



Implementing proposals to amend domestic energy supply licence conditions - requiring provision of key energy data in a machine readable format

Government response to consultation

September 2014

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Introduction

1. This document sets out the Government's Response to its consultation, launched on 10 March 2014, to introduce licence modifications that would require energy suppliers to provide key, personalised energy data to their domestic customers in a machine readable format. This Response should be read in conjunction with the final stage Impact Assessment and draft Licence Modifications that we intend to publish alongside this.
2. The Government has been working with the energy sector to explore the possibility of putting machine readable images on bills since April 2012, following an agreement announced by the Deputy Prime Minister. Under this agreement the energy sector agreed to explore the possibility of putting QR codes on energy bills, by spring 2013.
3. An energy sector working group, led by the Department for Business, innovation & Skills, produced a feasibility report in March 2013. This study concluded there were no significant barriers to the use of QR codes and that using them was likely to be helpful in increasing consumer engagement¹.
4. In the Government Response to the Department of Energy and Climate Change's (DECC) discussion document 'Ensuring a Better Deal for Consumers', published in May 2013, we set out our intention to continue working with the Department for Business, Innovation and Skills (BiS) led voluntary process, but put forward a timetable for action should this not lead to concrete action to benefit consumers.
5. In the absence of progress with the voluntary approach the Government took powers under the Energy Act 2013 to make provision about the way suppliers must provide information to their customers. The Act allows Government to require that information is provided by means of a code or in a format readable by an electronic device and that customer energy data are presented in a form that is clear and easy to understand.
6. The consultation on implementing these powers was designed to help inform and resolve outstanding policy issues and understand more about the cost impacts of licence modifications to require suppliers to place key customer energy data in a machine readable format, for example by way of QR code, on all energy bills and statements of account.

¹ Feasibility study on the use of QR codes in the energy sector" published by BiS in January 2014 and available online at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/276198/bis-14-519-midata-programme-feasibility-study-on-use-of-qr-codes-in-energy-sector.pdf

7. The consultation sought views on the approach to, and expected costs involved in, exercising and implementing these measures in a way that provided the maximum benefits to consumers. In addition, the consultation asked stakeholders to comment on the proposals' potential to contribute to the development of smartphone or tablet computer applications by energy suppliers and third party intermediaries, so that consumers could take advantage of the tariff options available to them with their existing supplier or to provide the basis for frictionless cross-market comparison of supply tariffs and supply contract terms.
8. The Government's proposals seek to build upon the benefits brought about by Ofgem's implementation of its Retail Market Review (RMR) reforms and the initiative to facilitate the secure provision of key customer data electronically to Third Party Intermediaries (TPIs) through the midata programme led by BiS².
9. These proposals look to further enhance the ability of trusted community and third sector organisations to deliver face to face help and advice to vulnerable consumers looking to reduce their energy costs, through programmes such as the DECC funded Big Energy Saving Network.

Consultation responses

10. Twenty six organisations responded to the original consultation. They comprised:
 - Eleven domestic energy suppliers
 - One local authority
 - Two consumer advocacy organisations
 - Two technology developers
 - Three third party intermediaries
 - Two consultancies
 - Three public agencies
 - One trade association
 - One private individual

² <https://www.gov.uk/government/policies/providing-better-information-and-protection-for-consumers/supporting-pages/personal-data>

General commentary

11. We are very pleased with the level of engagement achieved during the consultation period and the number of formal responses received. The majority of respondents to the consultation welcomed the principle of our proposals, which is to improve consumer engagement as well as the method: providing consumers with their key data in a machine readable format.
12. It was recognised that empowering consumers in this way would help them or trusted third parties to make informed decisions about their tariff options. In addition, it was acknowledged that these proposals have the potential to spur the development of applications that improve the accuracy and simplicity of the switching process and could unlock further innovation to benefit consumers.
13. A number of respondents cautioned that in order to reap the maximum benefit from our proposals, we should afford as much flexibility as possible to suppliers in implementing machine readable information on bills. In particular, there was widespread recognition that whilst mandating a particular technology, such as a Quick Response (QR) code, could provide consumer benefits in terms of familiarity and consistency, there were also risks that this could prevent newer, better functioning, formats being adopted and that a particular technology could become obsolete.
14. The Government has always sought to ensure that our proposals do not restrict suppliers' scope to innovate further and can be adapted to future technological change. We therefore welcome respondents' calls to avoid seeking to 'pick winners' when it comes to specific machine readable technologies and our final decisions reflect this.
15. Among those who expressed reservations about aspects of our proposals, some questioned whether the most vulnerable and disengaged energy consumers were likely to make use of technological innovations that required access and familiarity with smartphones, tablets or other hand held devices.
16. Several respondents argued that the case for our proposals had yet to be fully established, in that the use of technologies such as QR codes has been low and typically limited to the most engaged consumers.
17. As explained in our consultation document, this policy has not been taken forward to further entrench any benefits enjoyed by the technologically savvy and most engaged consumers. That is why the principle 'user case' model we have adopted when designing our proposals sees consumers, without access to a smartphone, being able to present their energy bill to a third sector advisor, friend or family member who made use of this technology, who could then upload data to inform an energy cost saving decision (for example, through a third party application cross market tariff comparison).

