Title: Consumer Tariff Amendments (power g) - Power to require suppliers to provide key information to customers in a form that allows smart phones to read and use it	Impact Assessment (IA)
	Date: 08/05/2013
IA No: DECC0128	**Stage:** Final
	Source of intervention: Domestic
Lead department or agency: DECC	**Type of measure:** Primary legislation
Other departments or agencies:	**Contact for enquiries:** dave.newton@decc.gsi.gov.uk

Summary: Intervention and Options

RPC: Green

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB in 2009 prices)	**In scope of One-In, One-Out?**	**Measure qualifies as**
£0m	£0m	£0m	Yes	Zero Net Cost

What is the problem under consideration? Why is government intervention necessary?

The majority of gas and electricity consumers do not engage in the market, which leads to the market not operating as effectively as it could, potentially resulting in higher prices for consumers. Factors that deter people from engaging include a perception that reviewing energy options is a time consuming and complicated process. Despite the number of accredited switching sites, which enable consumers to compare tariffs across the market, a majority of consumers do not use these to inform switching decisions. There is also evidence many consumers who use the services of accredited sites give up their searches because it becomes too difficult. Government intervention is needed because suppliers may not have sufficient incentives for suppliers to work voluntarily to provide consumers with their data in a format that will enable 'frictionless' cross market comparisons from accredited switching sites.

What are the policy objectives and the intended effects?

The Government objective in seeking to take powers is to provide certainty that appropriate action can be taken if necessary to ensure that consumers can take advantage of beneficial technological advances being applied to the energy supply sector. These changes, if applied, should aid quicker and easier switching, increase engagement and competitive pressure on suppliers, leading to lower prices for consumers.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

This impact assessment examines the costs and benefits of taking primary powers. The impact of any specific interventions, if powers were exercised, would be examined separately, alongside any consultation on secondary legislation, with a full impact assessment. We have considered the following options:

-Option 1: "Do nothing". Government does not take primary powers on to require suppliers to provide key information to customers in a format that allows smart phones or similar devices to read and use it.

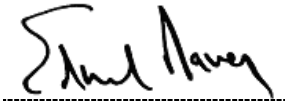
-Option 2: Taking power to require suppliers to provide key information to customers in a form that allows smart phones or similar devices to read and use it

Our preferred approach is Option 2, as taking powers will provide the certainty to energy suppliers, switching sites and consumers that using technological advances to make it easier for consumers to engage in the market is expected, and the direction of policy.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 2018/19

Does implementation go beyond minimum EU requirements?			**N/A**		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** **Yes**	**< 20** **Yes**	**Small** **Yes**	**Medium** **Yes**	**Large** **Yes**
What is the CO2 equivalent change in greenhouse gas emissions? (Million tonnes CO2 equivalent)			**Traded:** **N/A**	**Non-traded:** **N/A**	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:  Date: 08 May 2013

Summary: Analysis & Evidence

Policy Option 2

Description: Taking power to require suppliers to provide key information to customers in a form that allows smart phones to read and use it

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 7	Net Benefit (Present Value (PV)) (£m)		
			Low: 0	High: 0	Best Estimate: 0

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0		0	**0**
High	0		0	**0**
Best Estimate	0		0	**0**

Description and scale of key monetised costs by 'main affected groups'

The estimated Government staff and consultancy costs could be around £0.1m from secondary legislation if there is a further need for regulation. This is not a direct cost of taking powers as they may not be taken forward and therefore this is not included in the table above.

Other key non-monetised costs by 'main affected groups'

There could potentially be costs to some players in the market if they believe that there is increased regulatory uncertainty due to the Government taking powers in this area.
Direct costs of specific interventions will be considered at the secondary legislation stage should that be necessary, potential high level impacts are presented in Annex A.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0		0	**0**
High	0		0	**0**
Best Estimate	0		0	**0**

Description and scale of key monetised benefits by 'main affected groups'

N/A

Other key non-monetised benefits by 'main affected groups'

Taking powers to require suppliers to provide key information to customers in a form that allows smart phones or similar devices to read and use it may be seen by consumers and suppliers as insurance against the risk that the voluntary approach led by BIS is unsuccessful in delivering quick and easy cross market comparison and switching. Therefore any early planning and work on implementing such technology can be taken forward with certainty, potentially resulting in benefits to consumers being brought forward. It may also enhance the opportunity for the present voluntary action in advance of any regulatory action due to the knowledge that if effective action isn't taken forward by suppliers DECC would have the power to legislate changes.
Direct benefits of specific interventions will be considered at the secondary legislation stage should that be necessary. Potential high level impacts are presented in Annex A.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

Government can successfully implement the obligation to mandate suppliers to include customer information in a format (Quick Response (QR) code or similar) readable by a smart phone (or similar) if needed. By taking powers the Government is increasing certainty in the market that action will be taken, and we believe this outweighs any concerns that taking powers increases uncertainty.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 0	Benefits: 0	Net: 0	Yes	Zero Net Cost

Evidence Base

1. This Impact Assessment (IA) examines the arguments for and against Government taking primary powers to require suppliers to provide key information to customers in a form that allows smart phones to read and use it, most typically, but not restricted to, a Quick Response (QR) code[1]. The impacts of any specific interventions, if powers are exercised, would be examined separately, alongside any consultation on secondary legislation, with a full impact assessment.

Background

Consumer Empowerment and Midata

2. The Government launched its Consumer Empowerment Strategy, "Better Choices: Better Deals" in April 2011[2]. The midata project[3] was launched as part of this strategy, to allow people to view, access and use their personal and transaction data in a way that is portable and safe. As part of this programme energy suppliers have already agreed to give consumers access to their data in an electronic format they need to help switch suppliers. Five of the six largest suppliers have already or are just about to provide this information to their customers, with the sixth looking to implement by the middle of 2013.

