this, decided to introduce split contracts in the future as well. We consider that split contracts offer customers full transparency on the cost of the handset, and the flexibility for customers to spread the cost over a time period that suits them.

We carried out research into customers' preferences, based on non-branded versions of the split contracts currently available in the market. Our research showed that customers like to be able to select their own handset contract period. ><. This clearly indicates that it is customer preferences and requirements driving the longer handset contract periods, and that providers are catering for these preferences.

Ofcom comments in its consultation that some stakeholders have cautioned against split contracts because they do not necessarily offer the best value deal. The best value for a customer depends on a number of individual factors. Customers could be better off buying a handset separately, and paying the whole amount in one go, but not all customers may be able to afford this. Customers



could use a credit card and be charged an APR, which could be more or less advantageous than a split contract.

Ofcom is concerned that split contracts could have the effect of tying customers into longer contracts with providers. Vodafone does not see any issues with split contracts if contract durations and any other relevant conditions, are made clear at point of sale. Currently, information on early termination rights and charges have to be explained to the customer at point of sale under GC C8, and we consider conditions relating to the handset contract can be treated in a similar way.

We agree that there is no need to mandate split contracts. The market is already adapting to customers' changing preferences, and is offering a huge variety of contracts to cater for different consumer preferences.

Ofcom has not included the option of doing nothing. In light of Ofcom's consultation on End and Out of Contract notifications, we consider Ofcom should take into account stakeholders' comments regarding that consultation, carry out further research and publish its statement on this. Depending on its decision, it should take time to let any interventions embed, and evaluate their impact before considering any other remedies which partly address the same issue.



HANDSET CHARGES FOR MOBILE USERS

A framework for cost benefit analysis of Ofcom's proposals

November 2018





CONTENTS

Exe	cutiv	ve Summary	4			
1	Cor	npetition in the UK mobile market	7			
	1.1	Customer preferences for mobile services vary widely	7			
	1.2	The retail market is highly competitive	9			
	1.3	Operators compete vigorously to acquire and retain customers	11			
2	Market outcomes in the UK					
	2.1	High mobile and smartphone penetration	13			
	2.2	Data usage has increased rapidly	13			
	2.3	Retailers offers have evolved to reflect changes in customer preference	14			
	2.4		18			
	2.5	Conclusion	20			
3	Ofcom's proposals have not been justified					
	3.1	The consumers affected	22			
	3.2	Ofcom's proposals	25			
	3.3	Competition impacts of Ofcom's proposals	27			
	3.4	Conclusion	30			

EXECUTIVE SUMMARY

Vodafone has engaged Frontier Economics to review Ofcom's proposals on intervention in mobile consumer contracts that bundle handsets and services.

Overall, the competitive nature of the UK market means that it functions effectively with a wide range of retailers competing to acquire and retain customers. This has fed through into high penetration of services and of smartphones and decreasing prices over time.

Bundles of handsets and subscriptions have been a feature of the UK market since the first cellular services were introduced in the 1980s. Bundles may have benefits for some customers, who prefer a single point of contact for sales and support or wish to spread the cost of handsets over time. Bundles can also bring benefits to suppliers, who can ensure handsets and services are efficiently combined. In recent years the proportion of customers buying such bundles has begun to decline, reflecting the relative maturity of the market for smartphones and the increased transparency in pricing. Indeed, some providers in the market recently started offering split contracts which allow customers to purchase a bundle whose bill has separate components for the cost of the handset and of the mobile services usage.

While the vast majority of customers who buy bundles are within their minimum contract period, Ofcom has identified that 6% of customers on such plans are outside the minimum contract period and are still paying the same as when they took out the plan. This number is equivalent to customers on average staying with their contract for 45 days after the end of a two year contract. The relatively small number of customers indicates that the market is functioning effectively, with operators having a strong incentive to compete to either acquire or retain customers at the end of their minimum contract period by offering updated plans, with or without handsets and customers taking up these offers.

This small proportion of customers outside their minimum contract period will be some combination of:

- Customers who have recently finished their minimum contract and are consciously delaying changing to a new contract, for example if they are waiting for a specific smartphone to be launched;
- Customers who haven't got around to upgrading or switching;
- Customers who made an active choice to stay out of contract, for example because the perceived benefits of changing contracts are deemed to be too limited; and
- · Customers who are more disengaged from the market.

Maintaining the existing contract temporarily may be a rational decision and any regulatory intervention should take this into account. The information available to Ofcom does not appear to identify any break-down of out of contract customers in each of these sub-groups.

Ofcom has made two proposals to address potential issues associated with customers being outside their minimum contract period:

- To provide customers with additional information at the point of entering bundled contracts and at the end of the minimum contract period.
- Requiring changes to operators' tariff and contracts, for example requiring them to move to a SIM-only deal at the end of the minimum contract period.

Ofcom has not carried out a detailed impact assessment of the potential costs and benefits of the proposed measures.

Intervention in this area is not targeted at particular vulnerable groups and indeed is likely to disproportionately benefit high income/high social group customers as:

- Higher income groups are more likely to be on contracts with a bundled handset: Ofcom's Technology Tracker shows that 68% of people in the highest income households buy their mobile services with a subsidised handset while for the lowest income group only 36% of people do;
- A much greater proportion of the customers in social groups A and B with a bundled handset report that they are outside the minimum contract period the social groups D and E; and
- Customers with higher incomes are more likely to purchase high value handsets and so would benefit more from switching to SIM-only deals.

Ofcom's assessment of the (static) benefits of intervention does not take account of the fact that evidence suggests customers who have most to save by switching away from their contract are more likely to switch. Ofcom has produced no analysis of the likely dynamic impact of the measures suggested, in terms of either how customers' behaviour is likely to change following the intervention or how operators may change their pricing and market behaviour in response. Without such an analysis it is impossible to determine what, if any, net benefits would result from any Ofcom intervention.

Ofcom's first proposal is to provide consumers with further information when entering the contract and towards the end of the minimum contract period. This information would separate the costs of bundles into the part associated with the handset and the part associated with services. This information would also have to be provided at the end of the minimum contract. Similar information is already freely accessible with both SIM-only service plans and SIM-free handsets widely available and marketed by providers. In addition, price comparison and switching websites help customers comparing the costs and features of different types of contracts. However, providing the information routinely to customers may lead to some action from customers who would otherwise be disengaged.

