Laurasia Associates
Communication Consultants

Laurasia Associates Limited

Response to Ofgem Consultation

Moving to reliable next-day switching.

Introduction

Laurasia Associates Limited ('**Laurasia**') is pleased to have the opportunity to respond to this important consultation.

Laurasia is recognised as a global expert in the implementation of number portability in the telecommunications market and has successfully worked with operators, regulators and governments in a wide range of countries and has implemented a number of different vendor solutions for the central number portability system. More information on Laurasia is provided in Annex 1 to this response.

Our proven methodology of implementing number portability (both Mobile Number Portability (MNP) and Fixed Number Portability (FNP)) has been successful. Our expert team has in-depth experience in both undertaking complex number portability Cost Benefit Analysis (CBA) and benchmarking and as well as thoroughly understanding the specific challenges and issues to be addressed in implementing number portability.

Laurasia has considerable experience in telecommunications and has worked on a broad range of fixed and mobile number portability programmes across the world for regulators and operators, including:

- Leading the development of fixed number portability in a number of Caribbean territories and Gibraltar, assessing, developing and applying best number portability practices to optimise fixed number portability processes in terms of efficiency and customer porting experience, for instance, in the Bahamas, Laurasia Associates has developed and implemented a single number portability platform capable of supporting fixed and mobile number portability using the same core yet simple and efficient number portability process and functionality;
- Advised CICRA the sector regulator in the Channel Islands on implementing fixed number portability based on best practices;
- Advised stakeholders within the UK fixed number portability working group on enhancing and optimising the UK fixed number portability process and service;
- Developed a positive working relationships with all global number portability system providers and vendors to maintain awareness of global and regional number portability developments and best practices;
- Providing specialist analysts and experts producing respected detailed annual and quarterly global and national number portability fixed and mobile reports assessing and analysing practices, processes and service performance across all countries offering fixed and mobile number portability services;
- Advising international carriers and global operators on optimising global and national operations through leading edge number portability practices;

- Actively engaged with UK government, political, regulatory and industry stakeholders to apply telecoms number portability best operational, customer experience, regulatory and commercial practices to the leading edge UK bank account switching/bank account number portability and Utility Switching programmes; and
- Regularly invited to present expert leading edge and innovative number portability strategic, regulatory, commercial and technical papers and presentations to specialist regulation and number portability conferences and seminars across the world

During parts of this consultation response we reference the number portability process implemented in the majority of countries where number portability is seen as a success. A high level process flow for number portability is included below for reference.

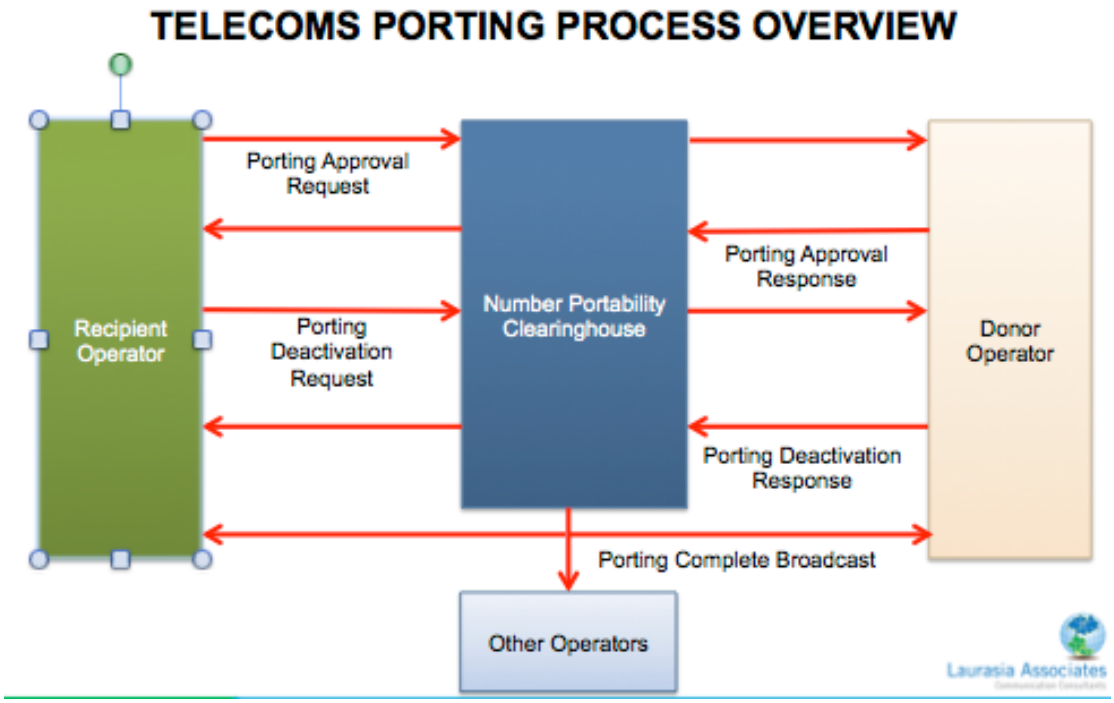


Figure 1: Illustrations of a high-level porting process used in the telecoms sector (Source: Laurasia Associates)

The key points of this process is that it is simple with a small number of transactions and it is recipient led, i.e. the operator that is winning the customer is the one that drives the process. The Number Portability Clearinghouse is central to the process and controls all of the process steps as well as maintaining the central reference database for all telephone numbers.

There is a close analogy between the telecoms process and a process that could be applied to the energy sector. Two key areas are debt management and reasons to refuse a port[1]. A key principle with number portability in the majority of jurisdictions is that debt cannot be a reason to block a port. Operators have established procedures

[1] The term applied to moving a telephone number from one operator to another is called a 'port'. A 'port' and a 'switch' are interchangeable and we will use both terms in our response to this consultation.

to handle debt, blocking a port should not be one of those. Also reasons to refuse a debt are kept to a very small number. To make the process simple, if in the rare occasion a port is blocked or refused then the porting request is cancelled and the customer would have to request a port again. This means that the clearinghouse is not holding on to suspended porting requests. However, with a limited number of reasons to refuse a port, this reduces the number of occasions that this happens.

Consultation Response

CHAPTER: Two

Question 1: Do you agree that we have accurately described the benefits of improving the switching process?

In its introductory text to this chapter Ofgem is correct to identify the consumers interests that a switching process needs to serve. These can be summarised from the consultation document as being:

- Consumers understanding and actively participating in saving money by switching supplier;
- Confidently interacting with the different parties with a role in the switching process;
- Are able to take a few, simple steps to quickly and reliably change supplier, and
- Switching to tariffs and services that best meet the consumers needs and switch again to access better deals when their needs change.

