Ofcom's Assessment of the Use of Reactive Save Activity by Suppliers of Fixed Voice and Broadband Services: *An Economic Analysis*

Prepared for

BSkyB, BT and Virgin Media

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Date: May 2012

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EXECUTIVE SUMMARY

1. We have been asked by a group of Communications Providers (BSkyB ("Sky"), BT and Virgin Media ("VM")) to conduct an economic analysis of Ofcom's conclusion, in its Consumer Switching Consultation of February 2012, that "reactive save activity" conducted by incumbents to retain fixed voice/broadband customers is fundamentally undesirable as it is very likely to be anticompetitive and thus of harm to consumers.

2. So-called "reactive save activity" relates to a provider's ability, as part of the formal switching process, to identify all customers who intend to switch to a competitor, allowing the provider to make a 'counter-offer' to try to induce the customer to stay. Under current rules, this is only possible with switching processes that are "Losing Provider Led" (and specifically in the case at hand, the so-called "Migration Authorisation Code" (MAC) process), under which a customer has no choice but to contact his current provider in order to switch. Counter-offers made by the customers' current providers are specifically termed "reactive save activity".

3. We begin by noting that Ofcom's analysis of reactive save activity appears to be based on an incomplete understanding of the facts of the "save" market and their implications for the analysis at hand. For instance the distinction that Ofcom draws between reactive save activity and other forms of retention activity is generally spurious. The reality of reactive save is that it takes place in the context of retention activities generally – relating to Gaining Provider Led as well as Losing Provider Led switching, but also to customers not engaged in any formal switching process. In addition, reactive save offers are not individualised or explicitly targeted at competitor offers in the way that Ofcom appears to believe.

4. Ofcom's Consultation concludes that reactive save activity is undesirable as it leads to reduced customer switching, impedes the entry and growth of new competitors, and may dampen incentives to compete among existing providers, thus harming consumers. Ofcom argues that these effects are specific to reactive save activity, such that the prevention of reactive save (perhaps through the adoption of "Gaining Provider Led" processes) would be of benefit to consumers. We disagree with Ofcom's position on both these points, as we feel that Ofcom's reasoning suffers from several key flaws.

5. **First**, Ofcom's assessment that reactive save has detrimental effects on competition appeals primarily to general intuitions rather than robust economic analysis. In particular, Ofcom associates three conceptual economic phenomena with reactive save activity: an *adverse selection* effect (due to the current provider "knowing more" about the inherent value of a customer than a prospective new provider); some form of *price discrimination* (as a provider can make selective offers to 'switchers' and other customers); and a *reduced incentive to offer good deals*. None of these arguments can support, individually or collectively, a coherent case that reactive save will lead to a reduction of competition in this case:

    - On "adverse selection", the concern appears to rely on the presence of significant asymmetric information regarding customer 'value'. But this is unlikely to play a major role in this market: all broadband providers offer different deals for different packages (e.g. different levels of broadband usage), and there is limited difference in value between customers on similar packages. Moreover, in practice information on consumer 'value' (within packages) is not generally used to guide

the 'save' offers made to customers. Almost all customers are regarded as worth gaining, and providers can 'win' customers who are entering the market for the first time, as well as 'poaching' them from competitors.

- On "price discrimination", the Consultation Document is particularly unclear. But even if reactive save did indeed allow some price discrimination, there is no argument as to why this would be bad for consumers.
- Ofcom's aversion to reactive save relies strongly on what appears to be a mistaken belief that reactive save activity acts essentially like a *price guarantee*. Ofcom invokes the economic literature on price guarantees to draw a direct parallel between the welfare effects of price guarantees and those of reactive save. In particular Ofcom embraces an interpretation of reactive save activity as having effects similar to a 'meet-or-release' price guarantee which will dampen competition (because attempts to 'poach' customers will be less likely to be successful if a counter-offer can always be made). In fact the analogy is inappropriate and incomplete. The structure of reactive save is *not* that of a price guarantee, most critically because reactive save offers do not directly respond to competitor offers and there is no price matching. The intuition that providers will be deterred from trying to win customers from their competitors is superficial, and (as our own analysis shows) preventing reactive save can in fact be harmful in welfare terms.

6. **Second**, Ofcom's concern that reactive save activity can "restrict entry incentives" into the broadband/fixed voice markets reflects a presumption that entry would occur in the counterfactual. We see no attempt by Ofcom to explain what kind of entry one should expect to see in this market, by what type of players; why this would be superior to competition between existing suppliers, and importantly how exactly the use of reactive save materially contributes to deterring the entry one would realistically otherwise see. If there is no realistic prospect anyway of entry on an appreciable scale in the UK fixed voice/broadband market (other than perhaps from resellers), then preventing reactive save activity because "at the margin" it may somewhat reduce the potential for entry would appear to constitute (costly) regulatory intervention without merit. On this point we also note that Ofcom seems too quick to dismiss the relevance of the current nature of competition in the markets at hand to an analysis of the effects of preventing reactive save activity.

7. **Third**, the Consultation Document makes reference to "empirical evidence" gathered by Ofcom to support its conclusions, but in fact this is very narrow and uninformative on the effect of reactive save activity on consumer welfare. In terms of conceptual framework, Ofcom establishes no link between lower customer switching, harm to 'entrants', and *consumer* harm. Even if lower consumer switching was to result from 'successful' reactive save activity, there is no reason why a market with more observed switching should be deemed more competitive than one with less switching.

8. What is more, it is important to consider what *preventing* reactive save activity would achieve. Our own analysis – drawing on a more relevant literature than price guarantees, namely that on switching costs – indicates that rather than reactive save being welfare-reducing, it is the *prevention* of reactive save activity that may be detrimental to consumer welfare. Our analysis indeed shows that most categories of consumers are generally better off where save activities are permitted.

9. Our **fourth** criticism of Ofcom's analysis is therefore that it does not appear to give adequate consideration to the question of the appropriate counterfactual (against which the expected benefit of removing reactive save needs to be gauged). In practical terms, the prevention of reactive save activity (such as through the adoption of a universal Gaining Provider Led switching process, favoured by Ofcom) would not eliminate other save activity. Indeed both consumers and providers could be expected to adapt their behaviour if reactive save were to be prevented, for instance by replacing these retention activities with longer minimum contract periods (and not necessarily redirecting the funds available for these discounts to lower prices more generally). Hence it cannot be simply assumed that any problems which *may* be associated with reactive save would be seamlessly removed by its prevention. In fact, limiting reactive save activity could well lead to the introduction of other retention measures that could leave consumers worse off.

10. **Overall,** we find Ofcom's analysis of reactive save activity to be limited and partial, unsubstantiated by relevant empirical evidence and reliant on a number of assumptions and analogies rather than robust economic analysis. It provides no credible basis for supporting Ofcom's negative assessment of reactive save, which in turn forms virtually the entire basis for Ofcom's broader conclusion, in its February Consultation Document, that LPL switching processes are generally detrimental to competition and a specific GPL option (the GPL-TPV option) should be adopted instead. As discussed in our companion paper assessing the merits of Ofcom's cost-benefit analysis of different switching processes[1], insofar as the conclusion that LPL processes are undesirable relies almost entirely on the estimated "welfare cost" of reactive save, it is unsound and should be revisited.

1 *Ofcom's Impact Assessment of Changes to Switching Options for Fixed Voice/Broadband Lines: An Economic Review,* CRA, May 2012.

1. INTRODUCTION AND OVERVIEW

11. This report has been prepared by a group of economists from Charles River Associates ("CRA"), led by Dr Cristina Caffarra, Vice President and head of the European Competition Practice. Dr Caffarra is an expert in the application of modern industrial economics to competition law, and in the empirical analysis of markets in the context of competition investigations. The CRA team includes PhD-qualified economists with experience of competition and regulatory policy matters. We have extensive experience of the telecommunications sector, having advised clients on numerous matters including specifically in relation to investigations of anti-competitive conduct and market inquiries by both competition and regulatory authorities.

12. We have been asked by a group of Communications Providers (BSkyB ("Sky"), BT, and Virgin Media ("VM")) to conduct an economic analysis of Ofcom's conclusion, in its Consumer Switching Consultation of February 2012, that "reactive save activity" conducted by incumbents to retain fixed voice/broadband customers is fundamentally undesirable as it is very likely to be anticompetitive.[2]

13. Ofcom has been conducting for some time a review of the effectiveness of consumer switching for fixed voice and broadband services in the UK. The latest instalment in this review is a Consultation document dated February 2012, which contains Ofcom's current view of the "problems" which are associated with the existing switching processes, as well as a discussion of a number of possible options for modifying such processes, which could be adopted to deal with the problems. In a companion paper[3] we discuss what we believe are problems and flaws in Ofcom's evaluation of the costs and benefits of the various alternative options it has identified. The focus of this paper is the belief, which underpins much of Ofcom's assessment of alternative switching processes, that major harm to competition results from so-called "reactive save activity" – whereby an incumbent provider is able to make a counter-offer to a customer who has requested a switch to another provider, in the course of the formal switching process.

14. Ofcom appears concerned that "reactive save activity" could put new entrants (and growing providers) at a disadvantage relative to incumbent providers, to the ultimate detriment of consumers. Ofcom also expresses concern that reactive save will dampen incumbents' incentives to offer good deals to existing customers. Ofcom's negative assessment of reactive save strongly colours its position on alternative switching process 'options', including its declared preference at this stage for a "Third Party Validation (TPV) process"[4] despite the fact that, by Ofcom's own admission, this is the costliest and most intrusive option.

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2 Note that only party-specific confidential versions of this report have been shared with each provider: none has seen the whole unredacted report.

3 *Ofcom's Impact Assessment of Changes to Switching Options for Fixed Voice/Broadband Lines: An Economic Review,* CRA, May 2012.

4 As Ofcom sets out at paragraph 6.37 of the Consultation Document, this is "a GPL [Gaining Provider Led] process which utilises the customer's existing account reference (provided by their current provider on their bill) or other information if they are unable to provide their account reference (e.g. telephone number and address) to authenticate the consumer, and a TPV process to perform consent validation."

15. We believe that Ofcom's view of reactive save is one-sided and flawed, as it overlooks the significant potential for save activity to be in fact *welfare enhancing*. We explain in this paper why a more balanced analysis of the effects of save activity, including insights from the economic literature, leads in fact to a view that preventing such activity could be detrimental in welfare terms (not the other way around). We believe this should be properly acknowledged in Ofcom's analysis.

16. The structure of this paper is as follows. In Section 2 we describe how reactive save activity actually takes place in practice – this is important foundation for the discussion that follows, as it highlights that Ofcom's aversion to reactive save may be motivated (at least in part) by an incorrect appreciation of how the process actually works. In Section 3 we briefly describe Ofcom's analysis of reactive save activity, as set out in the Consultation Document, and we describe several concerns regarding this analysis.

17. Section 4 examines in detail Ofcom's conceptual arguments as to why reactive save leads to consumer harm. Ofcom's concerns regarding 'adverse selection' of customers are addressed at Section 4.1. In Section 4.2 we critique Ofcom's (confused) position on price discrimination; and at Section 4.3 we discuss the analogy Ofcom draws with price guarantees.

18. In Section 5 we go on to question a fundamental pillar of Ofcom's belief that reactive save activity is ultimately pernicious: the view that it hampers new entry into the broadband and fixed voice markets. We explain that since there is no realistic expectation of new facilities-based entry on an appreciable scale in any event, action to prevent reactive save seems neither justified nor appropriate.

19. We then address in Section 6 the specific empirical evidence that Ofcom presents in the Consultation Document in support of its concerns, and show that this is in fact inadequate and uninformative. In Section 7 we lay out our own analysis of reactive save, which suggests it may be actually of benefit to consumers; and in Section 8 we consider the counterfactual. Section 9 concludes.

2. HOW REACTIVE SAVE WORKS

20. We begin with a description – based on discussions with each of BT, Sky and VM – of how reactive save activity actually occurs in practice. Note that while other providers may well engage in different processes, to the best of our knowledge the descriptions below apply fairly generally throughout the industry.

21. In this section we focus in particular on a number of features which we believe may have been overlooked or misunderstood in Ofcom's analysis, but matter for the appropriate economic analysis of the effects of reactive save, and of the likely impact of preventing reactive save activity. In particular:

- While reactive save activity is (by Ofcom's own definition) relevant to only a subset of switches, it is not in practice meaningfully distinct from other save activity, including offers made to customers engaged in other switching processes, but also customer services provided to dissatisfied customers (or customers just seeking a better deal) who have yet to initiate any switching process.

- The same customer service agents deal with these different types of customer, and they typically have the same 'deals' available to offer to all customers (for a given 'package' of products). Agents are incentivised to 'save' all customers if possible using these deals.
- However, the deals available to agents are generally restricted, and there is no explicit matching of competitor prices. Indeed, save activity need not relate to price at all, often focusing at least in part on service quality, for example.

22. It is important to understand these facets of reactive save activity, since they have implications both for the appropriate economic analysis of the effects of reactive save, and for the likely impact of preventing reactive save activity. For example, it is highly relevant that the bulk of customer retention activity would continue even if reactive save activity were prevented.

2.1. 'Reactive save' is relevant to only a subset of switchers?

23. Under Ofcom's own definition, "reactive save activity" can at present occur only under a MAC switching process, as it is prohibited under the NoT process.[5] Whether a MAC is required to switch provider depends on the technology employed by *both* the LP *and* the GP. This can depend on: the products being purchased by the customer; the customer's geographic location; the identity of the LP; and the identity of the GP. Critically, a MAC is *never* needed for a switch in which either the LP or the GP (or both) is using MPF or cable technology.[6]

24. Reactive save therefore relates to only a subset of cases of switching of broadband services. By Ofcom's own data, around one in seven broadband switchers use the MAC process.[7] Sky estimates that only around **[●Redacted]** of the new broadband customers

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5 There are currently three switching processes in use:

- **Notification of Transfer (NoT)**, whereby there is no need for the customer to contact his current provider (known as the "losing provider", or LP) – this is therefore a "Gaining Provider Led" (GPL) process;
- **Migration Authorisation Code (MAC),** whereby the customer must contact his current provider (the LP) to acquire a code that is then provided to the gaining provider – this is a "Losing Provider Led" (LPL) process;
- **Cease and Re-provide (C&R)**, whereby the customer separately terminates his contract with the LP and requests a new service from the GP.

See paragraph 1.8 of the Consultation Document.

At paragraph 1.26 of the Consultation Document Ofcom states: "Reactive save activity is where the Losing Provider is able to accurately identify, as a result of information it receives through the formal switching process, all those customers intending to switch and to make them a counter offer not to switch." Calls made to the LP by customers engaged in an NoT process do not fall under Ofcom's definition of reactive save (see paragraph 5.36).

6 Around **[●Redacted]** of Sky's customer base, and **[●Redacted]** of BT's and **[●Redacted]** of Plusnet's customers, use SMPF/WLR technology, as do **[●Redacted]** of VM's non-cable ("National") customers. Sky estimates that **[●Redacted]** of TalkTalk's customer base, and **[●Redacted]** of the customers of Orange, O2, and Plusnet use SMPF/WLR. BT estimates that **[●Redacted]** of TalkTalk's customer base, and **[●Redacted]** of the customers of Orange, O2, and the Post Office use SMPF/WLR technology.

7 See slide 52 of the "Fixed Broadband Switching" research.

it gains require a MAC,[8] while BT estimates that only about **[●Redacted]** of customers it loses to competitors require a MAC.[9,10]

25. The MAC process – and hence reactive save – is therefore currently relevant to only a fairly limited subset of switches between broadband providers. Even customers switching to a provider which uses only SMPF technology will not always require a MAC, since the technology of the losing provider in the switch is also relevant. However, this limited current role for the MAC process should not be taken to mean that it can be considered in isolation – as we now explain.

2.2. 'Save' activity is not specific to callers requesting a MAC

26. Under the MAC process, a customer who wishes to change his broadband provider must call his current provider (the LP), at which point the LP can make what Ofcom terms a "reactive save" offer.

27. These offers are made by call centre staff members ('retention agents'), who are also responsible for providing MACs. However, these agents also receive calls from other customers: namely those not seeking MACs, but who are at least considering leaving the provider in question (or reducing the range of products/services they buy). The customers may have self-identified as "thinking of leaving", by pressing the appropriate button following an automated menu of options. Alternatively, some customers are transferred to the 'retention' department by agents in other departments (e.g. billing) once the nature of their enquiry becomes clear.[11]

28. Crucially, the same retention agents who issue MACs and engage in reactive save activity also speak to other 'types' of callers. This includes customers engaged in an NoT process: as Ofcom has noted, many customers still call their current provider even when the switching process does not necessitate it.[12] This is consistent with the results of research conducted by BT on reasons behind cancelled orders in February 2010. The results showed that **[●Redacted]** of WLR order cancellations and **[●Redacted]** of LLU (MPF) order cancellations (both of which follow the NoT process) were due to the customer being made a better offer by their current provider.[13] Retention agents also speak to customers who are not yet involved in *any* formal switching process, but are in

8 **[●Redacted]**.

9 **[●Redacted]**.

10 The figures for VM are less representative due to their position as a primarily cable operator. VM estimates that only around **[●Redacted]** of new broadband installations on their non-cable services require a MAC to switch. **[●Redacted]** On the other hand, **[●Redacted]** many of VM's non-cable customers are in more rural areas (areas not covered by the cable network) where it is likely that most, if not all, broadband providers are using SMPF technology (meaning a MAC would be required for most, if not all, switches). Hence VM's non-cable customers are not representative of UK broadband customers in general.

11 In the case of Sky, for example, around **[●Redacted]** of calls answered by retention agents are transferred from other departments.

12 Ofcom's analysis suggests that "between half … and three quarters … of consumers switching broadband through the NoT process contacted the LP at some point during the switch" (paragraph 5.36 of the Consultation Document).