18. Third party intermediaries and other potential application developers have signalled their intention to develop applications that read and utilise machine readable data. It is clear however, that any development, testing and marketing costs involved for developers could not be justified unless all energy suppliers were required to provide this data and in an easy to access format. Without the applications that use this data it is very difficult to demonstrate the level of consumer take-up and developers would have no incentive to go further than testing 'proof of concept' applications or expressing an interest in future innovation.
19. Several respondents also argued that these measures were unnecessary so soon after the implementation of Ofgem's Retail Market Review reform package, which included information remedies designed to improve consumer engagement.
20. We recognise that the RMR reforms included significant changes to the tariff options available to consumers, as well as the information provided to them and the way it is presented. However these modifications are designed to complement and not supplant the information remedies required under the RMR measures, and have been backed by Ofgem as a potentially useful tool in driving further consumer empowerment.
21. The following sections provide a summary of the responses we received and the Government's response, on each of the consultation questions asked.

Data required

Consultation Question

1.	What data items are required to fully realise the benefits of information available electronically?
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22. The majority of respondents agreed that the 12 items of data required under the midata voluntary agreement were appropriate and should form the basis of the information accessible via the machine readable image.

23. Two respondents questioned whether the inclusion of a customer reference number would be necessary, with one small supplier expressing concern about the data protection implications. The same respondents also argued that there should be an indicator of whether the consumption information was estimated or actual.

24. One large supplier sought guidance on how the consumption of customers on time-of-use tariffs, or who had been with their supplier for less than 12 months, would be displayed, and suggested that the usage (kWh) that has determined the customer's Personal Projection be used.

25. Another respondent argued that the inclusion of MPAN and MPRN codes would leave people open to being switched without consent, and that customers with more than one MPAN may require more than one machine readable image on their bill.

26. A number of respondents suggested additional data items that they believed could enhance and broaden the functionality of the machine readable image, including:

- Tariff end date
- Details, if any, of current tariff's exit fee
- A 'use by' date for the information contained within the machine readable image
- Supplier fuel mix
- Supplier's record on complaints
- The property's Green Deal or EPC status
- Customer's Warm Home Discount or Priority Services Register status
- Customer name
- Future payment method
- Meter type
- Grid supply point (GSP) for electricity

- Local distribution zone for gas (LDZ)
- Information on time of use consumption if relevant
- Online/offline account management preferences
- Address

27. In making suggestions for additional items to be included in the machine readable image, a number of respondents acknowledged that the number of data items required would need to be limited for the sake of simplicity and to prevent the image from becoming too large. Several respondents also stressed the importance of ensuring that the required data items are provided by all suppliers, using the same technical standards, irrespective of the technology used to encode that data.

Government response

28. There has been consistent agreement as to the minimum data items that would be necessary for a consumer to make an informed decision on the best tariff, switching or choice of payment method for their circumstances³. Whilst in response to this consultation some have put forward arguments for including additional information, we have sought to balance the potential consumer benefits of these against the potential cost, complexity and time needed to include them.

29. In determining what data items should be included in a machine readable image on bills and statements of account, it is important to strike the right balance between:

- a) information that could be of potential use to consumers through applications using this data;
- b) requiring too much information which would require an over-size machine readable image;
- c) requiring information that may not be available to energy suppliers billing systems and therefore require system changes, which would negatively impact on cost and complexity; and
- d) ensuring that data required does not expose individuals to unnecessary data protection risks.

30. The data items we put forward in the Consultation were based upon those agreed with the larger energy suppliers as part of the BiS-led midata programme and set out in the BiS feasibility study into QR codes published earlier this year⁴.

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66515/6996-better-deal-energy-consumers.pdf

⁴ “Feasibility study on the use of QR codes in the energy sector” published by BiS and available online at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/276198/bis-14-519-midata-programme-feasibility-study-on-use-of-qr-codes-in-energy-sector.pdf

31. Some of the suggested additional data items can be inferred from or taken by cross referencing additional data sources, for example:
- Details, if any, of current tariff's exit fee
 - Supplier fuel mix
 - Supplier's record on complaints.
32. Some suggested information may not be discernible from suppliers billing system or other data sources and could therefore best be provided by a consumer directly, for example whether they would prefer to see offline or online account management options.
33. We had put forward in the Consultation whether a customer's reference number would be a useful data item that could help better inform either a tariff or supplier switching process. The Government agrees with respondents who argued that this information was unnecessary to realise the consumer benefits of this proposal and that this could potentially increase data protection risks.
34. The Government therefore agrees that all suppliers should provide the data items set out below:
- a) Post Code
 - b) Current provider
 - c) Current electricity tariff (if applicable)
 - d) Current gas tariff (if applicable)
 - e) Current electricity payment method
 - f) Current gas payment method
 - g) Meter Point Administration Number (MPAN)
 - h) Meter Point Reference Number (MPRN)
 - i) Electricity usage over twelve months to bill/statement date
 - j) Gas usage over twelve months to bill/statement date
 - k) Start date (the period covered by the bill)
35. The Government further proposes that where a domestic customer has been with an energy supplier for less than twelve months that their 'annual consumption data' should be estimated in accordance with existing standard licence conditions.
36. Other suggested data items could be useful to help consumers identify the best deal for their circumstances, such as a property's Green Deal status and whether a customer is eligible for the Warm Home Discount or the Priority Services Register. It is not clear however from the responses received to the consultation whether this data would be available from all energy suppliers billing systems and if so, if this information is held in a uniform format.

