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Internet Telephony Services Providers' Association
The Voice of Advanced Communications

Business Fixed Line Switching

Why have industry-led attempts to reform the current system failed?

As Ofcom are aware there have been a number of industry-led attempts to resolve the ongoing difficulties with the current system for fixed-line business switching, many of these have focused on the top-down establishment of a centralised service, and have also been particularly concerned with attempting to streamline the process and therefore reduce the average time taken to switch – whilst mobile users can switch in an hour, it can take fixed line business customers over a year. Similarly, part of the reason Ofcom's reserves of telephone numbers are under pressure is because of the current cumbersome nature of the switching regime. Attempts to reform the system have failed for a number of reasons:

a. There has been no one single cohesive attempt to reform the system since the Ofcom mandate in 2007[1], which was then overturned due to the concerns of, predominantly but not uniquely, mobile network operators. It is quite possible that without mobile as part of the solution it would have progressed much further. Meanwhile, various organisations (including FCS and ITSPA) have over the years attempted to disrupt the *status quo* and trigger reform of the system but neither has been universally successful.

b. The Industry is fully aware that without Ofcom's regulatory support no initiative that may be agreed by industry is ever likely to be adhered to by all. If this were the case we would already have significantly fewer issues with the current process as it stands today (as if the process is followed by all parties involved, although it is inefficient, it works). Without some level of regulatory intervention there is no motivation for many to invest time, effort or money in improving a process that can be ignored. Additionally, experiences of recent years have demonstrated that there are too many vested interests amongst industry for reform to take place without the backing of the regulatory body. Fundamentally, the environment needs to change so that *doing something* is preferable to *doing nothing*. Until there is an explicit regulatory-backed statement of expected acceptable outcomes, there is no impetus within the industry to affect change.

c. Industry is sometimes concerned with future proofing the system to a level which paralyses development. There are many countries which have superior switching systems than the UK. Similar systems to these could be used in the UK very quickly, however some believe these solutions don't deal with potential future challenges such as the eradication of geographic telephone numbers. Whilst this is a fair point, it is clear that such 'problems' are not immediate challenges and will only in fact arise many years down the line. Finding a solution that will meet our requirements for the next 10 to 15 years would still be hugely beneficial to

[1] https://www.ofcom.org.uk/consultations-and-statements/category-1/gc18_routing/statement

industry and, with an eye on technology neutral solutions, significant disruption caused by technological changes could be avoided.

d. The cost of any significant change is going to be considerable and therefore there has to be a very clear benefit to all those required to contribute. A problem with all previous attempts to introduce new systems has been uncertainty around both the cost and the benefit. This is a slight 'chicken and egg' scenario as until you can specify the final solution it is impossible to specify the final costs or benefits. This was one of the key objections in the 2008 overturning of Ofcom's decision in court[2].

e. There are concerns about sharing customer data. Some attendees of the industry groups have indicated that this is a bigger factor preventing them embracing any centralised storage of information.

f. The majority of problems are caused by a minority of networks and those within the handful of organisations with the power to influence change do not attend the meetings of industry bodies and other groups which could prompt serious reform.

How can the problems be resolved?

When considering how the system can be reformed, the issue needs to be considered in three parts:

1) Service Establishment (going from a need to port to an ability to port)
2) Porting Orders
3) Call Routing and in life management of numbers

Each component causes its own problems and each component has a separate set of solutions. Whilst the ideal solution would deal with all three simultaneously, given the number of years of no progress many would agree that progress in any of these components would be a step in the right direction. Some 'easy wins' could also spark momentum to move industry in the right direction.

[2] http://www.catribunal.org.uk/238-657/1094-3-3-08-Vodafone-Limited.htm

1) Service Establishment is probably the simplest to address. Industry have specified a process that essentially works if all the steps in the process are followed. Whilst it could be streamlined (indeed initiatives like ITSPA's template contract and a testing process tried and tested over many years have helped), the whole process can actually be completed within a matter of hours if necessary. In our experience the only barriers to a swift service establishment process is when one or both parties have no commercial driver to make it happen, or one or both parties do not understand (or care for) their obligations to comply.

   If Ofcom were to clarify the requirements under GC18, vitally including clarification of reasonable timescales, and back this up with a robust response to complaints of avoidance we would be in a far better position than we are today where networks claim lack of knowledge, lack of resources and lack of desire to enter into agreements. It is impossible to determine exactly how many business contracts are lost or the impact on users as a result of not being able to port numbers to another provider in a reasonable timescale but evidence that ITSPA has gathered illustrates that this is a considerable problem.

