Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title: Consumer switching: next steps and call for inputs

To (Ofcom contact): Shaun Kent

Name of respondent: Aileen Boyd

Representing (self or organisation/s): SSE plc

Address (if not received by email):

CONFIDENTIALITY

What do you want Ofcom to keep confidential?						
Nothing	No	Name/address/contact Details/job title	No			
Whole response	No	Organisation	No			
Part of the respon	se No	If there is no separa	ate annex, which parts?			

Note that Ofcom may still refer to the contents of responses in general terms, without disclosing specific information that is confidential. Ofcom also reserves its powers to disclose any information it receives where this is required to carry out its functions. Ofcom will exercise due regard to the confidentiality of information supplied.

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response. It can be published in full on Ofcom's website, unless otherwise specified on this cover sheet, and I authorise Ofcom to make use of the information in this response to meet its legal requirements. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

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

Name Aileen Boyd

Signed (if hard copy)



Shaun Kent, Floor 2, Consumer Policy Ofcom, Riverside House 2a Southwark Bridge Road London SE1 9HA Head Office Inveralmond House 200 Dunkeld Road Perth PH1 3AQ

Telephone: 01738 456401

email: aileen.boyd@sse.com

Date: 30 September 14

Dear Shaun

Our Reference: Your Reference:

Consumer switching – next steps and call for inputs

SSE welcomes the opportunity to respond to the consultation. We are a relatively small retail-only supplier in the retail communications market but we have extensive retail market experience from our main industry base in energy. Since entering the communications retail market over a decade ago, we have taken every opportunity to engage with Ofcom's work on the development of switching processes, as we know how fundamentally important these are – both for the experience of customers seeking to exercise choice in moving between suppliers and for suppliers seeking to grow their market share. Gaining provider led (GPL) switching processes are the norm in other similar markets such as electricity, gas and water and we fully support them being used throughout the communications retail markets. We therefore support the conclusions that Ofcom reached in its August and December 2013 statements to require a harmonised GPL process to be used for all transferable fixed voice and broadband products on the Openreach access network.

Similarly, we support Ofcom's proposal to extend harmonised GPL switching arrangements to a range of other network and bundle situations so that, as far as possible, customers are provided with the same front-end process to initiate a switch of service between one supplier and another whatever their precise requirement, geographic location or underlying technologies used to provide the current and destination services. The universal awareness of the simple message that customers only need to speak to their chosen gaining supplier in order to arrange for their chosen transfer to take place would do much to increase customer confidence and willingness to shop around to the benefit of the competitive dynamic of the communications retail market.

In order to support this universal GPL 'front-end' switching process with customers, there is a technical requirement for process interfaces to be developed between access platform providers on the one hand and the range of retail suppliers on the other – some of whom



operate through intermediaries known as third party integrators (TPIs). We are aware that the supply chain through access platform operating communication providers (CPs) via wholesale service CPs, potentially reselling wholesalers and TPIs to end retailers can be complex. However, we believe that appropriate market design can minimise the systems and IT work required across the industry to develop the required interfaces and that the key to this is to standardise as much as possible.

In the period leading up to the production of Ofcom's August 2013 decision document, we had been promoting a logical data model of customer switching in the communications market, based on the way such systems are defined in other similar markets and had discussed this approach with some other parties with an interest in the communications market. This was referenced in the 'Next Steps' section of the August document as worth further consideration and touched on in the December document (paragraph 5.7). We were therefore surprised that there was no reference to this in the call for inputs but have again taken the opportunity of this response to re-provide information on the outline of this approach, which becomes more cost-effective as more separate access networks are added to the scope of harmonised switching arrangements.

Furthermore, in our experience, switching systems can only operate in a sustainable and enduring manner to the benefit of customers if they are coordinated and managed through industry governance arrangements operating at a 'whole market' level. This allows processes and data items to be change controlled and thus readily adapted proactively to market and technology changes to <u>avoid</u> prospective harm to consumers and competition. We expected to see more discussion of this topic in the call for inputs and now take the opportunity of this response to set out again comments in this area in appendix 2.

The rest of this response is set out as follows:

- Appendix 1 contains our response to the specific call for inputs questions;
- Appendix 2 sets out a summary of our proposals on market coordination for switching;
- Appendix 3 discusses the need for a data model to underpin effective switching processes; and
- Appendix 4 shows the outline of SSE's proposed market data model.

I hope these comments are helpful and we would certainly be happy to discuss the themes of this response further with Ofcom as Stage 2 of the consumer switching project proceeds.

Yours sincerely

Aileen Boyd Regulation Manager



Response to Consultation Questions

Q.1 Do you agree with our characterisation of the switching processes and practices for the networks and services in scope for this phase of work? Are there aspects of such processes that you consider have significant consequences for consumers' experiences of switching or the functioning of markets?

We comment on this, taking each of the areas that Ofcom highlights in section 3, in turn.

<u>KCOM</u>

We have no direct experience of KCOM's wholesale processes but are aware that, if we wished to serve domestic customers in the KCOM area as we do on the Openreach network, we would have to build new interfaces to KCOM. It is not feasible for a small retailer to develop non-standard interfaces for such a comparatively small area. This thinking perhaps also applies to other CPs, since Ofcom notes that currently, changes of supplier are mostly those relating to business customers.

Thus, a key aspect of existing processes for switching in KCOM's area that has an effect on consumers' experiences is that there is a lack of standard interfaces for competitors to KCOM to use. This leads to a lack of competitive forces in KCOM's area, affecting the functioning of the market. In harmonising the KCOM switching processes for broadband, therefore, we believe there would be benefits for consumers in KCOM's area if the new harmonised switching process incorporated wholesale interfaces for retail CPs to use that reflect those in use for Openreach's access network. In other words, switching processes for wholesale products on KCOM's networks should be harmonised with those in place for the Openreach network.