Laurasia agrees with Ofgem's statement that "*Improving the change of supplier process can provide direct benefits for consumers as well as wider competition benefits. This can contribute towards our vision for smarter energy markets that are more efficient, dynamic and competitive.*"

However, it is Laurasia's experience in the implementation of switching process in a variety of markets that what makes switching processes a success is the simplicity with which the consumer can request, and complete, a switch, quickly and safely. This is also related to the number of times that a consumer has to get involved with the switching process. In the ideal world and the ideal process the consumer would only need to request and validate its request to switch and the next time that the consumer would be contacted is when the switch is successfully completed. Best practice telecoms number portability services use a central switching platform to automatically update the customer of the status of their switching request via SMS or email, i.e. when the request has been accepted or rejected and when the switch is about to take place.

Laurasia also agrees with Ofgem view that *"We believe that a more efficient, faster and more reliable process can reduce switching costs and increase consumer engagement. This can increase competition, leading to innovation, better service and pressure on prices".*

In the telecoms markets where Laurasia has been involved since 2007 we have witnessed many changes in markets following the introduction of fixed or mobile number portability. The changes that Ofgem consider in its consultation document have been experienced in the telecoms markets. These include more competitors entering the market, encouragement for operators to improve and maintain a higher Quality of Service (QoS), provide innovation in products and services and increase competitiveness in the pricing of products and services. Experience from the telecoms switching sector over the past two decades shows that telecoms switching has evolved massively from complex time driven de-centralised donor led processes in which switching took up to 4 weeks to slick, fast, task driven, centralised recipient led processes in which a customer's service is switched in a matter of minutes.

The figure below shows how the porting services in the telecoms sector has evolved to give a current, less than 1 day porting time.

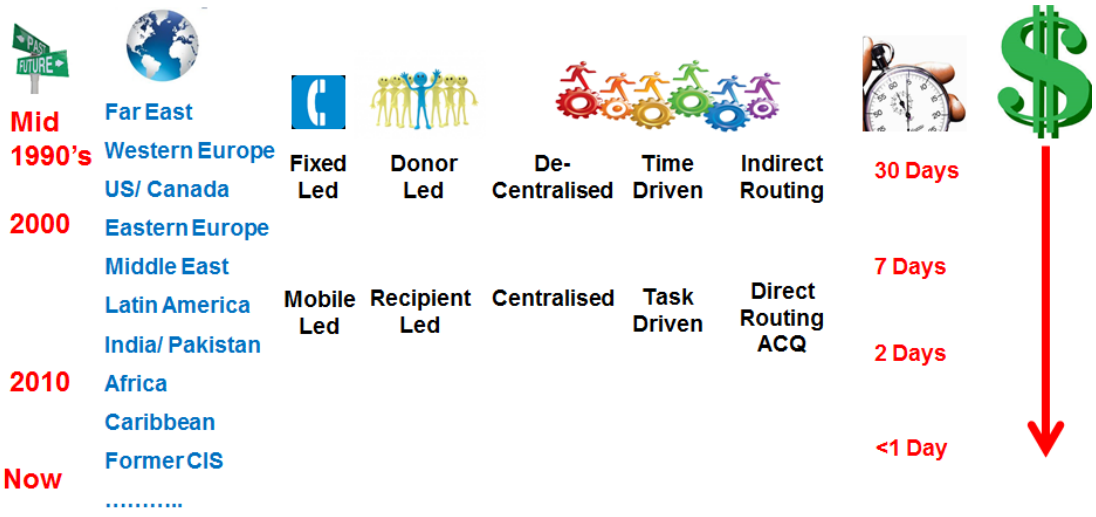


Figure 2: Evolution of number portability processes (Source: Laurasia Associates)

The key learning point from telecoms number portability is that delivering a consistent, efficient and positive porting experience to consumers encourages consumers to use the service and drives demand.

In Chapter 2 of its consultation document Ofgem highlights three key areas where "*consumers are exposed to significant shortcomings in the change of supplier process*". These are:

- Reliability of the switching process;
- Length of the switching process, and
- Complexity of the switching process.

From Laurasia's experience there is a number of key factors that have made number portability a success. Many of these are focussed on ensuring that the consumer receives a quick and reliable switching experience and that there is a limited number of reasons for a switch not being successful. These key factors can be described as:

- **Recipient Led** – the operator who is signing up the customer drives the porting process. The Donor operator, the operator loosing the customers has limit activities in the process, therefore reducing the opportunities to delay the process
- **Centralised** Number Portability Clearing House
- **Quick** – porting can be completed within 24 hours
- **Simple porting process** – **automated** – **real-time**
- Customer **validation** & communication
- **Minimal rejection** and failure rates – **limited rejection** reasons
- Cheap or **preferably free** to the consumer
- Debt is not a reason to block a port

Over the years, the processes used in number portability have evolved to where we are today. This evolution against key factors is described in the diagram below:

Feature	Then	Now
Switching Time	Up to 30 days	Less than 4 hours
Service Disruption	Up to 3 days	Less than 20 seconds
Switching Approach	Donor Led	Recipient Led
Switching Process	De-centralised & Manual & Time Driven	Centralised & Automated & Task Driven
Customer Data Transfer	Complex	Simple
Switching Steps	Multiple	Minimal

Figure 3: Development of key success factors for number portability (Source: Laurasia Associates)

CHAPTER: Three

Question 1: Do you agree with our impact assessment on next-day, two-day and five-day switching based on either a new centralised registration service operated by the DCC or enhancing existing network-run switching services?

Laurasia understands that Ofgem has assessed the potential to deliver the next-day and two-day options through a new, DCC-run centralised registration system for the gas and electricity market with common processes and data flows. Ofgem has compared this to an approach that would rely on enhancing existing network-run switching services that are run separately for the gas and electricity markets.

Ofgem has also, under its next-day switching proposal where a consumer could enter into a contract and be supplied by their chosen new supplier from the start of the next day, identified three key process changes that are required to achieve the target. A summary of the process changes to result in a next-day switch are:

Supply Point Register – upgrade of communications and processing to be near real time;

Objections – introduce and maintain a central objections register updated daily by suppliers;

Gas confirmation window – reduction in the two day window currently in place.

An assessment of these options have been carried out against:

- Reliability;
- Speed
- Consumer expectations and future flexibility
- Efficiency of market and arrangements

- Implementation risks
- Estimated costs.

One key point that Laurasia considers is missing from Ofgem's key points of a process to result in next-day switching, is that any cooling off period should start once the switching process is underway or has been completed and NOT before the switching process starts. Cooling off should involve a simple reverse switching transaction, but the definition must be clear to all parties.

Laurasia agrees with Ofgem's view that by placing the switching arrangements under the control of the DCC (or potentially any common function provider) provides an opportunity to reset the governance framework and incentivise behaviour that supports better outcomes for consumers. In addition, another benefit is that the DCC is a licensed entity so Ofgem could take enforcement actions if the quality of service did not meet required standards.

