



Department  
of Energy &  
Climate Change

# Consultation on amending Smart Meter In-home Display Licence Conditions

Smart Metering Implementation Programme

3 August 2015

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Any enquiries regarding this publication should be sent to us at [smartmetering@decc.gsi.gov.uk](mailto:smartmetering@decc.gsi.gov.uk).

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# General information

## **Purpose of this consultation:**

This consultation seeks views on proposals to amend smart metering in-home display Licence Conditions.

**Issued:** 3 August 2015

**Respond by:** 23 September 2015

## **Enquiries to:**

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## **Territorial extent:**

This consultation applies to the gas and electricity markets in Great Britain. Responsibility for energy markets in Northern Ireland lies with the Northern Ireland Executive's Department of Enterprise, Trade and Investment.

## **How to respond:**

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Responses to this consultation should be sent to [smartmetering@decc.gsi.gov.uk](mailto:smartmetering@decc.gsi.gov.uk) no later than 23 September 2015.

## **Additional copies:**

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## **Confidentiality and data protection:**

Please note that DECC intends to publish the individual responses to this consultation on the [GOV.UK website](http://gov.uk). This will include a list of names or organisations that responded but not people's names, addresses or other contact details. You should therefore let us know if you are not content for the response or any part of it to be published. If you indicate that you do not want your response published we will not publish it automatically but it could still be subject to information requests as detailed below.

Further, information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you do not want your individual response to be published on the website, or to otherwise be treated as confidential please say so clearly in writing when you send your response to the consultation. For the purposes of considering access to information requests it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

**Quality assurance:**

This consultation has been carried out in accordance with the [Government's Consultation Principles](#).

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

DECC Consultation Co-ordinator  
3 Whitehall Place  
London SW1A 2AW  
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# 1. Executive Summary and Introduction

## Introduction

- 1.1. The Government's vision is for every home and smaller business in Great Britain to have a smart meter. The roll-out of smart meters by energy suppliers will play an important part in Britain's transition to a low-carbon economy, as well as help us meet some of the long-term challenges we face in ensuring an affordable, secure and sustainable energy supply.
- 1.2. Smart Meters are the next generation of gas and electricity meters. They will offer a range of intelligent functions and provide consumers with more accurate information, bringing an end to estimated billing. Consumers will have near-real time information on their energy consumption to help them control and manage their energy use, save money and reduce emissions.
- 1.3. Energy suppliers are required to take all reasonable steps to install smart meters in GB domestic and smaller non-domestic premises by the end of 2020. A standard smart metering installation will in most instances include gas and electricity smart meters, an In-Home Display (IHD) for domestic premises, and a communications hub (typically co-located with the electricity meter).
- 1.4. These devices will communicate with each other via a Home Area Network (HAN), as defined by the Smart Metering Equipment Technical Specifications (SMETS). Suppliers are required to make consumption and tariff information available to the consumer via the HAN. This will allow consumers to see energy information on their In-home Display, but also allow them to link other smart devices to the HAN<sup>1</sup>.

## Background and Purpose of this Document

- 1.5. Suppliers are required by the terms of their standard supply licence (the 'Licence Conditions') to offer all domestic consumers an IHD where they install a smart metering system (the 'IHD mandate'). The IHD has been a longstanding requirement under the smart metering implementation programme, and is a critical part of our commitment to put consumers in control of their energy use.
- 1.6. For many consumers, the IHD will be the first opportunity to visualise their energy consumption: how much they use, when they use it, and how much it costs them. IHDs provide the data to help begin a consumer's journey towards increased energy efficiency.
- 1.7. A significant proportion of the expected benefits of the smart metering programme are delivered by domestic consumer energy saving (some £4.3 billion<sup>2</sup>), facilitated by the

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<sup>1</sup> For more information about how data from smart meters is expected to transform the market for energy services see: <https://www.gov.uk/government/publications/smart-meters-smart-data-smart-growth>

<sup>2</sup> DECC (2014) *Impact Assessment*, available at: [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/276656/smart\\_meter\\_roll\\_out\\_for\\_the\\_domestic\\_and\\_small\\_and\\_medium\\_and\\_non\\_domestic\\_sectors.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/276656/smart_meter_roll_out_for_the_domestic_and_small_and_medium_and_non_domestic_sectors.pdf)

IHD and communication activities from suppliers and Smart Energy GB (the organisation set up to ensure that consumers understand smart meters and their benefits).