37. The Government does not therefore seek to mandate the inclusion of these data items; however, we would support and work with energy suppliers in identifying whether other data items could be included in a machine readable image without requiring system changes or otherwise negatively impacting on image size, usability etc.
38. It is clearly vital that the data required is consistent across all suppliers. The seven largest suppliers already provide the required data items to consumers as a .csv file under the midata programme. This will provide a good starting point for ensuring data consistency and we will work with energy suppliers and technology developers in the coming months to identify further work necessary and agree common data standards.

Where and how machine readable images should be sited

Consultation Question

2.	To be most effective for customers where should QR codes be placed on bills and statements of account?
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39. Several suppliers agreed with our proposal that the machine readable image should be placed on either the first or second side of a bill, as this is the page most likely to be retained by a customer.
40. A number of respondents suggested specific locations for the image to be placed, such as at the top or in the middle of the first page, or simply in a “prominent” position. One supplier and the Information Commissioner cautioned that the machine readable image should not be visible through the address window of any communications as a data protection precaution.
41. Other respondents highlighted the challenge of accommodating the machine readable image on pages one or two given the need to account for the bill’s primary purpose – to provide an overview of a customer’s account and often request payment – and the information requirements introduced through Ofgem’s RMR reforms.
42. Only one supplier argued that there was insufficient space to add the machine readable image to pages one or two of bills, and suggested it be placed alongside the ‘Tariff Comparison Rate’ (TCR) box.
43. Finally, one respondent argued that the position of the machine readable image would not matter as long as it was uniform across all suppliers.

Government response

44. We set out in the Consultation document the rationale for placing machine readable images on the first or second side of all bills and statements of account and this view was shared by the majority of respondents who expressed a view, including many energy suppliers who agreed on the importance to consumers of consistency in placement of machine readable images and the need for this to be on one of the first two pages.

45. Ofgem has also looked at the benefits to consumers of clearer information on bills, statements of account and annual statements, as part of the package of information remedies following their Retail Market Review. As a result they have introduced new requirements prescribing information and, in some cases, setting out where this information should be placed in communications to consumers. This work was informed by the Consumers Bills and Communications Round Table Group (CBCRG)⁵.
46. The Government agrees with Ofgem, that any changes to customer communications necessitated by requiring machine readable images should take into account the need for bills to be clear. We are also mindful that the primary purpose of a bill is to prompt payment.
47. The Government therefore welcomes Ofgem's suggestion that we work with the CBCRG to identify and agree a common placement of machine readable images, whilst supporting the view that any machine readable image should be on the first or second side of bills and statements of account. This will ensure that the image is placed in an appropriately prominent position, and is on the page consumers are most likely to bring along to outreach events, whilst affording an opportunity to discuss how this fits with existing requirements.

⁵ A working group constituted by Ofgem to look at the information and communications customers receive.

Consultation Question

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| 3. | Do you agree with the proposed text for the ‘call to action’; if not please propose amendments together with your rationale for them? |
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48. The proposed text of the call to action in the consultation read:

“Scan this image to download your key energy data to your smartphone or tablet. This could help you see if there are better deals available in the market”

49. A number of respondents suggested an alternative text for the Call to Action, while two suppliers suggested Government carry out consumer research on how to make the messaging most engaging.

50. In more general comments, two respondents stated the language in the Call to Action should not assume a consumer may wish to switch supplier rather than tariff as a result of scanning a machine readable image on their bill. Another argued that suppliers should not be required to include a switching prompt on a bill.

51. Several respondents stated that the Call to Action should clearly explain to consumers what scanning the machine readable image could do, what technology would be required and how to use it. There were also recommendations that the text use standard industry language, and be amended to better engage vulnerable groups.

52. With regards to data protection, there was a request that the Call to Action inform consumers how the machine readable image would make use of their data.

Government response

53. The Government consultation set out the rationale for including a call to action to accompany machine readable images on bills and statements of account. This rationale was informed by the conclusions of the BiS feasibility report into QR codes, which set out that “QR codes will need a Call to Action and communication activity to promote the opportunity they provide in energy engagement. A centralized, industry-wide communication is recommended to ensure consumers are made aware of the fact of and the reasons for QR codes appearing on bills and statements so that the benefits for consumers are made known.”⁶

⁶ Pages 17- 18 of the “Feasibility study on the use of QR codes in the energy sector” published by BiS and available online at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/276198/bis-14-519-midata-programme-feasibility-study-on-use-of-qr-codes-in-energy-sector.pdf

54. In consulting on an appropriate call to action to accompany machine readable images, we sought to initiate discussion as to what this should say and what material it should include. It is clear from the range of responses received that there is not a clear consensus on this and that there is considerable potential benefit in testing this with consumers. The Government therefore proposes to work with industry stakeholders, potentially through the CBCRG, to identify and test the most appropriate call to action that meets the objectives set out in the feasibility study.