Ofgem's conclusion regarding speed is that allowing a consumer to start to receive supply the day after switching means "*that they could benefit more quickly from cheaper prices, better service and new and innovative products. This may also encourage more consumers to switch.*" Ofgem concludes by saying that the next-day switching criteria, by definition, performs best against this criterion.

From Laurasia's experiences there is a number of fundamental benefits for consumer switching time to be almost instantaneous, these include:

- The customer actually feeling that they are in control of the service;
- Customer stops the 'shopping around' process for a period of time if the switch takes place;
- Customers do not always remember the fact that they had requested a switch if the switching period takes a number of days and will become more concerned and 'nervous' the longer the switching process takes;
- Customers prefer to be involved in the switching process by initiating the switching request but also being updated on the progress of their switching request;
- Perception that the supplier can deliver a quality product in terms of switching, and
- Increase in consumer satisfaction.

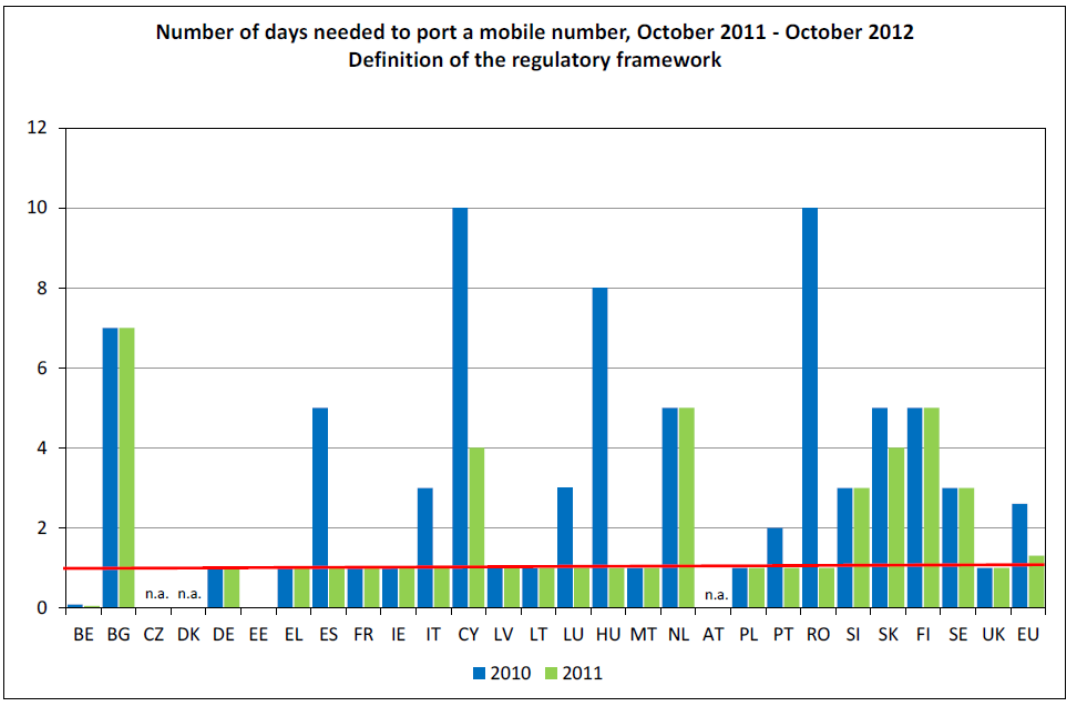
As Ofcom noted, the speed of a switch should be backed up with the reliability of the switch and should not include a reduction in the ability for consumers to resolve issues such as exceptions in the process.

Ofgem states that "*The introduction of next-day switching compares well with consumers' current experience of switching in other markets such as telecoms (one- or two-day switching) and banking (seven days).*

From the graphs below we can see how successful faster number portability processes are in the telecoms sector.

The first graph shows the number of EU countries where porting processes of 1 day (the horizontal red line) are in place for mobile numbers

The second set of graphs show a correlation between high volumes of ported numbers for those countries that have shorter porting times.



Source: Communications Committee

Figure 4: Number of days to port a mobile number (Source: EU)

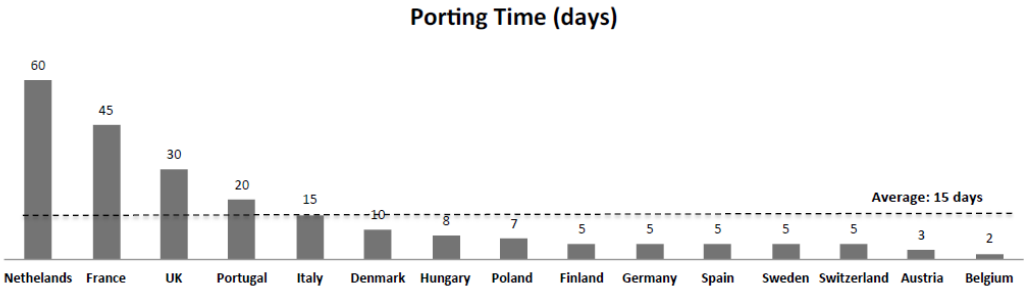
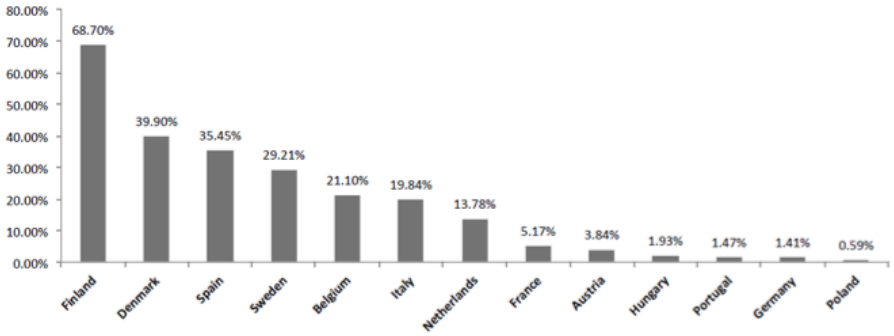


Figure 5: Porting Time (days) – 2008 (Source: EU)



Source: European Commission (2010)

Figure 6: Percentage of Number Ported across Countries up to 2008 (Source: EU)

Laurasia also agrees that the introduction and wide spread roll out of smart meter technologies will increase customers expectations of what the energy supplier can actually achieve. There might also be the risk that the consumer considers that a smart meter is similar to a mobile phone (and in fact that are a number of similarities including the underlying communications and technologies of the meter) that the expectation of an improved switching time being introduced in parallel to the introduction of the Smart meters would seem a natural evolution of the market. It is also interesting to note that Ofgem has identified a number of energy markets where next-day switching is standard[2]. If consumers were more aware of this and also the understanding of the enhanced control of the market that Smart meters bring then consumers would be expecting a much-improved switching time.

A single common centralised registration service does provide the element of management and control that such a switching process requires. Over the years in the telecoms sector a centralised reference database that is managed, typically by a third party to the operators delivers the underlying capability for short number portability times.