- 1.8. The rationale for the IHD mandate is supported by a strong evidence base, as set out in the smart metering impact assessment. The findings of the Early Learning Project (ELP) published in March 2015<sup>3</sup> provide further evidence confirming that IHDs are central to consumer engagement – with many consumers seeing the IHD as ‘the smart meter’. The ELP showed that, in most cases, consumers accepting an IHD were continuing to use them up to two and half years after installation. Continued use of the IHD was also linked to energy saving benefits. In addition the research identified convenience benefits to pre-payment consumers.
- 1.9. There is evidence that other forms of feedback may provide additional benefits. Innovative forms of feedback might, for example, integrate smart meter data into other devices, including tablets, smart phones or even televisions. However there is very little UK or international research in this area. Unknowns include whether such alternatives are likely to be effective and enduring methods of engaging consumers and whether they would add to the energy saving benefits of IHDs. Whereas IHDs have been shown to be accessible and used by most consumer types, the characteristics of consumers who would use alternatives to IHDs are also not understood.
- 1.10. This consultation considers how the Government could facilitate supplier trials of alternative energy consumption engagement tools under the Smart Meter Programme. The Government wants to understand if the IHD mandate remains optimised for the costs and benefits accruing to consumers. To this end we want to support innovation and gather evidence on the performance of alternative approaches. We want to do this in a way that protects and promotes the current IHD mandate until robust evidence is available to consider any alternative policy requirements.

## Summary of Proposals – reinforcing the IHD mandate

- 1.11. The IHD mandate requires suppliers to offer an IHD at any domestic premises where they install a smart metering system. This is to ensure that IHDs are the primary smart meter data consumer engagement tool, as they are a proven means of educating and engaging consumers.
- 1.12. This does not preclude suppliers from offering their customers, where they so choose, a different type of engagement tool in addition to an IHD. The Government has never intended however for the offer of an alternative engagement tool to undermine the offer of an IHD. In response to issues raised by Ofgem and industry that Licence Conditions may allow an interpretation that does not support this policy intent, chapter 2 proposes some amendments to the Licence Conditions to clarify and reinforce the IHD mandate.
- 1.13. Significant uptake of other unproven engagement tools risks reduced energy and bill savings accruing to consumers at an individual household level, creating a risk to delivery of the Programme’s benefits that could be substantial.

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<sup>3</sup> DECC (2015) *DECC’s Policy Conclusions: Early Learning Project and Small-scale Behaviour Trials*, available at: [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/407539/1\\_Early\\_Learning\\_Project\\_and\\_Behaviour\\_Change\\_Trials\\_Policy\\_Conclusions\\_FINAL.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/407539/1_Early_Learning_Project_and_Behaviour_Change_Trials_Policy_Conclusions_FINAL.pdf)

## Summary of Proposals – allowing for trials of IHD alternatives

- 1.14. The Government would like to see robust evidence on the benefits offered by alternative and innovative approaches to engaging consumers with their smart meter data. We recognise that for some types of consumer, presenting real-time data on alternative devices might provide additional benefits, whilst for others alternative approaches exploiting social or behavioural mechanisms may best engage them. However, there is currently a lack of evidence on the enduring consumer benefits of such alternative tools for different types of consumers with smart meters.
- 1.15. Chapter 3 therefore sets out our proposals to enable suppliers to conduct trials offering IHD alternatives. This would be delivered by amending the existing Licence Conditions to enable suppliers to apply to the Secretary of State for a derogation from the requirement to offer IHDs when installing smart meters. Chapter 3 also proposes principles and assessment criteria that would be set out in a guidance document for suppliers wishing to apply for a derogation including the scope, minimum functionality and trial methodology.
- 1.16. Our intention is for this derogation process to be time limited (i.e. not available on an enduring basis) and that the evidence gathered be submitted to DECC to inform considerations on whether the existing Licence Conditions remain optimised for consumers or whether amendments are needed. Suppliers will remain obligated to deliver smart meter systems to GB households by the end of 2020.