3. In practice this means that consumers can access their consumption and tariff data securely from, for example, an energy supplier's website, and elect to receive this in a data file which can be sent to their own email address. Consumers can use this information to better understand their consumption and compare the tariff details to other offers in the market.

4. The Department for Business, Innovation and Skills (BIS) published a consultation on the Government's midata initiative in July 2012, seeking views from stakeholders on the potential need for legislation to require suppliers of goods and services to supply, on request of the consumer, personal transaction data in an electronic, machine-readable format.

5. The Government response to the consultation, published 19 November 2012, sets out, amongst other things, the leading role of the energy sector in the midata programme and following this amendments have been tabled in the Enterprise and Regulatory Reform Bill to establish an order-making power to require suppliers to provide access, upon request, to consumers own transaction data in a portable electronic format. .

6. The midata programme has shown how consumer empowerment through data release can operate and progress has been made on establishing a vision and principles. We also understand better the current consumer and business perceptions and the need for safeguards when consumers use their data.

Smart phones and Quick Response Codes

7. QR codes are essentially a type of bar code that includes information that can be scanned by QR code readers on smart phones, tablet computers and similar devices.. QR codes combined with the appropriate development of applications means that people will be able to check the best deals and switch supplier using their smart phones.

8. The potential of helping consumers through smart phones is large and increasing rapidly, with 39% of UK adults now owning such a device[4], which is itself a substantial increase from 27% from the year before. Energy consumers who own a smart phone or similar device and are aware of the benefits of the QR technology would be able to use this method to quickly and easily compare tariffs and switch supplier. Whilst this technology would benefit those who have their own device, it also has a wider reach via friends & family and advisory services such as Citizens Advice, and particularly to vulnerable consumers who are targeted by outreach events (see paragraph 23).

[1] There are other similar technologies which allow smart phones to read data and upload it – i.e. Google Goggle and Blippar.
[2] You can download this at: http://www.bis.gov.uk/policies/consumer-issues/consumer-empowerment
[3] http://www.bis.gov.uk/midata
[4] As at Q1 2012 - July 2012 Report from Ofcom: http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/UK_5.pdf

Application to electricity and gas retail markets

9. Following an agreement with energy suppliers, announced by the Deputy Prime Minister in April 2012, energy suppliers committed to work with Government, to investigate the possibility of putting QR codes on energy bills and annual statements to facilitate switching through smart phones. BIS is leading work to consider with the industry technical issues that need to be resolved, such as data size limitations and consumers' data protection and security, and aims to report shortly. BIS's initial evaluation of QR codes suggests that they can be helpful in facilitating access to data and removing friction at low cost.

10. Also, Ofgem provided clear evidence in its Retail Market Review[5] that the majority of consumers do not engage in the energy market and are paying more than they would be if they were on a lower available tariff. "Sticky" customers (indicated by low levels of switching) make it difficult for new entrants to attract a customer base. Ofgem's tracker survey shows just 13% of gas customers and 14% of electricity customers switched their supplier in 2011, which is a decline below the level of 2010. This is a third year of decline for gas customers and a fourth year of decline for electricity customers[6] (see Annex B for further details).

11. Action is therefore needed to ensure the majority of customers are placed on the cheapest tariff that meets their preferences and to drive customers to engage more actively in the market. By improving accessibility of information and comparability of tariffs, Ofgem's proposals give consumers the tools they need to participate more effectively in the market. If successful, consumers will be in a better position to choose the best products and tariffs for them. This increased engagement should increase competitive pressure and potentially reduce market prices.

12. The BIS work on midata and the voluntary agreements on information and QR codes are complementary to the Ofgem RMR measures which look to encourage and equip consumers to get the best deal from the energy market.

13. In addition, Ofgem, in their Retail Market Review consultation document, cited evidence that "friends and family were also seen as useful sources of information and advice. This appeared to be especially true for older and some more vulnerable consumers[7]." There is therefore, potential for technology based solutions to benefit older and vulnerable consumers through friends and relatives providing the smart phone or similar devices , that enables cross market comparisons by people they trust. DECC's discussion document 'Ensuring a Better Deal for Consumers' published on 20 November 2012 therefore set out proposals to take this a step further by requiring energy suppliers to place Quick Response (QR) codes onto consumers' bills.

14. As part of this exercise, DECC asked for views on what customer data, held by energy suppliers, should be required for release in order to fully enable development of tariff comparison and energy efficiency applications through QR codes as part of a suite of measures to help consumers engage in the energy market.

Problem under consideration

15. In a perfectly competitive market both consumers and suppliers have full information on anything that might influence their respective decision-making processes, for example supplier costs, alternative products and prices. However where a party has incomplete information, they are at a disadvantage in the market. At present, suppliers are better informed than individual consumers, particularly domestic consumers, leaving consumers at a competitive disadvantage[8].

16. The fact that the majority of customers do not shop around to seek out the best deals and that suppliers can differentiate their offers between new and existing customers means there is less pressure on suppliers to compete (see Box 1) than in a perfectly competitive market. Suppliers currently compete only for the minority of customers that shop around, making market entry by new

[5] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=460&refer=Markets/RetMkts/rmr
[6] Ofgem highlight that the main reason for this could the voluntary cessation of doorstep selling from suppliers.
[7] P 30 Ofgem's Retail Market Review, Updated Domestic Proposals
[8] Ofgem's Retail Market Review – Impact Assessment for the final domestic proposals, http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/The%20Retail%20Market%20Review%20-%20Final%20Impact%20Assessment%20for%20domesitc%20proposals.pdf

suppliers difficult. This potentially results in higher prices for the majority of consumers that do not engage, some of which remain on poor value "dead" tariffs

Box 1: Impact of consumer disengagement on competition

Consumers play a key role in a well functioning market. Through their active participation and choices in the market, consumers put pressure on suppliers to offer the products that consumers want at competitive prices. However, 'sticky' customers can create for suppliers a degree of slack, and reduce the incentive to drive down costs and to innovate to meet consumers' preferences, potentially leading to higher prices for consumers. In order to be active, consumers need to have a clear understanding of how to access, assess and act on market information to choose the best product and tariff.