Ideally, however, the interface developed for market participants to use for KCOM's area would be abstracted above any particular type of underlying infrastructure rather than aiming to mimic interfaces provided by Openreach, with a consequent need to make amendments as Openreach develops its own interfaces if the two are to remain in step. This is discussed in more detail in Appendix 3. From KCOM's point of view, if switching interfaces for other CPs are to be developed, they would perhaps see advantages in building those interfaces only once towards a central logical 'hub' rather than seeking to mimic Openreach interfaces and becoming tied into Openreach development schedules, as the latter issued further releases and tweaks to their own bespoke interface designs and processes.

Bundles

We agree that communications services are often bought in bundles involving the 3 platforms (i.e. underlying access networks) mentioned: Openreach; Virgin's cable network and Sky's satellite system for Pay TV services.

We believe that switches across different networks, as Ofcom has highlighted, brings additional effort and 'hassle' for consumers in having to become involved in the coordination of starting/ceasing their services, with the consequent adverse effects that Ofcom identified in its work on strategic switching for the Openreach network alone.



Number porting is mentioned and we believe that customers' expectation in moving between the Openreach and cable networks is that they could retain the same number. In our view, number porting on change of access network should be a normal, integrated part of consumer switching; most consumers want to retain their CLI on switching and expect this to be possible, especially if not moving house at the same time. Instead of being a separate process that a consumer has to engage with, we believe that number porting should be built into access platform switches such as those between Openreach and cable networks.

It is interesting to note that Ofcom has discovered that 'informal' GPL switching processes have developed between some CPs where number porting is involved due to the extra coordination that this entails between them. This may benefit a proportion of customers who are switching between 'cooperating' CPs but it creates a competitive anomaly. If switching processes are available for some CPs, they should be made available to all on a non-discriminatory and standard basis otherwise smaller CPs are unlikely to be able to access them. As with KCOM's market area, if standard switching interfaces are not available or not made known to the market then many CPs will not attempt to win customers from cable to their own Openreach-based services, leading directly to a lessening of competition for these customers.

This section also discusses the customer experience in seeking to switch bundles including pay-TV services between different suppliers. We agree with Ofcom's description of the processes, noting the fact that Sky's TV service is provided over a separate satellite platform. This does lead a consumer moving away from this platform to more involvement in the switching process since Sky must be contacted to cease that service. This both creates additional switching hassle for the customer and provides Sky with the opportunity for a reactive save discussion with the customer.

The possibility of reactive save undermines competition and has an adverse effect on the market, as Ofcom's analysis for the Openreach-based market has already shown. If this issue is not addressed, we believe that the pay-TV component of bundles will undermine the benefits of GPL switching that has been mandated for other aspects of the bundle i.e. fixed line telephony and broadband. The same is true of a mobile offering as part of a bundle as that requires a losing provider led (LPL) process if number porting is involved. As a supplier of both fixed line and broadband services, we have already seen this effect on the conversion rate of sales for both services in the period when there was a GPL process for fixed line switching but an LPL MAC process for the type of broadband switching that we had to use on the Openreach platform.

Another aspect of bundled services that Ofcom should consider, in our view, is the ease with which these can be 'unpicked' if the consumer finds an attractive alternative deal for one or more components of the bundle. To give a concrete example, consider a bundle of fixed line telephony, broadband and pay TV. If a supplier states that pay TV is only available if, for example, the broadband service is also taken, then the customer is locked in for both products and, if they wish to move their broadband service, will face the 'hassle' of making arrangements for a new pay TV service as well. We believe that it would be in consumers' best interests if market rules are developed that require all elements of



bundles – to the extent technically feasible – to be made available separately. The bundle should only be constructed commercially, such that the consumer potentially sees discounts if products are provided as a bundle from one supplier but is free to break the bundle (albeit with a financial cost) if he wishes to take advantage of a more attractive offer for one or more elements of that bundle.

Mobile

We believe there are a number of ways in which switching services has been made difficult for mobile customers.

The consultation document refers to one of these i.e. the need to follow an LPL process if the customer wishes to retain his number through use of 'number porting' processes. It also touches on the fact that, supposing the customer does not wish to port his number, he has to deal with coordinating the cessation and start of services with different suppliers. In relation to this, we note that there is no incentive for his chosen new network/supplier of mobile services to tell him about the facilities to port his mobile number, as that would give his existing supplier a reactive save opportunity. It could be that more consumers would choose to port their mobile number if this facility was more widely known and even promoted by gaining providers. We would certainly expect the customer preference for retaining their existing number to be similar to the preference of landline customers to do this when switching between fixed line networks.

Other areas of concern of which we are aware include:

- Network locked handsets Ofcom has published some information in this area over the summer months, noting the link between this topic and potential barriers to switching;
- Customers seeking to change package with the same mobile service provider being • dealt with in an inflexible manner by their service provider; we are aware of situations where package change requests are not dealt with in a timely manner and where the link between fixed term call contracts and the contact number used is rigidly enforced. As an example of the latter concern, a fixed term contract has been enforced and termination charges required where the customer only wished to move their number to a different network and was willing to continue the existing contract with a different number to avoid termination payments. In fixed line services, the number identifying the service is regarded as a changeable attribute – a different number can normally be provided for a modest administration charge. In our view, with a suitably designed guestionnaire, Ofcom may find a range of similar issues mentioned if research is conducted about general switching difficulties encountered by mobile customers. Our belief is that many of these could be resolved if standard GPL switching processes, explicitly encompassing number porting and setting out the rights of retail customers under the process, were to be imposed in the mobile area.



Q.2 Do you consider that the eight issues that we identified in section 4 in relation to switches on the Openreach network are relevant for the networks and services in scope for this phase of work? If so, to what extent are they relevant and why? Are there other issues we should also consider?