Other key qualities that should form part of a single, centralised process delivery are:

- Independent & non-discriminatory – first in first out;
- Consistent and efficient service delivery irrespective of switching parties involved;
- Flexibility to meet varying demand;
- Fully traceable – ensure stakeholder compliance to stated standards, and
- Easily upgraded to implement improvements etc.

It is not just the management of the database it is also critically the management and overview of the flow of messages between parties involved in the switch which could also lead to the consumer being kept up to date with the current status of the switch.

As Ofgem correctly notes, in the banking sector in the UK, where account switching is achieved in a 7 day timeframe Vocalink provides a managed switching service where it actively monitors the exchange of data between parties to ensure that data flows are sent in accordance with the timescales required to deliver the seven day switching requirements. Vocalink employs exception reporting to mange overdue data transactions.

Ofgem makes a key statement that by re-engineering the switching arrangements by centralising registration services under a central party provides an important opportunity to simplify the switching arrangements and Laurasia agrees that these benefits are highly unlikely to be achieved by building on the existing registration systems and therefore a centralised solution would provide significant benefits.

One concern that was expressed in the Ofgem consultation document is the time required to send messages to meters and the potential of any detrimental impact that faster switching may have on the ability of the losing suppliers to balance their gas and electricity positions and any wider implications for balancing and the wholesale market.

Whilst Laurasia appreciates that this response document is not the time or the place for the delivery of a technical introduction on how telecoms networks operate there is

[2] Norway, Greece, Victoria (Australia) and Ireland.

a significant difference between switching in the telecoms market and switching in other markets.

Two things have to happen when you 'port' your telephone number between, for example, two mobile phone networks. Firstly there is the administrative process that is usually controlled by process flows that are provided by the central reference database supplier (similar to the methods used by Vocalink in the bank account switching process) for validating the customer (i.e. the customer requesting the port is the actually registered customer for that number), ensuring that the customer is not blocked from porting its number (limited number of valid reasons why an operator can block a port) and then managing the process between the operators until the port is successfully complete, note that it is now standard process to keep the customer informed of the progress of the port throughout the process. Secondly, and the most technically complex part of the process is that EVERY CALL that the customer then receives has to be routed[3] by the operators differently. As the telephone number is the identifier of the customer and also technically to where the call needs to be delivered, if a number has moved between operators then on a per call basis the database has to be interrogated to see where the customer has moved to (which operator now provides the service to the customer) in order that the call can be successfully routed, first time without delay, to the customer. The changes to the routing, updating the routing databases etc. all has to be completed in the very short porting window that is in place. This is successfully done in many countries with porting time in hours not days. We are positive that with the correct processes, communication pathways and technology the energy sector could overcome and address the technical issues that are presented.

In this section of its consultation Ofgem addresses some of the estimated costs of introducing faster switching. For completeness we present some information regarding a small number of recent number portability implementations that Laurasia has been involved in. This should indicate the costs experienced in the telecoms industry. It should be noted that the costs experienced in the telecoms sector are significantly lower than those predicted in the energy sector.

Nigeria – 110 million mobile customers – Mobile Number Portability (MNP) central clearinghouse (NPC) cost $1 million to set-up (cost absorbed by the provider) – with annual operating revenues of $1.25 million based on around 1 million successful porting transactions charged on a per transaction basis of $1.25. Four operators in the mobile market, each invested around $10 million to support number portability and the interworking with the NPC.
Ghana – 30 million customers – 800,000 ports per annum – nil set-up – annual NPC operating costs of around $700,000 – six operators each invested between $5 million and $10 million to support the MNP service.
Jamaica and Trinidad (similar country data) – approximately 2.5 million users – Set-up cost – in-country around $600k, running costs around $400k – remotely hosted common solutions cheaper - $180k per annum – charged as monthly service charge.

Table 1: Illustration of costs of introducing number portability in four countries (Source: Laurasia)

[3] How it is passed between operators

Question 2: Do you agree with the proposal to implement next-day switching on a new centralised registration service operated by the DCC?

Laurasia, based on its experience in other markets, strongly agree with the proposal to implement next-day switching utilising a centralised registration service and would encourage Ofgem not to consider any non-centralised approach to the implementation of a faster switching process.

Laurasia is aware of the role that DCC has currently been assigned for the introduction of smart meters. However, without fully understanding the systems, processes and contractual relationship, Laurasia does not consider itself to be well placed to comment on as to whether the DCC is the best organisation to provide this centralised role.

Laurasia does consider that there is a number of software and solution providers who currently provide such functionality to other markets such as telecommunications for mobile and fixed number portability and to the banking sector for bank account switching that Ofgem should look towards these vendors when considering the functionality and operational performance of such a solution.

Question 3: Do you consider that fast (e.g. next-day) switching will not have a detrimental impact on the gas and electricity balancing arrangements?

Reiterating what Laurasia stated in response to a previous question. The processing of data and communications of inter-stakeholder messages should not be a cause of any detrimental impact on any part of the process. Other industries have demonstrated real-time data transfer and actioning of process steps and we recommend that Ofgem seriously consider aiming for real-time processing whilst taking into account any trade-off against time, cost and quality.

As to whether the proposal, as put forward by Ofgem, would have a detrimental impact on the gas and electricity balancing arrangements Laurasia does not have enough detail on this matter to form an educated opinion and therefore does not provide a comment on this particular point.

Experience with the switching of similar post-paid telecoms services shows that next day switching (the EU has mandated that all telecoms switching is one day or next day) has the following features. Ofgem should consider these when further developing the framework for faster switching.

1. Settlement of bills and charges between the donor and customer are outside of the switching process;
2. Clearly defined cut-off within the switching process where the supply of services and billing is transferred from the donor to the recipient operator, and
3. Efficient billing and CRM systems operating near-time billing enable final bills to be generated and processed quickly and accurately- minimise risk to donor operator.

CHAPTER: Four

Laurasia's experience of implementing number portability in many countries is trying to make some of the complex issues simple. This can take up a considerable

amount of the implementation time and takes the 'eye off the ball' when it comes to achieving the overall success of the initiative in hand. In addition complex IT and data exchange solutions are never a quick solution to what in some cases are underlying process complexities that are simply not necessary.

Question 1: A central electricity metering database is currently included within our proposed packaged of reforms. Do you agree it should be excluded?

It is Laurasia's opinion that Ofgem and all the stakeholders involved in the faster switching programme should take an alternative view at how the exchange of data and processes can be totally re-engineered for this issue.

Including a central electricity-metering database could add considerable resource requirements to all stakeholders and this could cause additional delays and issues to the delivery of the faster switching objective. We consider that this requirement should not be included in this proposed package of reforms.