Ofcom's second proposal is less clear in terms of the detailed implementation, but would require operators to change the tariff after the minimum contract period. Some customers could potentially benefit, for example customers delaying making purchasing decisions at the end of the minimum contract period could bear less costs from doing so. However, this could be offset by price increases for other consumers due to a softening of competition. Ofcom's proposals could also lead

to a reduction in engagement, with some consumers passively allowing themselves to be moved onto the 'default' option rather than actively searching out the best offer. This could result in customers becoming less engaged, not seeking out deals which may better suit their needs and potentially getting a worse deal over time.

Intervention could also have a distributional effect. If operators had to recover a greater proportion of costs in the minimum contract period rather than effectively over a slightly longer period, in a competitive market this would be expected to lead to price increases within the contract period, which would partially offset the lost revenues. This would increase the cost for those customers who currently change their tariff at the end of the contract period but benefit those customers who do not act at the end of the minimum contract period. Given that higher income customers are more likely to be outside the minimum contract period this redistribution would, if anything, be regressive.

To the degree that Ofcom's proposals reduce operators' ability to introduce innovative pricing, Ofcom's analysis also fails to take into account the potential welfare benefits that could be brought by tariff innovation. Such benefits may be greater in periods of rapid technological change, such as the forthcoming introduction of fifth generation mobile technology.

1 COMPETITION IN THE UK MOBILE MARKET

In order to understand the costs and benefits of intervention in the UK mobile market, it is necessary to understand the nature of competition and current trends in the market. This will help identify, to the degree that there have been issues affecting a segment of the market, whether competition is likely to alleviate any issues on a forward looking basis.

If Ofcom decides that competition is not likely to be effective in addressing the issue, then it needs to ensure that any intervention is both effective and proportionate. The market is dynamic and as such the impact of any intervention will be complex, with a range of direct and indirect effects, which will impact on both the effectiveness of any intervention and the likely costs and benefits in terms of welfare.

If Ofcom restricts its analysis solely to direct effects, it will generally over-estimate the benefits of any intervention to consumers by not taking into account the competitive reaction of operators, which may offset the impact of any intervention. Additionally, Ofcom's analysis will also under-estimate the potential costs to consumers and society as a whole by ignoring dynamic efficiency losses.

1.1 Customer preferences for mobile services vary widely

The first notable characteristic of the UK mobile markets is strong customer heterogeneity, with preferences and characteristics varying in a number of dimensions including:

- Usage and willingness to pay for services (voice, data, SMS): depending on their age and socio-economic group, customers have very different needs. For example, younger customers may have relatively low usage of voice services but might be willing to allocate a significantly higher proportion of their disposable income to a mobile phone and data than older customers;
- Willingness to pay for handsets: Retail costs of smartphones vary from less than £100 to more than £1,000. A basic sub-£100 handset can run the majority of commonly used applications¹. The demand for higher priced handsets may to a degree reflect the "fashion consciousness" of customers rather than the need for particular capabilities. Again, this variation in available handsets reflects heterogeneity in willingness to pay which again depends on different factors (age, budget, socio-economic group, etc.);

Ofcom's estimates of the cost to customers at the end of the period is £18.32 per month or over £440 over a 24 months' period. This is far in excess of the cost of a basic smartphone needed to 'engage in society'.

- <u>Budget constraints</u>. As the price of top end handsets has increased gradually over time, the cost may exceed some customers' available budget, leading to a desire to spread out handset costs over longer time periods to stay within budgets. Also, some might have a preference for "budget certainty", meaning that they prefer to know at the beginning of the month how much they will be spending, while others will opt for pre- or post-pay options whose price depend on actual usage to allow control over spend from month to month.
- Opportunity cost of time. For some customers getting the lowest price possible that meets their needs may be a priority and they are willing to spend considerable time to ensure they meet this objective, where necessary dealing with multiple suppliers. Other customers may have a high opportunity cost and may prefer to minimise search time, even if they are aware that this means they may not get the lowest possible cost. For example, younger 'tech savvy' customers may find it easier and generally less time consuming to search for the best deal and may have more free time and therefore face a lower opportunity cost, while some time-poor customers may value ease of purchase;
- Degree and type of customer support required: customers vary in the degree and type of customers support required, both during the purchasing process and on an on-going basis with some customers preferring to have support in person while others are happy (or prefer) to self-support or use online resources².
- <u>Creditworthiness:</u> operators will undertake some degree of credit scoring before allowing customers to acquire a high value handset with the payment spread over time.

This heterogeneity provides competing operators with a strong incentive to offer a wide range of different offers in order to closely match the preferences of different segments of customers at the lowest possible price for these customers.

1.1.1 Customer preferences change rapidly over time

In addition, as the mobile eco-system³ is evolving rapidly over time customer preferences tend to change relatively quickly compared to most other sectors with:

- Handset manufacturers refreshing handsets on an annual basis;
- New generations of mobile network technology being introduced every decade with incremental updates introduced between generations;
- New smartphone applications being constantly developed; and
- Data usage increasing exponentially over time.

An example of this could be the successful business model of Giffgaff, which entered the UK mobile market in 2009 with the idea of a network run by its own members. It never opened a call centre, but has a really easy-to-use website where customers can find forums to get their questions answered. Giffgaff has experienced a constant increase in the number of subscribers since it was launched.

Mobile services, devices and applications.

These trends are expected to continue, with the introduction of 5G technology in 2020 and continuing growth in data usage.

1.2 The retail market is highly competitive

1.2.1 Four MNOs and with a significant share of customers using MVNOs

There are four vertically integrated Mobile Network Operators and an increasing number of MVNOs and resellers.

Figure 1 below reports market shares based on subscribers for the period 2013-2017, the MNOs share of the market has declined from 88% in 2013 to 84% in 2017, while the rest belongs to an increasing number of MVNOs, offering mobile services through wholesale access to the MNOs networks.