13 The sample involved **[●Redacted]** WLR order cancellations and **[●Redacted]** LLU order cancellations.

some way dissatisfied with their current package (perhaps due to a recent change in their circumstances, or technical problems), including (but not limited to) those who wish to see if a better or more appropriate offering can be acquired.[14]

29. These 'non-MAC' callers significantly outweigh callers whose purpose is to request a MAC. BT's consumer retention team fields around **[●Redacted]** calls every week, but issues only **[●Redacted]** MACs (a rate of **[●Redacted]**).[15] A review of a sample of nearly 1,000 successful (i.e. accepted) broadband save offers recently made by BT indicated that only **[●Redacted]** had called to request a MAC, and around **[●Redacted]** were looking for a better deal from BT (as opposed to actively looking to switch). Sky's retention team receives on average **[●Redacted]** calls every week from customers looking to leave Sky,[16] but issues on average approximately **[●Redacted]** MACs per week (a rate of **[●Redacted]**). VM's non-cable operations received **[●Redacted]** calls into its retention department in the first quarter of 2012 and issued **[●Redacted]** MACs (a rate of **[●Redacted]**).[17]

30. We note that some customers who initially call to request a MAC may not in fact be issued with one, if initial save activity is successful and they therefore choose to stay with their current provider. However, it is also the case that many customers who are given a MAC did not explicitly request one.[18] Sky notes that **[●Redacted]**. Thus Sky finds that only **[●Redacted]** of the MACs it issues are *actually used*. Although the situation is slightly less extreme, BT estimates that **[●Redacted]** of MACs issued are *not then used*. For VM, of **[●Redacted]** MACs issued in the first quarter of 2012, **[●Redacted]** were not then used.

31. Thus, 'save' activity is not specific to the MAC process, nor to LPL processes in general. Indeed, save activity often takes place without any formal switching process having been initiated. Furthermore, as we discuss below, the treatment of reactive save customers by retention agents is no different to the treatment of 'non-MAC' callers. By necessity, therefore, the rest of this discussion must consider retention activity in general, not only so-called 'reactive' save. This is not only because a MAC is relevant to only a small proportion of switching activity, but because reactive save activity is simply *not meaningfully distinct* from other retention activity.

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14 Note that agents working in 'retention' do *not* deal with other types of enquiry, such as billing queries or technical problems (although there may be some overlap in terms of customers who are moving home). That is, each provider has a specific team to deal with those customers considering either leaving the provider or 'downgrading' their services.

15 Of the **[●Redacted]** calls to retention each week BT estimates that approximately **[●Redacted]** relate to customers with BT's broadband service, which would suggest a rate of **[●Redacted]** of issued MACs per call relating to a broadband customer.

16 **[●Redacted]**.

17 **[●Redacted]**.

18 This would sometimes occur for example when customers call their current provider to discuss leaving, but without a specific competitor to switch to in mind.

2.3. 'Save' offers do not depend on whether a caller requests a MAC and all customers are 'worth saving'

32. Agents are incentivised to 'save' customers *generally* (i.e. to try to ensure they do not downgrade their services or leave the provider) and to do so at the least cost to the provider (i.e. with the smallest discount, if any).[19] In order to do this, agents can typically offer deals chosen from a list of pre-approved offers (e.g. a certain recurring monthly discount): they cannot invent their own offers.[20]

33. The structure of agents' remuneration means that they are incentivised to make a save offer whenever it seems necessary to retain a customer. Thus in practice save offers are common, and will be made to most customers who would otherwise leave or at least threaten to (meaning that most customers whom providers fail to 'save' will have rejected at least one save offer). Sky estimates that approximately **[●Redacted]** of callers who claim to be looking to switch away from Sky receive a 'save' offer of some sort. In some cases there may be an exception relating to customers still under contract: **[●Redacted]**. Around **[●Redacted]** of BT retail customers are on contracts at any one time; and around **[●Redacted]** of VM customers.[21]

34. Agents will generally have access to a computer system that informs them of the customer's current package, contract, tenure, and other basic information (note this does *not* include individualised background information such as a credit rating). In some cases the computer system may also suggest a few offers that may be most appropriate for the customer (based on the data just mentioned – primarily their current package); however the agent is free to choose between these (if she wishes to make an offer).

35. Importantly, the save offers that agents can propose are *the same* regardless of whether the customer has requested a MAC, whether he claims to be engaged in any formal switching process, or whether he has made reference to a competitor. Obviously the agent will be aware of whether the customer has claimed to have contacted a competitor (and whether he has requested a MAC), and this may affect the agent's perception of how good a deal will be needed to retain the customer. However, this information *does not affect* the menu of offers available to the agent and agents are not instructed to proceed differently in these cases. Thus providers do not systematically or formally distinguish between these different categories of customer.[22]

36. It is also important to note that providers do not distinguish between customers 'worth saving' and those 'not worth saving'. Agents are incentivised to save all customers, of all profiles and 'values'.[23] Furthermore, while a customer's current package of products may

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19 To be more specific:

In the case of Sky, **[●Redacted]**.

In the case of BT, **[●Redacted]**.

In the case of VM **[●Redacted]**.

20 **[●Redacted]**.

21 **[●Redacted]**.

22 **[●Redacted]**.

23 **[●Redacted]**.

impact the offers made to him/her, save offers do not generally further distinguish between customers of different usage or 'value': so, for example, the remuneration of retention agents does not depend on whether the customer saved is a relatively light or heavy user for his/her broadband package.

2.4. 'Save' activity does not relate only to offering lower prices, and there is no systematic matching of competitors' prices

37. While the list of available 'save' offers are drawn up also taking into account current competitor offers, providers do not systematically price match and agents are not instructed to do so.

38. If a customer mentions a competitor deal this could inform the agent's choice of 'save' offer, but the agent is incentivised to encourage the customer not to switch away *at the least cost* to the provider and by using the set of offers at her disposal. A mention of a competitor offer does not therefore affect the save offers the agent can use to try to do this (indeed, for example, **[●Redacted]**). Indeed, agents have an incentive to try to convince the consumer that the package that they receive is worth some premium, focusing on overall 'value'. Aspects of the product offering other than price would sometimes be invoked at this point: **[●Redacted]**.

39. And sometimes a financially improved offer may not be necessary to induce a customer not to leave. This happens when a customer is somewhat dissatisfied with their current package but has no strong intention of leaving and can be persuaded to stay through, for example, a discussion of product quality, or an assurance that a resolution to technical issues will be expedited. **[●Redacted]**.[24]

40. We note on this point that while price appears to be one important reason for switching in some cases, issues such as broadband speed, or other technical problems, are also often very relevant. **[●Redacted]**. VM (non-cable) in May 2011 researched the reasons why customers chose to leave VM and found that **[●Redacted]**. The main drivers were: **[●Redacted]**. Such issues are less likely to be addressed by a simple offer of a discount.

41. Thus retention activity cannot simply be characterised in terms of offering better deals: there are other highly relevant aspects, to do with ensuring more generally that customers are happy with their products (as well as their price). And indeed, retention activity would seem to be relevant to ensuring that customers make informed choices about switching. It would therefore be erroneous to conclude that save activity – including reactive save – involves simple matching of competitor deals.

2.5. Summary

42. A number of features of reactive save activity must be properly understood, in order to correctly analyse the potential implications of this practice:

24 **[●Redacted]**. None of this requires a financially improved 'save' offer, but it is an integral part of retention activity. Similarly, in the case of Sky, **[●Redacted]**.

- While reactive save activity can occur only in certain switching processes, it is *not meaningfully distinct* from other forms of customer retention activity, including under other switching processes, but also general activity to ensure customers are content. The role of retention activity other than reactive save is highly relevant for any consideration of its prevention (i.e. the 'counterfactual').
- Reactive save offers do not systematically depend on the *type* of switching process in train or the *stage* of that process. Further, retention agents are usually incentivised to save *all* customers if possible, and the offers available do not usually depend on factors beyond, for example, the package of products being purchased. As well as the counterfactual, this is also relevant to the issue of whether there is a significant 'adverse selection' problem that can be linked to reactive save activity.
- Reactive save offers *do not involve direct price matching* of competitor offers. This has clear implications for whether certain existing economic research – such as that relating to price guarantees – is informative.

43. We believe not all features of reactive save have been correctly appreciated by Ofcom, and its negative view of reactive save activity (which we discuss immediately below) may be based on a mischaracterisation of their scope and potential effects.

3. OFCOM'S ARGUMENTS ON REACTIVE SAVE

44. Ofcom's February 2012 Consultation Document reviews consumer switching between providers of fixed voice and broadband services on the Openreach copper network.[25] Ofcom concludes that the current switching processes are problematic in a number of respects, specifically identifying six "problems".

45. One of the "problems" identified by Ofcom consists of so-called 'reactive save activity'.[26] Ofcom defines reactive save activity as when:

> *"… the LP is able to accurately identify, as a result of information the LP receives as part of the formal switching process, all those customers intending to switch and to make them a counteroffer not to switch."*[27]

46. Ofcom takes the view that this reactive save activity is likely to damage competition and thus harm consumers.[28] In this Section we briefly describe Ofcom's concerns.

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25 There are currently three switching processes in use:

- **Notification of Transfer (NoT)**, whereby there is no need for the customer to contact his current provider (known as the "losing provider", or LP) – this is therefore a "Gaining Provider Led" (GPL) process;
- **Migration Authorisation Code (MAC),** whereby the customer must contact his current provider (the LP) to acquire a code that is then provided to the gaining provider – this is a "Losing Provider Led" (LPL) process;
- **Cease and Re-provide (C&R)**, whereby the customer separately terminates his contract with the LP and requests a new service from the GP.

See paragraph 1.8 of the Consultation Document.

26 See paragraphs 4.4-4.5 of the Consultation Document.

27 Paragraph 5.1 of the Consultation Document.

3.1. Ofcom believes that "reactive save leads to consumer harm"

47. Ofcom's theories of consumer harm are not clearly articulated in the Consultation Document. However, it would seem that Ofcom's concerns relate to two possible mechanisms, both of which would have negative effects on competition and ultimately on consumers (see e.g. paragraphs 1.29-1.31):

- a dynamic effect whereby **entrants are disadvantaged** relative to incumbents and thus new entry and expansion by small players are deterred; and
- a **price discrimination** effect, whereby existing firms are able to offer poorer deals to non-switchers, and possibly an effect whereby firms compete less vigorously due to **weakened incentives to compete**.[29]

3.1.1. "Disadvantages" for "entrants"

48. At paragraphs 5.20-5.22 of the Consultation Document, Ofcom sets out three 'advantages' that reactive save allegedly provides incumbents over new entrants:

(a) an incumbent can target its attractive offers to customers already threatening to switch, whereas entrants must make attractive offers to all;

(b) since some save offers will be successful, entrants will incur higher average customer acquisition costs, as some 'won' customers will immediately be 'lost' to the counter-offer; and

(c) because incumbents will target save offers to 'high-value' customers, entrants will acquire a relatively high proportion of low value customers – an 'adverse selection' problem driven by asymmetric information between gaining and losing providers.

49. Ofcom thus argues (at paragraph 5.23) that:

> *"The cumulative impact of these disadvantages is that firms with low market shares or new entrants are likely to find it more difficult to expand, and incentives to enter the market may be materially weakened, all else being equal, under an LPL process. This limits entrants' ability to successfully challenge incumbents, and may ultimately discourage market entry and expansion."*

3.1.2. "Price discrimination" and "weakened" incentives to compete

50. Ofcom's second theory of harm appears to primarily relate to price discrimination by existing players in the market. Ofcom argues (for example at paragraph 5.24) that the opportunity for reactive save means that "*providers are less likely to offer discounts*

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28 Note that Ofcom differentiates reactive save activity from other save activity (i.e. outside the formal switching process), such as when a customer contacts his current provider with the explicit purpose of acquiring a better deal.

29 At paragraphs 5.25-5.28 of the Consultation Document, Ofcom sets out three pieces of evidence that allegedly support its concerns about reactive save. The first two go to the success rate of reactive save: Ofcom interprets the evidence as indicating that save activity is "generally effective" and that the MAC process leads to more customers being 'saved' than under the NoT process. The third piece of evidence relates to the use of the MAC process as opposed to the NoT process: Ofcom argues that the former is disproportionately used by new entrants and smaller providers. The conclusions Ofcom is drawing from these few pieces of empirical evidence are not set out clearly. However, notably, Ofcom appears to be relating its concerns about reactive save activity to reactive save's effectiveness in reducing the incidence of switching.

across their customer base because they know they will be able to target discounts just at those customers who attempt to switch." As Ofcom itself recognises,[30] price discrimination is unambiguously good for those customers who receive a discount, although the total welfare effects of price discrimination are ambiguous.

51. Ofcom also mentions that "reactive save activity may weaken the incentives for existing providers to compete vigorously with each other",[31] implying a more general concern that competition between existing providers is dampened by the scope for reactive save.

3.2. Parallel drawn by Ofcom between reactive save and price guarantees

52. Ofcom's belief that reactive save leads to consumer harm is underpinned, at least in part, by a parallel it draws between reactive save activity and price guarantees (specifically, 'meet-or-release' guarantees), as described in Annex 7 of the Consultation Document.

53. Ofcom relies here on a brief paper by Professor Morten Hviid, published with the Consultation Document,[32] which reviews the effects of price guarantees and considers their relevance to and implications for the MAC process. Prof Hviid notes that a typical explanation for price guarantees – that they act as a 'signal' of low price to uninformed consumers – is unlikely to be relevant to save activity, since the process is not generally advertised. Effects related to price discrimination and to consumer search behaviour are possible but – as he also recognises – have ambiguous effects for consumer welfare. Prof Hviid concludes that the current switching rules could harm consumers mainly by facilitating collusion between operators, deterring entry, and deterring rivals from offering "better deals".

54. The key intuition – that Ofcom adopts – is that if a supplier believes an offer made to a rival's customer will be matched by that rival, the supplier will not bother to make the offer in the first place (since switching costs mean the customers will prefer to stay with their original supplier). This effect may be exacerbated if the supplier believes the save offer will be made only in the case of high-value customers (an "adverse selection" issue).

3.3. Ofcom associates the problems of reactive save with LPL processes

55. While acknowledging that "[r]eactive save activity can occur under either a GPL or a LPL process",[33] Ofcom is more concerned about reactive save under an LPL process (i.e. the MAC process), for two reasons:

- reactive save under a GPL process is currently prohibited by regulation (and it would be difficult to do this under an LPL process);[34] and

30 See paragraph 5.24 of the Consultation Document.

31 Paragraph 5.24 of the Consultation Document.

32 Prof M. Hviid, "Applicability of the literature on price guarantees to the PAC and MAC processes", July 2010. This is in turn based on a slightly longer paper by the same author reviewing the economic literature on price guarantees: "Summary of the literature on price guarantees", July 2010.

33 See paragraph 5.30 of the Consultation Document.

34 Although in principle possible, reactive save activity is currently banned under the NoT process, as losing providers are prohibited from using the information gained as a result of the notification of transfer from the

- harm from reactive save is likely to be greater under an LPL process, because it will be more effective (due to the "inbuilt opportunity" to save, and the timing of save offers).[35] On this point, Ofcom refers to survey evidence which it argues supports its position (see paragraphs 5.37-5.50).

56. The belief that LPL processes imply problematic reactive save activity ultimately motivates in part Ofcom's rejection of the LPL "Options" in its analysis at Section 7 of the Consultation Document (see the table at paragraph 7.112 of the Consultation Document).

3.4. Concerns with Ofcom's analysis

57. We believe that Ofcom's analysis is flawed in several important respects.

- **Conceptual arguments as to why reactive save may have adverse effects on competition are not robust:**
  - Ofcom's argument that entrants – and others – will be deterred from trying to 'poach' customers from rivals relies on an assumption that there is asymmetric information which leads to *adverse selection*. However, the reality is that in this case asymmetric information is likely to be very limited, and its effects (if they exist at all) restricted.
  - Ofcom's references to price discrimination are unclear and incomplete.
  - Ofcom's overall analysis appears to be heavily based on an analogy with price guarantees. This analogy is simply not appropriate.
- Even if reactive save activity were detrimental to hypothetical entry incentives (which we consider implausible), **concerns about new entry are misdirected**:
  - In particular, Ofcom is concerned with the possibility of entry deterrence despite providing no evidence that further entry into the markets at issue could be expected under any realistic circumstances.
  - Ofcom also wrongly dismisses the relevance of the current market circumstances to the question of whether entry is likely and/or significantly beneficial to consumers.
- **The use of empirical evidence is inapt**. As well as specific limitations to the data presented, the **general emphasis on the "effectiveness" of save activity is misguided**:
  - Ofcom repeatedly appears to conflate the effectiveness of save activity – i.e. its impact on levels of switching – with resulting consumer harm. However, lower switching need not mean lower consumer welfare.

gaining CP to make such counter-offers to consumers. In contrast, the MAC process involves direct contact between the switching customer and the losing provider, which may prompt a 'counter-offer' from the losing provider. Note that we do not deal in this report with the question of whether reactive save *could* be effectively prevented under an LPL process.

35 See for example paragraph 7.113 of the Consultation Document.

- In contrast, we find that **the most relevant economic literature in fact emphasises the *pro*-competitive effects of save activities**. Further, some simple conceptual modelling indicates that **reactive save may in fact be of benefit to consumers – meaning that preventing it would in fact be harmful to consumers**.
- **Ofcom does not seem to have given adequate attention to the question of the counterfactual**: i.e. what would happen in practice if reactive save activity were prevented? One cannot simply assume that all else would remain equal.

58. We develop each of these points in Sections 4 to 8 below.

4. OFCOM'S CONCEPTUAL ARGUMENTS ARE NOT ROBUST

59. Ofcom relies on three main conceptual economic arguments to conclude that reactive save activity has anticompetitive effects. These relate to: **adverse selection** due to asymmetric information between LPs and GPs; possible **price discrimination** by incumbents; and an analogy between reactive save and **price guarantees**. All of these arguments are poorly founded on closer examination. In contrast to Ofcom's position, we see reason to believe that save activities could be pro-competitive, leading to lower prices, higher consumer surplus, and higher efficiency.