## Next Steps

- 1.17. The Government is using this consultation to gather comments and further evidence to inform its IHD policy and design decisions. Views are sought on our proposals and the legal drafting to implement this policy into regulation.
- 1.18. At the same time as the Government response to this consultation is published the proposed amendment to suppliers' Licence Conditions will be laid in Parliament as required by Sections 88 and 89 of the Energy Act 2008. If no objection is raised in Parliament during the 40 day period, we would expect it to come into legal force around the turn of the year.

## 2. Reinforcing the IHD mandate

*A key feature of the roll-out of smart meters is that energy suppliers must offer domestic consumers an In-home Display free of charge when they install a smart metering system. This section sets out proposals for ensuring this policy intent is fully met.*

### Introduction

- 2.1. The smart metering programme is focused on consumer benefits. At the heart of this is the mandatory provision of real-time energy consumption information over the Home Area Network (HAN), alongside the requirement to offer domestic consumers an IHD free of charge when they install a smart metering system (the IHD mandate). An IHD can help consumers understand and optimise their energy use, helping them to save money and play their part in reducing carbon emissions.
- 2.2. The IHD is the most visible part of the smart metering system for domestic consumers. It is the beginning of a consumer's journey towards increased energy efficiency, enabling better knowledge and motivation for taking energy saving action and engagement with the energy market. As defined by the IHD technical specifications, the IHD must meet minimum functionality requirements, including displaying information on:
  - Current and historical electricity and gas consumption;
  - Usage in pounds and pence as well as kilowatts and kilowatt hours; and
  - Ambient feedback that allows consumers to easily distinguish between high and low levels of current consumption.
- 2.3. For those on pre-payment meters (PPM), the IHD will also make checking their pre-paid balance simpler. The Early Learning Project found that in many cases, the IHD acts as a substitute for a poorly accessible meter, and therefore provides pre-pay customers with a more convenient way of managing their money.
- 2.4. The IHD is intended to be a universal offering to all consumer segments and geographic locations. The IHD mandate is expressed as an offer to the customer, which the customer can turn down should they choose. Suppliers are not prevented from offering other engagement tools in addition to an IHD.
- 2.5. We understand that Licence Conditions may allow an interpretation that does not support this broad policy intent with some suppliers now considering promoting IHD alternatives as an either/or offer i.e. suppliers would offer the alternative engagement tool on the condition that the consumer forgoes the IHD offer.
- 2.6. There is a risk that if this approach were adopted broadly it could lead to significant numbers of unproven alternative engagement tools being taken up by consumers. This could lead to reduced energy and bill savings accruing to consumers at an individual

household level, creating a risk to delivery of the Programme's benefits that could be substantial.

2.7. The IHD is part of a suite of behavioural drivers (including real time feedback, energy efficiency advice, accurate and regular bills and wider engagement activities) that lead collectively to projected domestic savings of some £4.3bn.

## Consideration and proposals

2.8. We want to ensure that the IHD policy intent is clearly reflected in the supply Licence Conditions. We want to support consumer offers for engagement tools in addition to IHDs where they can support that consumer in making further energy savings. At the same time, we want to prevent alternative engagement tools becoming the primary data access device where we have no evidence on how well they allow a consumer to achieve enduring energy savings.

2.9. We are therefore proposing to explicitly require that the promotion of any other engagement tool to a consumer receiving a smart meter is additional to and cannot undermine the IHD offer. This is in line with the policy intent behind the IHD mandate and will give us confidence in achieving the envisaged energy savings. Doing nothing would leave the Programme with an unmanaged risk to its business case benefits being realised.

2.10. We have considered several implementation approaches:

- One approach would be to completely prohibit suppliers offering anything other than an IHD during the install visit. Whilst this would remove the risk posed to our benefits case we do not want to close off the opportunity and potential value in allowing suppliers to promote and provide 'additional' devices and services at the installation point. This could include home energy reports, normative benchmark comparisons or other means by which consumers could help to better understand and act on information about their energy use.
- Another approach would be to strengthen requirements (both in the Licence Conditions and in the SMICoP) on the advice and information suppliers are required to provide consumers when offering an IHD. In theory this should reinforce the benefits of the IHD over the alternative and mean it was more likely to be taken up by the customer. Our view is that this would not sufficiently close off the risk and that an alternative offer could still be made more attractive.
- Our preferred and therefore proposed approach looks to strengthen the existing requirements in the Licence Conditions to reinforce the need for the IHD offer to be unconditional and not in any way undermined by another offer. We believe this provides an appropriate balance as suppliers would still be able to promote other engagement tools in addition to the IHD should they choose to, whilst reinforcing the IHD offer.