Consultation Question

4.	Are there communications other than bills or statements of account on which it would be useful to include key customer data in a machine readable format?
5.	What are the costs/ benefits of requiring machine readable information on communications other than bills and statements of account?

55. The majority of respondents agreed that the provision of key customer data in a machine readable format should be limited to customers' bills and statements of account. It was agreed that these supplier communications already displayed the data we set out in numbered paragraph 34 above, which means that implementation costs and data protection issues could be minimised.
56. A number of responses also noted that the receipt of a bill or statement of account is often a key trigger for a consumer to consider whether they might be able to secure a better deal for their gas and/or electricity.
57. Several respondents suggested that machine readable images should also be placed on reminder letters when fixed term tariffs come to an end, and price increase notifications, as these were also key prompts for consumers to consider alternative tariff arrangements.
58. The growth of the fixed term tariff market was highlighted as further evidence of the increasing importance of end of tariff notifications as a 'call to action'.
59. Several suppliers noted that not all of the required data items would be available in the system generating these additional communications and so requiring machine readable information to be presented on communications other than bills and statements of account could create significant technical barriers, including potentially extensive system modifications and necessary testing. This could also create additional costs and affect the implementation timetable.

Government response

60. The Government has sought to implement this policy in a way that maximises the benefits to consumers but which also recognises that any costs incurred by energy suppliers will also potentially impact on consumers. We have therefore been mindful of the need to minimise costs and disruption to energy suppliers required to implement this proposal.

61. The growth of fixed term tariffs and the clear decision point for consumers when they receive end of fixed term tariff notification letters, makes a persuasive argument for extending the scope of these requirements to include such communications. There is a similar case for extending these proposals to include price change notifications.
62. The Government is concerned however, that the costs and complexity to suppliers of changing their systems to include all of the required data items on fixed term and price change notification letters could have a detrimental impact on consumers and impact the timetable for implementing this policy. The Government does not therefore propose to require that machine readable images be printed on communications other than bills or statement of account.
63. The Government will however, seek to work voluntarily with energy suppliers, consumer groups and Ofgem to identify the barriers to and the cost and complexity of extending this requirement to key communications other than bills and statements of account.

How does the data display on an electronic device

Consultation Question

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| 6. | To make the information clear to consumers, is it necessary that each data item be accompanied by a descriptor, such as those provided at paragraph 24 above and, if so; do stakeholders have any comments on these descriptors? |
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64. The majority of respondents agreed with our proposal to require that each data item contained within the machine readable image be accompanied by a descriptor. There was general consensus that the descriptors should be brief to avoid exhausting the capacity of the image, and that the language contained within them should be standardised across the industry.
65. While several respondents agreed with our proposed descriptors, there were also recommendations that the language be cross-checked with language already used on bills and in Ofgem's Confidence Code. One respondent suggested that a working group made up of suppliers and key stakeholders be set up to discuss an agreed set of descriptors.

Government response

66. Requiring key energy data in a machine readable format is intended to stimulate the development of applications that can use this data to help consumers better engage with their supply arrangements and to help them find out about and get onto a better deal. We also expect that key energy data will be used to develop a range of applications that respond to consumer needs, perhaps using this data in conjunction with other data sources to develop energy efficiency services for example. Many respondents to the consultation set out their intention to develop applications that use this data.
67. Energy suppliers may also choose to add a web-link to the embedded data. This link could direct their customers to a bespoke area on a supplier's website, when used in conjunction with a supplier developed application or when scanned using a generic code reader.
68. The Government does not anticipate that the full consumer benefits of this policy will be realised unless machine readable code readers make clear to consumers what data items that are being presented to them.
69. Without descriptors for each of the required data items, consumers would not be able to work out easily what the data was telling them and so could be confusing and off-putting to them.

70. The Government sought, in consulting on the utility of providing descriptors for required energy data, to cater to the needs of consumers who scanned their data into generic code readers and applications.
71. The Government therefore welcomes respondents' agreement that data items be accompanied by relevant definitions and descriptions. We are encouraged by the generally positive response to the suggested descriptors we outlined in the consultation document. There are however potential issues as to the exact wording needed to ensure consumers understand the data, and how to ensure there is consistency with the language agreed through the CBCRG balanced against the size of machine readable image that might be required to accommodate adequate descriptors.
72. The Government will therefore seek to work with the energy industry, through the CBCRG to identify descriptors and with energy industry technical experts to ensure that these are consistent with keeping machine readable images as small as possible.