4.1. Ofcom's "adverse selection" concerns are ill-founded

60. One of Ofcom's key concerns, motivating the conclusion that reactive save activity can deter entry and weaken competition, relates to the possibility that a gaining provider (GP) is at a disadvantage due to an 'adverse selection' issue. The idea is that the incumbent (or, more generally, the losing provider – LP) is better informed about the "characteristics" of its customers, and can therefore decide whether or not it is worth trying to retain a customer who has indicated their intention to switch. Thus, a new entrant in the market trying to win customers from the incumbent will mostly gain consumers who are "low value"[36], and so they may not try to 'poach' in the first place. This leads to 'incumbents' charging high prices to their customers. Similarly, Ofcom is concerned that even among existing players the incentive to 'poach' is diminished by this adverse selection problem, and with it the strength of competition.

61. It is worth noting at this stage that a crude juxtaposition of "incumbents" and "new entrants" is not meaningful in the circumstances of this market. While this terminology is part of the usual shorthand of economic analysis, it is misleading in this case to characterise certain providers only as "incumbents": the *same* supplier is indeed an incumbent in relation to its current customers, but a "challenger" in relation to the customers of a competitor. Ofcom's discussion of entrants vs incumbents presents a simplistic dichotomy which does not correspond to the reality of the UK market in question. But in addition, *even if* one was to accept that it was appropriate to talk "shorthand" about entrants and incumbents, Ofcom's arguments are not robust.

36 See paragraph 5.22 of the Consultation Document.

4.1.1. Significant adverse selection is highly dubious in the circumstances of this market

62. An adverse selection mechanism always requires the presence of asymmetric information – in this case, between the LP and the GP regarding the "commercial value" (as Ofcom puts it[37]) of customers.

63. This seems, in practice, unlikely. Broadband packages typically involve some monthly fee with an upper limit on usage (although some top-end packages may offer unlimited usage). When contacting the customer, the GP will ask who the customer is with, and the kind of plan that he/she has and whether they had exceeded their usage limit. Since the price quoted by the GP will apply to a similar type of plan, the customer has no incentive to lie about the type of plan that suits his/her needs best. Since the type of package is the key determinant of the "value" of a customer, this means that LP and GP are on essentially equal footing in terms of knowledge of relevant customer characteristics. Furthermore, there are consumer data available to purchase with information on names, addresses, telephone numbers, and e-mail addresses – but also data such as age, income, affluence, TV usage (e.g. digital TV), and technology usage. For at least a subset of these consumers we understand that there is also information on individuals' product holdings (i.e. the products and packages they are currently buying).[38]

64. Of course, not all customers are equal. Two customers on the same package could theoretically be of different value to their provider if (and, realistically, only if) they had very different data/voice usage, as higher data/voice usage could be more expensive for the provider. Thus, a low-use customer paying for a high-usage package could be of higher "value" than a high-use customer on the same package staying within their usage allowance (a customer regularly exceeding his usage allowance would generally be upgraded to a – more expensive – higher-usage package). However, this additional cost is likely to be fairly small relative to the other costs of provision, and so any difference in value is unlikely to be significant.[39] [40]

65. Further, as mentioned at Section 2.3 above, we understand that information on actual usage is unlikely to affect the save offers made to customers in practice, since the remuneration of retention agents depends on factors such as whether the customer was saved and at what price/package – not on whether that customer is a relatively light or heavy user for his/her broadband package. Furthermore, Sky's retention agents are **[●Redacted]**. VM's retention agents are **[●Redacted]**.

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37 See paragraph 5.22 of the Consultation Document.

38 We understand that this would generally cost of the order of £0.05-£0.10 per record and that this cost is unlikely to be a barrier for smaller providers. **[●Redacted]**.

39 **[●Redacted]**.

In the case of BT we understand that **[●Redacted]**. On the other hand, **[●Redacted]**.

40 We note that the situation would be somewhat different for fixed line telephony, as some consumers are on packages that involve significant metering (although with calling plans that put each consumer in the correct 'category' this may again be limited). Thus a customer's value may be increased by high call usage outside the inclusive elements of their package, and diminished by high usage within the inclusive elements of their package. Again however, it would be relatively easy for the GP to ascertain a customer's usage by asking relatively simple questions (e.g. Do you make many international calls? Do you make many calls to mobiles?), therefore there is no significant asymmetry of information between GP and LP.

66. We therefore do not see how in practice there is likely to be significant asymmetric information, and a realistic adverse selection problem in this market.

4.1.2. The impact of any adverse selection on efforts to gain customers is likely to be limited

67. Even if some adverse selection was indeed present, we do not see how its impact could be significant. In terms of 'poaching' by other established firms, the key issue is whether it would *actually lead to losses for the GP*. The fixed (not sunk) per-customer cost of gaining must be small compared to the revenues generated by any broadband customer over even a few months. So as long as the GP does not incur large variable costs in serving the new customers, switching any customer is profitable anyway (taking sunk costs as given of course). This suggests that any residual adverse selection problem (due to some level of asymmetric information) would not significantly affect such gaining activities – competitors will make the effort anyway.

68. As to entrants, the expectation that – for a given cost of entry – one would be able to attract lower value customers would have an impact on entry decisions, even if serving these customers remains profitable (indeed even if the entrant *cannot* make a loss on acquiring any given consumer). But note that there are also *new* subscribers entering the broadband market: according for instance to Enders Analysis, year-on-year growth in the number of UK broadband subscribers is around **[●Redacted]** in 2011. BT reports that the broadband market is forecast to grow **[●Redacted]** by 2016.[41]

69. And to state again the obvious, new entrants are not "entrants" forever. The very value of gaining new customers or winning customers from incumbents depends on the entrant's own ability to protect these newly acquired customers from further poaching by others. Thus any measure that would reduce a supplier's ability to retain customers who provide a relatively large profit margin would have two opposing effects: it would make it easier for entrants to get customers, but it would make acquiring customers less worthwhile. The net effect on the incentive to enter is then ambiguous. More generally making markets *ex post* more competitive may have detrimental effects on incentives for further entry when entry costs are significant. We discuss this further below, as it is a more general point that applies beyond the 'adverse selection' mechanism.

70. Overall we do not see how, in practice, adverse selection can be a material problem or indeed how it would have a serious impact on competition between existing suppliers, or entry by new suppliers. In the context of other barriers to entry into this market, we cannot see any evidence (and Ofcom has not provided any) that adverse selection is empirically significant.

4.2. Ofcom takes a confused stance on the competitive significance of price discrimination

71. Ofcom's concerns about the "competition weakening" effects of reactive save activity are vague and unsupported. One strand of its argument is an apparent concern about the possibility that reactive save is an instrument of price discrimination among a firm's

41 This argument does not apply to fixed voice services alone, the market for which is declining in both volume and revenue terms. However, here the notion of facilities-based entry is itself simply not plausible – something we discuss further at Section 5 below.

existing customers: "*We are also concerned that reactive save activity may weaken the incentives for existing providers to compete vigorously with each other. For example, with reactive save opportunities, providers are less likely to offer discounts across their customer base because they know they will be able to target discounts just at those customers who attempt to switch.*" (paragraph 5.24 – see also paragraph 5.66).

72. Of course a measure of price discrimination is inherent in save activities of all descriptions: some customers (potential switchers) receive improved offers, while others (those not threatening to leave) do not. In the main body of the Consultation Document, as just mentioned, Ofcom briefly refers to price discrimination as a concern in its own right. But then Ofcom acknowledges that price discrimination has ambiguous welfare effects, and at Annex 7 it goes on to dismiss altogether the relevance of the price discrimination literature – stating that it has "limited applicability" to reactive save activity (see paragraph A7.57).

73. Further reference to price discrimination is made by Ofcom in the context of its references to the economic literature on price guarantees. As discussed extensively in the next section, Ofcom relies on a brief review of the economic literature on price guarantees produced by Prof Hviid to motivate much of its negative conclusions on reactive save. Ofcom refers to Prof Hviid as taking the position that "for reactive save activity the pro-competitive benefits from price discrimination appear speculative and hard to measure, whereas the negative impacts were much more obvious" (paragraph A7.71). However Prof Hviid's view of price discrimination in his paper is rather more uncontroversial – i.e. that by enabling price discrimination, save activities could have positive consumer effects, but this would have to be precisely assessed.

74. Overall, one is left none the wiser by Ofcom's stance on price discrimination, which is confused and lacks precision. It does not advance the assessment of the consumer welfare effects of preventing reactive save activity: even if reactive save activity relates to price discrimination, Ofcom does not show that this will be of overall harm to consumers. Indeed, as our analysis at Section 7 below indicates, price discrimination can be consistent with an overall positive impact on consumer welfare.

4.3. The literature on price guarantees is not generally relevant to reactive save activity

75. Ofcom's argument that reactive save activity dampens competition between suppliers seems based in large measure on a notion that firms will be less inclined to offer good deals to try to win a rival's customers if they do not expect those deals to be successful. As a result overall higher prices can be sustained. Such a claim is not generally supported by economic analysis. While this simple mechanism may apply in the presence of contracts that explicitly refer to the actions (prices) of rival firms, it is not relevant to the analysis of 'save' offers as these are actually implemented in this particular case.

76. Ofcom's analysis of the alleged competition-dampening effects of reactive save is limited to the analogy which it draws with the economic literature on price guarantees. Reactive save offers are likened in particular to a 'meet-or-release' clause (whereby either a better offer from a rival will be matched, or the customer will be released from his contract to enable him to take up the rival's offer). This is similar to a price-matching guarantee (whereby a firm guarantees it will match any better offer from a rival), though a 'meet-or-

release' clause does not strictly *guarantee* to match the rival's price, and is typically found in the context of business-to-business transactions rather than retailing.

77. The assumption is that because reactive save activity affords the LP an opportunity to meet (or beat) the GP's offer, it amounts to a meet-or-release deal, or at least can be expected to result in similar effects. Thus Ofcom argues that if one has the expectation that the LP will always match one's offers, this acts as a deterrent to making attractive price offers in the first place. There is then a "*weakening of providers' incentives to compete for each other's customers*" (see paragraph A7.67).

78. As mentioned, Ofcom relies in this area on a brief review of the economic literature conducted by Prof Hviid, an expert on price guarantees. Ofcom specifically consulted Prof Hviid on the applicability of price guarantees to reactive save activity. Based on his analysis of the literature, Prof Hviid concluded in a brief note for Ofcom that reactive save activity under the LPL MAC process may have a similar effects to "meet-or-release" clauses.[42]

79. Ofcom recognises that "[r]eal-life markets often differ from theoretical economic models", but then goes on to adopt Prof Hviid's analogy on the basis that "such models can still provide useful insights into how specific features can affect real-life markets."[43] There is nothing controversial in such a statement. However, in order to provide useful insights, theoretical economic models must at least capture the essential features of the conduct and institutions that they are trying to assess. While the literature on price-matching and meet-or-release clauses is designed to provide insights into the effects of these particular types of contracts*, we do not believe that it provides any support for Ofcom's conclusions regarding "the impact of reactive save activity on competition.*" This is for two main reasons.

80. **First,** the reality is that the competitive effects of price beating and price matching clauses are always found to depend on the fine details of the market and the guarantee scheme. The OFT recently commissioned a substantial study to consider "price relationship agreements"[44], including across-firm guarantees such as 'meet-or-release' clauses, as well as across-customer guarantees such as 'most-favoured nation' clauses (whereby customers are guaranteed that theirs will be the lowest price the firm offers). The initial results of this study make clear that there are multiple reasons for such guarantees to be offered – including several that are good for consumers. This is also consistent with Prof Hviid's work, which indicates that price guarantees have six different possible effects.[45]

81. Indeed, the literature on price guarantees shows that a negative effect on consumers only arises under precise conditions, which might not be met in this industry. Therefore, even

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42 Prof M. Hviid, "Applicability of the literature on price guarantees to the PAC and MAC processes", July 2010, referenced at footnote 327 of the Consultation Document.

43 Paragraph A7.60 of the Consultation Document.

44 The DOJ has also shown a growing interest in so-called "contracts that reference rivals".

45 Namely: on the incentives to compete; on the ability to collude; on entry decisions; on the ability to price discriminate; on the ability to signal low prices; and on consumer search behaviour. See pages 3-4 of Hviid's paper, "Applicability of the literature on price guarantees to the PAC and MAC processes", July 2010, referenced at footnote 327 of the Consultation Document.

if reactive save activity were equivalent to a price guarantee, no *general* conclusions could be drawn without examining in great detail features such as: (a) whether some or all suppliers offer a guarantee; (b) whether the guarantee is matching or beating the rival price, and whether it applies to all selling prices, or only published prices; and (c) the degree of differentiation of suppliers and consumers, whether consumers have different preferences among suppliers, and how informed consumers are about different prices. Each of these matters in a subtle way. For instance, Prof Hviid himself acknowledges that if consumers switch for reasons other than price, then his results may not hold.[46]

82. These subtleties highlight the importance of an analysis which is careful and precise – rather unlike Ofcom's superficial reliance on Prof Hviid's brief note. There is wide recognition that the literature is complex and nuanced and that a blanket conclusion that this class of contracts is anti-competitive is not warranted.

83. **Second, and most importantly, the analogy Ofcom draws is not appropriate, due to salient differences between reactive save activity and price guarantees.** We expand below in greater detail on why reactive save is *not* equivalent to a price guarantee.

Reactive save does not impose an obligation to match (or beat) an offer

84. First, as Prof Hviid indeed makes clear in his paper, reactive save activity does not correspond to the typical price guarantee, since there is no promise by the LP to match (or indeed to beat) any GP's offer.[47] This immediately distances reactive save activity from the bulk of the guarantees reviewed in the relevant economic literature, which are those which *do* amount to a promise to meet/beat the competition.

85. Instead, Prof Hviid and Ofcom draw a link between reactive save and 'meet-or-release' clauses.[48] Prof Hviid describes such clauses thus: "*The firm promises either to match better terms offered by a rival or to release the customer to take up the better offer without penalties.*"[49]

Reactive save imposes <u>no</u> obligations on suppliers

86. Reactive save is also very different to a meet-or-release clause. Not only does reactive save activity fail to impose a matching obligation on a provider, it fails to impose *any* additional obligation on a provider, as we now explain.

87. Reactive save often applies to customers who are already free to switch suppliers; that is, those who are no longer under a contract from which they might be 'released'. In this sense the 'release' element of the 'meet-or-release' clause is not relevant, since it exists with or without reactive save activity: the customer can leave the LP at any time without sanction. In this case reactive save might be seen as a promise "*either to match (or beat)*

46 See page 5 of his paper, "Applicability of the literature on price guarantees to the PAC and MAC processes", July 2010, referenced at footnote 327 of the Consultation Document.

47 See page 3 of his paper, "Applicability of the literature on price guarantees to the PAC and MAC processes", July 2010, referenced at footnote 327 of the Consultation Document.

48 See for example paragraph A7.58 of the Consultation Document.

49 See page 3 of his literature review paper, "Summary of the literature on price guarantees", July 2010, referenced at footnote 327 of the Consultation Document.

better terms offered by a rival or to not do so" – which of course is no substantive promise at all.[50]

88. On the other hand, if an existing contract still applies, then there will likely be charges associated with switching, but these do not relate to reactive save activity. That is, with or without reactive save activity there will be costs incurred by such a customer if he wishes to change supplier. Reactive save relates to prices if the customer chooses to stay with the LP; it therefore does not affect any such early-termination charges. In this sense a reactive save offer is a promise "*either to match (or beat) better terms offered by a rival or to release the customer to take up the better offer subject to the charges that have been previously established*". Again, this adds nothing to the existing obligations of the LP.

89. All this is to say that the LP makes no substantive guarantee or promise to its customers through its engagement in reactive save activity. It may or may not make a counter-offer as part of the switching process, and this may or may not be viewed as superior to the GP's offer by the customer in question. However, the possibility of reactive save remains only an *opportunity* for the LP: it imposes no additional obligation on the firm (and therefore gives no additional guarantee to its customers). In this sense it is fundamentally different to a meet-or-release price guarantee.

90. Ofcom has attempted to address this point in its Consultation Document by arguing as follows (at paragraph A7.61):

> *"We also dispute that differences in legal structure mean that reactive save activity has a different economic effect from LPGs. Reactive save activity may not a contractual arrangement in the sense that there is no legal requirement for an offer, however if it is widespread among providers, then the economic effects will be similar. Specifically:*
>
> - *A consumer cannot switch without automatically triggering the opportunity for reactive save activity. The provider can always choose to make an offer at the point where the consumer has not yet completed the switch;*
> - *This is common knowledge among all providers;*
> - *Data from providers (although limited) show substantial discounts being offered."*

91. Ofcom goes on (paragraph A7.62):

> *"As long as a significant proportion of consumers who request a MAC are made save offers (which is the case* […]*), reactive save activity is likely to have the same effects of a price guarantee and the intuitions from that literature apply. Therefore, arguments such as 'save offers will not always be made'* […] *do not imply that the basic intuitions from the price guarantee literature cannot apply to reactive save activity."*

92. This is simply assertion that does not rely on any economic analysis. It shows a lack of understanding of the mechanisms that underlie the economic literature on price matching clauses, which generally depend on there being a commitment to price matching as opposed to a simple opportunity to match. Thus the notion that if reactive save is

50 Moreover, even if the incumbent were to actually match the offer received by the consumer, the consumer is in no way obliged to stay with his current supplier. The lack of any obligation on either side is a crucial difference between "meet or release" clauses and reactive save activity.

"widespread" or if offers are made to a "significant proportion" of potential switchers then the price guarantees analogy holds would require justification, which Ofcom does not provide.