100% 13% 15% 15% 15% 16% 16% 16% 90% 80% 23% 24% 23% 23% 22% 22% 22% 21% 21% 21% 70% 60% 24% 24% 24% 24% 24% 24% 23% 23% 24% 23% 50% 40% 11% 11% 11% 11% 12% 12% 12% 12% 13% 13% 30% 20% 30% 29% 28% 28% 28% 28% 28% 27% 27% 26% 10% 0% 2013 2013 2014 2014 2015 2015 2016 2016 2017 2017 Mar Sep Mar Sep Mar Sep Mar Sep Mar Sep ■BT/EE Three **■** O2 Vodafone MVNOs

Figure 1 Mobile market subscribers market shares, 2013-2017

Source: Telegeography, UK country profile

The increase in the MVNOs share of the market corresponds to a gradual increase in the number of MVNOs subscribers from 2010, as presented in Figure 2 below. The market appears accessible to new entrants with the examples of Giffgaff UK in 2011 and TalkTalk in 2012: both operators managed to remain in the market, with an increasing number of subscribers. There has also been further entry from Sky.

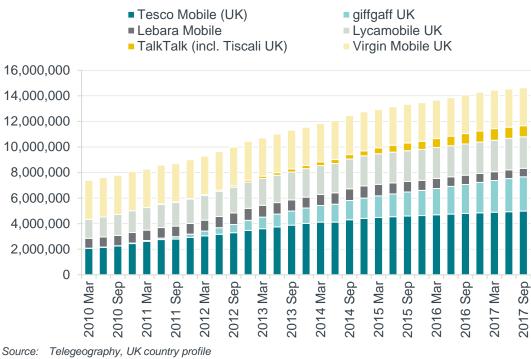


Figure 2 MVNOs subscribers numbers 2010-2017

MNOs have a strong incentive to invest to offer the latest technology and high quality networks while minimising cost, to compete for customers both at the retail level, against other MNOs, MVNOs and other retailers, and at the wholesale level, where MNOs compete to retain and acquire MVNOs hosted on their network.

1.2.2 Multiple channels to market

Operators use a number of different channels to market:

- Direct retail shops: these are shops in cities and towns all around the UK and Northern Ireland, owned by an MNO where customers make their choice supported by dedicated staff in person. This option is generally best suited for those customers who need more assistance. In these shops customers can choose from offers of a single operator and prices tend to be higher than in other channels reflecting the degree of customer care.
- Dixons Carphone and other independent retailers: For example, Dixons Carphone offer a broad range of handsets and technological devices and services from three of the four MNOs along with a tied MVNO, allowing customers to compare prices across a number of providers.
- Internet sales: in this case customers can purchase their mobile services through MNOs websites, mobile apps or websites from independent resellers. In common with many other sectors Internet sales may offer lower prices than physical stores reflecting lower costs.
- Telesales: some customers prefer to subscribe over the telephone, either in response to a call from a provider or initiated by the customer.

1.2.3 Easy switching procedure

The Ofcom Decision on reforming the switching of mobile communication services (2017) reports that, in the UK, there is only a "minority of consumers who either find the process difficult or are deterred from switching".

The main drivers of switching in the mobile sector can be identified as follows:

- Continued innovation in networks and handsets: a growing number of handsets is launched on the market every month and the mobile market experienced a fast evolution of the network, currently transitioning towards 5G. This fast paced technological progress incentivises customers to keep switching contract to get a new device or to search for a contract upgrade (e.g. all the benefits of the 5G network).
- Relative ease of switching: it appears that 79% of the customers who switched in the last 18 months did not find it difficult⁴. In addition, in December 2017 Ofcom decided the introduction of three measures which will enter into action from July 2019 and are expected to resolve the minor difficulties customers are currently facing. They consist of the following:
 - introduction of Auto-Switch: a simplification and standardisation of the current switching procedure;
 - prohibiting charging for notice after the switching date; and
 - providing transparency to consumers (e.g. on providers' website, where consumers need to be able to find all information relative to the switching process).

1.3 Operators compete vigorously to acquire and retain customers

The relatively high level of switching provides a strong incentive for operators to set competitive prices to try to acquire customers from other operators. In response, providers offer their existing customers competitive prices to reduce the probability that they switch to other operators.

This retention activity ensures that customers in general benefit from price reductions over time, even if they do not themselves switch. \gg

1.3.1 A large number of tariff packages reflect nature of demand

The UK mobile market is characterised by a large number of channels to market, analysed in more detail in section 1.2.2. Customers have several different possible ways to purchase mobile services, such as operators' own retail shops,

⁴ Ofcom quantitative research on mobile switching, Sept 2016.

independent electrical and telecommunications retailers (e.g. Dixons Carphone), internet sales, and MVNOs' offers, with a wide or niche focus.

Both mobile operators and retailers have a strong incentive to closely match customer preferences, in order to acquire new customers and retain existing customers: this is reflected in a large number of promotions and new tariff offers launched every month.

The rapid evolution, compared to other sectors, means that existing offers in terms of handsets and services will become uncompetitive in a relatively short period of time compared to new offers. This will provide a strong impetus for customers to switch service plans and handset on a regular basis.

1.3.2 Bundles of handsets have been a consistent feature of the market

The bundling of handsets and services has been a common feature of tariff plans since the introduction of mobile services, although the commercial rationale has changed over time:

- In first generation services, the handset was tied to the service, with no separate SIM allowing the service to be separated from the handset;
- In the period where penetration was growing quickly, customers were generally new subscribers and so needed a handset when they subscribed to a service;
- At the introduction of the iPhone, Apple did not allow the iPhone to be purchased separately from a subscription service.

However, in recent years the purchase of handsets has been increasingly decoupled from the purchase of services. This reflects two developments:

- Top end smartphones have become more expensive; and
- As the smartphone market has become more mature, many customers find older smartphones are sufficient.⁵

This has led to a significant growth in SIM-only contracts and the introduction of 'split contracts' which separate the handset and services component, allowing more flexibility in how handset costs are recovered, for example allowing handsets to be recovered over a longer period than 24 months⁶.

frontier economics 12

C2 General

The handset may be used by someone other than the original purchaser, for example passed on to family members to acquired second had.