Machine readable format

Consultation Question

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| 7. | Should the licence modifications limit the range of machine readable formats, for example to those that have data embedded in them and, if so, should we prescribe the minimum image size (2x2cm) of such images? |
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73. The majority of respondents agreed with our proposal that the licence modifications should not seek to limit the range of machine readable formats that can be used to contain the key customer data. There was a consensus that prescribing the machine readable format would limit potential innovation and create a risk that rapid technological change might make the 'chosen' format obsolete.
74. One technology developer also advocated that machine readable formats should specifically include optical character recognition, whereby the required data can be read from the actual text on a bill and not necessarily contained in an image, such as a QR code.
75. One switching service thought that a single prescribed machine readable format was necessary, and stated that the standard should be QR codes given it is the most widely used technology. They further stated that allowing for multiple formats could increase application development and maintenance costs, while consumers who moved between suppliers may have to adapt to various different technologies.
76. Several suppliers questioned whether a minimum size for the machine readable image should be prescribed, citing the importance of flexibility. However, other respondents stated that a minimum size would be useful.

Government response

77. Throughout the design of our proposals, including in the powers taken through the Energy Act 2013, we have sought to avoid limiting innovation by prescribing a specific machine readable format that could be used to access key data from bills.
78. The most established machine readable technology is the Quick Response (QR) code, and their use is growing. We have acknowledged throughout this process that this is a technology that is at risk of short-term obsolescence from richer image recognition and near field communication applications and so in framing licence conditions we have allowed any format meeting the following conditions:

- a) The data must be embedded in a machine readable image rather than hosted remotely through a link to a website. This removes the need for validation steps to access the data which could frustrate the use of machine readable images on bills at face to face outreach events;
- b) Requiring data to be embedded in a single image – removing the need to scan multiple pages of a customer communication to upload all of the required data;
- c) Prescribing the order the data are presented in;
- d) Requiring the image to be in a format that can be scanned and uploaded to a portable electronic device with optical scanning capability (such as a smartphone or tablet device);
- e) Requiring the machine readable format used is publicly available and is free from royalty.

79. We recognise that some developers have already made progress in utilising optical character recognition and other technologies and do not want to stifle these initiatives. We are mindful however, of the need to ensure that consumers are able to clearly identify a machine readable image and what they can do with this that is different to other 'static' data, such as a Tariff Information Label. Whilst our modifications will therefore not prescribe the specific format of the machine readable images, we do require that they meet the criteria above and that any 'image' is clear and distinct from other information on a bill or statement of account.

80. Our proposals for a minimum image size sought to build on the findings of the QR codes feasibility study and ensure that images and the data within them could be utilised by code reading applications.

81. In order to further provide suppliers with flexibility over the design of their customer communications however, we do not propose to set a minimum size for machine readable images. Suppliers will, however, be expected to ensure that the machine readable images they produce are of a size that allows for the data embedded within them to be accurately read and clearly displayed.

82. Images should also be of a size that will catch the attention of consumers, and allows them to clearly understand their purpose and functionality. We therefore recommend that suppliers view the suggested 2cm x 2cm format as the smallest practical size for this purpose.

83. Whilst we are confident that these proposals will allow new technologies to come to the fore, we are mindful of the potential for unintended consequences in drafting licence conditions that might potentially restrain the scope of future development in ways we cannot anticipate. In order to ensure that our proposals do not constrain innovation therefore, we will therefore commit to reviewing the licence modifications before the end of 2018.

Data protection

Consultation Question	
8.	Are there any specific data protection issues relating to trusted third sector advocates utilising machine readable images to inform cross market comparison applications?
9.	If so, what safeguards, if any, can be put in place to ensure data, once used, is not retained in an application?

84. With regard to data protection issues, several respondents emphasised the importance of the way in which third party intermediaries (TPIs) sought to make use of the information contained within machine readable images on bills.

85. Consumer advocates stressed that in seeking permission to access consumers' data TPIs would have to explain clearly how their data would be used, how it would be kept securely and for how long. This would be particularly important with vulnerable groups, given anecdotal concerns among consumers about giving personal information to TPIs. One comparison website also warned that unscrupulous TPIs could use collective switching schemes for data harvesting.

86. A number of respondents noted that if the machine readable image was limited to containing data items that were listed elsewhere on a supplier communication, then there would be no additional data protection risks. While the data contained within the code would not be visible to the consumer, making clear that the data items in any machine readable image were limited to those needed to facilitate a cross market comparison could alleviate concerns.

87. A consumer group stressed that third sector advisors would need to receive appropriate training covering data protection issues before they could make use of consumers' data at outreach events. It was noted that some advisors may use personal devices, and that consumers would need to be informed as to whether their information may be retained on these devices, for what use and for how long.

88. Several respondents proposed that application developers agree to standard requirements in relation to the retention of data. These could include guidelines on the limit of data that could be retained, how long it could be retained for and steps to ensure consumers were aware that their data was being retained. It was further suggested that application developers engage with the Information Commissioner to determine best practice in this area.

89. A price comparison service called for the current guidelines regarding the use of data to remain, adding that TPIs would need explicit authority from consumers who had not undertaken a switch that their data could be used for future marketing purposes.
90. Any third sector organisations using customers' data would need to put in place practices to ensure advocates did not hold on to consumers' data on personal devices.