When suppliers make excess profits or act inefficiently, this should incentivise new entrants into a market. However, consumer disengagement puts new entrants to the retail market at a potential disadvantage. Any new entrant has to offer larger discounts to incentivise consumers to switch compared to a more competitive market. New entrants have no sticky customers that were inherited at the time of market opening as the incumbents do, they have had to compete to gain all their customers and so all their customers are [or at least were at one point] active in the market. The customers of new entrants are more likely to switch than those of incumbents, and therefore new entrants cannot segment their customers in the way incumbent suppliers can.

This market structure enables the incumbents to offer more competitive tariffs to those who do switch whilst keeping the tariffs of sticky customers higher (see Annex B paragraph 82). The fact the large incumbent suppliers are able to undercut new entrants due to their more profitable large 'sticky' customer base makes new entrance difficult. This increases the incumbents' market power and leads to potentially higher prices.

17. The reasons for this lack of engagement (see Box 2) include the proliferation of tariffs and complex tariff structures which make it difficult for consumers to compare tariffs and understand which offer the best value for them and the lack of clear information on bills. Another factor is a lack of awareness that cheaper tariffs exist[9]. Many consumers are not confident enough to engage in the market and/or are put off by the perceived hassle and time it takes to switch supplier. Others may be aware that there are savings to be made but in the absence of a specific prompt or trigger to act, stick with the tariff they are already on[10].

[9] SPA Future Thinking, 'Options for cheapest tariff messaging on customer communications; Report of qualitative research, 2012
[10] SPA Future Thinking, 'Options for cheapest tariff messaging on customer communications; Report of qualitative research', 2012

Box 2: Barriers to effective consumer engagement

Ofgem has carried out consumer research and analysis to assess the barriers to consumer engagement which they have presented in the recent RMR document[11]. The barriers to engagement that Ofgem identified are:

● Complex tariffs – the number of different tariff structures on offer are confusing, with complex structures, including multi-tier tariffs and various discounts applied. This puts off many consumers from searching, leads some consumers to abandon their search, may result in an increased frequency of poor switching decision and contributes to a lack of trust in the industry.

● Inadequate information – there is evidence to suggest that consumers find information that they are sent from suppliers difficult to understand and use, particularly for vulnerable customers.

● Lack of trust and poor supplier conduct – there is evidence that the overall perception of the energy industry is fairly negative, and suggests that consumers believe suppliers make it deliberately difficult to switch supplier.

Behavioural economics also suggests that consumers have:

● Limited capacity to assess complex information, or 'bounded rationality', when making decisions on switching. Time and attention are a scarce resource for an individual and so use rules of thumb when the information they need to assess is complex; this often results in non-optimal decisions.

● 'Status quo bias' – consumers have a tendency to not change from what they are currently doing unless they face strong reasons to do so.

● Loss aversion – consumers feel more strongly about losing rather than gaining value, and therefore could be less likely to switch for fear they may be worse off.

● High discount rate – consumers put more weight on the costs/hassle of switching than the gains they could achieve over a longer time period by switching.

Source:
-'What can behavioural economics say about GB energy consumers?' Ofgem March 2011
http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Behavioural_Economics_GBenergy.pdf
-'Assessing the effectiveness of potential remedies in consumer markets' OFT April 2008,
http://oft.gov.uk/shared_oft/economic_research/oft994.pdf

18. Government is proposing to take powers in the Energy Bill supporting Ofgem's RMR proposals that seek to address the barriers to effective consumer engagement (see Box 2) to limit the number of core tariffs suppliers can provide, prescribe features of tariffs and mandate suppliers to move customers on poor value "dead" tariffs to "open" ones, requiring suppliers to provide personalised information on bills about the cheapest tariff and use tariff comparison tools for each tariff.

19. Further to this the Government is proposing to support Ofgem's forthcoming review by clarifying the power to make, upon a request from Ofgem, the activities of energy Third Party Intermediaries (TPIs) licensable, which looks to build trust in the TPI section of the energy supply market if necessary. This is important as in the domestic sector price comparison sites are used by thousands of households every month and are now the main source of information for customers to compare tariffs across the market. The importance of TPIs as an interface between consumers and the energy companies is also expected to grow, for example, with the introduction of smart meters and grids and an increased focus on energy efficiency.

20. TPIs play an important role in providing a proportion of consumers with cross market comparisons that will best equip them to make fully informed switching decisions. These sites accounted for around 17% of all consumer switches, including both switches to another supplier as well as to a different tariff and payment method with their own supplier[12]. If consumers are switching tariff types and payment methods directly with their supplier, we do not know if they are considering tariffs available across the market which is important for competitive pressure on suppliers. When looking at those who switched supplier, 27% of people who switched gas supplier, and 25% for electricity, switched through a comparison site. It was also found that 34% of people who switched gas supplier, and 31% for electricity found out about the deal on offer by using a comparison service.

[11] http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/The%20Retail%20Market%20Review%20-%20Final%20domestic%20proposals.pdf

[12] P27 Ofgem's Retail Market Review, Updated Domestic Proposals. This includes consumers who have switched supplier or switched tariff or payment method with their current supplier.

21. These switching sites could potentially play a greater role in increasing consumer engagement in the energy market, however there are still barriers that may limit their effective take-up. These include lack of awareness of the sites and the information required, as well as the time taken to gather and input the information to these websites.