2.11. We would welcome views on this proposal. This should be considered in the context of the proposals set out in chapter 3 in relation to enabling controlled trials of IHD alternatives.

## Consultation Questions

- |    |   |
|----|---|
| 1. | Do you agree with the preferred approach for closing off the risk to the IHD offer summarised at paragraph 2.10c? |
| 2. | Do you have any comments on the proposed legal drafting amending IHD Licence Conditions at Annex 2?               |

## 3. Allowing for trials of IHD alternatives

*This chapter considers the policy and design implications of enabling suppliers to undertake trials of other energy use engagement tools as part of their smart meter rollout instead of offering consumers an IHD.*

### Introduction

- 3.1. It is important that consumers are given appropriate tools to access their energy consumption and tariff data easily so that they are prompted to take action to reduce their energy usage thereby benefiting from energy bill savings. To date, GB and international evidence suggests that IHDs are the best tool to enable consumers to do this. The IHD mandate (as discussed in chapter 2) has been in place since 2012.
- 3.2. Since we introduced the IHD mandate, we have reinforced a consumer's right to access their energy data by introducing operational Licence Conditions that require suppliers to establish a Home Area Network (HAN) over which energy and tariff information is available. It also obliges suppliers to take all reasonable steps to connect alternative data access devices to a HAN where requested to do so by the consumer and the device is technically capable of connecting.
- 3.3. The IHD has always been seen as a first important step to improving consumers' understanding of their energy usage. In introducing the IHD mandate we recognised that consumers would have different preferences for the way they would like to receive information about their energy consumption. We expected that suppliers and other service providers would have commercial incentives to build on the minimum IHD technical specifications, for example by providing a wider range of services around information on usage or additional functions. We want suppliers to be motivated to provide their customers with the suite of engagement tools which can best allow them to understand and act on their energy use.
- 3.4. There is evidence that other forms of feedback may provide additional benefits. The Government's Energy Demand Research Project<sup>4</sup> included trials with historic feedback, and concluded that such other forms can be useful. Other routes may be less effective; the ELP synthesis literature review<sup>5</sup> notes that consumers rarely use web-based feedback from utility sites, or even from third-party sources, and that such feedback appears to be effective mostly for people who have already been engaged.
- 3.5. The ELP synthesis argues that other forms of feedback (for example historic, written analysis) are likely to complement real-time feedback provided by the IHD. This may be because different forms of feedback work in different ways and serve different purposes e.g. historic feedback being more useful for managing heating energy use, and an IHD for other purposes.

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<sup>4</sup> <https://www.ofgem.gov.uk/gas/retail-market/metering/transition-smart-meters/energy-demand-research-project>

<sup>5</sup> Smart Metering Early Learning Project: Synthesis report – Annexes p. 45

- 3.6. Feedback is an area of ongoing innovation, and over time the Government expects that consumption data will be used in a variety of ways to deliver consumer benefits, both by suppliers and other parties. Although IHDs supplemented by written information (e.g. home energy reports) currently appear to be an effective combination, it is possible that innovation could lead to the development of superior ways of engaging some types of energy consumers.
- 3.7. The Government's Early Learning Project research identified that some consumers (in particular the more technologically savvy) express the desire for other sorts of engagement tools, such as via mobile phones<sup>6</sup>. Some suppliers and alternative service providers suggest that other engagement tools such as this offer the potential for greater energy savings than an IHD (possibly at lower costs). The evidence base for these innovative engagement tools alongside smart meters is however weak or non-existent. Some suppliers also suggest they have been constrained from deploying other engagement tools by the current Licence Conditions, as they always have to offer the IHD, and there is a risk of having to provide both an IHD and the alternative free of charge, with associated duplication of costs.