Reactive save imposes no obligations on customers

93. Reactive save also imposes no obligation on the *customer*. The customer need not reveal information about the GP's offer, nor must he accept the LP's counter-offer, even if it is financially superior. This is in contrast to a meet-or-release clause, whereby the customer is released from his contractual obligations if and only if he reveals the nature of the offer from the competitor, and the current provider does not make a 'matching' offer. Indeed this is why competition authorities (such as the European Commission) have showed concern that meet-or-release clauses (sometimes referred to as "English clauses") can amount to single branding obligations on customers.[51] Clearly this sort of effect does not apply to reactive save activity. This key difference between reactive save and meet-or-release clauses highlights the gap between the two types of phenomenon.

Offers made to customers are generally public knowledge

94. The other concern sometimes associated with "English clauses" relates to the acquisition of information on competitors' offers. By obliging a customer to provide information on the rival offer in order to take advantage of the 'meet-or-release', such a clause allows the existing provider to gather information on the offers being made by its competitors. This is obviously potentially important in business-to-business cases where contracts are likely to be individually negotiated and therefore private information, and may result in concerns about collusion or abuse of dominance.

95. In contrast, we understand that the standard offers made by a broadband provider to new customers who join from other suppliers (or who are new to the broadband market) are generally public knowledge, since they are widely advertised and/or available on the providers' websites. It therefore does not seem plausible that reactive save activity has significant collusive or abusive effects of this kind.

Reactive save is not advertised to consumers

96. Related to the lack of obligations imposed by reactive save activity is the lack of customer awareness of the procedure. Prof Hviid himself mentions this in his review of PAC and MAC processes, stating: "*It can be assumed that current providers do not advertise the fact that they will use their final chance at keeping customers before releasing a MAC/PAC code to match a lower price. If the firms wanted to do this, they could simply offer their consumers a meet-or-release type guarantee.*"[52] As Prof Hviid argues, this means that low-price signalling is unlikely to be a motive for firms engaging in reactive save activity.

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51 See, for example, paragraph 129 of the European Commission *Guidelines on Vertical Restraints* (2010), which state: "*Under the heading of "single branding" come those agreements which have as their main element that the buyer is obliged or induced to concentrate his orders for a particular type of product with one supplier.* […] *A so-called "English clause", requiring the buyer to report any better offer and allowing him only to accept such an offer when the supplier does not match it, can be expected to have the same effect as a single branding obligation, especially when the buyer has to reveal who makes the better offer.*"

52 See page 4 of his paper, "Applicability of the literature on price guarantees to the PAC and MAC processes", July 2010, referenced at footnote 327 of the Consultation Document.

Reactive save does not involve the direct matching of competitor prices

97. As already discussed, reactive save activity imposes no obligation on the provider to match price. Ofcom acknowledges this, but notes that, nonetheless, reactive save offers are fairly common and often successful (see for example, paragraph A7.62 of the Consultation Document). This however does *not* imply that price matching is going on in this subset of cases. The reality of reactive save activity, as we understand it from our clients, is that *even when it occurs* it does not constitute price matching.

98. As discussed at Section 2 above, in general, a 'retention agent', employed to take calls from all customers who have been identified as "thinking of leaving" the provider, has the scope to make a 'save' offer to her client. Agents are not usually permitted to invent their own offers or discounts: each will typically have a pre-approved list of offers that is regularly reviewed by the provider. Obviously the agent will be aware of whether the customer has mentioned a particular competitor or offer: however, this information *does not affect* the menu of offers available to the agent.

99. A typical meet-or-release clause would allow for the current provider to make a tailored offer to the customer that exactly matches the offer received from the provider attempting to 'poach' his business. Indeed such precise matching is inherent in the notion of a meet-or-release clause, since it determines whether the 'release' element is activated. In contrast, a reactive save offer – in the context at hand, at least – is usually chosen by a retention agent from *a restricted list of pre-determined offers*. This list may have been devised with regard to competitor offers, and the choice of offers made by the agent could be influenced by a competitor offer mentioned by a customer, but the practice of reactive save does not imply a direct link between the reactive save offer and the competitor price. It is not standard industry practice to directly match price, and, indeed, **[●Redacted]**, and **[●Redacted]**.

100. It is important here to differentiate between explicit price matching guarantees and the general phenomenon, seen in all oligopoly markets, that competitors' prices are related. A firm may respond to a change in a competitor's price: this does not indicate price matching and there is no reason to think that this undermines the general incentive to offer lower prices or better deals. The *direct* and *explicit* link between competitors' prices is critical to the argument that price matching dampens competition, and this is not present with reactive save.

101. **Overall**, then, Ofcom's key conceptual economic arguments are simply not robust or convincing. Its concerns about 'adverse selection' seem misplaced, since the asymmetric information necessary to cause this problem is likely limited, and would probably not significantly affect efforts to gain customers anyway. Ofcom's position as to the relevance of price discrimination is confused, and no proof that this would lead to consumer harm is offered. Finally, the analogy that Ofcom draws with price guarantees just does not reflect the reality of reactive save activity, meaning that an analysis of that literature permits no conclusions to be drawn regarding the effects on consumers of reactive save. Ofcom's conclusion that reactive save activity is damaging to consumers is therefore based on unsound economic reasoning. As we show later in this report, reactive save activity may in fact be of benefit to consumers, and its prevention therefore harmful to them.

5. OFCOM'S FOCUS ON ENTRY IS MISDIRECTED

102. The previous Section of this report considered the key pillars of Ofcom's argument that reactive save activity deters entry and softens competition between existing players. We have explained that we find these arguments unconvincing. However, even if accepted, these arguments are relevant only if the identified effects significantly harm consumers – to the extent that costly interventions to prevent reactive save activity (and hence remove the "harmful" effects) would be justified.

103. In the case of entry into the broadband and fixed voice markets in particular, we believe this assumption is likely to be erroneous. Most importantly, Ofcom does not consider whether new entry would be likely even in the absence of reactive save activity. We discuss this now. We then go on to consider the wider assertion by Ofcom that the current competitive circumstances of the markets are not relevant to its assessment.

5.1. Further significant facilities-based entry in the UK broadband/fixed voice market appears unlikely

104. One of Ofcom's key concerns with reactive save activity is that it acts as a barrier to new entry into fixed voice and broadband markets (see Section 3.1.1 above). It is well-recognised that the current structure of the UK fixed voice and broadband markets is the product of significant developments in recent years, with all commercially viable technological platforms being represented, and strong competition among four well-established operators. However, Ofcom's consultation does not contain a coherent discussion of whether, in the current circumstances of the market, additional entry is at all realistic (or by what type of players, on what technology), such that, if reactive save activity were restricted, there would be a greater probability of new entry. This is despite that fact that Ofcom's argument implicitly assumes that entry would occur were it not for the problems caused by reactive save activity.

105. We begin by noting that entry will only arise if potential entrants find it profitable to both acquire and keep customers. The likelihood of entry therefore depends both on how hard it is for entrants to find new customers or pry existing customers away from incumbents and on how profitable these customers turn out to be.[53] This second effect itself depends on the entrant's ability to retain acquired customers at a sufficiently profitable price, which will be lower if price competition is stronger.

106. There are several indications that price competition is far from tame between "incumbents" in the UK market. A BT confidential report[54] notes: **[●Redacted]**, and **[●Redacted]**. The same report discusses **[●Redacted]** in the broadband market and notes that **[●Redacted]**. The report further notes: **[●Redacted]**.[55] **[●Redacted]** The

53 Curiously, Ofcom only looks at one side of this equation when assessing the impact of reactive save activity on entrants. Ofcom argues that reactive save makes it harder for entrants to capture consumers without acknowledging at the same time that, under the same logic, reactive save activity would make acquired customers more profitable for the entrant and would therefore increase the entrant's incentives to acquire these customers in the first place. This relates to the issue of whether lower switching encourages or discourages entry; a point discussed further below.

54 BT Consumer Market and Competitor context, Issue 10 Q4 2011/12.

55 **[●Redacted]**.

intense price competition between UK broadband and fixed voice providers is also widely reported in newspaper articles as well as industry publications.[56]

107. It is also critical to consider that the fixed voice and broadband markets are industries where improved performance depends heavily on significant investments. While of course dynamic efficiency is generally spurred by competition, it is also clear the need for large investments places a natural limit on the number of firms that can thrive in a market – as investments need adequate returns. The deeper policy question is *where* the UK market is currently placed in terms of this relationship between competition and investment, and what type of "entry" could be realistically expected that was truly "new" and "facilities-based" (as opposed to just access-based resellers) in the face of the required investment.

108. Major investment is indeed being undertaken at present in UK broadband infrastructure. Ofcom's own Communications Market report 2011 notes the large investments that BT and VM have made in upgrading their networks to offer super-fast broadband.[57] Enders Analysis provides a similar picture for high speed broadband offerings.[58] Additionally, over the last few years there have been significant investments in LLU.[59] Again, given

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56 For example, a Scottish Daily Record article (*Log on for a good deal*) dated 7 September 2011 notes that "ORANGE have rejoined the battle for high-speed internet customers that has been raging for months. The company have been losing business to rivals such as Sky, TalkTalk and BT's Plusnet, who have been slashing prices. But the French firm have hit back by launching what they claim is the UK's cheapest broadband bundle." A Daily Telegraph article (*Offset rising utility bills with savings on home phone, broadband and TV*) dated 13 August 2011 notes: "The first place to start is by assessing the cost of your home phone, broadband and digital TV bills **as cut-throat competition is driving down prices in the market**. Plus, there are services available that will take care of all the work for you, so it really is the easiest way to quickly start saving money." (emphasis added). Another Daily Telegraph article (*Price war drives cost of broadband down to just £3.25 per month*), dated 21 May 2011 notes that "**There is a price war underway between the UK's biggest broadband and home phone providers** as they chase cash-strapped customers - and the savings available this month are eye-watering" (emphasis added). A 2011 Research and Markets report entitled "United Kingdom – Key Statistics, Telecom Market and Regulatory Overviews" notes that "**The UK's telecom market, one of the largest in Europe, is characterised by fierce competition in the mobile and broadband sectors**, and by a broadcast sector which has pioneered business models for distributing digital content. As a consequence, mobile and broadband penetration is comfortably ahead of the European average, while digital TV uptake has reached 90 percent of the population. **Consumer prices across the board have fallen steadily, while network capabilities have been greatly expanded following recent investments by British Telecom and Virgin Media in Next Generation Networks**." (emphasis added)

57 Ofcom's Communications Market report 2011 (see pages 246-247) notes that: "In 2010 Virgin Media started to upgrade its network to support an 'up to' 100Mbit/s service, which is currently available to around four million UK homes and the roll-out of which should be completed by mid-2012, while it has also trialled an 'up to' 200Mbit/s service. In 2010 Virgin Media extended the footprint of its cable network to cover an additional 177,000 homes".

"BT's roll-out of fibre-to-the-cabinet (FTTC) services continued in 2010, and by the end of the year an estimated 16% of UK homes were connected to an FTTC-enabled local exchange…..

BT has committed to making fibre-based services available to 40% of UK households by summer 2012, and to 67% by 2015, using a mixture of fibre-to-the-home (FTTH) and FTTC"

58 Enders Analysis, "UK fixed telecoms market: broadband and telephony trends to Q4 2011", page 4. The report notes **[●Redacted]**

59 As mentioned above, the Q4 2011/12 BT confidential report notes that **[●Redacted]**. The Ofcom 2011 Communications Market report notes that the number of LLU lines grew by 18% in 2010 and by 16% in 2009. The Ofcom report explains that "A number of larger LLU providers (such as O2 and Sky) which previously offered only stand-alone LLU broadband services (leaving BT to provide voice services over the same line),

this factual background it seems hard to argue that current market participants are underinvesting and that further competition is needed to improve investment incentives. We also note that the view that more competition can only go so far in motivating greater broadband investment is widely shared, including by the European Commission.[60]

109. Furthermore, and notwithstanding the ongoing investment in broadband, the UK fixed voice and broadband markets have been approaching a level of maturity. As Ofcom knows well, the structure of the UK retail fixed voice and broadband markets in the UK have changed substantially in recent years,[61] with several suppliers besides BT now established for some time.[62] The fixed voice market has been declining for some time in both usage volume and revenues.[63] Ofcom's own Communications Market report 2011 shows retail fixed voice revenues declining over the period 2005-10 at a 5 year CAGR of -2.6%, with fixed voice call volumes declining by over 20% in the five years to 2010 (5-year CAGR of -4.6%).[64] While fixed broadband connections continue to increase (5-year CAGR 14.6% with y-o-y growth of 7.2% in 2010), *revenues* from fixed broadband services declined y-o-y both in 2009 and 2010. [65]

110. In short, the key features of the market are a requirement for significant ongoing investment in infrastructure, competitive pressure from mobile-based and other services, highly differentiated offers and at the same time aggressive price competition by existing providers to retain customers and expand their own base. These features have clear implications for the *level and type* of entry that can be realistically expected in retail communications markets going forward. *It is only against a conclusion that significant entry is otherwise realistic and likely, that the question of whether "reactive save activity" can be detrimental to entry and therefore competition has any merit.*

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have started to offer bundled fixed voice and broadband LLU services over the past few years, and take-up of these services has been the main driver behind continuing LLU connection growth" (see page 282). **[●Redacted]**

60 See for instance reports that "Senior European Union officials in charge of the "Digital Agenda" have renewed their efforts to get industry leaders and regulators to lobby national governments to preserve proposals for broadband funds in the next EU budget" (MLex Editorial, 20 April 2012). The belief that subsidisation of broadband investment is required to ensure greater broadband investment indeed strongly suggests that more competition is not always enough.

61 A 2011 Ofcom Communications Market report notes that "BT's share of total fixed-line voice call volumes fell below 40% for the first time in 2010, with its market share declining by 3.5 percentage points to 36.5% during the year. Virgin Media also lost share during 2010 (down 0.9 percentage points to 12.1%), while other direct providers (up 3.7 percentage points) and indirect access providers (up 0.8 percentage points) both increased their shares." (Ofcom 2011 Communications market report, page 286). BT's share of the fixed telephony market has been for some time the lowest market share for an incumbent in the EU (European Commission, 15th Progress Report on the Single European Electronic Communications Market 2009, page 411).

62 Sources like Enders Analysis, among others, similarly report the following structure in Q4 2011 for the UK broadband market: BT Retail with **[●Redacted]** of total broadband subscribers, VM with **[●Redacted]**, Talk Talk Group with **[●Redacted]** and Sky with **[●Redacted]** (see "UK fixed telecoms market: broadband and telephony trends to Q4 2011"). These also face credible competition from Orange and O2, each currently with **[●Redacted]** of the market.

63 The Q4 2011/12 BT confidential report mentioned above notes that: **[●Redacted]**.

64 Ofcom 2011 Communications Market report, figure 5.39 on page 283 and figure 5.40 on page 284.

65 *Ibid*, figure 5.57 on page 294 and figure 5.58 on page 295.

111. Ofcom's theory of harm, namely that reactive save activity harms consumers by deterring entry, is not relevant if indeed it is the case that meaningful entry is unlikely in the UK communications market in the first place. We do not see this as likely or indeed plausible scenario, and we do not think Ofcom can entirely sidestep this important question.

112. To recapitulate, we believe that Ofcom's position on reactive save and entry is not well grounded for two main reasons. First, banning reactive save activity would not necessarily increase entry incentives, not least since an entrant cares about acquiring consumers that they will be able to retain *at a sufficient profit margin*. Second, the actual likelihood of entry and the benefits of further entry both seem low. Given that – as we argue in Section 7 below – preventing reactive save could easily lead to lower consumer surplus for a given number of providers, "facilitating entry" cannot therefore be a sufficient reason for tampering with reactive save activity.

5.2. The relevance of a careful consideration of the nature of current competition

113. Ofcom's failure to properly assess the likelihood of future facilities-based entry into the markets at issue would seem connected to its claim that the level of competition in the markets at hand is simply not relevant to its analysis. Ofcom states at paragraph A7.42:

> *"Market competitiveness is not a binary variable i.e. it is not that markets are either competitive or they are not; it is a continuum. A market can be considered competitive at a given time, yet become more competitive at a later time. A set of markets can be considered competitive, yet there could be wide agreement that some markets within that set are more competitive than others. The issue is not whether the retail communications markets that we consider are competitive or not. The key issue in this context is the extent to which switching processes may impede competition."*

114. We agree that clearly markets can exhibit differing levels of competitiveness, and that circumstances can change over time. However, the practical reality of regulation and competition policy is that it is usually highly relevant to consider whether a market is currently functioning well for consumers (and in some cases this may amount to a judgement as to whether it is "adequately competitive" or not). This is because interventions by authorities and regulators carry costs (of enforcement and of inefficiency) which must be weighed against the likely benefits of the intervention – and these benefits will depend in part on the current market circumstances.

115. In general, if markets are performing well for consumers there is likely to be merit in a pragmatic approach which relies on general competition law (and consumer protection rules) – rather than costly additional regulation to try to further 'tweak' the nature of competition. The latter is unlikely to offer a net benefit to consumers.

116. We therefore disagree with the final sentence of paragraph A7.42: "*The key issue in this context is the extent to which switching processes may impede competition*". Ofcom's remit cannot be only to hypothesise as to ways in which a certain activity – in this case reactive save – could lead to some effects that might, under certain circumstances, be associated with consumer harm. Rather, in the case of reactive save activity, Ofcom's concern must be whether preventing such activity would be of net benefit to consumers: a question which requires careful analysis of what such prevention would entail. Such an analysis is incomplete without a consideration of the current market circumstances.