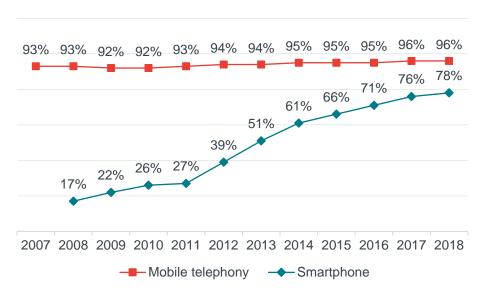
⁶ Ofcom's 'General Conditions' restrict contracts including services to a maximum of 24 months.

2 MARKET OUTCOMES IN THE UK

2.1 High mobile and smartphone penetration

The 2018 Communication Market Report published by Ofcom shows that both the overall mobile penetration is high and the increase in smartphone take up has been extremely rapid, suggesting that there is little unmet demand.

Figure 3 Mobile telephony services and smartphone penetration rate, 2007-2018



Source: Ofcom Technology Tracker

Note: The base is all adults aged 16+ (2018 n=3730)

This high penetration also has an impact on the market dynamics.

- <u>Customer acquisition generally involves existing customers</u>: With very few 'new' customers to connect, retailers (including new entrant MVNOs) wishing to grow need to attract customers from existing retailers and the existing providers need to respond to retain their subscribers.
- Customers are experienced, repeat purchasers of handsets and services: the high mobile services penetration rate (red line in Figure 3 above) for the last ten years, combined with the high take up of smartphones (teal-coloured line in Figure 3 above) means the majority of customers are making repeat purchases and so are well placed to choose from the available offers.

2.2 Data usage has increased rapidly

There has been a steep increase in the amount of data used over the last five years, reflecting both demand side factors, with increased penetration of smartphones and usage of applications that require more data such as video, and increases in supply due to the roll out of 4G networks. The 2018 Ofcom Communications Market Report highlights an increase in the average monthly

mobile data purchase per active connection from 0.2 to 1.9 GB over the five years to 2017 with the number of 4G subscribers reaching 58.4 million in 2017, from zero in 2012.

2.3 Retailers offers have evolved to reflect changes in customer preference

2.3.1 There has been a shift from pre-pay to contracts

Prior to the widespread uptake of smartphones, the market was broadly split between 'pre-paid' services, where customers bought airtime (voice and SMS) in advance of making calls and messages, and 'post pay' contracts where subscribers were billed monthly depending on their usage. Many customers preferred pre-pay services as they provided greater control of expenditure and they allowed providers to offer services to all customers without the risk of bad debt.

The increased penetration of smartphones and data has made contracts relatively more attractive because:

- Unlike calls and SMS, customers have limited awareness and control on the amount of data they are using and there has been a move towards flat rate pricing for data (i.e. a fixed data allowance), removing one of the key advantages of pre-pay in terms of providing control of spend; and
- Contracts allow the cost of acquiring handsets, which increased when smartphones were introduced, to be spread over a significant length of time.

However, as the smartphone market has matured, with retail prices of basic smartphones falling to below £100 and many customers already having a working smartphone, the need to spread the cost of a new smartphone over a long period of time has diminished for many customers, leading to an increase in 'SIM-only' service contracts, without a bundled handset.

In addition, the prices for top end handsets have increased to the extent that even spread over a 24 months bundled plan, the monthly cost is not affordable for some customers who wish to purchase a handset. These customers can finance the cost of the handset separately, either through a 'split' contract with a provider or buying a SIM-only plan and buying and financing the handset with a third party.

Vodafone SIM-only customer base as a precentage of Vodafone's total customer base has grown from \times to \times within the last year. A recent analysis indicates that around \times of new SIM-only contracts were taken out by customers who were previously on a handset contract⁷.

This shift to SIM-only is also shown by latest Ofcom report on price trends.

Vodafone Confidential

frontier economics 14

C2 General

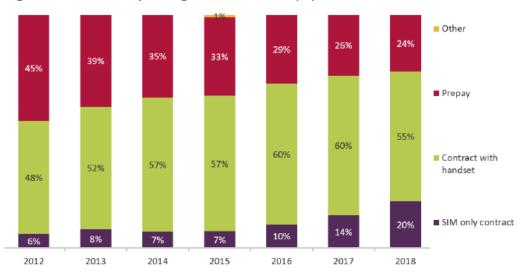


Figure 4 Mobile packages distribution (%): 2010 to 2018

Source: Ofcom Pricing report 2018

The rapid increase in the 'stock' of SIM-only usage suggests that SIM-only is an even higher proportion of new connections⁸.

This current trend for a wider range of more flexible contracts is supported by the evidence on contract length.

The 2018 Ofcom Communication Market Report highlights that " *Until 2006, most pay-monthly services had a minimum contract term of 12 months but, as is shown by the GfK data, by Q4 2007 three-quarters (75%) of new pay-monthly mobile contract sales had a minimum contract period of 18 months, with almost all other sales having a minimum term of 12 months (11%) or one month (13%). By Q4 2017, the proportion of new pay-monthly contract sales with a minimum term of 18 months had fallen to less than 1%, and the most common contract length was 24 months; these accounted for 47% of sales (up from 1% in Q4 2007 but down from a peak of 72% in Q4 2012)."*

2.3.2 There has been an evolution to 'flat rate' bundles differentiated by usage limits

The rapid growth of data usage following the introduction of smartphones led to a move away from two part pricing with a monthly subscription and additional

frontier economics 15

C2 General

Dixons Carphone reports instead that the proportion of SIM-only new mobile connections rose to 29.8% in 2018: https://www.dixonscarphone.com/~/media/Files/D/Dixons-Carphone/documents/preliminary-results-2018-presentation.pdf

^{9 2018} Ofcom Communications Market Report, available at https://www.ofcom.org.uk/research-and-data/multi-sector-research/cmr/cmr-2018

payments for airtime (calls and SMS) to flat rate contracts with a set data allowance. The 2018 Pricing trends for communications services report⁴ shows that

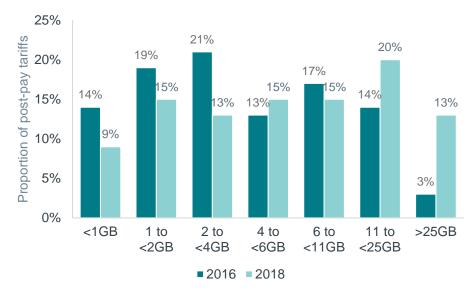
- 61%¹⁰ of monthly mobile contracts in July 2017 included unlimited calls and
- 83%⁶ of monthly mobile contracts in July 2017 unlimited SMS.