Government response

91. The Government recognises that when consumers scan a machine readable image containing their key energy data, they must have a clear understanding of who will then have access to that data, how they might use it and how long they will keep it for.
92. We remain convinced that as consumers will need to have their paper bills with them in order for data to be scanned, the risk of customer specific information being accessed without consent is lessened and would almost certainly require theft of the document which already contained all or most of this data.
93. The Government is, however, concerned to ensure that consumers and vulnerable consumers who use this data (for example at outreach events), are fully aware of what data a machine readable contains and that this is used for the purpose intended and for which they have given their consent.
94. The Government therefore commits to undertaking a Privacy Impact Assessment in partnership with the Information Commissioner's Office to ensure that best practice is followed in this regard. We are working with colleagues in the Department of Business, Innovation & Skills as part of the midata programme to provide third parties with secure, automated access to consumers' data, with those consumers' consent. As part of this, we are discussing with third parties and application developers appropriate standards in relation to the safe and ethical retention and use of data by third parties.

Timings

Consultation Question

10.	Are there any further issues to consider with regard to the proposed implementation timetable?
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95. A number of energy suppliers expressed concern about the proposed implementation timetable. Respondents focussed on the number of regulatory obligations suppliers are currently in the process of delivering, including the transition to a shorter switching period. Suppliers explained that an obligation to place machine readable images on bills within the proposed timetable would place an additional burden on already stretched resources, given the need for testing as well as bill and system redesigns.

96. Some smaller suppliers suggested implementation should be delayed so that the RMR reforms are given time to take effect and to see if recent increases in the number of customers switching to smaller suppliers can be sustained. A consumer group said that the implementation timetable should take account of need for third sector advisors to be equipped with the smart phones or tablets necessary to make use of consumers' data.

97. Other comments on timing included that all suppliers should be required to implement the proposals at the same time.

Government response

98. Whilst the largest tranche of regulatory changes, the measures required under Ofgem's Retail Market Review reforms are now in place as of June 2014, the Government recognises that domestic energy suppliers still face practical challenges to make system changes to deliver smart meters, quicker switching and midata.

99. Through public statements and policy direction, Government has clearly signalled its intent to develop measures to require machine readable images. We have worked with energy suppliers to deliver on the voluntary agreement they signed with the Deputy Prime Minister in April 2012, to explore the possibility of putting machine readable images on bills by spring 2013. Despite an industry working group study of spring 2013, concluding that there were no significant barriers to the use of QR codes we have seen little voluntary progress by energy suppliers to implement these proposals.

100. The Government is therefore determined to ensure that this policy is implemented in a way that will allow consumers to benefit as soon as practically possible. We also seek to ensure, where possible that implementation is consistent with the related implementation of automated access to energy data through the midata programme.
101. We also recognise however, that this needs to be consistent with energy suppliers' ability to design, develop and test the necessary system changes.
102. In addition, whilst there is no statutory obligation to do so, it is a principle of good regulation that stakeholders are afforded an opportunity to comment on the draft licence modifications that we intend to publish alongside this Response. The Government therefore seeks stakeholder responses to the draft licence conditions, not longer than four weeks after the publication of this Response, on or before 9th October 2014.
103. The Government further proposes to lay final licence modifications following the Conference recess and, with the will of Parliament, intends that the modifications will be in force by December 2014. The date of implementation will be determined following the work we plan with Ofgem, energy supply companies and other stakeholders through the autumn to resolve outstanding issues, but our aim remains that consumers should benefit from these requirements as soon as possible.
104. We are confident however, that the timetable set out above will not only ensure that consumers can have confidence in the final product but will also allow sufficient time for developers to develop and test applications that use this data.

Costs of implementation

Consultation Question	
11.	We invite suppliers' assessment and analysis of the likely monetised set up and on-going costs, including labour costs, of implementing these proposals.
12.	If you are a supplier, what steps will you have to take to comply with the proposed licence modifications? Are there any additional actions you will have to take other than acquiring software to produce the machine readable image, redesigning the bill and changing the bill generation and printing processes, and extra printing over the years?

105. Respondents identified that suppliers would face both an initial set-up cost and on-going running costs in implementing our proposals. Set-up costs would include acquiring software to produce the machine readable image, bill redesign and as well as changes to the bill generation and printing processes.

106. Three of the six largest domestic energy suppliers, and one smaller supplier, provided monetised estimates of the set-up costs associated with the Government's proposals. These estimates generally assumed minimum implementation requirements in line with the proposals laid out in our consultation: that machine readable images be limited to bills and statements of account; that suppliers have flexibility in determining where the image is placed; and that there are no subsequent changes to the specifications of the image.

107. For the larger suppliers, estimates were in the range of £150,000 - £500,000 per supplier. However, only one of these three large suppliers provided a detailed breakdown of these costs. The small supplier respondent estimated set up costs in the region of £45,000 but also provided no detailed breakdown.