22. Research from Ofgem's March 2011 Consumer First Panel[13] shows that not all consumers are aware that they require a range of data to help them review their energy options, including the cost and features of their current tariff, their consumption and details of alternative tariffs which will inform whether a switch would be beneficial. It highlights lack of information about the consumer's current tariff as a barrier and concludes that consumers need to have access to clear information that enables them to make accurate decisions about their energy options at each stage of this 'customer journey'.

23. Feedback from outreach events designed to help vulnerable consumers and the fuel poor to reduce their energy bills e.g. Big Energy Week (Jan 2012) and Big Energy Saving Week (Oct 2012), has tended to support this finding. Whilst organisers (e.g. Citizens Advice) were able to engage with consumers on the range of energy help and advice available to them, the degree to which they were able to offer advice on tariff and switching options was constrained by a range of factors, including uncertainty as to the best tariff options suitable for each consumer's circumstances. This was in part due to a lack of basic information about their existing tariff, payment method and consumption. An additional barrier was the length of time it can potentially take to collate the various information required to inform a switch manually.

24. Ofgem's research also concludes that currently consumers are not necessarily aware of, or may not trust, what information and support is already on offer, and may 'give up' at any point if processing the available information becomes overwhelming[14]. Less engaged panellists thought there was insufficient information and support available to help them choose suppliers and tariffs. This research also found low consumer awareness of price comparison websites for switching energy supplier or tariff.

25. In addition, Ofgem's tracker survey[15] found that of those who had switched supplier, the consumers who used switching sites were more likely to be those who paid by direct debit, were in higher socio economic groups and had internet access. For example, 33% of social grade AB said they used an online comparison site to switch gas supplier, compared to 13% for social grades DE. Social grades DE were more likely to switch following doorstop selling or a salesperson in a public place than social grades AB.

26. Measures to regulate the activities of TPIs if deemed necessary, would be designed to go some way to providing the degree of consumer confidence required to make the use of switching services more widespread amongst all consumers. However these will not necessarily make the interaction between consumers and such sites any easier or simpler, by tackling the identified information barrier. However, providing key information to customers in a form that allows smart phones and other electronic devices to read and use it should tackle the information barrier.

Rationale for intervention

27. Intervention is needed to ensure that energy companies provide consumers with their data in a format that will enable 'frictionless' cross market comparisons from accredited switching sites which will make it easier for consumers to engage and ensure competitive pressure is acting within the market on energy suppliers. BIS are making progress with midata and sets out plans to establish an order-making power to require suppliers to provide access to consumers own transaction data in a portable electronic format. Energy suppliers have also committed to work with Government, to investigate the possibility of putting QR codes on energy bills and annual statements to facilitate switching through smart phones An update on progress with this voluntary approach, being lead by BIS with energy suppliers, is due shortly..

[13] Ipsos MORI, Consumer engagement with the energy market, information needs and perceptions of Ofgem, Findings from the Ofgem Consumer First Panel Year 4: second workshops (held in March 2012), October 2012.
[14] Ipsos MORI, Consumer engagement with the energy market, information needs and perceptions of Ofgem, Findings from the Ofgem Consumer First Panel Year 4: second workshops (held in March 2012), October 2012.
[15] http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Customer%20Engagement%20with%20the%20Energy%20Market%20-%20Tracking%20Survey%202012.pdf

28. It is not clear that there will be sufficient incentives for suppliers to work voluntarily with Government to develop this technology in a way which will enable cross market comparisons and make switching to an alternative supplier easier and more effective. The Government intends to support the BIS led voluntary work in legislation, increasing the likelihood and timeliness of the potential benefits from using QR codes, or similar technology, to enable cross market comparisons and switching. This is complementary to Ofgem's RMR proposals and the forthcoming review on TPIs.

Policy objective

29. The Government's objective is to provide certainty that appropriate action can be taken, if necessary, to ensure that consumers benefit from technological advances being applied to the energy supply sector. These changes, if applied, should inform tariff decisions, aid quicker and easier switching, and increase engagement and competitive pressure on suppliers leading to lower prices for consumers. Whilst this could help those who are active switchers already by making it quicker and easier to switch, it could also help those who are less active who rarely switch due to the perceived and in many cases actual, time it takes. It is also possible that this could help those who have never switched or have only switched once due to the potential of this technology being used at outreach events for vulnerable consumers as mentioned above.

30. This impact assessment examines the costs and benefits of taking primary powers. The impacts of any specific interventions, if some or all of the powers are exercised, would be examined separately, alongside any consultation on secondary legislation, with a full impact assessment.

Options under consideration

31. We have considered the following options:

- Option 1: "Do nothing". Government does not take primary powers on to require suppliers to provide key information to customers in a format that allows smart phones and other electronic devices to read and use it.
- Option 2: Taking power to require suppliers to provide key information to customers in a form that allows smart phones and similar devices to read and use it

Cost-benefit analysis

32. This section first describes what might happen under "Do Nothing" and then examines the costs and benefits of Option 2, relative to doing nothing. The cost-benefit analysis focuses on the "direct" impacts of taking primary powers, i.e. the costs and benefits that can be attributed to the act of introducing primary legislation alone. The impacts of any proposed interventions would be examined more fully alongside any consultation on secondary legislation with a full impact assessment. Annex A sets out the high-level impacts of potential secondary legislation.

Option 1: Do nothing

33. This section considers the direction of travel of retail electricity and gas supply, assuming Government does not take these powers to require suppliers to provide key information to customers in a form that allows smart phones and other electronic devices to read and use it.

34. In summary, it is possible that the voluntary agreement between Government and Suppliers could deliver the Government's objectives, however there is uncertainty as to whether this will happen and even if so a risk that this may not facilitate full cross market comparisons in a way that is optimal for consumers. If this occurs there may not be an appropriate primary legislative vehicle leading to an indefinite delay in realising the potential benefits of increased engagement from quick and easy 'frictionless' data upload.