This has significantly increased transparency for customers by significantly reducing the number of parameters that need to be considered when making comparisons between offers. Rather than having to take account of the monthly subscription price and separate prices for different types of calls and for SMS, customers now only need to compare the monthly subscription and the included data allowance.

2.3.3 Data allowances continue to increase

The increase in data usage has been reflected by a rapid shift in customer preferences towards contracts with higher data allowances. The Figure 5 provides a comparison between 2016 and 2018. This shows a significant shift in only two years, with a large reduction in contracts with data allowance of less than 4GB a month and a large increase in contracts offering 11GB or more a month.

Figure 5 Distribution of pay-monthly tariffs based on data allowance (%): 2016 vs. 2018



Source: Ofcom Pricing report 2018

Note: Data as of January of each year

In addition, operators have introduced the option of 'zero-rating' of certain applications. These options "enable users to access certain services, typically entertainment applications like Facebook or YouTube, without the data use of these services counting against the user's monthly data allowance." Figure 6

¹⁰ Data provided by Teligen and reported in Ofcom 2018 Pricing trends for communications services report

reported below provides some additional details on zero-tariff options currently available on the market.

Figure 6 Examples of major UK providers' zero-rating tariffs

Operator	Description of current offer				
Vodafone	'Vodafone Pass' monthly passes for zero-rated use of certain apps: - Video Pass (£7/month): Netflix, YouTube, Amazon Prime Video, DisneyLife, My5, TV Player, UKTV Play, & Vevo Music Pass (£5/month): Spotify, Apple Music, TIDAL, Deezer, Amazon Prime Music, Amazon Music Unlimited, SoundCloud & Napster - Social Pass (£5/month): Facebook, Twitter, Instagram & Pinterest Chat Pass (£3/month): WhatsApp, Facebook Messenger, Viber Messenger & Call+ Combo Pass (£15/month): All four passes in one.				
VOXI (Vodafone)	All customers receive zero-rated data for Snapchat, Instagram, WhatsApp, Facebook, Twitter, Viber a Facebook Messenger plus there are passes for zero-rated use of other apps: - Endless Video pass (£7/month): Netflix, YouTube, Amazon Prime Video, DisneyLife, My5, TV Player, UKTV Play, Vevo - Endless Music pass (£5/month): Spotify, Apple Music, TIDAL, Deezer, Amazon Prime Music, Amazon Music Unlimited, SoundCloud & Napster				
EE	6 months free, zero-rated, Apple Music for pay-monthly phone, 30-day and 12 month SIMO customers as well as shared plan customers				
Three	'Go Binge', a zero-rated offer for Snapchat, Netflix, TV Player, Apple Music, Deezer & SoundCloud. 'Go Binge' is available to new and upgrading customers on handset and SIMO Advanced plans of 4GB and above and pay-monthly mobile broadband plans of 12GB and above.				
Virgin Mobile	Zero-rated use of messaging on WhatsApp, Facebook Messenger and Twitter for all 4G customers.				

Source: Ofcom Pricing report 2018

2.3.4 Tariff structures appear pro-competitive and welfare enhancing

The rapid shift towards SIM-only contracts provides an example of how retailers respond promptly to changes in customers' preferences. As soon as a segment of customers moved from wanting to spread the cost of smartphones to wanting to the flexibility to buy services and handsets separately, retailers started introducing offers which reflect this demand in order to acquire and retain customers facing competition from innovative retailers, for example Giffgaff who initially only sold SIM-only contracts.

The move to flat rate pricing has also increased the comparability of offers, with the data allowance being the key differentiator between different service offers. As standalone retail handset prices are also readily available, this allows customers to easily compare offers between providers and also between buying a bundle of handset and service compared to a SIM-only plan and a handset purchased separately.

This combination of high transparency, relatively high levels of switching and rapid evolution of tariffs (e.g. data allowances) makes a strategy of significant 'front-

book/back-book'¹¹ pricing differentials infeasible as increasing the level of prices for existing customers over time will simply increase losses to other customers. For example, Ofcom collected data shows both that customer spend is higher within the minimum contract period than out of contract¹² and when out of contract the customer spend falls the longer customers are out of contract¹³. This contrasts with the corresponding fixed 'dual play' and 'triple play' market, where spend increases over the time since the customer was acquired.

2.4 Evidence suggests that the market is functioning effectively

2.4.1 Consumer spend has decreased over time

Despite significant growth in data usage, higher data allowances and more capable networks and handsets, prices have declined and this led to a decrease in the average revenue per user (ARPU) over the last decade.



Figure 7 UK Mobile ARPU 2007-2017

Source: Ofcom Telecommunications Market Data Update Q2 2018

Given the rapid increase in data usage, this indicates the prices on average are falling rapidly over time, introducing additional dynamism in the market as existing

frontier economics 18

C2 General

Companies charging higher prices to existing customers (generally on roll-over contracts or default tariffs) than newly acquired customers.

Ofcom - Helping consumers to engage in communications markets: Consultation on end-of-contract and out-of-contract notifications Figure 6:

¹³ Ibid. Figure 7

providers need to offer lower prices over time to existing customers to retain them in the face of falling costs and hence prices from competitors.

2.4.2 Prices are relatively lower than in comparable countries

Ofcom's 2018 Communications Market report shows a comparison between UK, France, Germany, Italy, Spain and USA in terms of prices of communications services offered.

Looking at the mobile market, the UK appears well placed, being the first in terms of the cheapest deal on the market and second in terms of average price for a mobile services contract, as reported in Figure 8 below.