We comment in turn on the eight issues identified in section 4 and then comment on some other issues.

(i) multiple switching processes

We agree with Ofcom that it is not a helpful or empowering environment for consumers when multiple switching processes exist. It can also distort competition where it is easier for a CP to gain customers under one process and harder for customers to switch away from that CP under a different process, compared with others in use in the market.

As Ofcom has outlined, there are a variety of processes in existence for switching bundles and at least two in use in KCOM's area. In mobile, as we have noted, there are incentives for gaining CPs to prompt the customer to cease and re-provide (C&R) rather than look to port his existing number. Bundle switching has a particularly large range of possible switching permutations.

In our view, adoption of switching arrangements which have a similar, GPL front end for the consumer to engage with (though they may differ in detail behind the scenes in GP contact with LP) would do much to improve the information provision throughout the market, by GPs and advice agencies, on how a customer can arrange to switch any of their retail communications services.

(ii) consumer difficulty and switching costs

We agreed with Ofcom's earlier research showing that LPL switching processes are associated with higher switching costs and have provided our own evidence that they adversely affected sales conversion rates, thus affecting the competitive dynamic of the market.

We expect the same conclusions to hold good where LPL elements (including those from a C&R approach where the LP has to be contacted) affect switching in the mobile services market, in bundles and in KCOM's area.

(iii) lack of consumer awareness of the implications of switching

In relation to harmonised switching processes on the Openreach network, LP notification letters are mandated to set out the implications of switching and we see no reason why this approach should not work in the other networks considered.

We have already noted that GPs in the mobile retail market do not have an incentive to make customers aware that they can port their mobile number. This picture could be transformed if the mobile porting processes were amended to allow a GPL approach.

(iv) insufficient customer consent

We have no view as to whether there is any particular risk of this in KCOM's network due to lack of experience in this geographical area. It is worth noting, however, that one cause



of apparent slamming on the Openreach network had its root cause in problems with the accuracy of Openreach's own address database. It would therefore be worth investigating whether an independent external address reference could be used as switching processes are developed both in the new areas Ofcom has highlighted and as switching processes are developed and improved for the Openreach network. The reference we are thinking of is the Unique Property Reference Number and this is discussed further in appendix 3.

(v) erroneous transfers (ETs)

It appears likely that at least some switches to and from the Openreach network may be subject to the same risks of ETs that Ofcom has found for switches wholly within the Openreach network. The comments under the previous heading are therefore also relevant here.

(vi) loss of service

In our view, this area links into that of item (ii) – consumer difficulty and switching costs. There is undoubtedly more hassle for a customer trying to arrange his own 'cease and reprovide' in managing notice periods with old suppliers and lead times with new suppliers. Our impression is that relatively long notice periods can be rigidly enforced by mobile service providers and that there must be some risk of a break in service where a consumer moves between cable and Openreach networks. Alternatively, a degree of paying for concurrent services seems inevitable across the volumes of consumers undertaking these transfers. It appears to us that one benefit of the existing switching processes, where there is an underlying 'per-day' wholesale charge, is that notice periods have effectively evolved to match the transfer time of the relevant switching process so that the consumer does not need to think separately about this.

(vii) lack of platform neutrality

We agree that consumers will generally experience more hassle with C&R processes and that even the perception of this hassle can lead to a disinclination to switch at all, thus adversely affecting the competitive dynamic of the market.

In the mobile market, we have already noted that we would expect mobile customers to have the same expectation that they can retain their mobile number on change of service provider as fixed line customers. We believe it would benefit customers in this market for the porting discussion to be an integral part of switching and for the process to be well-publicised. We think that a competitive distortion does exist as gaining mobile providers do not have any incentive to encourage their prospective customer to port their number since, with the current LPL process, it would give their existing provider a reactive save opportunity.

For the other areas, Ofcom has described a range of different scenarios, most often involving C&R switching, whereby consumers can move from one bundle to another. The position is clearly complex for consumers, which must result in a significant degree of inertia once they have moved to their 'first' bundle. This suggests that there is a first-mover advantage in persuading a customer to contract for a bundle including pay-TV, which itself could lead to competitive distortion. Going forward, we believe Ofcom should engage in tasking the industry to extend the GPL principle to bundle switching such that customers can approach one new supplier to make arrangements for switching all or some of his



bundle elements on the important basis that each can be retained separately, as discussed in our comments on bundles in response to question 1.

(viii) reactive save

As a small supplier seeking to gain market share, we have found reactive save opportunities built into the switching process (as happens under both LPL and C&R switching processes) damaging to our sales conversion rate. This adversely affects competitive forces in the market and, ultimately, the range of products and services available to consumers. Ofcom's earlier research on this topic in relation to switching services on the Openreach platform has borne out these points. We believe it is important for the health of the market that switching processes are constructed such that a consumer moving to a different supplier of a service is not <u>obliged</u> to contact their existing provider of that service. Similarly, we understood that previous proceedings at the CAT had established that, for telecoms markets, GC1.2 is to be interpreted as banning an existing provider from acting on information gained through transfer processes in order to influence the customer not to switch during the transfer process. If pay-TV is a product being bundled with communications retail products, then the ban should apply equally to the pay-TV providers otherwise this interpretation of GC1.2 would be undermined.