## Consideration and proposals

- 3.8. The central aim of allowing trials of IHD alternatives is to encourage suppliers to innovate and offer consumers other means of engaging on their energy use, as part of their smart meter roll out. We want to collate robust evidence on the value to consumers of these alternative engagement tools, both in terms of energy saving and the consumer journey. This can help the Programme assess whether the benefits to consumers under the current IHD policy continue to be realised for the least cost.
- 3.9. The primary risk with allowing suppliers to undertake trials of IHD alternatives is that the alternative could be ineffective and the consumer does not make the same energy savings as someone taking up an IHD. More broadly, whilst we want suppliers to take advantage of the opportunity to come forward with trials it is imperative that this does not distract them from escalating smart meter installation rates to meet the 2020 roll out mandate.
- 3.10. We believe this primary risk is outweighed by the benefits of allowing such trials to take place under the smart meter framework, including:
- Cost reduction. It is possible suppliers could promote cheaper devices capable of delivering the same or greater benefits for some consumers;
  - Suppliers would be encouraged to trial a wider range of products which could build capacity for a broader energy services approach;
  - Provides opportunities for manufacturers and vendors of innovative engagement tools to work with suppliers to develop the evidence base for their product; and
  - Provides the Government with evidence to ensure that the IHD mandate remains optimised.

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<sup>6</sup> Smart Metering Early Learning Project: Consumer survey and qualitative research p43: <https://www.gov.uk/government/publications/smart-metering-early-learning-project-and-small-scale-behaviour-trials>

3.11. Allowing suppliers to trial alternatives introduces both risks and opportunities but on balance we believe it is an important step to encourage innovation and gather an evidence base in order to ensure that we continue to drive consumer savings through the Programme in the most cost effective way. The proposed implementation approach and trial design requirements (see below) seek to minimise the risks as far as possible.

## Implementation approach

- 3.12. Suppliers must meet various requirements set out in the standard Licence Conditions related to the offer, installation and maintenance of an IHD. For example, when they install a smart metering system the supplier must provide the consumer with accurate information concerning the benefits of an IHD. Equally, should the consumer initially decline the offer of the IHD the supplier must provide an IHD where the consumer subsequently requests one within 12 months of their smart meter installation. Suppliers must also comply with the smart meter installation code of practice (SMICoP)<sup>7</sup>. The IHD must also meet a certain minimum level of functionality by being compliant with the IHD technical specification.<sup>8</sup>
- 3.13. Our ambition is to provide suppliers with flexibility to innovate within the broad scope of the Programme whilst at the same time protecting the business case benefits. We consider that consumer interest will be best served by minimising the number of constraints placed on suppliers in undertaking such trials in order to promote innovation and evidence gathering.
- 3.14. Our proposed approach is therefore to avoid specifying detailed trial constraints in legislation by introducing a Licence Condition that allows suppliers to apply to the Secretary of State for a derogation from the requirement to offer an IHD when installing a smart metering system. These trials would be available for a specified period of time and subject to such conditions as the Secretary of State may direct. The derogation process will offer Government the opportunity to steer, accept or reject the applications which are submitted.
- 3.15. To support the derogation application process we will publish a guidance document to suppliers ahead of the derogation window opening to clearly set out our expectations of trial activity, alongside the minimum information requirements suppliers should provide when submitting derogation requests and our criteria for assessing those derogation requests. These expectations are broadly framed below, but will be developed further in light of consultation responses as well as ongoing work with industry (under the auspices of the Smart Metering Delivery Group) to consider what good trials of alternative engagement tools should look like.
- 3.16. In addition we propose to set in Licence Conditions a backstop date by when derogation applications would need to be received by the Secretary of State and a requirement to offer all trial participants an IHD (or the opportunity to retain their alternative engagement tool) at the end of the trial period.

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<sup>7</sup> Available at: [www.electralink.co.uk/services/governance-management/smart-meter-installation-code-of-practice-smicop](http://www.electralink.co.uk/services/governance-management/smart-meter-installation-code-of-practice-smicop)

<sup>8</sup> The IHD technical specifications are available at <https://www.gov.uk/government/publications/smart-metering-implementation-programme-technical-specifications>

- 3.17. The main alternative implementation option to allow for trials of IHD alternatives would be to include more detailed and prescriptive requirements in the Licence Conditions about the scale of allowable activity, the trial design and outcomes, but to limit Government intervention and oversight beyond this. We do not believe this is the right approach as it will take the Government longer to define what we want the Licence Conditions to include or exclude, thereby delaying trials and evidence gathering. By placing more requirements in Licence Conditions it also risks limiting the sort of innovation which can come forward.
- 3.18. A middle option would be to extend a number of but not all of the requirements currently in place for IHDs onto alternative approaches. These are well established IHD requirements which stemmed from quantitative and qualitative trial evidence as well as consultation exercises. For instance, existing requirements include that the IHD device provide ambient and real-time information whilst it also needs to be provided for free and maintained for 12 months. We do not propose to copy these requirements across to trial activities as they will be restrictive of the type of alternative tool allowable, reducing the potential evidence benefits of trials.