Figure 8 International comparison of overall, lowest available and 'weighted average' stand-alone and bundled household usage prices: 2017

	Landline		Fixed broadband		Mobile phone		Dual-play bundles		Triple-play bundles		Overall rank
	Average	Lowest	Average	Lowest	Average	Lowest	Average	Lowest	Average	Lowest	across all metrics & services
UK	4	5	4	4	2	1	3	4	2	1	3
FRA	2	1	2	1	1	2	2	3	1	1	1
GER	1	4	3	3	4	3	1	2	3	1	2
ITA	6	6	1	1	3	3	4	1	4	4	4
ESP	5	2	5	5	4	5	5	5	5	5	5
USA	2	3	6	6	6	6	6	6	6	6	6

Source: Ofcom Pricing report 2018, using Teligen data

Note: Circles denote the top-ranking country for each metric

2.4.3 Customer satisfaction is high overall

Finally, a recent study commissioned by Ofcom shows that UK customers appear to be highly satisfied with the offer of mobile services. The mobile market appears to perform better than other communications services, such as broadband or Pay-TV.

Overall satisfaction with services from communications provider – total market % satisfied (very/fairly) 2018 vs. 2016 2015 2014 Landline 33% 53% 91% 58% Mobile Broadband 42% 85% Pay TV 39% 91% Bundle 45% 39% ■ Very satisfied ■ Fairly satisfied ■ Neither satisfied nor dissatisfied ■ Fairly dissatisfied ■ Very dissatisfied

Figure 9 Overall satisfaction with services from communications providers

Source: Ofcom research

2.5 Conclusion

The evidence suggests that the retail mobile market is working well for consumers in general, both in terms of prices and innovation.

The level of competition provides strong incentives for costs to be minimised and the overall level of prices to reflect these costs. The market is also dynamic, providing customers with innovative services and with offers evolving over time to meet customer preferences. There has also been a trend to increased transparency on pricing with a move away from two-part (or multi-part) pricing to all-inclusive bundles and the widespread availability and take up of 'SIM-only' service plans.

3 OFCOM'S PROPOSALS HAVE NOT BEEN JUSTIFIED

Despite the evidence that the market is functioning well overall Ofcom have identified a potential issue. A small proportion (6%) of customers who have purchased bundles of handsets and services report that they are outside of the minimum contract period for that contract, and are paying broadly the same as they were within the contract period. There could be a case for targeted intervention if Ofcom can identify that certain vulnerable customers are not served well by the competitive process and this can be effectively addressed by intervention by Ofcom.

Many customers in this situation could change to an equivalent SIM-only deal which would likely be generally lower given that SIM-only prices do not need to recover handset cost, and prices for equivalent data usage tend to fall over time.

Based on this evidence Ofcom is consulting on two potential interventions:

- Requiring operators to provide more information to customers both when entering a contract which bundles handsets and when the minimum contract term is coming to an end; and
- Requiring operators to move customers to a lower tariff at the end of the minimum contract period.

We would assume that before intervening, Ofcom will carry out an impact assessment as set out in its document "Better Policy Making" 14:

Subject to the principle of proportionality, an Impact Assessment will generally:

- identify the impacts of each option on the interests of particular groups of stakeholders;
- identify any impacts which each option would have on competition;
- identify and, where possible, quantify the costs and benefits flowing from the impacts which each option would have;
- · assess the key risks associated with each option

In the Consultation, Ofcom have neither carried out such an assessment nor provided components of the analysis that would feed into such an assessment. Below we review the available evidence and the potential effects of any change, which Ofcom would need to take account of when conducting an impact assessment.

¹⁴ Better Policy Making Ofcom's approach to Impact Assessment Issued: 21 July 2005

3.1 The consumers affected

Ofcom's proposals focus on customers who buy both handsets and services in a contract bundle. The evidence above shows that this is currently a diminishing proportion of customers overall, with an increasing number of contract customers choosing to move to SIM-only offers and a growth in split contracts, where the customer's spend is cut automatically when the handset component ends.

Of the decreasing number of customers who buy bundles of handsets and services, the vast majority are in the minimum contract period at any given period. Ofcom's previous proposal to notify consumers when their minimum contract period has expired, if effective would be expected to reduce this number further¹⁵.

Of the respondents to Ofcom's Switching Tracker Survey in 2017 who were on a contract which bundled handsets and services, 10% said they were out of contract. Of these approximately 60% were paying 'a similar monthly tariff' as when they signed up¹⁶. These are the 6% of customers that Ofcom is seeking to address.

Ofcom's switching survey does not provide any further information on the reasons why these customers have not moved to a different tariff at the end of their minimum contract period. The rationale and effectiveness of different interventions will be dependent on why customers have not changed contract. There would appear to be a number of potential reasons:

- The customer temporarily delaying moving to another plan, for example because they currently don't have time to search for a new offer or because they are waiting for a particular handset to be released;
- The customer indefinitely not searching because their search costs are higher than the perceived benefit in cost savings from moving to another offer; or
- The customer not being engaged in the market due to one of the barriers identified by Ofcom: 'Finding the right offers to meet needs' and 'Ease of leaving your current service' 17.

The first two examples are arguably utility maximising behaviour by the consumers and the rationale for intervention would appear to be weak. The third example may provide a stronger rationale for intervention, in particular if the dis-engaged customers are likely to be vulnerable.

While we do not have information to determine why customers do not switch when their minimum contract period has ended we do have information on:

The distribution of customers who buy bundles of handsets and services; and

¹⁵ Consultation on end-of-contract and out-of-contract notifications Start: 31 July 2018

Ofcom Switching Tracker 2017

Ofcom's call for Input 'Helping consumers to engage in communications markets'. Ofcom also cites 'Knowing when to look for better deals' as a barrier to engagement, but this would not appear to be a barrier in this case as the customer has reported knowing that their contract has ended.

The distribution of these customers who are outside their minimum contract period.

This information can be used to identify the potential effectiveness of Ofcom's proposals in targeting particular groups of customers.

3.1.1 The intervention is unlikely to effectively target vulnerable customers

Customers buying bundles of handsets and services

As noted above there has been a trend towards contract customers compared to pre-pay, and an increasing number of SIM-only customers within the contract group. However, the distribution is not even across customer groups, reflecting differences in the preferences and characteristics of these customers. As can be seen below, groups who are more likely to contain vulnerable customers such as the elderly, low income households or social groups DE are more likely to buy prepay services. Within these groups a higher proportion of contract customers buy SIM-only plans as can be seen in Figure 10 (i.e. the prevalence of bundle contracts varies more than the prevalence of SIM-only contracts).