Other Issues

- We consider that it would be useful if Stage 2 of Ofcom's work on consumer switching took into account any longer term issues that arise in the work that Ofcom is leading to implement Stage 1 of the project. One area that appears to be becoming something of an issue is the topic of 'RID management'. RIDs are retailer identification codes that are issued through Ofcom's Numbering team and, in developing industry switching processes, will become a required and validated item on certain types of order. Recent industry discussions have focussed on minimising the interval between a new RID being issued and its availability to market processes as a valid RID otherwise new entrants could be denied the opportunity to trade for an arbitrary period of time. We note in passing that the RID is one of the items that features in the outline data model that we discuss in appendix 3 it would be included within the definition of 'industry participant identification' in that discussion.
- As noted in the covering letter, we consider that market coordination and governance, as well as the development of an underlying data model upon which to base process definitions are important developments that should be considered as part of Stage 2 of Ofcom's switching project. We discuss these topics in more detail in the remaining appendices.



Q.3 Could the current switching processes for the networks and services in scope be modified to result in a better experience for or protection of consumers, and/or more effective competition? If so, why and how should they be modified? Are any modifications in your view available that might be implemented relatively quickly and easily? What risks and costs might be associated with these revisions or modifications?

We comment on this, taking each of the areas that Ofcom highlights in section 3, in turn.

For KCOM's area, we are not familiar with the current processes but agree with Ofcom that there would be benefits in harmonising existing processes to a single GPL NoT+ process. For maximum benefit to competitiveness in the market, the interfaces should be standardised in order to open up the area to greater competitive pressure. We discuss this further in Appendix 3.

For bundles and switching between the separate Openreach and cable networks, Ofcom has already identified that there are a range of different processes in place – many requiring the customer to use C&R processes. The single step of greatest benefit that would assist customers in relation to these switches is for the switching processes to become GPL led, thus allowing the customer to use the GP as his agent to obtain a seamless transfer experience. It could be that a range of different processes are needed to support this 'behind the scenes' and we would hope that these could evolve efficiently into standard market mechanisms under the governance arrangements discussed in appendix 2.

In relation to mobile services, we believe there are two themes of work that Ofcom could consider: adopting GPL switching mechanisms for porting mobile numbers as discussed above for bundles; and improving mobile inter-operability on the contractual front. We believe that contract forms in mobile could be more flexible and that this is in tune with the developing European framework for electronic communications. We have given examples above of ways in which customers are penalised for the sort of changes they wish to make. The different elements of a mobile service could be made more readily separable to enable consumers to mix and match: handsets; calls; texts; more general data services; and the actual mobile number associated with the service. It is in a consumer's interest to be able to choose how these are combined, not be locked into an unalterable contract with stiff termination fees if, for example, he would like to change one element such as the number used. This point is similar to the one made above in relation to the unpicking of bundles in response to Q1.

Q.4 Is there anything that you consider is relevant to the switching of networks and services in scope for this phase of work that we have not set out in this document?

Yes. In Ofcom's December 2013 statement on consumer switching, there were several references to further areas of work that have not been mentioned in the current call for inputs.

Paragraphs 5.7 and 5.13 from the document are reproduced below.



- 5.7 In carrying out this second stage of work, we will need to consider the extent to which the GPL NoT+ process may warrant further development, or whether an alternative option such as a hub and database solution might be proportionate.
- 5.13 We plan to publish details and timelines for carrying out further work in this area in Spring 2014. This will include looking at how we propose to engage with industry stakeholders to develop our thinking. It will consider appropriate governance arrangements and implementation issues, such as data protection, data security and implementation timescales and will take account of relevant initiatives in government to improve switching processes.

From these paragraphs, we had expected discussion of the following areas in Ofcom's initial 'Stage 2' document:

- Consideration of a hub/database approach to consumer switching;
- Governance arrangements with industry in order to develop switching processes further on a Project basis; and
- Governance of business-as-usual switching processes.

As mentioned earlier in this response, we consider that governance and the underlying market data model for switching are extremely important issues in the development of robust and sustainable switching processes and we have set out views on these areas in appendices 2, 3 and 4.

From other paragraphs in the December document, such as 5.6, we had expected there to be some discussion also on the following topics:

- The extent and cause of erroneous transfers (ETs);
- Assessment of the work being undertaken on the accuracy of the Openreach database and the recently introduced MPF helpline;
- Fibre to the premises (FTTP) products on the Openreach network; this technology was explicitly linked with the possibility of a rise in ETs and as one of the platforms where harmonised switching would next be considered along with cable and KCOM networks. We were therefore surprised to see that, at paragraphs 1.8 and 3.2 of the call for inputs document, this is described as a service with low take up that would not be considered in the next stage of Ofcom's work on switching.

We understand that FTTP and new fibre networks are technologies that are currently being rolled out, making it increasingly likely that consumers will experience these as they move house, for example. Ofcom has recently applied code powers to a range of organisations intending to roll out fibre networks. We believe that those organisations who do not intend to provide their own services but to offer wholesale access to other CPs would welcome the possibility of being able to 'join' a harmonised switching process such that consumers attached to their networks could take advantage of the full range of retail CP offerings that can be provided using these switching processes. On the basis that this technology is the next one to affect consumers – and bearing in mind the issues around broadband switching after the introduction of local loop unbundling (LLU), discussed in appendices 2 and 3 – we believe it would be prudent for Ofcom and the industry to 'design before disaster' and consider switches to, from and within this technology as part of stage 2 of the project.



Proposals on market coordination for switching

In our view, **coordination** between industry parties on 'back-end' switching processes is the key enabler in achieving smooth transition processes for customers in network-based service markets. As Ofcom has already identified earlier in the switching project, it is necessary for industry parties to 'work together' (along with Ofcom) to sort out the process changes required to implement phase 2 of the first stage of the project. In our view, such coordination is actually a continuous requirement: necessary changes to existing switching processes need to be identified, developed, implemented, monitored, maintained and amended as required in a transparent, change-controlled manner. This continuous requirement is best served by an ongoing coordination arrangement that can deliver efficiently on all the activities mentioned for the benefit of the market and its customers.