2) Porting orders are a further significant challenge. The industry process, as currently written, works (albeit inefficiently) when followed. The key difficulty is the failure of the regulatory system to ensure that the existing process is followed. If existing penalties were levied for not doing so, the whole experience would be much better for all.

   For example, many people argue that the process should reduce lead times and this would be the ideal scenario. However, if industry completed all ports within the lead times already in place it would have an even greater impact than reducing the lead time for some. Much user reassurance would be gained from certainty.

   The current process is also very manual, resulting in errors. If a relatively simple way to exchange data that required less manual intervention was developed – an example of which is already in place between the major network for simple single line ports – this would reduce the number of problems considerably. A more automated way of exchanging data would also eliminate the claims of forms not being received or information being translated incorrectly.

   A number of large porting partners already utilise some form of porting portal which should be relatively simple to convert to communicate either directly to another network's database or to a central porting order database, as is the case in many other European countries.

   A more robust and fault free order process would eradicate a considerable number of the complaints which range from the time it takes to confirm ports are accepted to actually

getting the correct numbers ported on the correct day. Further details of these problems can be found in the case studies at the end of this document.

3) The final issue that needs to be considered is a central call routing database. Whilst industry opinion is not united on the immediate need for a centralised database, many see this as the ultimate desired end point for the UK's fixed line switching system. However, there is a key factor that needs to be taken into account to ensure that a centralised database is ultimately deliverable and effective.

   The reality is a central database will only work well if adopted by a majority incentivised to use it properly. This incentive needs to be provided gradually by the regulator in the form of dictated timescales and outcomes for number portability. Currently, there is no incentive for larger operators to invest in making it easier for other CSPs to win their business.

   ITSPA believes that the provision of this incentive is the only way to ensure a fixed-line "central database" will both be developed and be successful once it is created, and that a top down implementation will not be successful.

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Case Studies

Gamma:

A county council (the "**CC**") wanted to change their telephony services provider from the incumbent provider (itself a reseller of a minor network's services) to a reseller of Gamma Communications plc ("**Gamma**") in late 2014[3] early 2015.

This switch involved the transfer of a block of 10,000 03 numbers that had been sub-allocated by the incumbent to DCC; the standard, British Telecommunications plc ("**BT**") led industry process for this takes 40 working days from inception to completion.

In March 2015, the Gamma project manager first escalated the issue to the Head of Regulatory Affairs; the incumbents were not co-operating with the project, a situation compounded by the incumbent using BT's IP Exchange product, which does not, unlike its rivals' number range hosting services[4], offer managed number portability as standard.

This lack of co-operation continued, with the incumbent deciding that it would only correspond on the matter by written letter.

It was not until September 2015, following the informal involvement of the Office of Communications in relation to a complaint raised by Gamma under Section 96A[5] of the Communications Act 2003, did the incumbent enter into a formal arrangement with Gamma to facilitate the transfer of these numbers. It wasn't until mid-November 2015, a year after the service should have been made live, that the numbers were transferred.

The consequence of these delays is that it, seemingly (despite it being organised enough to be attempting a change more than a year in advance), forced the CC out of contract with the incumbent, and, to my knowledge, had to consume the incumbent's services at best an unbudgeted rate and at worst a punitive rate. E-mail correspondence at the time suggests they had an increase to the cost of receiving inbound[6] calls of c£20,000 a month, for at least 2.5 months, representing a waste of taxpayers' cash of a minimum £50,000.

Fundamentally, this came about because there is no articulation from Ofcom as to what "fair and reasonable" means in terms of timescales for business switching, allowing the incumbent free-reign to abuse the CC.

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[3] Indeed, the Gamma reseller signed the warranty on the use of "national dialling only" numbers which are used in the call flow desired by the CC in November 2014, expecting the project to be complete relatively quickly.
[4] Gamma and we believe *inter alia,* KCOM, TalkTalk, Vodafone and Magrathea all do this as standard.
[5] Ofcom reference IA/00124/07/15
[6] Due to the nature of the service, the CC managed to switch its outbound calling considerably earlier, this case study relates just to their ability to receive calls to all their services. Some may argue that the waterbed effect is such that the incumbent was subsidising its inbound platform with margin on outbound calls and had to recover this, however, my experience of the market is that this is rarely the case.