Figure 10 Contract type by age band, household income and social group

Source: OFCOM NATIONS & REGIONS TECHNOLOGY TRACKER - H1 2018. 3rd January to 28th February 2018.

This pattern could be explained by lower income customers choosing not to buy, or not having the ability to buy, high end smartphones and so having less need to spread handset costs over many months.

Customers outside minimum contract periods

Given the small sample size, there is limited information on the distribution of the customers who report being out of their contract period. However, the information available shows that those customers who buy handsets through a contract in social group AB are much more likely to be outside the minimum contract period as social group DE.

18%
16%
14%
10%
8%
6%
4%
2%
O%

AB

C1

C2

DE

No, I am out of my minimum contract period

Don't know

Figure 11 Proportion of customers with bundled contracts outside the contract period by social group

Source: OFCOM SWITCHING TRACKER 2017. 2nd August to 2nd September 2017.

This suggests that a greater proportion of more affluent customers would benefit more from any Ofcom intervention.

Ofcom over-estimates the potential savings from intervention

The evidence presented in the July 2018 Consultation on end-of-contract and out-of-contract notifications shows the average spend per bundle reduces as the customer becomes more out of contract. In addition, the differential between these customers' spend and that of SIM-only customers also reduces. Given that overall ARPUs have been largely static over time, this is likely to be a mix effect. In particular, those customers who are paying most for a bundle appear to be much less likely to remain on the same tariff once the minimum contract period is over.

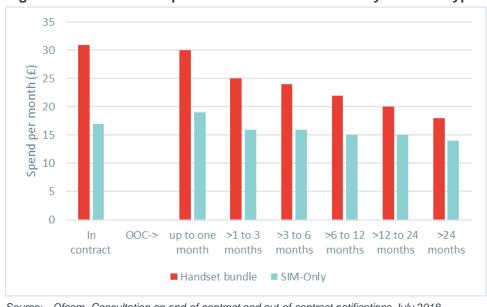


Figure 12 Customer spend in and out of contract by contract type

Ofcom- Consultation on end-of-contract and out-of-contract notifications July 2018

As a result, the potential weighted average savings per out of contract customer from moving to SIM-only will be much smaller than the £18.52 per customer per month estimated by Ofcom (which is broadly equal to the differential between handset bundles and SIM-only for customers in contract). For those customers of bundles who are out of contract by more than two years, the differential would be only £1/month if they were moved to the average SIM-only 'in contract' spend.

Conclusion

Any intervention which focuses on bundles of handsets and services is likely to have a greater impact on those customers who buy such bundles, who tend to be younger and more affluent than average. The evidence also shows that more affluent customers are more likely to be out of contract, which could support the hypothesis that this behaviour is at least in part related to search costs rather than lack of engagement/knowledge. The evidence also suggests that those who have the highest spend are more likely to engage at the end of their contract.

3.2 Ofcom's proposals

3.2.1 Ofcom's first proposal: increased information

Ofcom's first proposal is to provide customers with a breakdown of prices when they enter a contract which bundles a handset with services. Under the IFRS 15 accounting standard, operators such as Vodafone are required to split handset revenues from service revenues in their accounts and so it would be relatively straightforward for operators to provide corresponding information when the purchaser enters into a contract.

It is unclear how this would affect either customers' choices when acquiring a handset and services together or their behaviour at the end of the contract.

With the increased penetration of smartphone and increase in data usage, operators have moved to simpler tariff structures based on flat rate pricing. At the same time the growth of Internet commerce has allowed engaged customers to collect easily information from multiple suppliers. This means that the ability to compare offers across a number of suppliers has increased as there is a limited number of variables to take account of. When purchasing a handset and services at the same time, if a customer has decided on a specific handset and level of data usage it is straightforward to compare costs between different offers, including separately buying the handset and a SIM-only subscription.

At the end of the contract period it is straightforward for a customer to compare their current spend with offers in the market, including SIM-only offers. This is partially due to the rising role of comparison websites. These websites provide customers with a clear overview of the offers available, comparing them on parameters the customer inputs. As a result of this increased transparency, Ofcom's data shows the vast majority of customers are confident that they can compare the costs of different services 18.

The customers being given additional information are to a degree already engaged in a purchasing decision, when the information is given at the time of purchase. Information is already readily available to consumers on handset retail prices and SIM-only contract prices as competing providers have a strong incentive to make this information available.

Regulating the provision of further information will bring some more transparency on pricing which may lead some customers to change plan, but may not in itself lead more engagement where the barrier is not a lack of information itself.

3.2.2 Ofcom's second proposal: moving to a 'default' tariff at the end of the minimum period

Ofcom's second proposal would require operators to move customers to a 'default' SIM-only tariff at the end of the minimum tariff period. Subject to implementation issues, this would explicitly 'solve' the issue Ofcom has identified as all customers would benefit from reduced costs at the end of their minimum contract period.

However, this could be at the expense of a longer term decrease in engagement with the market, as any reduction in the differential between what customers are currently paying and other offers in the market is likely to reduce the level of switching. Some customers who would have engaged with the market at the end of the contract may passively allow themselves to be moved onto a default tariff, which could be less favourable than that which they would have otherwise chosen.

¹⁸ 81% according to OFCOM SWITCHING TRACKER 2017. 7

In particular, as the General Conditions prevent providers from offering contracts with a maximum term of more than 24 months, at the end of a 24 month contract period, any default SIM-only tariff would have to be a '30 day' plan allowing the customer to leave at any time. 30 day plans will typically have higher effective prices than equivalent 12-month plans as customers will value the flexibility to switch at any time and the average customer lifetime will be shorter meaning that operators will have a short period over which to recover any one-off costs.

In addition, operators will have an incentive to increase 'default' tariffs above the price level offered for similar plans to customers who actively select a tariff, because customers on the default tariff will be less engaged than the average (as engaged customers are likely to make an active choice) and so will be relatively inelastic. Even where an increase in the default tariff does result in some customers looking at other offers, the current provider should be able to 're-capture' a high proportion of these customers through their other offers.