117. To be more specific, thinking about Ofcom's concerns regarding the effect of reactive save on entry incentives, the relevant question is not simply whether reactive save activity may (as a matter of general principle) deter entry. The threshold questions that constitute the relevant context to Ofcom's analysis should include: how competition in the UK fixed voice and broadband markets takes place today; what role "new entry" can play against this background; whether significant new entry would be likely in the absence of "reactive save"; and only then, whether "reactive save" can have a *material* detrimental effect on the likelihood of entry. Only at that point should Ofcom proceed to consider the need for costly intervention – and whether the net benefit for consumers is positive.

118. We have already discussed that we find it implausible that reactive save will materially deter entry and that the likelihood of substantive facilities-based entry seems remote with or without reactive save. In both cases these arguments were – and indeed must be – based on the specific facts of how these markets work.

119. Similarly, the positive impact of any additional entry may also be limited. On this point, we note that the potential gains from entry often decrease sharply as the number of firms operating in the market increases.[66] Indeed, in some cases entry can even be costly to society.[67] Furthermore, as we have already noted, entry will take place only if potential entrants can hope to make adequate profits from the customers they acquire. This is significant since a lack of entry caused by intense competition between efficient players is unlikely to be to the detriment of consumers.[68]

120. Against evidence that the existing major players in the UK fixed voice and broadband market are actively seeking to retain and (importantly) *expand* their customer bases, offering rich menus of options to customers (so that their preferences are catered for), and competing hard on price, it is not clear why further entry – or indeed the threat of such entry – would be of *significant* benefit to consumers.

121. **Overall**, it would seem that Ofcom does not dispute that the markets at hand are competitive: rather, its position is that this is *irrelevant*. This is an unwarranted omission. The level and – more importantly – the *nature* of competition in the industry affect both the likelihood of and potential benefits of future new entry. Once the maturity and

66 *Mutatis mutandis,* empirical studies elsewhere have noted that the benefits of further entry in these markets tend to be exhausted relatively quickly. For instance a paper by Xiao & Orazem (2011) that examines entry and competition in the local US broadband markets finds that "the fringe players from the 4th firm on have little effect on the competitive conduct of the broadband market" (Xiao, M. & P.F. Orazem, 2011, "Does the fourth entrant make any difference? Entry and competition in the early U.S. broadband market", *International Journal of Industrial Organization*, 29, pp.547-561).

67 As is well known, a prospective entrant will take into account the cost of the resources involved, and compare it to its expected profits. Where at least part of the entrant's profits come from taking profits away from others (the "business stealing effect"), additional entry can occur even if the corresponding consumer benefits fall short of the (social) cost of the resources required for entry. If this effect dominates, then further entry is in effect welfare decreasing as it allocates too many resources to the "wrong" sector of activity.

68 More generally, the dichotomy that Ofcom implicitly draws between "competition from new entrants" (=good) and "competition between incumbents" (=irrelevant) is not justified – analytically and in fact. For any existing consumer the provider is the "incumbent". And the provider engaging in save activity may in fact be a smaller supplier, with a larger one attempting to gain the customer. In other words, a given supplier is thus both 'incumbent' and 'entrant' for different customers at the same time, which is surely relevant when considering the disadvantage at which Ofcom alleges save activity places the 'entrant.'

competitiveness of the markets are considered carefully, it is clear that the consumer benefits of any such entry would probably be muted and – more importantly – that further substantive facilities-based entry seems unlikely in any event. Given that Ofcom admits that preventing reactive save will incur costs, it is critical that so doing will also offer significant benefits to consumers. Certainly in terms of facilitating consumer-welfare-enhancing entry, this seems implausible.

6. OFCOM'S EMPIRICAL EVIDENCE IS UNINFORMATIVE AND ITS EMPHASIS ON THE EFFECTIVENESS OF SAVE MISGUIDED

122. Ofcom devotes a brief sub-section of its Consultation Document (paragraphs 5.25-5.28) to "empirical evidence" which, it argues, supports the concern that "reactive save leads to consumer harm".[69] Ofcom specifically mentions three pieces of evidence, which go to:

1. the relative effectiveness of save under the MAC process vs. the NoT process;
2. the overall effectiveness of save offers; and
3. the use of the MAC process by different providers.

123. As discussed below, this evidence is at best very limited, and at most suggestive – rather than conclusive – as to the factual reality at hand. More significantly, the evidence simply does not go to the question of whether reactive save harms consumers. It is therefore uninformative on the consumer harm that can be associated with reactive save activity, and on the likely impact of preventing of reactive save activity.

6.1. The effectiveness of the MAC process compared to other save activity

124. The first piece of evidence (paragraph 5.25) concerns information on a week's sales by one provider. The evidence is purported to show that, in a specific week in 2010, customers who contacted the provider were more likely to ultimately switch to that provider if they did not need to acquire a MAC from their current provider.

125. First, the number of customers involved would appear to be very low (there were only 45 customers who required a MAC), and these figures can only be a very small snapshot. But most importantly, it is not clear what one is to make of this "evidence" in terms of drawing a link to consumer harm. Ofcom mentions that the evidence indicates that customer acquisition costs may be higher under the MAC process than under other processes. Since it compares switching under a MAC process with other switching, this evidence would appear to be linked to Ofcom's argument later in the Consultation Document that save activity is more effective under an LPL process than a GPL process (see paragraphs 5.37-5.50). Ofcom sees two reasons for this: first, consumers are more likely to contact their LP under an LPL process than a GPL process; and second, the timing of the save offer under an LPL process will make it more effective.

126. On the first point, of course a high proportion of customers (indeed, all of them) will contact their LP under an LPL process (since, unlike a GPL process, an LPL process

69 Section heading at paragraph 5.17 of the Consultation Document.

mandates contact with the LP). However, in practice, many consumers who do *not* in fact need to contact their LP *do so anyway*, so the difference is limited. As to the second point, that reactive save is more effective than other forms of save, even if the customer contacts the LP anyway, Ofcom's key concern appears to be that a reactive save offer comes *earlier* in the switching process than a save offer under a GPL process. Ofcom states (at paragraph 5.44):

> *"Under an LPL process at the point at which they contact the LP, the consumer has not formally entered into a contract to the potential gaining provider. By contrast, under GPL processes, many of the switchers who do contact the LP (e.g. those who contact when they receive the notification from the LP) will have already committed to switching and will have been far into the process. In the LPL MAC process, a consumer who accepts a save offer need take no further action. In the GPL process, a substantial proportion of consumers who accept save offers would then need to contact the potential GPL to cancel the switch."*

127. Ofcom then presents evidence that:

- Comparing switchers under the NoT process with switchers under the MAC process, a higher proportion of the former (56%, compared to 39%) received their save offer *after* they had signed up with the GP (see paragraph 5.45). This suggests – although the difference in proportions is not very large – that MAC offers may come 'earlier', on average, than NoT offers. This of course does not say whether this means they are more effective.
- Of those customers who considered switching but were 'saved', only 5% had already signed up to a proposed new provider (and so then had to cancel). This compares to 37% who had contacted a new provider but not formally signed up, and 45% who had not contacted a new provider (10% had contacted a new provider but were unsure whether they had formally signed up) (see paragraph 5.47). Taken at face value, this indicates that more successful 'saves' take place at an earlier stage of the process. [70]

128. While it is possible that some save activity may be more effective if it comes earlier on in the switching process, i.e. before the consumer has signed up with the GP, still Ofcom's comparison of the MAC and NoT processes ignores a key point: that a great deal of contact with the LP occurs *before any switching process is formally set in train.* A comparison of save activity under the MAC process with save activity under the NoT process is therefore inevitably partial. Intuitively, save activity aimed at customers not yet engaged in any switching process (who perhaps have had no contact with a possible alternative provider) should in fact be *more* effective/successful than that under a MAC process. By Ofcom's own data, set out above, 45% of 'saved' customers had had no contact with a new provider – these customers were therefore not involved in any formal switching process. **[●Redacted]**.

129. Thus while it is possible that reactive save under the MAC process is on average more effective than at least some other forms of retention activity, Ofcom's (limited) evidence is not conclusive on this point. And most broadly, whatever the merits of Ofcom's evidence on this matter, information on 'success rates' alone is not informative as to the effects of

70 Ofcom supplements these points with appeal to the 'default bias' found in behavioural economics and to intuitions regarding hassle and scope for counter-offers (see paragraph 5.48).

reactive save activity on consumer welfare (as discussed also further below, observations on the rate of switching cannot be simplistically translated into effects on consumers).

6.2. The effectiveness of save activity in general

130. The second piece of evidence set out by Ofcom at paragraphs 5.25-5.28 draws on consumer research. Based on a sample which Ofcom itself again admits was small, there is a finding that "four out of five" customers considering switching who were made a save offer accepted it. The same research however notes that due to the low incidence of contact with the previous provider (60% for broadband and 69% for fixed voice) only one in five "considerers" actually received a save offer. Therefore if anything this piece of research suggests that any discussion of the effectiveness of save activity (which can occur only once the customer considering switching has come into contact with their current provider) should be put into context by considering how many customers considering switching actually ever contact their current provider.[71]

131. Later research indicated that two-thirds of customers who started the switching process but then decided to remain with their existing provider had accepted a save offer. This says nothing of unsuccessful save offers. It also obviously raises the question of why the remaining third of switching customers changed their minds: Ofcom's consumer research indicates that the reasons included "process" reasons, such as hassle, and "other" reasons, such as early termination charges and the current provider being perceived as the best. **[●Redacted]**.

132. Sky indeed estimates that of those customers who call to downgrade or cease their broadband services, around **[●Redacted]** are 'saved', with around **[●Redacted]** of these customers being saved without an improved offer. BT estimates that **[●Redacted]** of the callers to its consumer retention team who buy broadband are 'saved', in the sense that they continue to purchase broadband from BT, at least in the period immediately after the call. The figures for voice and TV services are similar.[72] **[●Redacted]** VM finds that **[●Redacted]** are successfully 'saved'.

133. Thus while save activity can be successful (why would it be undertaken, otherwise?) this says nothing in itself about whether lower switching should be seen as inevitably detrimental to consumers.

134. We also note that this evidence appears to relate to save activity in general, and does not separate out the effectiveness of *reactive* save, under the MAC process. This is unsurprising given that – as we have explained – reactive save activity is only one element of the customer management activity in which providers engage. But then, the evidence tells us nothing about the effect of preventing reactive save, since other save activity can be expected to continue even if *reactive* save activity is prevented. We discuss the counterfactual in more detail at Section 8 below.

71 See section 6.5, page 44 of the September 2010 "Consumer Switching and Bundling" research by Saville Rossiter – Base.

72 This figure includes customers who are persuaded not to leave or downgrade by a persuasive argument about speed/quality of the product or because they are still under contract and do not want to incur the ETCs.

6.3. The use of the MAC process by different providers

135. The third piece of evidence cited by Ofcom relates to use of the MAC process: Ofcom argues that it is "disproportionately" used by new entrants and smaller providers.

136. A MAC (as previously mentioned) is required only for a subset of broadband switches, depending on the technology used by both the LP and GP. While it is true that some smaller players use technology that might require a MAC (i.e. SMPF/WLR), this is also true for a significant proportion of customers of larger players, including **[●Redacted]** of Sky customers, **[●Redacted]** BT customers, and **[●Redacted]** VM non-cable customers. In addition, the need for a MAC will also depend on the technology being used by the *other* provider involved in the switch. Thus MACs will definitely *not* be required if a new provider gains customers from e.g. VM's cable service or from an MPF service (which accounts for most of TalkTalk's services, for example – see footnote 176 of the Consultation Document, which indicates that TalkTalk uses SMPF/IPstream for 11% of its customers).

137. Ofcom's analysis at paragraph 5.27 therefore seems to overstate the role of the MAC process in switching to and from smaller providers. But, again, the more important question is what this information – even taken at face value – can possibly tell us about the effects of reactive save activity on consumers. The significance of this observation appears related to Ofcom's view that reactive save under the MAC process is uniquely harmful to competition, and hence to consumers. But as there is no basis for this conclusion, then data about the relative use of the MAC process are also not particularly informative, let alone dispositive.

138. **Overall,** Ofcom invokes in the Consultation Document a few pieces of "empirical evidence" that are intended to provide support for its theory of harm in relation to reactive save activity. In fact, the scope of this evidence is extremely narrow. Even on its own terms, it is inconclusive. And in terms of providing support for the ambitious theory of harm that Ofcom seeks to put forward, it is inadequate.

6.4. Even if reactive save were to lead to less switching, it does not follow that it harms competition

139. Ofcom's empirical evidence highlights a puzzling assumption that appears to underlie Ofcom's arguments, as set out in the Consultation Document: namely, that to the extent that reactive save activity were to result in less switching, then this would be an indicator of consumer harm.

140. Assume for now, for the sake of argument, that reactive save does indeed reduce consumer switching (i.e. is more 'effective'). In Ofcom's view this must result in a lessening of competition. But the effectiveness of reactive save activity in itself does not allow one to draw conclusions about its consumer welfare implications, because one simply cannot assume that less switching is bad for consumers.[73] At the simplest level, successful save activity means that consumers have gained a better deal without having

73 Note that while we argue in this section that increased switching need not indicate higher consumer welfare, we do not dispute that lower switching *costs* are probably good for competition and hence for consumers in most cases. However, this is not relevant to an assessment of reactive save activity, since this does not represent a switching cost.

to switch provider, which is to their direct benefit. So, for consumers who are successfully "saved" at least, less switching equates to higher surplus, not to consumer harm. For save activity to be harmful to consumers therefore, it must be either that they directly hurt other types of consumers or that they lead to higher overall price levels. It is hard to see how the fact that consumer X is dissuaded from switching by a better counter-offer would have any direct negative effect on any other consumer.

141. Ofcom's concern can therefore only be that the possibility of reactive save activity decreases the firms' incentives to "poach" each other's customers sufficiently to lead to higher prices for all, or at least a majority of consumers. While such a welfare-decreasing effect could indeed also lead to less switching in equilibrium, it does not have to. According to this theory of harm, it is precisely because the threat of losing customers would be greater when reactive save activity is not possible that firms would set *lower* prices to their consumers to start with. As these lower prices do (and are meant to) reduce switching, one cannot conclude that more switching would be observed in equilibrium if reactive save activity was prevented. In other words, even if we follow Ofcom's theory of harm (taking entry as given for now), the welfare benefits that might arise from preventing reactive save activity would not necessarily be associated with an increase in the observed rate of consumer switching. This is in fact hardly surprising: if the industry were in a perfectly competitive equilibrium, the only switching that would be observed would correspond to consumers with changing tastes or circumstances. The observed rate of switching tells us nothing about either the intensity of competition in the industry, nor about the effect of policy changes on consumer welfare.

142. As to entry incentives, even assuming that significant further entry was indeed likely (on which we have reservations, as explained above) the effect of switching rates on entry is not obvious at all as a matter of principle. As mentioned previously, entry decisions are based on the expected profits that the entrant believes he might achieve over the lifetime of his involvement in the industry. Such lifetime clearly involves both an early phase when the entrant will mostly be seeking to acquire consumers, and a more "incumbent" phase when the entrant will care about retaining the customers that he has acquired. If – following Ofcom's own thinking – reactive save activity really makes it harder for entrants to acquire customers but helps incumbents *keep* them, then the overall effect of such activity on entry is *a priori* ambiguous: even if it makes acquiring customers more difficult, it also makes it more worthwhile.

143. We analyse some of these mechanisms further in the rest of this report, and indeed the next section shows that the impact of successful (and unsuccessful) save activity on consumer welfare may well be positive.

7. OUR ANALYSIS INDICATES THAT PREVENTING REACTIVE SAVE MAY WELL LEAD TO WELFARE *LOSSES*

144. Ofcom's analysis of reactive save in the Consultation Document relies on a few conceptual arguments presented as "evidence" that reactive save activity harms consumers. We have explained that there are differences in practice between the way in which reactive save works and the assumptions in the price guarantees literature. We have also laid out several reasons why the overall effect of reactive save on consumers is not obvious.

145. But there is more: in order to consider policy intervention that would in effect lead to a *de facto* prevention of reactive save activity, it is not enough to set out the *potential* effects that reactive save might have on competition; one must also consider the welfare effects that prevention might have. In other words, the welfare effects of reactive save activity can only be assessed with respect to a relevant benchmark in which such activity is indeed prevented. In the context of the Consultation Document, the most reasonable benchmark would seem to be a situation where the losing provider is not allowed to make a counter-offer to customers who have received a better deal from a rival. We discuss below the implications of such a benchmark for the welfare assessment.

7.1. The relevant literature is the economic literature on competition with switching costs when firms can discriminate between old and new customers

146. As mentioned, reactive save activity is not part of any contract between supplier and provider. The possibility of engaging in such activities does not therefore carry any obligation for either the current provider or the customer. This means that the economic literature on price matching or 'meet-or-release' clauses simply does not apply since it looks at a "game" with a timing and a set of possible actions that differ quite radically from those involved in reactive save activity.

147. There is however another part of the economics literature with more direct relevance to the issue of reactive save. What differentiates a firm's current customers from other customers that it might seek to acquire is the existence of switching costs. In spite of the regulator's best efforts to minimise the cost of switching from one provider to another, switching still takes some time and effort. It might also include a "psychological element" (some consumers just "do not like" to switch) that is irreducible. Reactive save activity is therefore best seen as offering a better deal to 'locked-in' customers (i.e. those who would have to incur some switching cost if they wanted to move to another supplier) who have received such an attractive offer from another provider that they would be willing to bear the cost of switching away from their current provider. This clearly implies that reactive save activity can only be meaningfully analysed with reference to the economic literature on competition with switching costs.

7.2. Preventing discrimination can easily lower consumer welfare

148. A number of academic papers have looked at situations where firms can distinguish between their own customers and those of their rivals and might therefore find it optimal to offer different deals to the two groups. One specific contribution which subsumes many of the previous findings is Shaffer and Zhang (2000),[74] which considers competition between two firms selling differentiated versions of the same product. Each firm has a group of current customers, which are "locked in" in the sense that they would have to incur some switching cost if they moved to the other supplier. To keep matters simple, the authors assume that there are no "unattached" customers, i.e. every possible consumer currently buys from one of the two providers.