## Requirements and Principles

- 3.19. This section sets out our current thinking on those areas that we believe should be taken into account by suppliers in developing and executing trials. It highlights the criteria which may be considered by the Secretary of State in determining whether to issue a Direction granting a derogation. We welcome comments on these considerations and will develop these matters further for inclusion in the guidance document. This section also sets out in more detail what we propose is placed in the enabling Licence Conditions (key proposals in bold).

### Core requirements

- 3.20. **The derogation from the IHD mandate would expressly be for suppliers to conduct trials of alternative energy use engagement tools.**
- 3.21. Any application for a derogation will need to be in line with the general policy intent of ensuring consumers are provided with engagement tools based on both their electricity and gas smart meter data so as to engage them further in reducing their energy consumption and increasing their interest in engaging with the energy market. To influence any change in enduring policy requirements the fundamental approach will however need to be broadly replicable by other market participants.
- 3.22. When applying for a derogation suppliers will at a minimum need to demonstrate:
- that they have a reasonable expectation that the alternative approach will lead to regular and sustained engagement with energy consumption information and in turn energy savings;
  - how they will continue to satisfy Energy Efficiency Directive derived Licence Condition requirements in relation to a consumers access to their consumption data.
- 3.23. We would welcome any further views on these and any other key criteria which should be set out in the guidance and taken into account by the Secretary of State in deciding whether to issue the supplier a Direction allowing for a derogation from the IHD mandate.

## Volume of activity

- 3.24. We have considered whether the size of trials should be prescribed in Licence Conditions, for example by setting a maximum number of participants or a percentage of installations in any period. On balance, we consider specifying a limit in Licence Conditions could prevent useful trials from being developed.
- 3.25. **We therefore propose that trial sizes will be assessed against the principle that they must be sufficiently large to generate meaningful results, while remaining within agreed limits to protect against adverse impacts on the business case.**
- 3.26. In practice, this means we would expect that actual energy consumption analysis may need, in accordance with previous examples of good research such as the Early Learning Project, up to 10,000 participants. Trials focused on intermediate (non-energy consumption) outcomes, for example engagement with energy consumption feedback or energy saving actions taken would need fewer participants to generate statistically significant results.
- 3.27. The scale of trials is therefore proposed to be considered and directed by the Secretary of State as part of the derogation application process - we would welcome views on this proposal.

## Consumer safeguards

- 3.28. Our minded to position is that **the alternative engagement tool being trialled must be offered as part of the smart meter installation.** This will encourage suppliers to demonstrate the engagement tool and will ensure consistency with the existing IHD Licence Conditions. However, we recognise that there may be cases where a different approach could be more appropriate. We would welcome views.
- 3.29. We have considered the range of requirements in place for IHDs in the Licence Conditions and the SMICoP that specifically look to safeguard the consumer experience, and whether to extend them into this trial activity. This includes, for instance:
- that no charge be permissible
  - that the engagement tool offered is appropriate to the consumer
  - that this information be provided in a clear and intelligible way
  - that the device be maintained for 12 months
  - that the device be appropriate to the consumer
  - that the device is installed in an appropriate location and set up as far as practicable to meet the needs of the household
- 3.30. We are not minded to impose these requirements as part of any trial for the following reasons: not all of these requirements are consistent with a 'trial'; not all of these requirements are consistent with alternative engagement approaches which may not rely on a specific display device in the home and more broadly, as we expect suppliers to embed relevant best practice disciplines, where appropriate, to maximise the impact of their trials.