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Disclaimer

This case study for business switching was written from the experience of the Head of Regulatory Affairs at Gamma Communications plc, the UK's fourth largest fixed network. Gamma operates a wholesale model and 80% of its revenues comes from c850 resale partners in the UK. The balance is from 2 others which are wholly owned subsidiaries. To that end, Gamma only enters a dialogue with the End User with the permission of the entity in between; the reseller.

In this case, the reseller for the CC was recently acquired by another. The resulting consolidation of these entities has rendered it difficult to gain such permission and therefore this paper is drafted from the personal experience of those involved at Gamma with all the other parties anonymised. Ofcom has knowledge of the parties (the complaint reference is below) and can require more information be provided to it under its Communications Act powers, should it wish.

Vonage:

In June 2015, Vonage sent to Clive Carter of Ofcom at his request examples of fixed line number porting problems. Below is a redacted summary which provides a small sample of many problems experienced:

- Examples of the delays using the IPEX platform to port numbers where there is no porting agreement with the range holder. Business days to complete 34, 34, 35, 55, 55, 63, 75.
- An example where there was confusion over whether the losing communications provider was a reseller or service provider. The port took 159 business days to complete after several submissions.
- Numerous port requests rejected because customers have disconnected the lines that they want to transfer. The industry wide process prevents the porting of inactive numbers.
- A customer quoted the address on his invoice from BT in his number port submission to the gaining provider. This was rejected by BT because the address was incorrect. This highlighted that BT Openreach use a different address to BT Retail.

Magrathea: Porting case study 1

In one notable recent example, Openreach inexplicably and in contravention of the process ported a range of 81 numbers to Magrathea's network four weeks before they were scheduled to be ported. This was done without notifying Magrathea and before the numbers were built on our network, the consequence of this was that service ceased on the entire range.

The range was serving a large doctors surgery in London which therefore stopped receiving calls for most of the day and into the evening. Most seriously their out of hours service, which acts like a medical emergency service, failed.

This caused patients alarm and distress and they were forced to phone the emergency services instead. The emergency services subsequently filed a complaint with the health ombudsman and the matter was escalated to NHS England.

Eventually, service was restored however Openreach's mistake was further compounded when, on the scheduled port date, it became apparent that at the time they restored service to the numbers they also cancelled the porting order but had not informed Magrathea of this.

The surgery and our service provider client were then further inconvenienced as Magrathea had to start the order process again from the beginning, the numbers finally ported 4 weeks after the original scheduled port date, which was 8 weeks after the catastrophic error. Our client believes this to have had a serious negative impact on their relationship with the end user (the surgery) and is concerned that it will have had a detrimental effect on their future business as this migration had been due to be the first phase of a much bigger contract.

No valid reason for the problems has been forthcoming and it was only the considerable efforts on the part of the Magrathea porting team that had service restored and maintained at all.

Porting case study 2

A port for a single number was first rejected in September for an incorrect postcode and then rejected again in October as Openreach had an open order for the number on their system. Our client contacted us on 14th December stating that BT had told them that they had already ported the number to us sometime in November.

To aid swift resolution we built the number on our network and began to see calls immediately, thus confirming the number had indeed ported despite us never receiving an acceptance notice. Subsequently the end user wanted the number restored back to BT Openreach so we raised an Emergency Restoration. It took at least a further two days before service was restored to BT.

Porting case study 3

A port for a single number was accepted to port on 6th December. The order instructed that the main billing number, along with 2 associated numbers and a DDI range were to remain with the range holder. We triggered the port on the appropriate date but quickly realized that Openreach had actually ported the main billing number rather than the required single number.

We were then notified that the issue was with BT IP Exchange and that an emergency restore instruction had been issued and a request for the correct number to be ported. Service was eventually restored to both numbers some 36 hours after failure despite three levels of escalation being followed.

Porting case study 4

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A porting order was accepted with a port date of 13th December. The main billing number was to port while the DDI range was to be ceased.

On completion of the port activity on that date (approx 15:15 – despite triggering at 11:00) we received notice from our client that service had ceased on the main billing number. On complaining to Openreach we were advised that they had not ceased the DDI range therefore had to revert the entire port to BT to complete it correctly. They eventually restored the main billing number to Magrathea and service was resumed late that evening.

Summary

Whilst these examples range from major to merely frustrating, this is just a small sample of the issues that arise in a typical week and for which we receive no explanation and appear to have no redress. Each case is not only severely damaging for our reputation but also for the reputation of our clients (the Service Provider) and obviously can have a major impact on the individual or organisation who relies on the telephone service.