74 Shaffer, G. and Z.G. Zhang, 2000, "Pay to Switch or Pay to Stay: Preference-Based Price Discrimination in Markets with Switching Costs", *Journal of Economics and Management Strategy*, pp. 397 – 424.

149. The paper tries to answer two questions. First, if one or both of the providers could actually discriminate between his existing customers and those of the rival, who would get the best price: "loyal" customers or customers that a firm is trying to "poach" from its rival? Secondly, compared to a benchmark where price discrimination is not allowed, what happens to equilibrium prices and who benefits/loses?

150. On the first issue, Shaffer and Zhang find that, in most cases, the firms find it optimal to "pay customers to switch", i.e. to make a better offer to the consumers that they are trying to poach than to their own current customers. However, if there is significant (demand) size asymmetry between the two providers, then one can observe an outcome where the smaller of the two providers adopts a "pay to switch" strategy while the larger of the two providers actually offers lower prices to its own customers than to those who are currently served by its rival. Overall then "paying" one's own customers to stay put can indeed emerge as an equilibrium strategy.

151. On the second issue, the analysis shows that banning price discrimination in favour of or against existing customers can easily be welfare decreasing. Moreover, the ability to discriminate appears to work in favour of the smaller firm.[75]

152. Of course Shaffer and Zhang do not directly consider the effect of so called "reactive save" policies, as the special deal that current customers might or might not get does not explicitly depend on whether or not they have received an attractive offer from the rival. However, "reactive save" offers at least have, as Ofcom notes, the same "price discrimination" flavour as the contracts considered by Shaffer and Zhang. Their results should represent therefore at the very least a cautionary tale: preventing this type of practice is unlikely to have well identified, unambiguous positive effects on consumer welfare.

153. We should add that the formal model of Shaffer and Zhang could also be seen as fairly close to a situation with reactive save activity if we factor in the fact that, under a LPL system, the losing provider cannot verify that the existing customer would actually move to a rival. Put differently, in a world where all consumers behave opportunistically, every existing customer would call his or her current provider and claim that he/she would like to move to the rival.[76] The price offered to current customers can then be seen as their provider's best offer to retain them. In this view then, the Shaffer and Zhang paper does capture reactive save activity as long as the provider cannot discriminate at all between its own customers.

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75 In more detail, their results are as follows:

• If firms are banned from discriminating between their own customers and their rivals' customers, then it is never the case that the ban results in lower prices for all. On the other hand, it is entirely possible that such a ban would make every customer worse off.

• If demand is symmetric (i.e. the firms are of "similar size") then both firms end up discriminating between the two groups of consumers even though they make lower profits than if they could both refrain from doing so. In other words, the decision of whether or not to price-discriminate has the structure of a "prisoner's dilemma": both firms would rather avoid it but they both discriminate, leading to more intense price competition to the benefit of consumers.

• If demand is asymmetric, the ability to discriminate actually favours the firm with the smaller market share.

76 Indeed price comparison websites such as Martin Lewis' www.moneysavingexpert.com provide consumers with the tools to do just that.

154. In the next section we describe a simple model that captures the idea of "reactive save activity" more explicitly in the sense that a firm sets an initial price for its existing customers and then only "reacts" to the price offered by its rival by changing the price that it offers to those customers who would otherwise switch. In this sense, our model captures the case of "truthful" customers who only claim that they would switch if they actually would. We also concentrate on the asymmetric situation where one firm – Firm A – has an installed base of customers, while the other – Firm B – does not. As we will see, our analysis largely confirms Shaffer and Zhang's results: preventing reactive save does not raise welfare unambiguously and can easily lower consumer surplus quite significantly.

7.3. The effect of reactive save activity on the competition between two firms: a simple conceptual framework

155. As seen in the previous section, the existing literature on "endogenous" switching costs already suggests that preventing firms from discriminating between old customers (whom they are trying to *retain*) and new customers (whom they are trying to *acquire*) might well decrease consumer welfare. In this section, we extend this literature by developing a simple conceptual framework for the competition between an incumbent and an entrant which involves some simplifications, but we believe captures the main observed features of the market in question.

7.3.1. Set up

156. In our framework, for simplicity we assume there are a Firm A and Firm B, offering differentiated products, with consumers having different relative preferences between the products offered by them. Each consumer purchases at most one unit of the product, buying from the supplier that proposes the best deal for her, based on both price and the product characteristics. There are costs to switching between providers, and irrespective of their relative preference for the two broadband products, consumers also differ in their switching costs.

157. We assume that, to start with, a certain proportion of consumers have been buying from Firm A, while Firm B currently has no customers. Based on this initial allocation of customers Firm A and Firm B simultaneously choose the prices that they will offer to *new* customers and Firm B also chooses the price that it will charge to its current customers. For Firm A, 'new' customers only include consumers who did not purchase from her before. For Firm B, 'new' customers include both consumers who are new to broadband and consumers that he might be able to pry away from Firm A. We assume that Firm B cannot discriminate between unattached customers and customers who are already served by Firm A.[77]

158. Finally, Firm A is able to identify its current customers who, on the basis of the initial price offerings, would want to switch to Firm B. Firm A can then make those customers a counter-offer. There are two implicit assumptions here. Firstly we assume that Firm A

77 There are two reasons for proceeding in this manner. Firstly, it seems more realistic. Our understanding is that obtaining information about who is already on broadband and who is not is not always straightforward. Moreover, a significant part of an entrant's strategy involves media advertising that reaches both types of potential customers equally. The second reason for choosing this assumption is that the case where both firms can engage in price discrimination is already captured in the economics literature discussed above.

knows which customers are about to switch. This is our way of modelling the type of reactive save activity that Ofcom appears to worry about. Still, this is an extreme case as, in practice, we know that not all potential switchers would have to or choose to contact the losing provider. So our model overstates the incumbent's ability to make save offers. The second implicit assumption is that Firm A makes a single counter-offer to all potential switchers. This is a simplifying assumption. One could also solve the analysis under the assumption that the incumbent is able to separate existing customers between those with "high" and "low" switching costs. Although this would be a rather complex exercise, we do not believe that it would have any significant effect on the nature of our results.

159. Moreover, as discussed above in the section on asymmetric information and adverse selection, we believe that, in practice, the incumbent only has limited relevant information on which to tailor more individualised "save" offers. As a final note, our assumption that Firm A can actually identify the set of consumers who would actually switch in the absence of a counter-offer significantly overstates the incumbent's ability to tell "genuine switchers" apart from bluffers. In this sense, our model is in fact closer to a "matching" model than reality would actually warrant. The fact that we still find that reactive save's effects on prices and consumer welfare are very different from the effect that Ofcom associates with actual "price-matching" clauses is therefore all the more significant.

160. The details of our analysis are set out in the Annex. The main insight is that ***all consumers are better off in the equilibrium where save activities are permitted except for consumers who stay with A and do not receive a save offer.*** This result casts doubt on the notion that preventing reactive save activity can be assumed to offer a net benefit to consumers. We also compute the effect of reactive save activity on overall consumer surplus, i.e. we weigh the losses of captive consumers who do not receive a save offer against the gains of all other categories of consumers. We find that, for the values of the parameter that we have tried at least, ***total consumer surplus is in fact higher when reactive save activity is allowed than when it is not***.

7.3.2. Intuition

161. Contrary to Ofcom's intuition, the ability to make 'save' offers in our analysis causes suppliers to compete *harder*, offering lower prices to most, if not all, consumers.

162. The intuition behind the results of our formal analysis is fairly simple. The diagram below shows the various categories of consumers involved.

163. Consumers who are "locked in" are those who are currently getting their broadband from Firm A. Clearly these consumers find Firm A's offer more attractive than those who decided not to buy, which is why they are "located" to the left of the graph. Further to the right, we find unattached customers. Given the offers that both Firm A and Firm B make to these "new" customers, those located farthest to the right find Firm B's offer more attractive (as it corresponds more closely to what their "ideal" broadband product would be).

164. We begin with our benchmark situation in which there can be no reactive save activity. In this framework, Firm B has an incentive to compete for some of Firm A's existing customers. Since these customers have to incur a switching cost to patronise Firm B and are also fairly fond of Firm A's product to start with, getting some of these customers requires much more aggressive pricing on Firm B's part. This in turn limits the price that firm A can profitably charge to its locked in customers. Moreover, since Firm B cannot discriminate between new and attached customers, these lower prices also extend to the unattached customer segment.

165. We can now introduce reactive save activity. While it is optimal for Firm A to make a counter-offer to any customer wanting to switch to Firm B, it is not optimal to make a counter-offer that all of these customers will accept. This just follows from the traditional monopoly trade-off: a better save offer retains more consumers, but leaves firm A with a lower profit margin. Given this, Firm B knows that it can still get some customers away from Firm A. However, since it anticipates the reactive offer, Firm B also knows that it will have to offer an even lower price to capture some of the attached customers. This leads to more aggressive pricing by Firm B. This in turn means that Firm A has to be more aggressive to capture new customers since Firm B charges the same price to both segments of the market.

166. Hence **consumers who switch to Firm B as well as all new customers are better off with reactive save**. Moreover, since consumers who decide to take the reactive save offer must prefer it to the (lower) price offered by Firm B, these consumers must also be better off than under the benchmark without reactive save activity.

167. The situation of consumers who remain with Firm A, without benefiting from a save offer, is less straightforward. On the one hand, Firm B's more aggressive pricing in the situation with save offers leads Firm A to set a lower price in order to defend its installed base. On the other hand, the save offers make it possible for A to discriminate between customers at risk of switching and customers not at risk so that only the first group needs to be offered a better deal. For some values of the parameters, this second effect dominates and customers who stay with Firm A are worse off when save offers are allowed.

168. Our analysis suggests that ***reactive save activity appears likely to be welfare increasing***. By justifying its misgivings about reactive save offers by analogy to the mechanisms triggered by price-matching clauses, Ofcom is applying the wrong type of economic analysis to the issue at hand.

8. OFCOM'S ANALYSIS GIVES INADEQUATE CONSIDERATION TO THE COUNTERFACTUAL

169. In order to properly assess the likely effect of a possible policy intervention that would prevent reactive save, one cannot think only about the possible effects of reactive save activity today. One must also have an understanding of the proper counterfactual: i.e. what would happen in the (hypothetical) world in which the intervention is taken. There are two critical elements to such a counterfactual. Firstly, what form would the policy intervention take? Secondly, how would one expect firms and consumers to react to that policy intervention?

8.1. The Nature of the Potential Policy Intervention

170. Reactive save offers arise when an existing customer who is genuinely considering shifting to another supplier contacts her current provider before the switch is finalised (in particular to acquire a MAC), thereby giving that provider a chance to make an attractive counter-offer. If one does indeed believe that such counter-offers have significant anti-competitive effects, then in principle one possible intervention would be to attempt to prohibit the current provider from making a counter-offer to customers showing a clear intent to switch suppliers. This would seem very hard to implement efficiently/effectively as it is nearly impossible to gauge whether a given customer calls her current supplier because she *truly* intends to switch, or because she simply wants to get a better offer by *pretending* to be about to switch or perhaps is just dissatisfied or confused about some aspect of the service received. For example, preventing firms from making any type of offers to customers who request a MAC would fail to distinguish between "true" and "pretend" switchers, depriving some consumers who would stay with their current suppliers anyway of the opportunity to get a better deal.

171. Alternatively, one could take action to decrease the probability that the customer actually gets in touch with her current supplier before the planned switch becomes effective. This would involve changing the switching process to minimise contact between the losing provider and the switching customer: one possible such policy would be to move to a generalised GPL system. This would likely decrease the percentage of customers who contact their existing provider before the switch is finalised, which might reduce the proportion of "true switchers" who might be saved. However, the magnitude of this effect should not be exaggerated. In particular, although discussing it briefly, Ofcom appears to fail to realise the full implications of the fact that contact between potentially switching customers and their current provider occurs – and would keep occurring – even under a GPL process. Moving to a uniform GPL system would therefore not drastically modify the LP's ability and incentives to propose offers to retain customers. A further drawback from a generalised GPL policy is that it would again make it harder for "pretend switchers" to get a better deal from their current provider.

172. Overall then, it seems that policies designed to limit the perceived anti-competitive effects of reactive save activity would be either hard to implement or would only have rather limited effects and would likely hurt consumers who can get better deals by "pretending" to switch under the current system. We expand our discussion of likely consumer reactions in the next section.

8.2. The Reaction of Consumers

173. By definition, as a MAC process mandates contact between the consumer and the LP, it will lead to at least as many consumers contacting their LP than would a GPL process such as NoT. However, as Ofcom itself recognises, a large proportion of consumers speak to their LP during the switching process, *even if this is not necessary*.[78] Ofcom states (at paragraph 5.36):

78 Slide 14 of Ofcom's "Fixed Broadband Switching" research indicates that 86% of switchers contacted their LP. The same Ofcom research indicates the figure for switchers using NoT was 77% (and 98% for the MAC process; 99% for C&R). Ofcom's research also indicates that customers who *considered* switching but did not do so often never contacted a new provider (38%), and most (82%) had not signed up to a new service before they were 'saved'.

> *"Some save activity still occurs under the NoT process. Although there is no requirement to contact the LP during the NoT process, many switching consumers do so. If a consumer initiates a contact with an existing provider and wishes to engage into 'save' discussions, this provider has an opportunity to engage in save activity. As noted below, between half (consumer research 2010) and three quarters (broadband consumer research 2011) of consumers switching broadband through the NoT process contacted the LP at some point during the switch[79], and of these around half receive a save offer. This does not fall under our definition of reactive save activity, as it is customer initiated and not part of the formal switching process."*

174. Thus, while reactive save cannot (by definition and legal restriction) take place under the NoT process, there remains scope for the LP to make a 'save' offer to many of the customers engaged in this process.[80]

175. A great deal of current 'save' activity is thus entirely unrelated to the MAC process.[81] More than this, however, much 'save' activity is unrelated to *any* specific switching process. This is because much 'save' activity takes place *before* any specific switching has occurred. By Ofcom's own data, 45% of those 'saved' spoke to the LP before they had even spoken to a prospective GP.[82] The same Ofcom research indicates that a sizeable proportion – 44% – of save offers received by switchers *under the NoT process* came *before* the customer actually placed the order or signed up with a new provider.[83] In this sense they were not actually 'NoT process' switchers at the time of the contact with the LP. This is consistent with many potential switchers contacting their LP when it is not necessary to do so.[84]

176. Ofcom contends that the high proportion of customers who contact their LP when it is not strictly necessary may be confused – for example, about early termination charges (ETCs). They cite the fact that "79% of those who called [the LP], said this was to cancel the service".[85] However, we understand from BT, Sky and VM that many calls to their 'retention' teams are not from customers determined to switch but uncertain about the process: it is often a first step for a customer who is in some way dissatisfied with their current package (perhaps due to a recent change in their circumstances, or technical

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79 *Our broadband consumer research 2011 (slide 14) found that 77% of consumers who switched broadband (as a standalone service or as part of a bundle) using the NoT process had contacted their previous provider. For fixed voice switchers going through the NoT process our consumer research 2010 (Figure 32 page 42) found that under half (42%) had contacted the LP.*

80 As mentioned in Section 2.2 above, research conducted by BT on reasons behind cancelled orders in February 2010 found that **[●Redacted]** of WLR order cancellations and **[●Redacted]** of LLU order cancellations (both of which follow the NoT process) were due to the customer being made a better offer by their current provider.

81 See also Section 2 above.

82 See slide 45 of the "Fixed Broadband Switching" research.

83 Albeit a lower proportion than the 61% for the MAC process (and 65% for C&R). See slide 16 of the "Fixed Broadband Switching" research.

84 It is also important to note that Ofcom's figures relate to switchers only, and thus to *unsuccessful* save offers (data on successful save offers do not appear to separate out the proposed switching process).

85 Paragraph 5.43 of the Consultation Document.

problems) and wishes to see if a better or more appropriate offering, or another resolution to their difficulties, can be acquired. The customer may indeed consider switching if no alternative is forthcoming, but the motive for the call is not confusion and, critically, many calls would be made even if the customer was *certain* that it was not necessary to contact the LP in order to switch.[86] The BT/Sky/VM commissioned May 2012 telephone and broadband market study indicated that of those who would still contact the LP under GPL processes (43% of all respondents), 60% would do so to see if they could get a better offer from the LP. It seems to us that Ofcom assumes too readily that people who call when they do not need too are confused: it seems more plausible to us that it is in many cases privately optimal for them to call to check both on ETCs and on possible better deals.

177. Furthermore, it is natural that the early termination of a contract will incur some (reasonable) charges and that if customers require clarification of these it would seem perverse to suggest that they should not call their current provider. On this point we note Ofcom's finding that 42% of switchers who incurred an ETC found out about this only *after* they had signed up and placed an order with the new supplier.[87] This suggests that one benefit of an LPL process may be that ETCs can be made in fact clear to consumers, allowing them to make an informed decision (although we do note Ofcom's finding that 88% of switchers who paid an ETC were nonetheless happy with their decision to switch).[88]

178. Overall, then, given that many consumers tend to contact their current provider anyway either because they want to "test the waters" or in order to clarify the objective conditions of the switching process (e.g. ETCs), any policy that tries to limit save activities by limiting contact between current providers and potential "switchers" is unlikely to be very effective (and, as already explained, it is in any event far from clear that preventing save activity would be to the benefit of consumers anyway).