The requisite degree of coordination in other similar markets such as gas, electricity and water has been achieved through formal, impartial and transparent **governance** of market processes such as switching. We therefore consider that Ofcom's stage 2 work on switching should include consideration of how to develop appropriate and enduring governance arrangements for switching. Not only will there be business-as-usual changes to be made to processes but it is likely that there will be post-implementation issues that need to be fixed from stage 1 of the project. There are also a number of items in this project that have been de-scoped from the 20 Jun 2015 Harmonisation Date but which should be reconsidered once the higher priority changes have been implemented: an example of this is the harmonisation of BT Wholesale's 'wholesale calls' product in terms of cancellation codes used.

Assuming that the original objective remains that harmonised processes should be in place for <u>all</u> consumers looking to switch their voice and/or broadband services to a new supplier on the Openreach platform, then such anomalies should be ironed out. In our view, there needs to be a governance vehicle in place to ensure that appropriate actions to achieve this are captured and progressed. Otherwise, there will be no incentive for relevant CPs to carry out the required work.

We believe that well-designed and strong central governance (with Ofcom acting as the ultimate "authority") will both enable the fair and democratic participation of all types of CP and form a legitimate 'industry body' with whom Ofcom can formally engage to influence the direction of travel of industry developments without the need to become involved at a detailed level when issues arise. We welcomed Ofcom's recognition at paragraph A7.142 of the August 2103 statement that there would be benefits in a governance process:

"We anticipate that such a governance process would have benefits in future as a result of providing a framework for industry cooperation, for example in adapting to future changes in the market."

We acknowledge that there is a cost (and this can be made transparent through appropriate funding arrangements) entailed in formalised industry cooperation but there are also significant costs entailed in the continuation of various forms of harm to customers and competition without such coordination. We whole-heartedly agree with Ofcom's



comment at paragraph 3.18 of the August 2013 statement that the competitive market operating freely does not necessarily guarantee robust and smooth switching processes.

It is, in our view, intuitively obvious that an assembly of CPs acting in their own best interests in a market does not produce the best-coordinated switching arrangements for the benefit of customers or competition. Furthermore, the existence of the problem of "multiple switching processes" illustrates that these have been developed at different times in an uncoordinated manner over time. As a further example: unbundling of BT exchanges was introduced to the market without any thought for how unbundled customers would be able to switch back to the BT Openreach network. This led directly to the peak of complaints to Ofcom some years ago about broadband switching that led eventually to the introduction of the original version of General Condition 22. When balanced against the costs of all the harm caused to customers and competition, together with all the effort expended by Ofcom since it was formed to address these issues, we believe the transparent cost to industry of developing a suitable form of coordination and governance would be outweighed by the reduction in harm and hidden costs that such an arrangement would bring.

Independent, formal governance would provide a transparent and equitable mechanism whereby <u>all</u> industry parties (not just the largest vertically integrated CPs) could have input to propose changes to and raise concerns with current arrangements. It would be a means to develop consensus on how to amend market switching processes to cater for new developments or issues. It would bring a standardisation of approach to market change that would allow the industry to 'work together' to agree a way forward; this can be seen in operation in other similar network-based markets such as energy and water provision.

A formal governance arrangement is one created with a constitution, a set of rules for operation and a transparent and fair funding arrangement – based, for example, on the relevant market shares of retail CPs at a particular point in the year or perhaps on data that Ofcom already has about the relevant revenue earned by larger CPs in the market. Whilst the Office of the Telecommunications Adjudicator (OTA) has been a useful body, able to be tasked by Ofcom to investigate various industry issues, it is not a governance body in this formal sense. It does not have formal links with all relevant CPs, there are no rules to govern its proceedings or how its decisions are made and it thus lacks formal legitimacy to make decisions on behalf of the market.

Drawing on the look and feel of governance arrangements in other similar markets where services are delivered over a network infrastructure suggests that a successful governance model for switching is likely to involve two distinct levels:

a level that deals with the mechanics of representation, funding and process; and
a level that deals with the description of the switching arrangement – the object that the above level governs; this is likely to involve the development of a detailed rule set describing who does what to deliver the customer switches within scope of the governance arrangement. This document could be termed a 'switching code' and would be change controlled via the governance process. It would be extended and amended as necessary via a transparent industry-owned process of proposed, discussed and agreed modifications.



We recommend that Ofcom's switching work now explicitly considers how best to develop and enforce independent governance of switching processes in order to cement the crossindustry coordination required to protect consumers' interests on an ongoing basis in this aspect of communications market processes.



The need for a market data model

Introduction

Appendix 2 has discussed the benefits of coordinated and independent governance of switching processes, concluding with a discussion on the separation between change control processes and the formal description of the retail switching processes, which forms the object that is change controlled. At any time, the current version of the latter exactly describes what market data is held, what industry flows can amend that data and the required actions from each relevant market participant in what timescale in order to formally effect a change of supplier event for a particular retail communications product provided to a particular consumer. Separately, the change control level has a set of formal processes in place which govern how proposed changes to the retail switching processes are considered and introduced.