35. Many suppliers have developed applications which use or seek to further inform customers about their consumption and the range of offers and services available from their existing supplier. These are valuable tools for suppliers to engage with their existing customers.

36. Since the launch of midata, which aims to unlock the power of consumers' data across all sectors of the economy, the energy sector has been at the forefront of developments. Energy suppliers have

signed a voluntary agreement with Government to participate in the midata programme, to provide their customers with their data in a machine readable format by autumn 2012. However, whilst five of the six largest energy suppliers were able to provide a midata solution for their customers by the agreed winter 2012 timetable, one did not meet this schedule and is not likely to achieve a solution until summer 2013. Government is taking primary powers in the Enterprise and Regulatory Reform Bill to underpin voluntary progress with midata.

37. Consumers can now access their consumption and tariff data securely from, for example, an energy supplier's website, and elect to receive this in a data file which can be sent to their own email address. This enables them to use this information to better understand their consumption and compare the tariff details to other offers in the market. However, this does not provide a method to 'frictionlessly' upload data to inform a rapid and accurate tariff comparison, either from an existing supplier or across the market.

38. Much of the progress to date, with providing consumers with their own data electronically, has been achieved through voluntary agreement. Government is presently conducting a voluntary agreement with energy suppliers to investigate the utility and technical feasibility of QR codes on energy bills, which BIS are leading.

39. Whilst we have seen and can anticipate further progress with this work, if the Government did not act, there would be no certainty around BIS's ability to secure an agreement at all or if secured would rapidly progress technology based solutions to improved tariff comparability both within a supplier's own tariff offerings and cross market in an optimal way for consumers.

40. If taking the powers were delayed until the outcome of the voluntary action, an appropriate primary legislative vehicle may not be readily available if regulation was deemed necessary. This would lead to a delay in the use of QR codes to facilitate cross market comparison and switching in an optimal way for consumers.

41. Ofgem and Government are looking to address the issues of tariff multiplicity and complexity through the Retail Market Review and proposed powers in the Energy Bill, but do not encourage the utilitisation of these helpful tools to make switching even more straightforward and quick. This measure is complementary to the proposals put forward by Ofgem in the RMR, and would be timely and potentially easier for suppliers to have these changes being implemented at the same time. There is a risk therefore that the full benefit of the technology is not utilitised and an opportunity is missed.

Option 2: Taking power to require suppliers to provide key information to customers in a form that allows smart phones to read and use it

42. BIS is leading on work in this area and is specifically progressing QR Codes with the energy sector on a voluntary basis. DECC is working closely with BIS to ensure policy is coherent and joined up. If sufficient progress is made with the voluntary approach these powers may not need to be used. In summary, taking these powers will create greater certainty that beneficial technological advances will be implemented, support the development of these applications, and increase the likelihood of a successful voluntary solution.

43. Taking powers to require suppliers to provide QR codes on energy bills may be seen by consumers, switching sites (and other third party developers) and suppliers as insurance against the risk that the BIS led work on QR codes and midata are prevented or delayed. Therefore any early planning and work on developing technology based solutions, for example by third party smart phone application developers, essential for providing cross market comparison services for consumers can be taken forward with certainty, enabling consumers to take advantage of this technology.

44. It may also enhance the opportunity for voluntary action in advance of any regulatory action due to the knowledge that if effective action isn't taken forward by suppliers DECC would have the power to legislate changes.

45. If taking the powers were delayed until the outcome of the voluntary approach, an appropriate primary legislative vehicle may not be readily available. This could lead to a delay in utilising the technology to benefit consumers and suppliers.

46. There may by some uncertainty created in the market by how and when we will use the powers and interaction with BIS – this should be mitigated by the knowledge that these powers and policies are being developed together with BIS to ensure a coherent and joined up approach. Also there will be a sunset clause on powers, which are time limits[16] and should serve to limit negative impacts on wider uncertainty of when the powers might be used, or whether they may be used in the future to pursue wider objectives.

47. If powers have not already been used by this time, a sunset clause on the primary powers should provide certainty to business that they would not incur costs that are not necessary to meet Government's objectives. If powers had already been used by this time, a sunset clause on the obligation itself would give business some certainty that they would only incur costs as long as the obligation was needed. If needed, Government could seek to renew powers.

48. By taking powers the Government is increasing certainty in the market that action will be taken, and we believe this outweighs any concerns that taking powers increases uncertainty.

49. The estimated government staff and consultancy costs could be around £0.1m from secondary legislation if there is a further need for regulation. This is not a direct cost of taking powers as they may not be taken forward and therefore this is not included in the cost benefit analysis and summary tables on page 2.

Rationale and evidence that justify the level of analysis used in the IA (proportionality approach)

50. This impact assessment examines the costs and benefits of taking primary powers.

51. This primary power is to ensure that consumers fully realise the benefit from technological advances being applied to the energy supply sector. Making it quicker and easier for consumers to switch supplier, and increasing engagement and increasing competitive pressure on suppliers, which could lead to lower prices for consumers.

52. In working up the voluntary approach, BIS and suppliers are considering the best approach and the costs and benefits of utilising this technology. If this primary power is exercised all evidence will be considered and analysis carried out.

53. Any specific interventions are not yet formulated, and so it is not possible to assess the actual impacts of these beyond the high level assessments presented in Annex A.

54. The impact of any specific interventions, if powers are exercised, would be examined separately, alongside any consultation on secondary legislation, with a full impact assessment.

Risks and assumptions

55. Government can successfully implement the obligation to mandate suppliers to include customer information in a format (QR code or similar) readable by a smart phone (or similar) if needed. By taking powers the Government is increasing certainty in the market that action will be taken, and we believe this outweighs any concerns that taking powers increases uncertainty.