8.3. The Reaction of Suppliers

179. Our own analytical work, set out at Section 7 above, compared a situation with reactive save activity to a very stark counterfactual, where such activities can actually be completely prevented. Even in such a context where policy can actually prevent reactive save activity, our work suggests that reactive save activity may in fact offer *superior* consumer outcomes to a situation where save activity was limited. The reason for this is that suppliers react to the impossibility of making reactive saves by changing their pricing policies. The fact that the current provider will not be able to offer deals to customers who find the entrant's offer attractive means that the "marginal" existing customer (i.e. the customer indifferent between staying and leaving) is now charged a higher price by the incumbent. This in turns leads the entrant to charge a higher price itself, and this leads the incumbent to also raises its price for new customers.

86 A survey conducted by Sky in March 2012, found that **[●Redacted]**

87 See slide 32 of the "Fixed Broadband Switching" research.

88 We note further that only 8% of switchers using the MAC process incurred an ETC (compared to 15% of switchers using NoT and 16% using C&R). See slide 30 of the "Fixed Broadband Switching" research. As explained in Section 2, **[●Redacted]**

180. The framework for our analysis was of course relatively simple. In particular, our model focuses narrowly on the firms' incentives to set prices. In practice, firms manage their existing customers and try to acquire new ones through a much richer panoply of tactics. It is therefore important to consider more broadly how firms might modify their overall customer retention and acquisition policies if their ability to use reactive save offers was significantly restricted.

181. Ofcom appears to believe that, if reactive save activity were significantly curtailed, the resources the "incumbent" providers currently allocate to them would simply be redirected towards other practices that would benefit customers. This is an unfounded assumption. It is clear that preventing LPs from making save offers would lead providers in the industry to find other ways to reduce churn. That these would lead to more desirable outcomes than reactive save activity is however unclear. Indeed, there are reasons to believe that providers would choose other strategies (e.g. ensuring more customers are under contracts), which would restrict customers' ability to switch – and hence entrants' ability to acquire customers without the corresponding benefits from the type of selective price cuts that consumers enjoy in a system where reactive save activity is not restricted. Before we directly consider possible supplier reactions to constraints placed on reactive save activity it is essential to understand clearly how such activities fit within the current retention strategies of providers. While save activity unrelated to the MAC process may fall under a different Ofcom definition, this distinction is largely spurious. As discussed above, the reality is that in general *providers' businesses do not distinguish in this way*: reactive save activity falls within wider retention and customer management activity.

182. 'Save' offers are not generally dependent on the switching process being used, even if this is known to the LP and/or the customer. As described above, customers "thinking of leaving" the provider are put through to the 'retention' team. The save offers available for the agent to offer to the customer do not depend on whether the customer is looking to request a MAC.

183. Thus the critical issue here is the lack of any substantive systematic difference between what Ofcom terms "reactive save activity" (i.e. save activity specifically related to the MAC process) and wider customer management activity. The reality of retention activity is that providers seek to retain their customers by ensuring they are content – in terms of price and product quality – regardless of any switching process that may be in train. 'Save' offers do not systematically or explicitly distinguish between customers at different stages of the switching process, or customers using different switching processes.[89] In this sense, Ofcom's focus on *reactive* save alone is misleading.

184. Given that "reactive" save activities are essentially not a distinct part of the overall retention strategies of providers, one should expect that any restriction placed on such activities would simply lead providers to invest the extra resources freed by the possible reduction of save offers made to or taken by potential switching customers on the types of churn-reducing activities that they are currently pursuing.

185. In particular, it seems unlikely that money currently allocated to offer discounts through the reactive save process would be re-allocated to wider price cuts if reactive save were prohibited. It seems much more likely that these freed resources would either be kept by

89 As explained in Section 2 above, **[●Redacted]**

the providers or (partially) used to increase the budget available for "saving" customers who contact their providers outside of a formal switching process.

186. Providers also seem likely to rely somewhat more heavily on other types of retention tools that they already use to some extent. Chief among these are contracts that make it more likely that customers do not consider leaving their current provider in the first place, including longer contracts (which would have implications for the flexibility available to consumers).

187. Indeed, **[●Redacted]**.

188. The potential for the development or intensification of contract-based strategies in response to limitations on reactive saves should be a real concern. A 2010 report by the Body of European Regulators for Electronic Communications ("BEREC") reports the results of a survey addressed to National Regulatory Authorities (NRAs) on the potential obstacles that consumers may face when looking to switch their fixed telephony, mobile telephony, internet/broadband and bundled services.[90,91] The results of the survey suggest that:

> *"Contractual issues were the biggest single obstacle to switching, being the top concern across fixed telephony, mobile telephony, internet/BB and bundled services. Concerns were predominantly to do with restrictive terms and conditions e.g. Early Termination Charges (ETCs.)"*[92]

189. The report also notes that:

> *"In response to the stakeholder consultation, BEUC and SSE agreed with these findings, citing contractual obstacles as the most significant issue for the whole communications sector. SSE, with extensive experience in the energy market, stated that contractual obstacles are more prevalent in the retail communications market than any other sector."* [93]

190. The results of the survey suggest that save and retention activity was considered by seven NRAs as a relevant problem in fixed telephony while only two NRAs considered it a relevant problem in internet/broadband. Importantly no NRAs considered it as a major obstacle in internet/broadband and only one NRA (Portugal) considered it as a major obstacle in fixed telephony in the past but not anymore.[94]

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90 BEREC report on best practices to facilitate consumer switching, dated October 2010.

91 Twenty eight countries responded to the questionnaire. The report notes that the vast majority of countries use a GPL process for all or at least part of their switching processes in fixed and mobile telephony while formal switching processes for internet/broadband are not universally established. "Of the 19 countries which do have a formal switching process for internet/BB, 14 follow a GPL process" (see page 5).

92 Ibid, page 6. See also pages 45-47 which suggest that 7 NRAs considered contractual issues as a major obstacle in fixed telephony while 13 NRAs considered it as a relevant obstacle, while in internet/broadband 6 NRAs considered contractual issues as a major obstacle and 13 NRAs considered them as a relevant obstacle.

93 Ibid, page 47. BEUC is the European Consumers' Organisation. SSE is a large UK energy company which has entered the retail communications market.

94 Given that the majority of countries surveyed followed a GPL switching process in fixed telephony it is perhaps not surprising that retention and save activities were not considered as a major obstacle. However they were also not considered as a major obstacle by any NRA in the internet/broadband market where as the report suggests that formal switching processes are not universally established.

191. The results of this survey are informative in considering the counterfactual of preventing or restricting reactive save activity either as part of a harmonised GPL process or otherwise. **[●Redacted]**, preventing reactive save activity will most likely result in **[●Redacted]**. As the results of the NRA survey identified contractual issues as the major obstacle to switching it is far from clear that preventing reactive save activity will result in more consumer switching.

9. CONCLUSION

192. In this report we have assessed the arguments regarding reactive save activity set out by Ofcom in its February 2012 Consultation Document. Ofcom considers reactive save activity to be one of the "problems" associated with certain switching processes – in particular LPL processes – and its negative judgement of the effects of reactive save contributes to its finding that a Third Party Verification switching process would be desirable.

193. We have described several concerns regarding Ofcom's assessment of reactive save activity.

194. First, the conceptual economic arguments which Ofcom invokes to argue that reactive save activity damages competition are not robust. In particular, the notion of 'adverse selection' by gaining providers is not likely to be relevant in this case. Further, the analogy which Ofcom draws with price guarantees – and which appears to motivate much of Ofcom's concern about competition-dampening effects – is misplaced.

195. Second, Ofcom's concerns regarding the possibility that reactive save activity may hamper new entry are misguided give that the likelihood of substantive new entry seems remote under any reasonable circumstances. In this, we feel Ofcom is also wrong to dismiss the relevance of current market conditions to the assessment of the effects of preventing reactive save activity.

196. Third, Ofcom's use of empirical evidence is limited and inapt, in particular to the extent that it relates to the effectiveness of save activity – i.e. its impact on levels of switching. Ofcom appears to draw a direct link between this and resulting consumer harm. However, lower switching need not mean lower consumer welfare.

197. Fourth, Ofcom does not give adequate attention to the issue of the counterfactual, and the ways in which consumers and providers would react if reactive save activity was prevented. Ofcom's focus on *reactive* save activity also means that it does not adequately consider the continuing impact of other retention activity.

198. We therefore find that Ofcom's arguments in terms of the effects of reactive save activity and the likelihood of consumer harm are not robust. Ofcom has provided no substantive economic analysis (beyond generic references to an economic literature which in fact is not directly relevant, and inapt use of sparse evidence) that preventing reactive save would lead to better outcomes for consumers.

199. Indeed, in our analysis we find that the most relevant economic literature in fact emphasises the pro-competitive effects of save activities. Further, some simple conceptual modelling indicates that preventing reactive save can harm consumers.

200. We therefore conclude that it is highly possible that under reasonable circumstances, the prevention of reactive save activity could have *negative* effects for consumers. Entry by efficient and differentiated competitors is unlikely to be materially deterred by reactive

save activity. Reactive save activity may well not dampen competition between existing providers: in fact, it may strengthen it and lead to better outcomes for consumers. And any consumer benefits from preventing reactive save activity are likely to be mitigated by the response of consumers and providers.

201. On this basis (as we discuss in our paper assessing the merits of Ofcom's cost-benefit analysis[95]), to the extent that the conclusion that LPL processes are undesirable relies almost entirely on the estimated "welfare cost" of reactive save, it is unsound and should be revised.

95 "Ofcom's Impact Assessment of Changes to Switching Options for Fixed Voice/Broadband Lines: *An Economic Review".*

ANNEX: A SIMPLE CONCEPTUAL ANALYSIS OF REACTIVE SAVE

Framework

We follow the same approach as previous authors by assuming that an existing supplier, Firm A, and a challenger, Firm B, are located at opposite extremes of a line. Consumers are distributed uniformly over this line. A consumer's location indicates her relative preference between the products offered by the two. At equal prices, a consumer located in the middle of the line segment would be indifferent between the two products. A consumer located farther to the left would prefer Firm A's product, and a consumer located farther to the right would prefer Firm B's product. This is a simple and traditional way of modelling the fact that Firm A and Firm B offer products that are somewhat differentiated from each other.

Each consumer purchases at most one unit of the product offered by the Firm that proposes the best deal. For any consumer, the best deal is the offer that minimises the sum of the price and the utility cost due to the fact that the product offered does not correspond exactly to the consumer's ideal specification. This cost is equal to a per unit cost t times the "distance" between the consumer's location and the location of the Firm offering the product. Hence, for a consumer located at x, the total cost of getting broadband from Firm A is

$$tx + p$$

where p is the price charged by Firm A. The total cost of getting broadband from Firm B for an unattached customer is

$$t(1 - x) + q$$

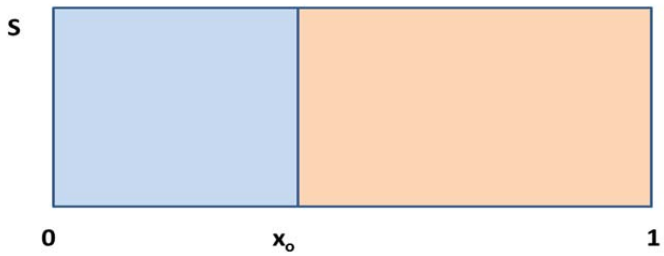
where q is the price charged by Firm B.

We now need to characterise one firm as an incumbent and the other as an entrant. To do this we simply assume that a proportion x_o of consumers already get broadband from Firm A, while Firm B has no current customers. For the existence of such an installed base of customers to make any difference, they must of course face some barriers to switching provider. We therefore introduce switching costs. For a customer currently served by Firm A, the total cost of purchasing from Firm B is

$$t(1 - x) + ts + q$$

where ts provides the switching cost an existing customer of Firm A faces in switching to Firm B.

We assume that, irrespective of their relative preference for the two broadband products, consumers also differ in terms of their willingness to switch. More precisely, the switching costs faced by individual consumers are uniformly distributed over the interval [0,S]. This is represented in the diagram below.



All consumers to the left of x_o currently get broadband from Firm A.[96] These customers differ from each other both in terms of the switching costs that they face, and their intrinsic preference for Firm A's product. Consumers located to the right of x_o are currently unattached. For ease of exposition we normalise the total mass of consumers (including both attached and unattached) to S which is equivalent to the area of the rectangle above.[97]

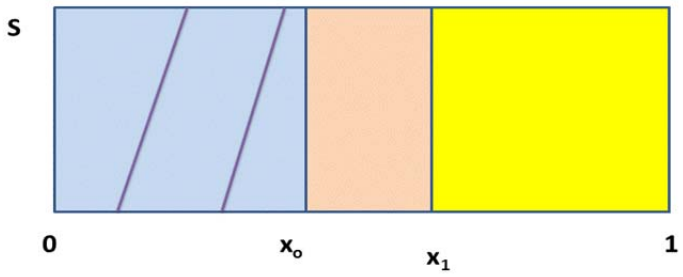
We now turn to the *timing* of the game. At the beginning of the game x_o is given exogenously. In a first stage Firm A and Firm B simultaneously set their prices. As we assume that the entrant, Firm B, cannot price discriminate between free customers and customers who have been purchasing from Firm A, Firm B chooses a single price q. Firm A chooses two prices, p_o and p_1. The price p_o applies to her current "captive" customers. This price is available to all customers located to the left of x_o. On the other hand, Firm A has no obligation to set a price that would actually be acceptable to all of these customers. A simply sets the price at its profit-maximising level given the price offered by the entrant. anticipating the unfolding of the rest of the "game". Firm A also sets a price p_1 that is only available to new customers. In the absence of reactive save activity, the game ends after the first stage.

With reactive save activity, there is a second stage of the game, where Firm A identifies the locked-in consumers who would want to switch to Firm B and makes a counter-offer p_s. There are two implicit assumptions here. First, we assume that Firm A does get to know which customer is about to switch. This is our way of modelling the type of reactive save activity that Ofcom appears to worry about. Still, this is an extreme case as, in practice, we know that only a fraction of these potential switchers would have to or choose to contact the losing provider. The second implicit assumption is that Firm A makes a single counter-offer to all potential switchers. This is a simplifying assumption. One could also solve the model under the assumption that Firm A is able to separate old customers between those with "high" and "low" switching costs. Although this would be a rather complex exercise, we do not believe that it would have any significant effect on the nature of our results. Moreover, as discussed above in the section on asymmetric information and adverse selection, we do believe that, in practice, Firm A only has limited relevant information on which to tailor more individualised "save" offers.

96 That is we assume that any existing customer of Firm A has a higher preference for Firm A's product than any consumer who is not purchasing from Firm A.

97 This normalisation has no effect on the qualitative results we derive below.

The type of "market movement" involved in the game that we have just described is illustrated in the following diagram.



The vertical boundary at x_1 separates the unattached customers going to Firm B (to the right) from those going to Firm A (between x_o and x_1). The slanted line farthest to the left is the boundary between old customers staying with Firm A, and those going over to Firm B after the first stage of the game, i.e. *before save activities occur*. The slanted line farthest to the right is the boundary between the customers that Firm A retains after the save offers, and those that join Firm B. The area between these two slanted boundaries corresponds to the customers that are "saved" by Firm A.

Solving this model for every possible subcase would not only be a major undertaking, it would also be tedious. We therefore focus on market configurations "without corners", i.e. in market situations such that:

- Both Firm A and Firm B capture some new consumers
- Firm A retains some of its old consumers
- A makes a save offer to all current customers who would otherwise switch to Firm B.
- Some of the customers receiving the save offer stay with Firm A.
- Some of the customers receiving the save offer move to Firm B.

While limiting ourselves to such cases is mostly meant to simplify the task at hand, we note that the features listed above also seem to correspond quite well to the behaviour observed in the market for broadband.

Analysis

We start by presenting a benchmark where Firm A is not allowed to make any save offers. The timing of this game is then exactly the same as the timing of the game described above without the second and last stage.

No Reactive Save Activity

The boundary between new customers purchasing from Firm A and new customers purchasing from Firm B is:

$$x_1 = \frac{q - p_1}{2t} + \frac{1}{2}$$

While the boundary between old customers staying with Firm A and old customers switching to Firm B is given as

$$x_2(s) = \frac{q - p_0}{2t} + \frac{1}{2} + \frac{s}{2}$$

where x refers to the position along the horizontal axis (product differentiation) and s refers to the position along the vertical axis (switching costs). Notice that this relationship is upward sloping since consumers with higher switching costs are more likely to stay with Firm A.

We first compute the number of locked in customers that each firm would capture. For Firm A we have:

$$D_I = Sx_2(0) + \frac{S}{2}[x_2(S) - x_2(0)] = \frac{S}{2}[x_2(S) + x_2(0)]$$

so that

$$D_I = \frac{S}{2}(1 + \frac{q - p_o}{t} + \frac{S}{2})$$

For Firm B, the number of customers that are taken away from Firm A is

$$D_E = S[x_o - x_2(S)] + \frac{S}{2}[x_2(S) - x_2(0)]$$

so that

$$D_E = Sx_o - \frac{S}{2}(1 + \frac{q - p_o}{t} + \frac{S}{2})$$

This gives us the following two profit-maximisation problems (note that production costs are assumed to be zero):

$$Max_{p_o p_1} p_1 \left(\frac{q - p_1}{2t} + \frac{1}{2} - x_o\right) S + p_0 \left(\frac{1}{2} + \frac{q - p_o}{2t} + \frac{S}{4}\right) S$$

$$Max_q Sq[\left(\frac{1}{2} + \frac{p_1 - q}{2t}\right) + x_o - \frac{1}{2}\left(1 + \frac{q - p_o}{t} + \frac{S}{2}\right)]$$

The first term within bracket in the second problem represents Firm B's sales to unattached customers, while the second term represents Firm B's sales to former customers of Firm A.