This appendix focuses on the development of the underlying model, which gives rise to the way that switching processes work. In terms of systems analysis and design, it is necessary to have a blueprint – a vision – for how the market works in a logical sense before processes can be designed and required data items specified. It is worth noting that other similar industries where networks are used to deliver competitive retail services use this type of logical model of how the processes work. For example, in electricity, the Master Registration Agreement, managed by a Service Company (MRASCo), is underpinned by the MRASCo Model available publicly at http://www.mrasco.com/mra-products/mrasco-model; and the planned introduction in April 2017 of retail competition for non domestic water customers in England will be based on a Market Architecture Plan that is currently under development – see http://www.open-water.org.uk/market-architecture-plan/

Use and development of market models in communications

At one time, before the advent of local loop unbundling (LLU). Openreach will have had such a model to underpin the processes used to allow retail switching using the required regulated wholesale line rental (WLR) product via the 'equivalence management platform' and its predecessors. It will have had an overview of the whole competitive retail market via its own internal database and reporting tools and was in a position to impose on other CPs the processes they had to follow and the interfaces to be used in order for them to gain retail customers. With the advent of LLU, that market overview was broken, as acknowledged in Ofcom's August 2013 document, and no one party now has an overview of the market or a control on the development of switching processes used. This situation has already led to various types of consumer harm: multiple switching processes; consumer difficulty and confusion: lack of consumer awareness of the implications of switching; erroneous transfers; loss of service on switching; lack of platform neutrality; and the range of difficulties faced by consumers wishing to switch back from LLU to Openreach based broadband services some years ago, since the processes to facilitate this had not been designed at the time that these customers were encouraged to switch to LLU services.

Ofcom's current call for inputs considers a number of other networks and switching situations beyond fixed voice and broadband delivered over the Openreach access



network. We very much support extending consideration of retail switching in this way and believe that the ultimate aim should be that every possible type of supplier switch that domestic and small business consumers wish to undertake in relation to a retail massmarket communications product is served by processes that provide a standard GPL process for the consumer as well as standard interfaces for retail suppliers and relevant wholesalers in the supply chain. Such standardisation is precisely what a properly designed data model of the whole retail communications market can readily provide. As well as dealing with bundle switching involving pay TV, with the KCOM area network, with the cable network and with mobile networks, we believe that any new fibre-based networks serving mass market customers and BT's own fibre to the premises (FTTP) access network should be brought into scope in due course as well.

A data model that explicitly allows for the existence of other networks (which the original Openreach data model will not have been designed to do) will also logically and efficiently allow for 'front end' switching processes that the retail CP interacts with to be designed in a stand-alone manner so that they work in the same way, no matter what network the customer is switching to, from or within. Similarly, efficient standardisation is brought into the systems that relevant wholesalers and access networks use to initiate and acknowledge the switch. The concept of a central 'hub' is often used to deliver this standardisation: rather than retailers building a one-to-one interface with every network in scope to deliver switching systems, they build a one-off interface to the 'hub' and then, as each network is taken on to the market switching systems, a one-off interface between it and the hub is also built. In logical terms, retailers and their wholesalers send flows to a central point (the hub) and the hub sorts out the derived flows that need to be sent to other CPs, including the relevant access networks. It can be seen that this approach provides economies of scale, as well as minimising effort by existing market participants, as new networks come into the scope of the market systems.

SSE has previously discussed a potential data model for the communications markets with Ofcom and others in the industry. For ease of reference and clarity, some slides outlining the idea are set out in Appendix 4. Although the term 'database' is also used in these, there is no suggestion that a new centralised data repository necessarily has to be created as part of this approach. What can be re-used from existing systems and processes and what should be newly developed are implementation considerations distinct from the logical cohesion of the final data model. It is convenient to consider, however, that in some form, there will be an auditable and addressable record of which supplier is providing which products to each customer on each network in scope at any point in time and this is the 'database' element of the 'hub/database' description used in the slides.

What the data model approach does require is a formalisation of industry participation and rigour in how certain necessary data items are described. The following entities would be expected to be formalised: industry participant identification (who is switching the customer?); switchable product set (what is being switched?); network termination points (which bit of the network serves this customer?); premises identification (where is the bit of network that serves this customer?); and network identification (which network is the customer being switched on/from/to?). Currently, there is no formalisation, no data model and no overall oversight of the switching processes that are happening in the retail communications market. We believe this illustrates why current switching processes are



not sustainable. Apart from the harm that, in our view, has been and is continuing to be caused to consumers, the situation is detrimental to competition, investment and market entry due to the lack of comprehensive documentation of an overall process, data model and change control framework that would give comfort and understanding to potential retail competitors and other types of investor.

Benefits of a 'Hub' model development

Throughout the August 2013 consultation, Ofcom acknowledged the capability of a 'database' approach to resolve the issues discussed. In the December 2013 statement, where Stage 2 of the planned work on switching is described, Ofcom also refers to further consideration of a 'hub and database model'. In light of this, we discuss below how a hub/database approach deals more comprehensively and in a future-proof manner with the problems identified at the consultation stage of Ofcom's switching project – particularly where these are only partly solved in Stage 1 of the implementation of GPL switching arrangements.

1. Multiple switching processes

The current problem of multiple switching processes is being addressed by Ofcom's decision to harmonise on the GPL 'NoT+' option. This decision deals with the processes that have developed up to now for current products being supplied over the Openreach copper network but going forward, it is still the case that further services – and the means of migrating to these services – could develop in an ad-hoc manner if the discipline of switching governance is not also in place. An industry hub/database approach providing standard interfaces via a uniform front end to gaining suppliers could more readily be extended to allow further copper product sets and those on other networks and technologies, than an initial bespoke arrangement that does not naturally allow for logical expansion.

2. Consumer difficulty/switching costs

The decision to move to the single harmonised GPL process will largely deal with the costs and hassle for customers of multiple processes, contact points and potential frustration of the intended process by LPs. As above, however, customers are likely to face difficulty again if ad hoc development of services outwith the main switching framework is allowed to occur over time. It is also worth noting that the costs of extending an initial implementation of a central hub/database approach will benefit from economies of scale in contrast to the alternative of CPs being required to develop new interfaces in order to 'consume' new products that has characterised the development of the industry to date. These system development costs of acquiring customers have had to be passed through to customers and our expectation is that the more coordinated approach of a central hub/database will allow these prospective costs of extending the scope of the initial implementation to be minimised.