3.31. **We are minded to require that suppliers provide consumers the opportunity to take up an IHD at the end of the trial (or where they exit the trial early).** This requirement would only apply where a consumer had not previously been offered an IHD. We also propose that this offer be extended to allow for the consumer to retain their existing alternative engagement tool where they prefer. We would of course expect the offer of the IHD to be in line with existing Licence Conditions in terms of providing “complete and accurate information, which does not mislead the customer, concerning the availability and benefits of an In-home display”. We would welcome views on the proposal and the implementing Licence Condition. This proposal reflects in the following key considerations:

- It is consistent with our broader policy intent that IHDs remain the best tool for consumers and that all consumers should be offered one at some point;
- It could provide a useful piece of research in itself, generating evidence with regards to comparative advantages and drawbacks between IHDs and alternatives;
- It also recognises, in allowing an either/or offer existing supplier concerns of consumers taking up both devices (which would add cost to the rollout);
- Consumers should be able to take informed decisions on the benefits of the IHD against retaining the alternative they will have used.

3.32. The current Licence Conditions include a requirement for when a consumer turns down the IHD offer but then changes their mind – the consumer has 12 months in which to take advantage of the initial IHD offer made at the point of the smart meter installation. Through the proposed trial provisions we are breaking the point at which the IHD offer is made and the smart meter installed. **We would welcome views on whether the existing provision which allows for consumers to change their mind within 12 months where they initially reject an IHD should be applied from the point of the IHD offer for trial participants** (i.e. at the end of the trial or where they exit the trial early).

## Functionality

3.33. Our view is that we should not require a long list of functionality requirements for the alternative engagement tool as this will increasingly constrain and direct the trial activity. This would be less useful to driving innovative activity and gathering evidence. We would welcome views.

3.34. **We propose to seek a restricted number of core functionality requirements through the application guidance**, including:

- Provision of feedback on both gas and electricity consumption. Within this we recognise that separate engagement tools could be developed for each fuel and that feedback could be presented in innovative ways, including combining with other data;
- Inclusion of appropriate security/privacy controls and specific PPM customer functionality (where reaching PPM customers);
- It should be capable of relaying energy consumption information via the Home Area Network or via the Data and Communications Company.

3.35. This list is deliberately limited to ensure flexibility to suppliers in terms of the types of alternative engagement tools that may be offered to consumers under their trials. We do not therefore propose to require real-time data provision that a ‘consumer

device' be installed in the home or to mandate the provision of data over the HAN. We are likely though to value evidence which is easily comparable to the IHD provisions.

- 3.36. It is worth reinforcing that any IHD derogation would be limited to IHD provisions. Suppliers would still need to meet other relevant smart meter supply Licence Conditions relating to data provision which the IHD derogation do not extend to, for instance, those flowing from the Energy Efficiency Directive and the operational licence conditions. These consumer protections would for instance mean consumers could still request access to 24 months of consumption data and request a relevant device be joined to their HAN.

## Trial design

- 3.37. We want robust and relevant evidence to be provided. Whilst we do not intend to specify particular trial requirements in the Licence Conditions **we would expect to see, as part of the derogation application, that suppliers bring forward proposals that identify and aim to address one or more specific research questions.**
- 3.38. We intend to set out our expectations in the guidance document but ultimately we want to be able to gather sufficient evidence to determine the magnitude and persistence of energy savings and more broadly to understand whether it leads to greater or lesser consumer engagement and benefits, and for which customer segments.
- 3.39. We would anticipate that the measurement of outcomes would depend on the detailed research questions and experimental design; they should include energy saving and/or behavioural impacts. We would also expect suppliers to provide detailed justification of the trial design, the research methods to be used and the approach to assuring the trial is robust in design and delivery (including the use of independent trial design expertise). We propose that trials would be able to cover either all consumer segments or a selection where clearly specified.
- 3.40. Where undertaken, **we propose that the counterfactual for energy savings should be based on an IHD (SMETS compliant) control group within the trial. We also propose that where possible and cost-effective, trials should include a third experimental arm including provision of both the alternative device and an IHD.** This is particularly important for trials of alternatives which are substantially different to IHDs, such as provision of historic feedback (where an important research question is whether the alternative provides additional benefits on top of those delivered by the IHD). Evidence on this would be needed to inform any cost-benefit assessment of the option of allowing historic feedback as an alternative to IHDs, given the evidence that real-time and historic feedback are likely to be complementary.
- 3.41. One methodological option would be the experimental design known as a randomised control trial (RCT), in which participants (of the range of segments to be studied) are first recruited into the trial (i.e. their agreement is obtained to be observed in some way) and then randomly assigned to different groups, without making any further choice.
- 3.42. Ideally, persistence would be measured over two years; however given the issues of timing considered below we acknowledge that this will not be practicable. However, we would regard energy consumption evidence collected over less than 12 months following installation to carry less weight.