In addition, as stated in Ofgem's consultation document "*a central metering database will only bring material benefits for traditional meters until 2020, at which point the roll-out of smart meters is due to be complete. Implementation [of the central metering database] is not envisaged before 2018, so a central metering database could support the change of supplier process for traditional metering for around three years*." Based on this and the potential delays that could impact on the delivery of a central metering database we would recommend that this is not the optimum solution to this problem based on a superficial analysis of the cost-benefits of such a solution.

For example, as proposed in Ofgem's consultation document, the number of reasons for exceptions should be reduced. This approach is best practice is the switching process that are utilised in the telecoms market. The number of reasons for refusal to accept, or refusal to switch should be at a minimum. The processes should be designed for the majority of cases to complete successfully without rejection or intervention.

Laurasia would recommend a detailed review of the processes and agreements that surrounds this process area with a view to significantly improving the process and reducing its impact on the faster switching programme.

Questions 2: If a centralised electricity metering database is included within our proposed package of reforms, do you consider that it should cover both AMR and traditional meters? Do you think that there would be any benefit in extending the central electricity metering database to cover smart meters?

If the agreed recommendation was that a centralised electricity metering should be included within the proposed package of reforms then it should cover as many of the meter types as possible and therefore should include AMR as well as traditional meters. Assuming that the functions of reading and handing over meter readings from the smart meter estate then it is difficult for Laurasia to quantify the benefits, if any, of including smart meters into the scope of the central electricity metering database.

A centralised approach could benefit traditional non-smart meter switching by challenging the current process and radically streamlining it to encourage

conventional service switching ahead of the smart meter rollout and to demonstrate a positive switching experience.

Centralised switching of smart and conventional services will share the same key process steps and an automated switching service managed via a central NPC can support separate switching processes, as we do with porting of fixed and mobile services using the same NPC.

CHAPTER: Five

Laurasia accepts Ofgem's view that "*delivering reliable next-day switching on a new industry platform will require a major industry change programme. The existing industry processes and data flows would need to be fundamentally redesigned and rebuilt.*"

However, this is the initial view of every operator and regulator we have spoken to in markets where number portability for the telecoms market has been introduced. There are significant process, systems and network changes to be designed and implemented and the initial views on the scope of the project are daunting and often questioned if achievable, and if achievable is it actually worth it, in terms of cost. In the telecoms industry we often state that every aspect of a telecoms operators business will be changed with the introduction of number portability. We accept that the scale and scope of the introduction of faster switching in the energy sector must also be massive. However, timescales should be looked at with a critical view and process issues revisited with fresh motivation to consider whether faster energy switching can be brought into the market in a timescale faster than that being offered by Ofgem.

The following principles are examples of ones that Laurasia has applied to a number of its implementation projects. We have adapted these as an example of how they could be applied to the energy sector:

- **Challenge existing thinking on switching** – be radical and decisive;
- **Bring back to base principles** – strip out unnecessary process steps and activities;
- **Simplify the number of meter readings** – establish a point of no return where the switch actually happens and forms the datum for service provision and billing;
- **Cooling off period starts once the switch process is underway** or finished and not before;
- **Review the timeframes for validation and approvals** – should be in hours not days, and
- **Review the timing of some activities which are not critical to the switch**, i.e. de-appointment of donor meter reader could happen after the switch has been completed.

Question 1: Do you agree with the implementation principles that we have identified?

Laurasia agrees with the implementation principles identified by Ofgem. Importantly focus on the consumer outcomes should be key in any principle agreed. However, we would suggest that "*getting the best outcome for consumers must be at the heart of the new switching arrangement*" should not sound like an opportunity for negotiations with all parties to agree on what 'the best outcome' for customers actually looks like. Ofgem should set out its view of what is the acceptable minimum when it comes to the best outcome and all parties must work towards achieving that outcome.

Ofgem as the consumer guardian must actively drive and manage switching evolution. Experience shows that successful implementations are driven by regulators having a vested interest in the success of the implementation.

Laurasia notes that Ofgem, when it discusses timing, would like to explore how a launch date could be brought forward (before the end of 2018). However, it is Laurasia's opinion, from its experience in implementing number portability in a number of countries that this could be achieved by a mixture of two activities, these being:

1. Ofcom proposing a new date that challenges stakeholders to dramatically shorten the timescale to implement faster switching, and
2. a focus on a critical review of the processes and systems supporting the switching process in order that re-engineering of these could lead to the necessary shortening of the switching timescales.

Laurasia strongly supports not only the principle of making the best use of industry expertise but also exploring wider than the energy sector and learning from the experience of the banking sector and from the telecoms sector where the principles and processes of consumer switching processes have been through a number of iterations and have seen significant improvement over the years. Whilst the industries are very different there are significant similarities and many of the consumer process activities have been worked through in the telecoms sector. By reviewing the lessons learnt and applying those to the energy sector we are sure that learning from the experiences in other sectors could significantly reduce the amount of time required to debate and resolve issues in the energy sector.

As an example, the table below illustrates some comparisons between the telecoms sector and the utility sector.

Feature	Telecoms	Utility
Donor & Recipient	Yes	Yes
Stakeholders	Multiple	Multiple
Transfer of Asset	Yes - Telephone Number/ Line	Yes - Meter
Unique Identifier	Yes – Telephone Number	Yes – Account/ Meter Asset Number
Activity Routing – 3rd Parties	Yes – voice & SMS traffic via 3rd party networks	Yes – electricity or gas consumption via 3rd party networks
Security Issues	Yes – Ownership & Validation of Account	Yes – Ownership & Validation of Account
Minimal Service Disruption	Critical	Critical
Debt Management	Yes – Usage up to point of switching	Yes – Usage up to point of switching

Table 2: Comparison of key aspects of switching between the telecoms and utility sectors (Source: Laurasia Associates)

The identification and management of risks is critical for a project of this type especially when considering the impact on consumers. However, a major risk to consumers is extending the current switching regime and therefore the initial risk should be to reduce the time required to introduction faster switching.

Question 2: Do you agree that Ofgem has identified the right risks and issues when thinking about the implementation of its lead option (next-day switching with centralised registration?

Ofgem has identified the following implementation issues and risks:

- Cost over runs;
- Risk of delay;
- Reliable transition to new arrangements, and
- Competing industry priorities.

These are all risks and issues which could be expected with the introduction of next-day switching with centralised registration. In addition Ofgem should consider the following implementation issues and risks:

- Process complexity (so consumers continue to avoid a switching process as it is not easy for consumers to understand how it works);
- Failure to agree costs relating to the introduction and ongoing costs of the next-day switching process;
- Consumer engagement (consumer likes to feel engaged in switching activities – it gives the consumer additional confidence);
    - Authorisation of Switch – How to communicate with the consumer? - SMS, email etc.;
    - Clear consistent sales process across all retail suppliers – prevent confusion & slamming;

  - Central communication to the customer at key stages in switch. This should be common for all switches and can be managed by the central platform;

- Management of customer switching data – central platform could raise data protection issues. Also potential data protection issues should be addressed early in the implementation process. In the telecoms sector data protection issues were addressed by not storing customer details, this might not be the case in the energy switching process;
- Monitoring switching service performance and addressing key issues;
- Suitable regulatory framework – enforce positive stakeholder behaviours through effective regulation and punitive enforcement, and
- Rigorous definitions and processes should be developed for cooling off and onward switching.