Direct costs and benefits to business calculations (following OIOO methodology)

56. This impact assessment examines the costs and benefits of taking primary powers.

[16] Time limits could potentially apply to the primary powers themselves, or to any obligation actually introduced as a result of secondary legislation, by introducing a "sunset clause". Domestic legislation that imposes a regulatory burden on businesses or civil society organisations and which comes into force on or after April 2011 is now required to include a sunset clause.
The inclusion of a sunset clause in a new regulation means that the regulation will expire automatically on a certain date unless positive action is taken to renew it. Sunset clauses should ordinarily take effect seven years after commencement unless some other time period is appropriate in a particular case. See HM Government, "Reducing Regulation Made Simple", December 2010.

57. There could potentially be costs to some players in the market if they believe that there is increased regulatory uncertainty due to the Government taking powers in this area. However, by taking powers the Government is increasing certainty in the market that action will be taken, and we believe this outweighs any concerns that taking powers increases uncertainty.

Wider impacts

58. This impact assessment examines the costs and benefits of taking primary powers which do not have any wider impacts. The wider impact of any specific interventions, if powers were exercised, would be examined separately, alongside any consultation on secondary legislation, with a full impact assessment.

Specific impact tests

Competition impacts

59. Primary legislation is not expected to have significant direct impacts on competition. Encouraging competition through encouraging consumer engagement is one of the policy objectives and is considered throughout the evidence base in this IA. The potential impact on competition will be considered in more detail if secondary legislation is introduced.

Small and micro business impacts

60. Primary legislation is not expected to have significant direct impacts on small or micro businesses. The potential impact on small and micro businesses will be considered in more detail if secondary legislation is introduced.

Equalities

61. Primary legislation is not expected to have any differential impacts on the basis of the protected characteristics. We will consider equality impacts in more detail, if the Secretary of State decides to use primary powers.

Human Rights

62. To the extent that human rights may be engaged, we consider the approach to be compatible with the Human Rights Act 1998.

Other specific impacts

63. Primary legislation is not expected to have any differential impacts in the following areas: wider environmental impacts; greenhouse gas impacts; health impacts; justice impacts; rural proofing impacts; and, sustainable development impacts.

Post-implementation Review

64. The Secretary of State would examine the direction of market travel and progress of the voluntary approach being led by BIS before deciding whether to exercise his/her powers, and if so, what intervention to take. Exercising the powers themselves would likely be subject to a sunset or review clause. We envisage that monitoring and enforcement of any intervention would be made available at a more advanced stage of policy development.

Summary and preferred option with description of implementation plan

65. The objective is to provide consumers with a frictionless technology based means of comparing tariffs across the market is designed to sit alongside further proposals to provide clearer information and simplify tariffs. This also is designed, more generally, to build on and underpin Ofgem's Retail Market Review objectives and principles, to ensure consumers can engage with the market. It is also designed to underpin and support the BIS led programme on midata and QR codes in particular.

66. The preferred option is taking power because it ensures that progress with the BIS led work on QR codes and midata is continues and that consumers are able to cross compare the market with frictionless data transfers.

67. It is proposed that this power is included in the Energy Bill. The impacts of any specific interventions, if powers are exercised, would be examined separately, alongside any consultation on secondary legislation, with a full impact assessment.

Annex A: Impacts of potential secondary legislation

68. The Government's objectives can be met by BIS specifically progressing QR Codes with the energy sector on a voluntary basis. We are taking powers to support BIS and ensure that a voluntary agreement is secured and if not that enabling consumers access to their own data in a format that will enable 'frictionless' cross market comparisons from accredited switching sites is not unnecessarily delayed, or impeded.

69. If powers were exercised, any specific interventions taken forwards would be examined more fully, alongside a secondary legislation stage consultation document, with a full impact assessment. The indicative high level impacts of any potential secondary legislation could be as follows, but this will depend on the specific measure which is not known at this time.

Consumers

70. Making it quicker and easier for consumers to switch energy supplier effectively and engage in the market should put competitive pressure on suppliers. This should reduce barriers to entry for new firms, potentially lowering prices for consumers and a net benefit for society.

71. Whilst this could help those who are active switchers already by making it quicker and easier to switch, it could also help those who are less active who rarely switch due to the perceived and in many cases actual, time it takes. It is also possible that this could help those who have never switched or have only switched once due to the potential of this technology being used at outreach events for the vulnerable.

72. Using outreach advocacy organisation*s*, as well as friends and family, should help benefits reach different groups in society. In addition, there could be a distributional benefit as there is a potential transfer because third parties are more likely to have success in helping vuln*e*rable consumers by using this tool to gain the potential savings from switching tariffs. However, it could leave out parts of society who don't have access to such technology and aren't reached in the outreach events.

73. There would be costs involved with the time and effort of consumers in familiarising themselves with how QR codes work and how to use them.

Suppliers

74. The cost of developing the QR codes is being investigated by the voluntary work BIS is taking forwards with energy suppliers. They are also considering further issues such as consumer data protection, to ensure that comparisons are quick and easy, whilst still protecting data. The cost of placing QR codes on energy bills is expected to be low, with potentially higher costs involved with the development of applications that make use of QR code data.

75. There would be costs involved with the time taken by suppliers to familiarise themselves with the requirements. There would also be a one-off cost to suppliers of developing a new bill layout to include the information required. However, as changes would be required due to other measures in the RMR package, the marginal cost should be low. There would be an on-going cost to suppliers of staff and IT systems to create individual codes, but these should be minimal as most suppliers currently use this technology for marketing applications.

76. This measure could benefit suppliers, through interacting with an independent switching service, consumers trust and confidence in suppliers could improve. This would also provide a level playing field for suppliers to compete, potentially generating a transfer from the incumbent suppliers to small suppliers and new entrants.