3. Awareness of the implications of switching

Ofcom considers that improvements in the specification of the 'exit' letter will address this area of harm and we agree that this regulated letter will form a long-lived element of switching arrangements. Going forward, we believe that a further benefit of an industry hub/database approach is that it would be able to show a prospective GP an agreed set of information about the services and technology available or in use at the



relevant premises. This would enable the GP both to assess the suitability of the premises for the provision of his products and to discuss some of the implications of switching with the customer instead of all the information on the topic coming from the losing letter alone. As a result, we believe there could be a more balanced explanation for the customer and a more level playing field for competition whereby all suppliers can have access to the same agreed information about the way that the site is currently supplied with communications services.

4. Insufficient customer consent/reactive save

Standard database functions of access controls, record keeping and the facility for audit reports can provide the benefits of central monitoring of CP activity. A comprehensive hub/database is naturally set up to record the use being made of it and this can provide assured market information to the regulator or any other market authority independently of reliance on any market participant. Thus, any noticeable trends in, for example, customer cancellations by attempting gaining CP and by losing CP could provide the basis for further investigation of these two issues respectively.

5. Erroneous transfers (ETs)

Ofcom acknowledged in the August 2013 document that a hub/database approach will result in ETs being extremely unlikely and we agree that a well designed data model will uniquely identify assets to a particular geographic location. A unique line identifier (the ALID for Openreach networks) should be a key component of the hub/database architecture. The line identifier would uniquely identify assets and – when linked with accurately maintained address data – be accurate as to the postal address of those assets. It is possible for a single premises to have multiple lines but these would have different line identifiers and therefore different database entries, which could be differentiated by their attributes such as CLI. Looking ahead to scenarios where CLIs are less effective at identifying services, SSE sees benefit in access line identifiers being made available to customers on their bills – so that customers themselves could quote this number to their CP to assist with switches or house-moves. This labelling could also be applied to the communications termination sockets inside premises in much the same way as a meter number can help to identify relevant physical energy supplies.

The maintenance of address data is an important consideration for any set of market processes that control customer switching and we note that there still seem to be problems in this area for Openreach. This is a weakness in current market arrangements and a clear benefit of moving to a central hub/database arrangement is the possibility of maintaining address data in one place for the benefit of the whole market as a single source of truth. Our preference is for the access network operator to hold the master data due to their operational relationship with the geographical network but there should also be processes in place to allow the address data to be amended if better information is in the hands of any other market participant. We note, in particular, that retail CP records might be accurate for billing address but do not have the same incentive for accuracy in the site address where the service is supplied, if this is different – whereas the access network operator should have an operational interest in address accuracy.



It is also worth noting that a refreshed approach to address accuracy should take into account a reference code known as the UPRN (Unique Property Reference Number) as maintained by the National Land and Property Gazetteer database¹. This unique property reference is increasingly used by government and commercial organisations to identify premises and, in our view, could help to firmly link premises to assets when used in a data model in conjunction with the access line identifiers used by different networks as these come into the scope of harmonised switching arrangements.

6. Loss of service

Loss of service on switching is an important issue that should not have been allowed to become a worry for customers in the communications market. As reliance on communications technology continues to grow (e.g. in personal finances and healthcare management), our view is that communications infrastructure is assuming the characteristics of a basic utility service. While the relevant statutory backgrounds might support a 'service always on' approach in other markets such as electricity and water, we believe that this approach could develop commercially in the communications market if the same hub/database framework for comprehensive identification of services and supplier(s) to premises as underpins those markets is adopted for communications.

7. Lack of platform neutrality

The August switching document acknowledged that a hub/database approach could be extended to accommodate future technologies and other infrastructures as required more readily than the NoT+ process specified for Stage 1. We agree with this and consider that equal treatment of all products and infrastructures in scope is a strength of the hub/database approach. It naturally allows a uniform front end for customer; similar wholesale processes for GPs and LPs; and is based on a data model where the level of abstraction readily allows other access networks as well as other products to be brought within scope. In this approach, there are also economies of scale: once the coordinating central hub, database and interfaces are established, new access networks can be added without all CPs having to build bespoke interfaces to them – the underlying data model represents one logical view of the whole market, as this develops over time. It is a vision that we have sought to illustrate in the slides describing the data model set out in appendix 4.

8. Other advantages

Below we set out brief reference to other advantages that a coordinated central hub/database approach is likely to bring.

- In a hub/database approach, a record of a customer's previous supply arrangements is readily available. When combined with appropriate market processes, this would facilitate speedily returning a customer to his previous arrangements where necessary and sorting out billing matters.
- It would avoid the need for each CP to maintain their own set of information about network termination points they serve they could instead make more

¹ See <u>http://www.nlpg.org.uk/nlpg/link.htm?nwid=19</u> for more information



use of centrally held market data, which may lead to greater efficiency across the market.

- Inventories for billing of wholesale services could be linked to independent market data, leading to potential efficiencies and greater accuracy.
- It would avoid the need for tactical fixes such as the MPF helpline, whose workings are not, in any case, subject to independent control.
- It provides a discipline for new entrants to the market who would undergo formal take-on procedures via the governance mechanism so that they can interact effectively with the central systems this also provides assurance to other market participants that new entrants are supervised at take-on.
- A database structure provides a means for new networks for example, the range of new fibre networks to join a coordinated switching system and allow their connecting customers to access a range of service providers.
- It provides an ongoing coordinating force for product and market development. Any new product proposals on ways of doing things would have to be assessed in terms of how it affects the switching processes and reference data requirements – thereby ensuring that the switching experience of customers is prospectively taken into account and disruption avoided when changes are introduced to the market.



Proposed outline data model for retail communications market

Basic Features of GPL switching model

What the model does do ...