Question 3: Do you agree that we have identified the right implementation stages?

Laurasia accepts that at the highest-level Ofgem has considered the correct implementation stages. We are pleased to see that Ofgem has considered and recognised the importance of the detailed testing and the relevance of ensuring that the solution is fit-for-purpose when taken to the market for general consumer engagement.

One important aspect to take into consideration is there might be a strong pent up requirement to switch supplier (in a faster time than available currently) and there might be an initial high demand for switching. The stakeholders need to ensure that the volume of requests that the solution can handle is able to meet demand and every effort should be put into ensuring that daily caps and quotas are not employed. This would significantly frustrate customers and would not be recognised as a quality solution to meet the demands of the consumer.

Question 4: What do you think is the best way to run the next phase of work to develop the Target Operating Model for the new switching arrangements?

Laurasia considers that there is a number of key steps in the next phase of work to develop the Target Operating Model for the new switching arrangements. These include:

- Ofgem providing a clear view of the objectives and targets of the introduction of a faster switching process;
- Carrying out a benchmarking exercise on best practices in the area of consumer switching
- A challenge on current thinking and activities;
- Establishment of a strong governance framework that is led by DECC/Ofgem and not by industry;
- Empowerment of DCC to take on the role of the central system provider;
- Engage specialist advice;
- Set a clear evolution roadmap with defined milestones, and

- Establish enabling regulatory framework as required.

Question 5: What do you think are the advantages and disadvantages of the DCC being directly involved in the design of a Target Operating Model for the new switching arrangements, and the development of the detailed changes required?

In its consultation document Ofgem, in presenting a draft high-level project timetable has already made an assumption of an approach where Ofgem uses its Significant Code Review (SCR) powers and the DCC leads the development of the Target Operating Model.

One key advantage of the DCC being directly involved in the design of a Target Operating Model for the new switching arrangements and the subsequent development of the detailed changes required is that the DCC would have a detailed understanding of the industry and the underlying processes and systems used to support the industry.

However, the status quo of processes and systems needs to be challenged when consumer switching is being introduced and whilst the DCC would be ideally placed to be key to the design of the Target Operating Model it is important that sufficient and robust challenge is given to ensure that dramatic process changes can be made and implemented to deliver some of the key switching principles that we have previously mentioned in this response.

Also, as we understand, DCC is a licenced and regulated entity under Ofgem and therefore potentially is not as independent as it could be in challenging some of the change requirements. If the DCC is put in this key role it should itself be challenged to deliver significant benefits to consumers in the availability of effective and efficient faster switching processes.

One disadvantage, also referred to by Ofgem in its consultation is that it recognises "*the particular risk of distracting the DCC from establishing its systems for the roll-out of smart meters*". Both the rollout of smart meters and faster consumer switching are two significant and important initiatives that need to be delivered on time and to budget. The DCC should not be stretched in such a way that it could fail on either, or both, of these major projects.

Laurasia would support the alternative approach in that Ofgem considers additional expertise needed in house or to run a competitive process to award the work to develop the Target Operating Model to a third party. Whilst Laurasia would have a vested interest in being involved in any such work, if it was tendered for. However, at this stage the comments on our preference is based on experience of the models used in the introduction of number portability in the telecoms industry and that third party involvement does bring additional benefits.

The favoured approach by regulators in the telecoms sector is to bring in outside experience to manage the industry implementation. In the telecoms model there is a central reference database supplier who is an IT/process automation supplier, similar to DCC in the Ofgem situation. However, these suppliers are not interested in managing the process design and inter-operator agreements. The system providers also see the benefits in an independent party implementing the regulatory requirements whilst working with all the stakeholders. Often the experience gained by the independent party in working across many jurisdictions speeds up the activity of process improvements and importantly provides the required challenge to the common obstacles that operators find. It is fair to say, that from Laurasia's

experience in the telecoms sector it is the same handful of issues that arise in every implementation we have come across (ranging from Russia, to Kenya, Ghana, Nigeria and through to Jamaica, The Bahamas as well as many other countries).

Whilst the use of a third party would incur additional cost Laurasia does not consider that the impact might be as great as Ofcom consider it might be. In addition a third party might be able to speed up a number of the processes and therefore bring benefits to the project and reduce the overhead cost of working groups for the stakeholders.

Question 6: Do you agree that an SCR is the best approach to making the necessary regulatory changes to improve the switching arrangements?

Laurasia is not ideally placed to discuss the details of the regulatory framework applied to the energy sector. However, it is our experience that without a strong mandate from the regulator and without the process changes and implementation of switching being controlled, and in some cases driven, by the regulator then operators will continue to voice their doubt on the benefits of consumer switching. In addition a firm regulatory mandate assists all stakeholders to focus on working through issues and finding acceptable process to overcome those pinch points such how to manage debt on a consumer account. The regulatory authority needs to set in place a number of guiding principles in order to 'force' through some of the required changes.

Question 7: Do you agree with the proposed implementation timetable? Are there ways to bring forward our target go-live date?

Laurasia considers that this implementation timescale is too long. It considers, based on experience of implementing complex number portability solutions that an 18 months implementation could be realistic at this stage. However a number of the key issues to successful implementation including the selection of the central systems solution, the streamlining of processes, the introduction of a soft launch on the smart meter estate all require clear and strong leadership from Ofgem and DECC. Processes will require challenge and not just continue as they are today. This might be best achieved by using expertise external to the energy sector to provide the rigor of challenge.

APPENDIX: Three

Question 1: Do you agree that we have accurately identified and assessed the main reforms that could improve the switching process?

At the high level Laurasia considers that Ofgem has identified and assessed the main reforms that could improve the switching process.

Supply Point Registration Services
Laurasia would support the option 1, a centralised registration option. The benefits of this system should be that it could support:

- near real-time processing and sending of messages;
- aligning both electricity and gas switching processes, data flows and governance;

- storing relevant data centrally, and
- supporting industry to update smart meters with consumer data on change of supply.

Objections (transfer blocking)
Whilst the option for shortening the objection window could improve switching times for consumers the more radical approach to pre-notification would ensure a near real-time handling of consumer requests.

The option where a register of objections status at each supply point could increase the complexity of a solution but more importantly would allow a speedier interaction with consumers to ensure a much speedier and reliable consumer switching process was in place.

Confirmation window
Is important to lessen or indeed remove completely differences between different types of metering that would impact upon the switching process. Any work to design and change confirmation window process should minimise this impact.