Solving these two maximisation problems give us the following first order conditions::

$$q - 2p_1 + t - 2tx_o = 0$$

$$t + q - 2p_o + \frac{St}{2} = 0$$

$$p_1 + p_o - 4q + 2tx_o - \frac{St}{2} = 0$$

Hence the equilibrium prices are:

$$p_o^N = \frac{2t}{3} + \frac{tx_o}{6} + \frac{5St}{24}$$

$$p_1^N = \frac{2t}{3} - \frac{5tx_o}{6} - \frac{St}{24}$$

$$q^N = \frac{t(1+x_o)}{3} - \frac{St}{12}$$

Plugging these values back into the boundary x_1, we get

$$x_1^N = \frac{1}{3} + \frac{7x_o}{12} - \frac{S}{48}$$

In order to compute total consumer surplus we will also need to determine the mass of "captive" consumers who end up purchasing from Firm A and Firm B respectively. We get:

$$D_I^N = S[\frac{1}{3} + \frac{x_o}{12} + \frac{5S}{48}]$$

$$D_E^N = x_o - D_I^N = S[\frac{11x_o}{12} - \frac{1}{3} - \frac{5S}{48}]$$

Notice that, for our assumed market configuration to be verified in equilibrium, we must have $x_2(S) \leq x_o$ at the equilibrium prices. If this condition is not verified, our assumed configuration does not apply. It does therefore make sense to concentrate on the range of parameters for which the condition is satisfied. By plugging the equilibrium prices into $x_2(S)$ we observe that, this inequality requires that x_o is large enough: $x_o \geq \frac{4}{11} + \frac{17S}{44}$. This condition becomes $x_o \geq \frac{3}{4}$ when S = 1, and it becomes $x_o \geq \frac{49}{88}$ when S = 0.5.

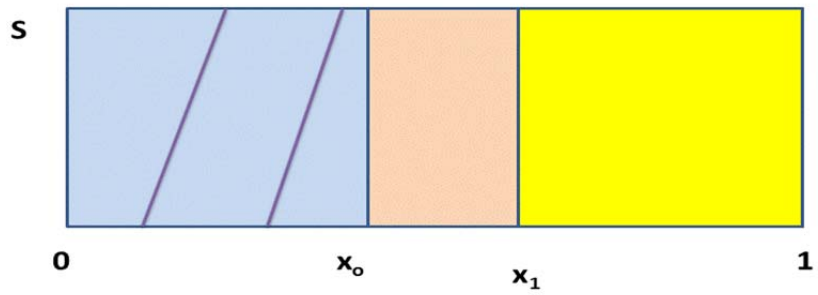
For the assumed market configuration to be valid, we must also have that $x_o \leq x_1$ at the equilibrium prices so that the incumbent does indeed find it profitable to serve some new customers. This is equivalent to checking that $p_1^N \geq 0$. This condition is verified when $x_o \leq \frac{4}{5} - \frac{S}{20}$. For S = 1, this implies $x_o \leq \frac{3}{4}$ so that, overall, the assumed configuration is verified in equilibrium if $x_o \in \left[\frac{3}{4}, \frac{3}{4}\right]$, i.e. if $x_o = 1$. Since our configuration assumes that there are some unattached consumers i.e. $x_o < 1$ we conclude that our configuration cannot arise as equilibrium when $S = 1$. For $S = \frac{1}{2}$, the condition holds when $x_o \leq \frac{31}{40}$. Hence, the assumed configuration is verified in equilibrium if $x_o \in [\frac{49}{88}, \frac{31}{40}]$.

More generally, there are values of x_o for which the assumed configuration is valid in the "no save" game as long as < 1 .

Introducing Reactive Save Offers

To obtain a sub-game perfect Nash Equilibrium of the game we proceed backwards starting with stage 2 where Firm A sets its save price for its existing customers contemplating a switch to Firm B given the prices set at stage 1.

Starting from the boundary defined by p_o and q, Firm A now has an opportunity to offer customers who would otherwise switch a price $p_S < p_o$. As mentioned at the outset, for simplicity we focus on the type of situation pictured below (to simplify our task we assume that the slanted boundaries intersect the top horizontal line to the left of x_o):



With such a configuration, the number of consumers "saved" by Firm A is simply

$$Q_S = S\frac{p_o - p_s}{2t}$$

The profit maximising save price is then

$$p_S^* = \frac{p_o}{2}$$

And the actual number of consumers "saved" by Firm A is

$$\frac{Sp_o}{4t}$$

Plugging this back into the expressions for D_E and D_I we can then solve the first stage simultaneous price-setting game. A and B's profit-maximisation problems are now

$$Max_{p_o} Sp_1\left[\frac{q-p_1}{2t}+\frac{1}{2}-x_o\right]+Sp_o\left[\frac{1}{2}+\frac{q-p_o}{2t}+\frac{S}{4}\right]+S\frac{p_0}{2}\left[\frac{p_0-\frac{p_o}{2}}{2t}\right]$$

$$Max_q qS\left[\frac{1}{2}+\frac{p_1-q}{2t}\right]+qS[x_o-\frac{1}{2}-\frac{q}{2t}+\frac{p_o}{4t}-\frac{S}{4}]$$

This gives us the first order conditions:

$$q-2p_1+t-2tx_o=0$$

$$t+q-\frac{3}{2}p_o+\frac{tS}{2}=0$$

$$p_1+\frac{p_o}{2}-4q+2tx_o-\frac{tS}{2}=0$$

The corresponding equilibrium prices are:

$$p_o^S=\frac{16t}{19}+\frac{5tS}{19}+\frac{4tx_o}{19}$$

$$p_1^S=\frac{12t}{19}-\frac{16tx_o}{19}-\frac{tS}{19}$$

$$q^S = \frac{6tx_o}{19} + \frac{5t}{19} - \frac{2tS}{19}$$

We can now compute the values of x_1, D_I and D_E that hold in equilibrium:

$$x_1 = \frac{6}{19} + \frac{11x_o}{19} - \frac{S}{38}$$

The mass of consumers who prefer Firm A's initial offer to the entrant's offer is given by

$$D_{Io} = S\left(\frac{4}{19} + \frac{5S}{76} + \frac{x_o}{19}\right)$$

The mass of old customers of Firm A who would have preferred Firm B's offer but stay with Firm A following the save offer is

$$D_{IS} = S\left(\frac{4}{19} + \frac{5S}{76} + \frac{x_o}{19}\right)$$

And the mass of old customers of Firm A who actually switch to Firm B is given by

$$D_E^S = S\left(\frac{17x_o}{19} - \frac{8}{19} - \frac{5S}{38}\right)$$

For our assumed market configuration to be verified in equilibrium, we need $x_2^S(S) \leq x_o$ at the equilibrium prices. This implies that $x_o \geq \frac{32+29S}{68}$. With S = 1 this condition becomes $x_o \geq \frac{61}{68}$. For S = 0.5, the equivalent condition is $x_o \geq \frac{93}{136}$. Furthermore, we also need $x_o \leq x_1^S$ which is equivalent to $p_1^S \geq 0$, i.e. $x_o \leq \frac{3}{4} - \frac{S}{16}$. For S = 1 this implies $x_o \leq \frac{11}{16}$, which is incompatible with the former requirement. For $S = \frac{1}{2}$, this second condition required implies that $x_o \leq \frac{23}{32}$ so that, overall, the assumed configuration is verified for $x_o \in [\frac{93}{136}, \frac{23}{32}]$.

More generally, there are values of x_o for which the assumed configuration is valid as long as $S \leq \frac{4}{7}$.

A Note on Assumed market Configuration

We have obtained conditions under which our assumed market configuration is verified in equilibrium. What happens if the conditions above are not satisfied? The condition that $x_2(S) < x_o$ is only required to ensure that the slanted boundary between Firm A and Firm B's sales to locked-in consumers does not intersect the vertical boundary at x_o. One could of course also compute equilibria for the case where these two boundaries do intersect. As our purpose is solely to show that save activity might well make consumers better off, we decided not to incur the further time and expense required to look at this other subcase. The condition that p_1 be non-negative is required for the incumbent to make sales to the unattached customers. For completeness, we will also look at such equilibria at the end of this appendix.

Comparing the Save Equilibrium with the "No Save" equilibrium.

Comparing these equilibrium prices to those that would prevail in the absence of reactive save activity, it is immediately clear that:

$$p_1^S < p_1^N$$

$$p_o^S > p_o^N$$

$$q^S < q^N$$

$$p_s = \frac{p_o^S}{2} < p_o^N$$

So the possibility of making reactive save offers leads to lower prices for all new consumers as well as for the locked in consumers who get a save offer but it also leads to higher prices for locked in consumers who do not get a save offer.

In the table below, we show the values of the equilibrium prices as well as the mass of consumers served at these prices under both the "save scenario" and the "no save scenario" for various values of S. We assume that t = 1 and x_o = 0.5, and use two values of S in the relevant range defined above.

	S = 0.25	**S = 0.5**
q^N	0.546	0.525
q^S	0.458	0.432
P_1^N	0.073	0.063
P_1^S	0.029	0.016
p_o^N	0.835	0.888
p_o^S	1.055	1.121
p_s^S	0.528	0.561
X_1^N	0.737	0.731
X_1^S	0.715	0.708
D_E^N	0.071	0.128
D_E^S	0.043	0.070
D_I^N	0.104	0.222
D_{Io}^S	0.066	0.140
D_s^S	0.066	0.140
Average Price N	0.162	0.336
Average Price S	0.157	0.329

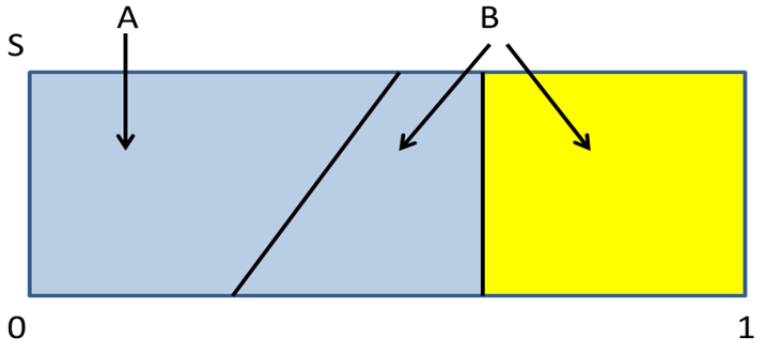
So we see that the average price paid by consumers is lower when reactive save offers are allowed than when they are not. Of course a full comparison of consumer surplus involves also "transportation costs" and "switching costs". Note however that the number of locked in customers actually served by the incumbent is almost identical with and without reactive save offers. Moreover, the incumbent serves fewer new customers when save offers are available. Since these customers are all located to the right of the midpoint of the line between the two firms, having them served by Firm B is more efficient than having them served by Firm A. This therefore represents a further gain in consumer surplus from reactive save activity. Finally, the number of locked in consumers who

actually switch is lower under reactive save so that the switching costs incurred by consumers are also lower.

We can therefore conclude that, in this market configuration at least, the availability of reactive save offers unambiguously increases total consumer surplus.

Another Possible market Configuration

We briefly consider the possibility that there might be equilibria where the incumbent does not sell to any unattached customers, as shown on the graph below.



Without reactive save activity, the relevant profit maximisation problems are:

$$Max_p pS[\frac{1}{2}+\frac{q-p}{2t}+\frac{S}{4}]$$

$$Max_q qs[\frac{1}{2}+\frac{p-q}{2t}-\frac{S}{4}]$$

The first order conditions are

$$t\left(1+\frac{S}{2}\right)=2p-q$$

$$t\left(1-\frac{S}{2}\right)=2q-p$$

So that the equilibrium prices are

$$p^N=t\left(1+\frac{S}{6}\right)$$

$$q^N=t\left(1-\frac{S}{6}\right)$$

In equilibrium, then, the shares of the market served by the incumbent and the entrant, respectively, are

$$D_I^N=S\left(\frac{1}{2}+\frac{S}{12}\right)$$

$$D_E^N=S\left(\frac{1}{2}-\frac{S}{12}\right)$$

For the assumed configuration to be verified in equilibrium, we need the upper part of the boundary between market shares to lie to the left of x_o, i.e.

$$x_o \geq \frac{1}{2} + \frac{S}{3}$$

With reactive save activity, we know that, as in our previous analysis, in the second stage the incumbent will react by making an offer at half the price level that it has chosen in the first stage of the game. The relevant profit-maximisation problems at the first stage are then:

$$Max_p pS\left[\frac{1}{2} + \frac{q-p}{2t} + \frac{S}{4}\right] + \frac{pS}{2}\left[\frac{p-\frac{p}{2}}{2t}\right]$$

$$Max_q qS\left[\frac{1}{2} + \frac{\frac{p}{2}-q}{2t} - \frac{S}{4}\right]$$

The FOCs are

$$t\left(1+\frac{S}{2}\right) = \frac{3p}{2} - q$$

$$t\left(1-\frac{S}{2}\right) = 2q - \frac{p}{2}$$

And the equilibrium prices are:

$$p^S = \frac{t}{5}(6+S)$$

$$q^S = \frac{t}{5}(4-S)$$

In equilibrium, the incumbent "saves" a market share equal to

$$D_{IS}^S = \frac{S}{20}(6+S)$$

And keeps the following share without having to make a save offer:

$$D_{Io}^S = \frac{S}{20}(6+S)$$

Leaving the entrant with a market share equal to

$$D_E^S = \frac{S}{10}(4-S)$$

Again, we check that the assumed market configuration arises at equilibrium prices. This occurs if

$$x_o \geq \frac{3}{5} + \frac{S}{20}$$

We can now compare equilibrium prices with and without save activities. It is immediately clear that

$$p^S > p^N$$

$$p_s^S = \frac{p^S}{2} < p^N$$

$$q^S < q^N$$

Qualitatively, then, we obtain the same results as under the other market configuration: consumers served by the entrant and consumers saved by the incumbent are better off when save activities are allowed, while consumers who stay with the incumbent without receiving a save offer are worth off.

Let us now have a quick look at total consumer surplus. To ensure that the assumed configuration is validated in equilibrium we will assume t = 1, S = ½ and $x_o \geq \frac{4}{5}$.

q^N	$\frac{11}{12}$
q^S	$\frac{7}{10}$
P^N	$\frac{13}{12}$
P^S	$\frac{13}{10}$
p_s^S	$\frac{13}{20}$
D_E^N	$\frac{11}{48}$
D_I^N	$\frac{13}{48}$
D_E^S	$\frac{7}{40}$
D_{Io}^S	$\frac{13}{80}$
D_s^S	$\frac{13}{80}$
Average Price N	$\frac{145}{288}$
Average Price S	$\frac{703}{1{,}600}$

So, in this market configuration – and for the chosen value of S – as well the average price paid by consumers is lower when save activity is feasible than when they are not. This is favourable for consumer surplus being higher with reactive save activity. On the other hand, the fact that Firm B's market share is lower with save activity and that in both cases it is lower than 0.5 is a factor that works against consumer surplus being higher with reactive save activity (as the market division with save activity leads to higher utility costs for consumers).[98] Finally, one must also weigh the switching costs that consumers moving from the incumbent to the entrant would have to bear, to determine the net effect of reactive save activity on consumer surplus. Based on the numbers reported in the table above, we assess below the effect of save activity to these three components of consumer surplus and determine its aggregate net effect on consumer surplus.

Given the Hotelling set-up the consumer surplus can be written as

$$CS = A - total\ payments - total\ transport\ costs - total\ switching\ costs$$

where *A* is an arbitrary constant that is large enough.

The elements of *CS* can be calculated as follows

$$total\ payments = average\ price * S$$

$$total\ utility\ costs = \int_0^{x_2(0)} Stxdx + \int_0^S [S-s]t\,x_2(s)ds + \int_{x_2(S)}^1 St[1-x]dx + \int_0^S ts\,[1-x_2(s)]ds$$

$$total\ switching\ costs = \int_0^S s[x_0 - x_2(s)]ds$$

where with no save

$$x_2(s) = \frac{q^N - P^N}{2t} + \frac{1}{2} + \frac{s}{2}$$

and with save

$$x_2(s) = \frac{q^N - p_s^S}{2t} + \frac{1}{2} + \frac{s}{2}$$

The table below reports the values these components of consumer surplus have and given the equilibria we have reported earlier for t = 1, S = ½ and $x_o \geq \frac{4}{5}$ with reactive save activity and without reactive save activity. Tha last row of the table provides the aggregate of these components by reporting the consumer surplus.

98 The aggregate consumer disutilty from purchasing a product that is different than the ideal one is lowest when two firms share the market equally. As the boundary between the firms moves away from 0.5 this aggregate disutility increases.

	with no reactive save activity	with reactive save activity
Total payments	$\frac{145}{576}$	$\frac{703}{3{,}200}$
Total utility costs	$\frac{107}{576}$	$\frac{1{,}883}{9{,}600}$
Total switching costs	$\frac{13}{480}$	$\frac{13}{960}$
Consumer surplus	$A - \frac{223}{480}$	$A - \frac{687}{1{,}600}$

The table above shows that indeed with reactive save activity total payments and total switching costs are lower whilst total utility costs are slightly higher. However, the sum of all three consumer cost categories is lower with reactive save activity. This implies in our model that total consumer surplus is higher with reactive save activity.

Caveat

What we have presented in this Annex is not a full analysis of the equilibria of the game that we set up, for several reasons. We do not consider market configurations where reactive save activity would not arise in equilibrium, even if they were permitted. We do look at the two market configurations in which reactive sale activities would arise and we do determine conditions under which these assumed market conditions are indeed verified in equilibrium. However, we do not further check whether the candidate equilibrium that we obtain in one of these two configurations could be destabilised by considering price deviations that would get us into the other possible configuration. We do not believe that this should be much of an issue for the first type of market configuration that we consider but it might affect the range of parameter values for which the second market configuration that we consider actually applies since, at the equilibrium prices, Firm A might actually find it profitable to make a "new consumer-specific" offer that would prove attractive to at least some consumers. Still our only purpose was to show that Ofcom's presumption that allowing reactive save activity hurts consumer welfare is not warranted. We believe that the modelling presented achieves that goal even without the type of complete equilibrium analysis just discussed.