3.3 Competition impacts of Ofcom's proposals

Ofcom's analysis does not examine the effect on competition and efficiency of the proposed intervention options. In particular:

- Any reduction in revenues at the end of the minimum contract period will have an impact on operators' pricing decisions for the corresponding customer groups which could lead to price increases for some customers; and
- Innovative pricing of products can increase welfare, and interventions reduce the ability of operators to price flexibly could reduce welfare.

3.3.1 Intervention may lead to increased prices

Operators set retail prices based on customer lifetime value

Operators seek to acquire or retain customers by meeting their preferences at a competitive price, while recovering the costs of serving these customers, including any one off costs. This means when acquiring or retaining a customer, operators need to set prices so that the cost of serving the customer is fully covered by revenues generated by the customer, i.e. the customer lifetime value (CLV) is positive.

The Customer Lifetime Value is the net present value (i.e. the future cash flows discounted to present value to take account of the cost of capital) of the gross profits attributed to the entire future relationship with a customer. Figure 13 below shows a graphical representation of the concept, in the case of a customer purchasing handset-inclusive bundle contract.



Figure 13 Illustrative customer lifetime value

Source: Frontier

The light blue bars represent the expected annual revenues the operator receives from the customer in each given year. After the minimum contract period expected revenues are assumed to decrease over time to account for the probability that the customer will switch to another supplier or offer.

In terms of costs:

- The teal bars represent the expected cost the operator faces serving the customer. This is a variable cost and includes the costs of calls, SMS and data. For an MVNO this cost will include wholesale payments to the host network and for a vertically integrated network will include the incremental cost of serving the customer including the opportunity cost of using network capacity for this customer.
- The yellow bar represents the operators' fixed cost for acquiring the customer (e.g. customer acquisition cost and handset cost).
- The dark purple line represents the expected margin the operator will generate in each year.

The red bar is the (discounted) value of the profits which represents the expected contribution of the customer to the operator's fixed costs (e.g. overheads, advertising and fixed network costs). This should be positive. As the costs are largely fixed or exogenous, the operator will alter prices in order to maximise profits:

- Too low and the CLV will be negative or too low;
- Too high and the price will mean that the operator is not competitive in acquiring or retaining customers.

A regulatory intervention which reduces CLV will tend to lead to increased prices

If Ofcom intervenes in a way that reduces the revenues from year 3 onwards (for example by requiring a reduction in prices after 24 months), this will reduce the CLV for this customer at the current level of prices. In a competitive equilibrium, the retailer will increase the prices for this customer in response as, while fewer customers may be acquired at a higher price, the value of the customers will be greater. In a perfectly competitive market, CLV would be zero in all cases and the increase in prices will exactly offset the reduction in revenues from the intervention.

Put more simply, if the operator is not able to partially recover some one off costs¹⁹ after the end of the minimum contract period, it will attempt to recover more within the minimum contract period by increasing prices. 6% of customers remaining on a tariff after the end of a 24 months' minimum contract is equivalent to another 1.5 months over which to recover these costs.

As the operator will be unlikely to be able to identify precisely which customer would have stayed on the tariff at the end of the minimum forecast period at the point at which the customer is acquired, the operator will increase prices for all groups of customers who could be affected by the intervention. This will have a distributional effect:

- Customers who would have continued on the bundled tariff after the end of the minimum contract period would see a reduction in cost; and
- Customers who would have switched to another offer at the end of the minimum contract period would see an increase in cost.

As the evidence available suggests that more affluent customers are less likely to switch at the end of the minimum contract period, the overall effect could be regressive.

In imperfectly competitive markets, the offset will only be partial but to the extent that this affects the future profits than can be generated by acquiring and retaining customers, it will have an impact on investment incentives, at a time when 5G investments are beginning.

3.3.2 Reducing the ability to innovate on pricing could reduce welfare

While an increasing proportion of customers have de-coupled acquisition of a handset from the purchase of mobile services, some customers still prefer to purchase bundles of handset and services from a single provider. This may be to easily spread the cost over a period of time for high cost handsets; for convenience purchasing a single provider or to have a single point of contact for support.

¹⁹ These costs will include handset costs but also other subscriber acquisition costs.

Going beyond the attempt to satisfy customers preferences, innovative pricing can also generate benefits for providers. During technology transitions, the cost of service may become a function of handset capabilities, meaning that it would be more efficient for operators to supply those customers owning a more advanced device.

Similarly, handset capabilities may require certain network functionality. For example, when the iPhone was launched it was closely linked with network services, for example to provide 'visual voice mail'.

As a result, allowing flexibility in pricing, including where handsets and services are bundled, can result in a higher level of overall efficiency for a number of reasons:

- customers could be offered higher data allowances for a lower price if operators have reassurance that the subscriber will use network technology with a lower cost freeing up capacity on existing networks; and
- there is more incentive to innovate if there is reassurance that new applications which require matching handset and network capabilities will be available to a wider range of customers

In the future operators may choose to bundle 5G handsets with service plans offering high data allowances to encourage the usage of the 5G network and free up capacity on the 4G network for other users.

If Ofcom intervenes in a way which restricts pricing flexibility, this could result in customers' preferences not being met as closely and a slower rate of technology adoption.

3.4 Conclusion

Ofcom has provided little qualitative and quantitative analysis to support its proposals. Overall the mobile market clearly functions well at meeting customers' needs. The focus on handset/service bundles does not appear to reflect a focus on engagement of vulnerable customers and Ofcom has not shown that its proposed interventions would bring net benefits to consumers through a thorough Impact Assessment.

Ofcom itself recognised the dangers of unnecessary intervention:

"The option of not intervening...should always be seriously considered. Sometimes the fact that a market is working imperfectly is used to justify taking action. But no market ever works perfectly, while the effects of...regulation and its unintended consequences, may be worse than the effects of the imperfect market"²⁰

Better Regulation Task Force (September 2003) quoted in Better Policy Making Ofcom's approach to Impact Assessment: 21 July 2005

HANDSET CHARGES FOR MOBILE USERS