APPENDIX: Four

Question 1: Do you agree that our approach, methodology and assumptions are appropriate to identify the quantified impacts of our reforms?

Laurasia, in principle, agrees with the approach, methodology and assumptions used to identify the quantified impacts of the reforms.

Question 2: Do you agree with our approach for approximating the direct costs for market participants of investing in upgrading existing registration systems to real-time processing and the ongoing costs of operating these systems?

Laurasia agrees in principle to the approach for approximating the direct costs for market participants of investing in upgrading existing registration system to real-time processing and the on-going costs of operating these systems.

Question 3: Do you agree with out assumptions that the direct costs for market participants of investing in systems to shorten the objections window and the ongoing cost of operating these systems would be similar for a two-day and a one-day objections window?

In Laurasia's experience of similar processes the actual systems cost to support such a solution would not change if the parameters of the timing of the switching process changed.

Question 4: Do you agree with our assumption (see Annex Figure 3) that 10% of the counterfactual change of supplier electricity meter read costs provided by market participants should be attributed to AMR meters?

Laurasia is unable to comment on this.

Question 5: Do you agree with our assumption (see Annex Figure 2) on the reduced efficiency of operating a central electricity metering database for traditional and AMR meters as the numbers of traditional meters declines?

Laurasia considers that there could be reduced efficiencies in the operating of two systems for central electricity metering database, for traditional and AMR meters as the number of traditional meters declines.

Question 6: Do you think there is efficiency potential for shortening the objections window to one day combined with: (a) upgrading the existing gas and electricity registration systems to real-time processing; or (b) centralising registration with real-time processing? If so, what do you estimate this efficiency potential to be?

Laurasia would consider that there are efficiency potentials for shortening the objections window to one day and combining that with either a) upgrading the existing gas and electricity registration systems to real-time processing; or b) centralising registration with real-time processing.

A five day switching process could be realistic prior to the introduction of the DCC and the associated smart meter estate. The introduction of smart meters would support same day switching as there would no longer be a manual meter reading element to the processes as this part of the process is one of the longer delay elements in existing consumer switching processes.

APPENDIX: Five

Question 1: Do you think the results set out in this appendix are comprehensive enough to show the potential direct cost impacts of the reform packages we have considered?

From its limited insight into the underlying costs of the energy sector Laurasia considers this to be a comprehensive set of results to show the potential direct cost impacts of the reform packages being considered.

However, in comparison to the costs we have seen for centralised solutions for number portability in the telecoms industry we express concern at the high costs that are being associated to some of the elements for the faster switching process.

For the option 1a, Next Day New Platform, the total incremental NPV costs of the reform packages is £123m with £22m allocated to the registration process and £92m allocated to the objections process. These costs are significantly higher than the costs we have experienced for the complete implementation of mobile number portability. In response to an earlier question we included example costs for four implementations which are a fraction of the costs predicted for the energy sector.

However, when taking into account the undiscounted capex and average annual opex costs per customer that Ofgem presents in Figure 5 these costs do seem acceptable as an underlying cost of consumers being able to quickly, efficiently and reliably switch energy supplier. However, as we have indicated in a response to any earlier question, consumer switching volumes increase the less a consumer has to pay to switch and the best responses are where there are no direct costs to the

consumer. Laurasia would recommend that switching costs are not directly passed onto consumers at the time of requesting a switch of energy supplier.

Contact Details

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Annex 1 - ABOUT LAURASIA ASSOCIATES

Laurasia Associates Limited is a UK based consultancy practice providing specialist regulatory and operational consultancy services to telecommunications regulators and operators across the world.

Laurasia Associates was established in June 2007 by James Wild, who recognised that there was a very significant gap in the specialised Number Portability Consultancy sector. The main focus of the company is successfully supporting the development and implementation of complex and unique multi-Stakeholder Number Portability programmes across the world (including Cost Benefit Analysis assessments), in both emerging and developed markets, including Europe, Africa, Asia/Former CIS, Caribbean, Latin and South America and the Middle East.

To meet this demanding specialist requirement Laurasia Associates has developed a broad range of core regulatory and operational consultancy capabilities and delivered via a virtual organization of globally located Associates, comprised of highly knowledgeable former senior operator and regulator executives, and is well placed to deliver maximum value through their real understanding gained across a broad range telecommunications segments and markets tailored to meet each client's specific requirements.

Laurasia Associates is widely acknowledged to be a market-leader in the development, implementation and operation of best practice Number Portability services and are regularly invited to present at prestigious Number Portability conferences, at which they share leading edge developments and global best practice with Regulators, Operators and Suppliers alike.

Laurasia Associates has experience of working with many of the vendors and integrators of number portability solutions.

Laurasia Associates can provide advice and support to regulators and operators in the following aspects of Number Portability:

- End-2-End Number Portability development and implementation programme management;
- Market impact and readiness assessment, including financial benefits and strategic analysis;
- Design, development and delivery of leading edge Number Portability regulatory and operational frameworks, aligning global best practices with local environmental and market requirements;
- Specialist network, business systems, process, retail channel and regulatory consultancy;
- Go to Market and public communication strategy development and delivery, including development of compelling NP retention and acquisition propositions and retail sales channel tactics;
- Commercial, operational, legal and regulatory impact assessment and consultancy support;
- Regulator engagement and leadership;
- Review and revision of existing Number Portability services to align to global best practices of porting quality, customer experience, efficiency and cost/charging.

Laurasia Associates has relevant technical, operational and regulatory experience of implementing number portability in a range of jurisdictions (large and small) and with Regulators and Operators alike.

Laurasia Associates possesses an in-depth understanding of the technical and business operations of fixed and mobile operators, from the regulatory and commercial drivers and demands, thorough understanding of fixed and mobile network infrastructure and business support systems and processes. Combining this detailed understanding of fixed and mobile operations with the broad range of challenging and complex regulatory, operational and technical number portability issues encountered in other implementations and consultancy work, Laurasia Associates is able to ensure that its client receives the optimised experience based advice.

Laurasia Associates has a detailed and positive experience of developing and implementing number portability solutions for clients, we have developed and honed an extensive number portability toolkit which is be used on technical number portability assignments with operators and regulators alike. This toolkit includes an extensive range of proven technical and operational impact assessment frameworks, number portability programme planning tools, number portability routing, provisioning and business systems technical and operational specifications, comprehensive testing schedules, number portability process documents, vendor assessment and contractual documents and other relevant materials. By using our number portability toolkit, Laurasia Associates is able to significantly reduce work-stream development and implementation timeframes, resourcing and costs for operators and regulators.

The journey to a fully operational number portability environment is challenging, complex, and at times frustrating. However, Laurasia Associates is ideally placed through its successful track record of supporting fixed and mobile operators in many jurisdictions, to partner with operators and regulators to ensure that the journey is optimised in terms of cost, resourcing, timescale, risk and business disruption.