108. These one-off cost figures are substantially higher than estimated in consultation stage IA. Despite this, most energy suppliers who responded to the consultation (10 in total) suggested that the driver of these costs would be the cost of labour used to re-design the bill and billing systems, consistent with the Government's approach in the IA.

109. One large supplier cost estimate included the likely costs of additional items, not required by licence modifications, such as the development of digital platforms to improve the customer experience, and applications to utilise the data embedded in the machine readable images. These high estimates reached up to £800,000 to £1m for full implementation.

110. Smaller suppliers stated that many of the modifications required for implementation would involve investment in new machinery and they would need to seek external help from contractors or consultants. They explained that this would increase their start-up costs, which are already disproportionate on a per customer basis given their smaller customer numbers compared to larger suppliers who have the necessary expertise in-house.
111. No respondent provided monetised estimates of the on-going costs of this policy, which as outlined in the consultation stage IA are essentially ink-on-paper costs. However two of the largest six energy suppliers expressed concern that, depending on the positioning of the machine readable image on bills and statements of account, the bill length may have to increase by one page to accommodate the format. One of these suppliers also expected there to be on-going costs associated with the quality assurance and testing of the machine readable formats.
112. It was also argued that suppliers may face increased queries from customers who were requesting information on what the machine readable image was for and why their bill had changed. These costs were generally estimated to be low.
113. Suppliers also noted that they would need to change their internal policies and training as with any change implementation process.

Government response

114. The BiS feasibility study⁷ set out that implementing this proposal would be low cost. The Government put forward an estimate of these costs in the Impact Assessment that accompanied the Consultation, and sought views on these estimates as part of the consultation exercise.
115. Despite the large number of consultation responses, unfortunately Government did not receive enough evidence to provide highly accurate cost estimates in the final stage IA, particularly with regard to smaller independent suppliers. Government recognises that the cost estimates provided in the consultation stage IA were a severe underestimate and has incorporated the evidence it did receive into the final stage IA.
116. Due to the particular lack of evidence received on the costs of implementation for smaller independent suppliers, the Government has taken a conservative view in estimating these costs for the final IA. These costs should be considered an upper bound for the costs which small suppliers may incur as a result of this policy.

⁷ BiS (2014) 'Feasibility study on the use of QR codes in the energy sector', p.16 [pdf], available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/276198/bis-14-519-midata-programme-feasibility-study-on-use-of-qr-codes-in-energy-sector.pdf

117. It should also be noted that the costs estimated in the final IA are calculated on the basis that suppliers will incur 'unwinding' costs when this policy comes to an end in 2019, as a result of having to undo changes made to their billing systems. However, no consultation respondent raised this as a potential issue so Government considers it highly likely that these costs may turn out to be lower than presented in the final stage IA.
118. The Government will be looking to work with suppliers, to discuss how this policy can be implemented in as low cost way as possible ahead of implementation.

Consultation Question

13. **Are the costs of implementation likely to be disproportionate for smaller suppliers? Please provide supporting evidence.**

119. A number of smaller suppliers argued that our proposals would disproportionately impact them. They stated that the fixed costs of implementation were not scalable, and would therefore disadvantage smaller operators. One called for implementation to be delayed by a year so that the Government could monitor the growth of the smaller suppliers in the meantime. It was also argued that the vulnerable consumers targeted at outreach events are less likely to switch to smaller suppliers due to lower brand recognition.

120. Several respondents agreed with our position that these proposals should apply to all suppliers in order to ensure that all consumers can benefit from the power of the own data. Furthermore, one large supplier argued that any policy intervention aimed at raising engagement, and ultimately increasing switching rates, must equally apply to all licensed energy suppliers or else there may be a distortion of the market.

Government response

121. Whilst the we have consistently maintained that all consumers should benefit from these proposals and estimated implementation costs for businesses to be relatively low, the Government is mindful that any fixed costs incurred by businesses implementing our measures will have to be spread across a narrower customer base by smaller suppliers and we therefore sought evidence on the likely impact on smaller suppliers, as part of the consultation.

122. Start-up costs required to implement this policy will depend on a range of factors including the flexibility of billing systems and the external IT expertise required as much as the size of a supplier but inevitably fixed costs are likely to impact more on companies with a smaller customer base.

123. In maintaining flexibility as to the type of machine readable image that can be considered compliant with Licence Conditions we hope that implementation costs for all energy suppliers can be reduced further. The Government will also look to work with smaller suppliers to identify ways to implement this policy in as cost effective and proportionate way as possible, whilst maintaining consumers' ability to access their own key data via a machine readable format.

124. Some consultation respondents argued that smaller suppliers are likely to be amongst the major beneficiaries of the increased consumer engagement and switching rates which are expected to result from this policy. Recent industry data on energy supplier switching provides some evidence to support this argument, with switches to smaller suppliers representing a rapidly increasing proportion of total switches over the last two years. In August 2012 the proportion of customers who switched their electricity provider was 9%; by June 2014 it is estimated to have grown to 49%⁸.
125. Based upon the evidence received however, the Government believes that a significant and sufficient proportion of the intended benefits of this policy can be achieved without including small and micro businesses within the scope of the regulation. In recognition of the proportionately higher cost impacts on small and micro business suppliers in implementing this policy the Government therefore proposes to exempt energy suppliers with fewer than 50,000 customers for a given fuel from this regulation. This exemption is in accordance with guidance in the Better Regulation Manual⁹.
126. The evidence received has been incorporated into the final stage Impact Assessment which we are publishing alongside the Government Response.