- The model is based upon a robust & flexible data model, which is easy to apply to both the Openreach copper network and, in due course, to other networks e.g. cable, fibre, mobile, Pay TV or other emerging networks – bringing the benefits of GP switching at the earliest opportunity to these further areas.
- 2. Uses a database similar in concept to a title registry
- 3. Uses a unique reference code for communications network termination point (NTP)
- 4. Provides an enduring view of NTP status location, technical options for service delivery, participants involved, actual services provided.
- 5. Allows actual behind-the-scenes switching process to happen as at present using Openreach EMP
- 6. Independently governed messaging systems keep the database updated so that a 'single source of truth' is available to authorised users
- 7. Customer interacts with their chosen GP, who can enquire into relevant characteristics of customer's NTP in order to provide good advice on switching.

What is the Data Model?

The **data model** describes the logical organisation of how data can be used and represented.

If you get it right, the model can be long lived and can cater for different market situations and developments - it will be flexible enough to apply to other network arrangements.

Our data model is organised around a unique reference for the comms NTP in the property. We have used the generic acronym Comms Point Reference Number (CPRN). For copper, this is equivalent to the BT Openreach Access Line ID (ALID)





Description of the logical Database

The database in our model has the following key features:

- · An inventory of all CPRNs in the UK for all participating networks
- Contains regularly updated Market Participant details for all participants and roles in scope
- · Stores relevant service details against CPRNs for all market participants
- · Uses a closed, secure data transfer mechanism
- Uses defined, standard data flows, where all participants use the same language to communicate with the database
- Provides web browser access for all market participants to see details for which they are authorised
 - Logon credentials identify the individual agent, the participant and the market role.
 - An audit trail of use is maintained for all transactions and enquiries
- Thus provides a regulatory/governance "eye" on the entire marketplace
- · Forms a central 'hub' linking all players in the communications market



		•	
CPRN	Role	Service Type	Market Participant
12 34567890001	SP	WLR Voice	SSE
12 34567890001 12 34567890001	Wholesaler	WLR Voice	BTW
12 34567890001	SP	Broadband 10Mb	Tesco
12 34567890001	Wholesaler	Broadband 10Mb	Pipex
12 34567890002	SP	LLU Voice	Talk Talk
1234567890002	Wholesaler	LLU Voice	Talk Talk
12 34567890002	ANO		Openreach
12 34567890002	SP	Broadband 10Mb	SSE
12 34567890002	Wholesaler	Broadband 10Mb	Thus
1745678930001	SP	LLU Voice	Talk Talk
1745678930001	Wholesaler		Talk Talk
1745678930001	ANO	220 10:00	Kingston
17/5678930001	SP	Broadband 10Mb	SSE
4745070330001	UI M/halaaalar		Thus
1/456/8930001	vvnoiesaler	Broadband 10Mb	inus

Database table - example schematic

Red and Blue show how CPRN number ranges can be allocated to ANOs



SSE plc Registered Office: Inveralmond House 200 Dunkeld Road Perth PH1 3AQ Registered in Scotland No. SC117119 www.sse.com



How Does this GPL model work? - process

A customer wishing to switch a service would provide the CPRN to the GP, or address/service details that allows the GP to identify the CPRN on the database, thus uniquely identifying the point at which the service(s) to be switched are located. CLI will also provide help in identifying the CPRN – but not in the longer term.

Views onto the database allow the technical details and capability of the NTP to be assessed by the GP agent for compatibility with the service he can provide. Once the GP agent has then had the discussion with the customer to establish that the customer wishes to switch service X to the GP, he puts a "service gain" request through normal ordering processes - the CPRN is added to this

Back End Process

Relevant data flows are sent to the database in parallel with normal ordering

processes, containing only necessary data items such as future switching date.

The database records the pending date and other relevant information.
Once the physical service switch is confirmed by the ANO, the Hub updates its

stored reference information, such as services and participants, against the CPRN.

Transaction history is maintained by the Hub and can be used for various reports

on SP activity and order fulfilment performance over the market as a whole.

Other Considerations

- 1. Independent running of the database and ownership of the model
 - This is seen as important for market confidence, allowing the switching system to be run equitably by the industry for the industry
 - · It provides transparent market control of market systems
 - It allows democratic control of future developments
- 2. Governance is needed to cover administration, funding, representation and change control
 - · Different models for this exist in other utilities
 - Funding could be proportionate to market share of NTPs in scope in order to be competitively neutral



Future Development Cable/Fibre/Pay TV/Mobile or new entrants

The strengths of this proposal are the Hub and the flexibility of the underlying Data Model.

Having established a standardised central architecture which provides a single view of all telecoms services on the BT Openreach copper network, using CPRN as the universal unique reference, the model can be extended to handle specific entities in other networks – for example the IMSI for mobile networks.

There will no longer be a need to introduce bespoke migration processes as and when new networks emerge – there will be one standard interface to the marketplace and the data model can be adapted to cope.

Once a premises can have more than one CPRN from different networks, the need for a robust property referencing becomes essential and this will need to feature in the adapted Data Model, along with other network specific entities such as IMSI.

To extend this model to Fibre, the CPRN would represent a unique combination of ALI/Port/VLAN. It may be feasible to consider labelling CPRNs on the NTE in customers' premises to assist in identification of the correct comms socket – in much the same way as electricity or gas meter numbers can act as a useful additional co-ordinate to confirm the identity of the relevant supplies.

Conclusion

Key aspects of the GPL switching model we have outlined:

• A flexible data model, which is capable of simplified use for immediate application to the Openreach copper network **but is also future proof** in its detailed form, especially for inter network operation and the proliferation of fibre ports/VLANs

- Would be independently controlled at the centre on behalf of the market
- · Would have transparent Governance
- Use would be audited and visible to the Regulator and/or Governance Authorities
- Has been done before e.g. water, gas, electricity
- Has the potential to complement other market processes such as Number Porting