77. There could also be some distributional costs to suppliers from a transfer from energy suppliers to consumers from more competitive tariffs that are being offered due to the higher level of competitive pressure in the retail market.

Third Parties

78. If switching sites decide to take forward work in this area, they would be able to develop applications that use the information from QR codes to present the consumer with cross market comparisons of tariffs. This would involve costs of development, but also the benefits of attracting consumers to their sites.

79. If smart phones or similar devices are used by third parties in outreach events to help vulnerable consumers to switch, this would involve the cost of training and having the necessary technology, i.e. handsets/QR readers to do so.

Risks

80. There is the potential for unintended consequences of these measures. For example, consumers who are not familiar with the technology may be confused by a QR code and potentially become disengaged with the market. In addition, there is a risk that consumers feel that suppliers do not value their custom because of this prompt to switch being on communication.

Annex B: Summary of Evidence and Analysis from Ofgem

Competition Analysis

1. Ofgem presents evidence on the current state of competition in the domestic electricity and gas retail market alongside their updated proposals. This is briefly summarised below; further detail can be found in the Retail Market Review[17].

Switching Suppliers, Tariffs and payment methods

2. "Sticky" customers (indicated by low levels of switching) make it difficult for new entrants to attract a customer base. Ofgem's tracker survey shows just 13% of gas customers and 14% of electricity customers switched their supplier in 2011, which is a decline below the level of 2010. This is a third year of decline for gas customers and a fourth year of decline for electricity customers[18]. In addition, among those who did not switch supplier in 2011, only 12% of both gas and electricity customers switched their tariff or payment method between January 2011 and March 2012 (when the survey was conducted). Almost two thirds of consumers claim to have never switched energy supplier. This is likely to be an underestimate but reflects the perceptions of consumers that they are inactive in this market. The Quarterly Energy Prices[19] publication by DECC shows that in December 2012, 38% of electricity customers were still with their home supplier, whilst 41% of gas customers were[20].

Market share and market power

3. The combined share of the six largest energy suppliers account for more than 98% of the domestic energy market. Due to the transition from monopoly provision, each of the major suppliers have an incumbent or legacy customer base – British Gas was the supplier of gas for all customers in GB and the other large suppliers all have legacy electricity customers in the regions where they were the sole supplier. There are around nine small suppliers who make up the rest of the market.

4. Ofgem use the OFT market concentration measures, which show that the single-fuel gas market is highly concentrated and the dual-fuel and single-fuel electricity are concentrated.

Churn: suppliers and customer types

5. Incumbents can segment the market between their less active legacy customer and their more active new customers. Ofgem state that electricity customers of new entrant suppliers switch at three times the rate of the incumbents' customers and gas customers of new entrant suppliers switch over six times the rate of the incumbent's customers, see Figure 2 below.

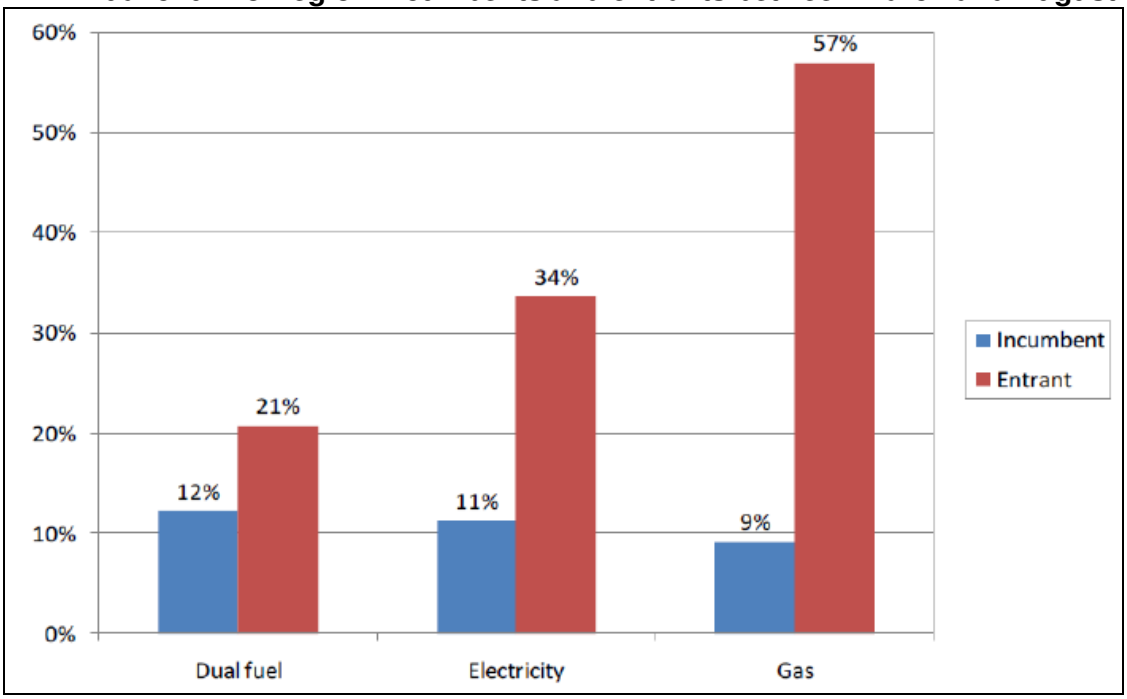
[17] The Retail Market Review – Final domestic proposals, April 2013 and Updated domestic proposals, October 2012 available here: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=460&refer=Markets/RetMkts/rmr and http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=300&refer=Markets/RetMkts/rmr

[18] Ofgem highlight that the main reason for this could the voluntary cessation of doorstep selling from suppliers.