⁸ Energy UK (2014) 'Energy Switching – April 2014', p.3 [pdf], available at: <http://www.energy-uk.org.uk/publication/finish/5-research-and-reports/1105-energy-switching-figures-april-2014.html>

⁹ Section 1.6.9 of the Better Regulation Manual, available online at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211981/bis-13-1038-better-regulation-framework-manual-guidance-for-officials.pdf

Consultation Question

14. If you are an energy supplier, what is your assessment of the non-monetised cost of implementing the proposals over the lifetime of the programme?

127. Three of the largest six licenced energy suppliers listed possible non-monetised costs they may incur as a result of the Government's proposals. These included increased customer queries as a result of the addition of machine readable images to bills, and the potential for confusion as the image on previous bills would provide consumers with potentially misleading information.
128. Two of the largest six suppliers expressed concern that the proposals would only benefit their most engaged customers, and had the potential to further alienate vulnerable and disengaged consumers.
129. Suppliers also noted that they would need to pay additional customer acquisition fees if the development of machine readable switching applications increased switching rates. If the proposals led to an increasing numbers of switches via TPIs, suppliers would have to pay more commission to these services. This would be a cost that could be recovered through increased prices.
130. One large supplier also noted that the demands on bill space made by the inclusion of machine readable images would limit further innovation in this area. However the same supplier also expressed a view that mandatory required information on bills now takes up all the available space, thereby negating any impact of the proposed policy in terms of displacing marketing messages.
131. Finally, one large supplier was concerned that a rushed implementation could prove ineffective and undermine consumer trust in the sector.

Government response

132. As outlined in the final stage IA which accompanies this response document, there has been a recent rapid increase in the take up of smartphones and tablets amongst 65-74 olds, who typically have low levels of media literacy. As of late 2013, 20% of those in this age group used a smartphone (up from 12% the year before) and 17% used a tablet PC to go online (up from 5% the year before). Therefore, while Government recognises the potential for machine readable images to confuse and even alienate some customers, the extent of this is likely to be low and fall over time.

133. The Government recognises that increased switching rates may be costly for suppliers in terms of customer acquisition fees and commission paid to TPI's. However, this policy is not designed or expected to generate unnecessary 'churn' in the domestic retail supply market, but to overcome an informational barrier to consumer engagement. Switching resulting from increased engagement drives competitive pressure in the market, leading to efficiency gains. Government considers that suppliers would only offer commission to a TPI if it was in their commercial interests i.e. a net benefit to them.
134. Although proposed licence modifications don't prevent energy suppliers placing other useful and/or marketing information on energy bills, the Government appreciates that mandating machine readable formats could limit the ability of suppliers to provide this to consumers. This policy however, is designed to overcome a specific barrier to consumer engagement in the retail energy market – the lack of clarity in the information provided by suppliers on tariff options and energy usage.¹⁰ Therefore Government considers it essential that the format be included on bills and statements of account, as the benefits they afford to consumers should outweigh any foregone benefits from other information which suppliers may provide.

¹⁰ Ipsos MORI (2012) '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)', pp.25-27 [web], available at: <https://www.ofgem.gov.uk/ofgem-publications/39452/consumer-engagement-energy-market-information-needs-and-perceptions-ofgem.pdf>

Consultation Question

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| 15. | We further invite third party intermediaries to provide their assessment of the likely costs of developing applications that will facilitate frictionless upload of the data to inform cross market comparisons and provide comments on their potential, including benefits to consumers? |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

135. Several respondents, including application developers and third party intermediaries, provided estimates of the likely costs of developing applications that would facilitate frictionless upload of the data to inform cross market comparisons. There was agreement that these costs would measure in the tens of thousands of pounds, and would be unlikely to exceed £100,000.
136. A consumer advocacy organisation warned that any calculation of the cost of developing applications should take account of the need to devise robust data protection policies and provide third sector advisors with tablets/smart phones.
137. A range of respondents were highly positive about the potential benefits to consumers of the development of applications by TPI's to provide frictionless, tailored cross-market tariff comparisons. These included easier switching, increased accuracy of the switching process, increased levels of trust in the switching process and improvements to engagement levels.

Government response

138. The Government is encouraged by the response from TPI's to this consultation and in particular the clear signal that they will look to invest in applications that use key energy data to help consumers make easier, more accurate and more informed tariff choices.
139. In the coming months ahead of implementation, Government will continue to seek engagement with application developers and TPI's that commission applications in order to ensure that licence modifications can be made to meet their requirements. Government will also work with suppliers on the 'call to action' and placement of machine readable images on bills and statements of account, so that the potential benefits from application development can be maximised.

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