Summary of Laurasia Associates Number Portability consultancy assignment experience and track record

In this section Laurasia Associates lists a number of its Number Portability assignments.

TSTT, Trinidad & Tobago - Number Portability Consultancy Assignment (2013 to Current)

- Undertaking NP impact assessment on the TSTT business operations
- Advising on NP service functionality, process and regulatory framework and requirements specifications

Ministry of Communications, Russia/Ernst & Young – Number Portability Consultancy Assignment (2013 to Current)

- Developing MNP service functionality, process and regulatory framework and requirements specifications

Ministry of Communications, Kazakhstan/Ernst & Young – Number Portability Consultancy Assignment (2012 to Current)

- Undertaking NP impact assessment on the Kazakhstan mobile market
- Developing MNP function, process and regulatory framework and requirements specifications

LIME – Jamaica – Number Portability Consultancy (2012 to Current)

- Advised on NP stakeholder engagement strategy and approach
- Advised on feasibility of proposed OUR NP framework and functional requirements

Turks & Caicos Islands Telecommission, Turks & Caicos - Number Portability Consultancy Assignment (2012 to Current)

- Drafting the Turks & Caicos Number Portability consultation framework
- Supporting the TCI Telecommission's consultation review & decision process
- Completed a high level financial and competitive impact analysis of NP on the Turks & Caicos market

Utilities Regulation & Competition Authority (URCA), Bahamas - Number Portability Consultancy Assignment (2012 to Current)

- Advising URCA and the Bahamas Number Portability Working Group on the development, implementation and launch of Fixed and Mobile Number Portability in the Bahamas, including development and management of the NP Central Clearinghouse vendor
- Completed a high level financial and competitive impact analysis of NP on the Bahamas market

Nigerian Communications Commission/KPMG - Mobile Number Portability – Number Portability Consultancy & Programme Management Assignment (2010 to Current)

- Led the selection of the Nigerian Mobile Number Portability Administration System provider, including drafting and managing NP Central Clearinghouse vendor RFQ selection and, regulatory/ legal and contracting frameworks
- Designed MNP business and operational processes and the implementation of MNP with Nigerian mobile operators
- Completed a detailed financial, operational and competitive impact analysis of MNP on the Nigerian market
- Leading the complex cross-stakeholder MNP implementation programme on the behalf of the NCC to ensure MNP is launched efficiently and on timely basis.

LIME, Cayman Islands - Number Portability Consultancy Assignment (2011)

- Provided commercial and regulatory support to LIME to optimise LIME's market position from the launch of Local Number Portability (LNP) in the Cayman Islands,

including developing LNP products, marketing propositions, sales/ channel strategies etc.
- Completed a high level financial and competitive impact analysis of LNP on the LIME Cayman Islands business and Cayman Islands market

Vodafone – Ghana - MNP Programme Management Assignment (2010 to 2011)
- Led and managed the end-2-end MNP programme to prepare, plan, implement, test, launch and operate MNP in Ghana, defined core MNP requirements, MNP process design, impact and risk assessment, regulatory/ commercial/ technical pre-requisites and managed the commercial/ marketing, regulatory and operational delivery activities, resources and project schedules
- Led the engagement with local regulators, other licenced operators and key number portability vendors

GibTelecom – Gibraltar – Number Portability Consultancy Assignment (2009 to 2012)
- Consulted on and supported the preparation, planning and implementation of Fixed and Mobile Number Portability within Gibraltar, defining core requirements, regulatory pre-requisites, NP Central Clearinghouse vendor/ RFQ selection and operational delivery activities and schedules
- Advised on engagement with local regulators, other licensed operators and key number portability vendors
- Completed a detailed financial, operational and competitive impact analysis of NP on the Gibraltar market as part of a regulatory challenge to the local regulator, GRA.

Safaricom – Kenya - Number Portability Consultancy Assignment (2010 to 2011)
- Consulted on and supported the preparation, planning and implementation of MNP within Kenya, defining core requirements, MNP Central Clearinghouse vendor/ RFQ selection, regulatory pre-requisites and operational delivery activities, resourcing and project schedules
- Advised on the engagement with local regulators, other licensed operators and key number portability vendors
- Completed a high-level financial, operational and competitive impact analysis of MNP on the Safaricom business and Kenyan mobile market

Vodafone – Qatar - Number Portability Consultancy Assignment (2010)
- Consulted on the preparation, planning and implementation of Mobile Number Portability within Qatar, defining core requirements, NP Central Clearinghouse vendor/ RFQ selection, regulatory pre-requisites and operational delivery activities, resourcing and project schedules
- Advised on engagement with local regulators, other licenced operators and key number portability vendors
- Completed a high-level financial, operational and competitive impact analysis of MNP on the Vodafone business and Qatar mobile market.

Keytech Group – Bermuda - Number Portability Consultancy Assignment (2010)
- Consulted on the preparation and planning for the potential implementation of Fixed and Mobile Number Portability within Bermuda, defining core requirements, NP Central Clearinghouse vendor/ RFQ selection, regulatory pre-requisites and operational/ commercial impact/ risk assessment, implementation activities, resourcing and project schedules
- Advised on engagement with local regulators, other licenced operators and key number portability vendors
- Completed a detailed financial, operational and competitive impact analysis of NP on the Keytech fixed and mobile businesses and Bermuda telecoms markets

Manx Telecom – Isle of Man - MNP Programme Management (2009)
- Directed the challenging and complex implementation of Mobile Number Portability using All Call Query Central Database solution Isle of Man. Coordinating the implementation programme for the upgrade and enhancement of call routing, OS-OS, provisioning, billing, mediation and CRM systems. Managed the in-house design,

development and implementation of a dedicated automated porting application. Led the engagement with the regulators and other licenced operators to agree regulatory frameworks, detailed business/ operational processes, transit/ porting charging mechanisms, interconnection contracts and the broader implementation and testing programmes.

Airtel Vodafone – Guernsey/Jersey – Number Portability Programme Management and Regulatory Consultancy (2008)

- Directed the challenging and complex implementation of Mobile Number Portability using All Call Query Central Database solution for both the Guernsey and Jersey businesses.
- Coordinating the implementation programme for the upgrade and enhancement of call routing, OS-OS, provisioning, billing, mediation and CRM systems.
- Led the engagement with the regulators and other licenced operators to agree NP Central Clearinghouse vendor/ RFQ selection, regulatory frameworks, detailed business/ operational processes, transit/ porting charging mechanisms, interconnection contracts and the broader implementation and testing programmes

In addition, Laurasia Associates and its consultants have also advised regulators and operators on NP in the following countries:

Paraguay	Colombia	Saudi Arabia
Morocco	Pakistan	Kuwait
Panama	Sri Lanka	Papua New Guinea
Bahrain	UK	Uganda
Moldova	Tanzania	Trinidad & Tobago
Albania	Costa Rica	Montenegro
Georgia	Sudan	Lithuania
Latvia	Azerbaijan	