[19] https://www.gov.uk/government/statistical-data-sets/quarterly-domestic-energy-price-stastics

[20] However, of those with the home supplier, some could have switched away and switched back again.

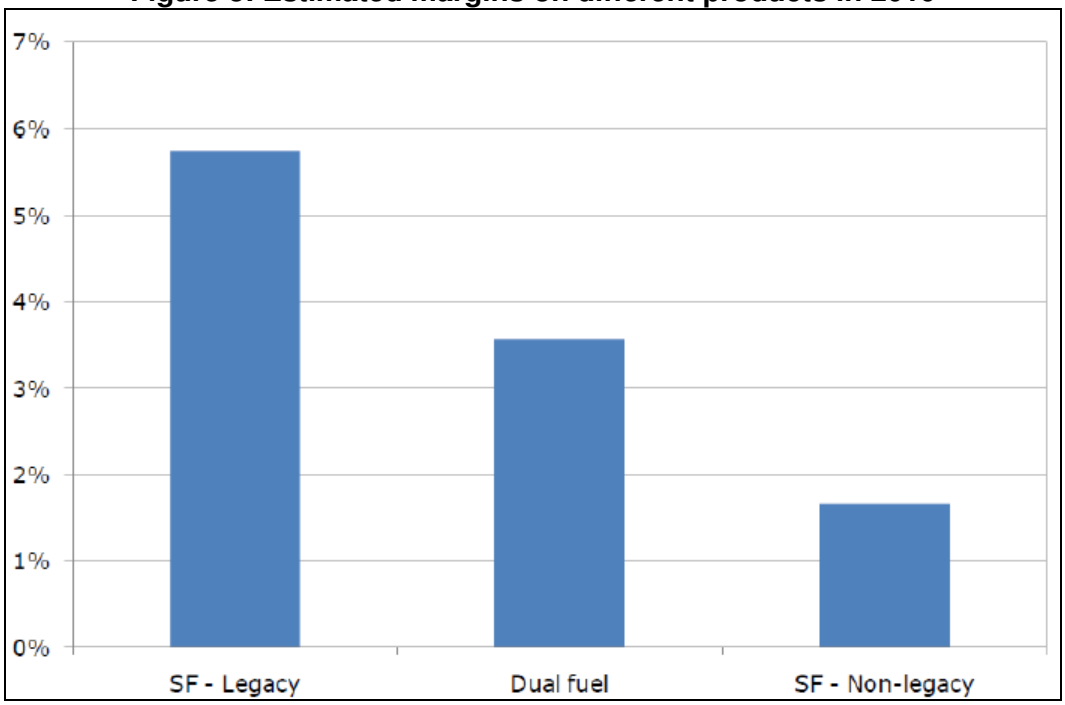
Figure 2: Annual churn of region incumbents and entrants between March and August 2010[21]



Margins: incumbent suppliers and their customers

6. The six largest suppliers make a higher margin on the fuel that they are an incumbent for – which suggests they have a degree of market power because these consumers are less likely to switch to a new supplier. The estimated margin earned in 2010 from single fuel (SF) legacy customers[22] is more than 5% which is significantly higher than duel fuel customers (less than 4%) or single fuel non legacy customers (less than 3%), see Figure 3 below. This in turn partly reflects the impact of selective online discounts, which reduce the margin earned from some active customers. In addition, the Energy Supply Probe in 2008 found that historically the major suppliers charged higher prices to customers in the region they were the incumbent supplier for than customers from other regions.

Figure 3: Estimated margins on different products in 2010



[21] http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/The%20Retail%20Market%20Review%20-%20Updated%20domestic%20proposals.pdf

[22] British Gas in the case of gas and the remainder of the incumbent suppliers in the case of electricity.

Vulnerable consumers and switching

7. Ofgem's tracker survey suggests that consumers who could be vulnerable are more likely to say they have never switched. Non-switchers are more likely to lack internet access, belong to the least affluent social groups (DE), live in rented accommodation and live in rural areas, be from black & minority ethnic backgrounds and pay their bills by standard credit or pre-payment meter. This indicates that more vulnerable consumers are still with their incumbent supplier and therefore are likely to be in the group that suppliers charge higher prices to and make a higher margin from.

Consumer Research in Ofgem's Retail Market Review

8. Ofgem commissioned various new consumer research reports as part of the RMR process which used a variety of qualitative research methods, including individual and group interviews and larger workshops. Together these provide useful insights into how to encourage effective engagement in the energy market. Some of the main findings of the reports are summarised below; more detail on the research can be found in Appendix 6 of the October 2012 RMR consultation[23] and the specific reports can be found on the RMR website.

    - Many consumers find choosing a tariff difficult, time consuming and complicated and some feel that the savings may not make the effort worthwhile. Findings from the March 2012 Consumer First Panel[24] show that confusion about what was on offer was a significant barrier for consumer engagement. Many panellists found the choice between so many options the source of their confusion and some panellists believed tariff proliferation proved suppliers are not acting to help consumers. In addition, the complexity of tariffs added to confusion and therefore disengagement, with the lack of standardisation found to discourage cross market comparisons.
    - Overall, participants found comparison guides could be used to help choose the cheapest tariff for them. However, the research did not find any format that performed substantially better than the others.
    - The majority of participants thought that a tariff comparison rate could make it easier to pick the best tariff for them.
    - Participants preferred communication that was short, using simple language and personalised to them. Only key information such as amount to pay would be read.
    - Participants generally preferred information on both the cheapest tariff for their current payment method and the cheapest tariff overall to be included.

[23] See Appendix 6 - Recent Consumer Research in the RMR Supplementary Appendix document available here: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=300&refer=Markets/RetMkts/rmr

[24] http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Consumer%20engagement%20with%20the%20energy%20market,%20information%20needs%20and%20perceptions%20of%20Ofgem.pdf