## Backstop

- 3.43. **We propose to require in Licence Conditions that all applications for a derogation from the IHD mandate have to be received by the Secretary of State on or by 31 January 2017.** Given the importance of the findings to inform policy we propose to make a standing condition of the guidance criteria that any evidence collected through the trials be submitted to the Secretary of State.
- 3.44. To allow for flexibility in trial design we suggest any specific date for submission of that evidence to be determined as part of the derogation application process and stated in the direction. However, our **current expectation is that all suppliers conducting trials will be required to submit evidence to the Secretary of State no later than mid-2017**
- 3.45. In combination these proposals look to balance a need for robust early evidence which can inform any broader policy changes against allowing suppliers time to plan, execute and report on trials. We recognise that this would encourage energy consumption analysis trials commencing before mid-2016. We would welcome views on the approach and timings set out.

Consultation Questions	
3.	Do you agree with the proposal to allow suppliers under their Licence Conditions to apply to the Secretary of State for a derogation from the IHD mandate in order to trial IHD alternatives? If not, please provide supporting comments.
4.	Do you agree with the proposed broad principles underlying the derogation process and the scope of the design requirements to be included in trial guidance? Please provide evidence to support your response and any other matters that you think should be taken into account.
5.	Do you agree that we should require in Licence Conditions all derogation applications to be submitted to the Secretary of State by the end of January 2017?
6.	Do you agree that suppliers should be required to offer those customers on a trial an IHD as an either/or with their alternative engagement tool at the end of the trial?
7.	Do you have views on whether the current Licence Conditions giving consumers 12 months to change their mind on taking up an IHD should apply from the point of the IHD offer for trial participants?
8.	Do you have any comments on the proposed legal drafting introducing new Licence Conditions at Annex 2?

# Annex 1: Summary of consultation questions

Consultation Questions	
1.	Do you agree with the preferred approach for closing off the risk to the IHD offer summarised at paragraph 2.10c?
2.	Do you have any comments on the proposed legal drafting amending IHD Licence Conditions at Annex 2?
3.	Do you agree with the proposal to allow suppliers under their Licence Conditions to apply to the Secretary of State for a derogation from the IHD mandate in order to trial IHD alternatives? If not, please provide supporting comments.
4.	Do you agree with the proposed broad principles underlying the derogation process and the scope of the design requirements to be included in trial guidance? Please provide evidence to support your response and any other matters that you think should be taken into account.
5.	Do you agree that we should require in Licence Conditions all derogation applications to be submitted to the Secretary of State by the end of January 2017?
6.	Do you agree that suppliers should be required to offer those customers on a trial an IHD as an either/or with their alternative engagement tool at the end of the trial?
7.	Do you have views on whether the current Licence Conditions giving consumers 12 months to change their mind on taking up an IHD should apply from the point of the IHD offer for trial participants?
8.	Do you have any comments on the proposed legal drafting introducing new Licence Conditions at Annex 2?

# Annex 2: Draft Supply Licence Condition amendments

## Electricity

### Condition 40: Provision of an In-Home Display

#### The general duty

40.1 The licensee must, where it installs or arranges for the installation of a Smart Metering System at any Domestic Premises on or after the Smart Metering Designated Date, ensure that it:

- (a) provides to the Domestic Customer at the premises complete and accurate information, which does not mislead the Domestic Customer, concerning the availability and benefits of an In-Home Display;
- (b) communicates that information in plain and intelligible language;
- (c) offers the Domestic Customer the opportunity to have an In-Home Display provided at the Domestic Premises from no later than the date the Smart Metering System is installed; and
- (d) where the Domestic Customer accepts the offer, provides at the premises from no later than that date an In-Home Display which operates, together with the Smart Metering System at the premises, so as to permit the intended use of the functional capability of that In-Home Display.

40.2 The requirement in paragraph 40.1 is subject to paragraphs 40.4 and 40.8.

#### Duty in relation to the Offer of an In-Home Display

40.3 Where:

- (a) pursuant to its obligation in paragraph 40.1, the licensee offers the Domestic Customer the opportunity to have an In-Home Display provided at the Domestic Premises; and
- (b) at the same time as making that offer the licensee also offers the Domestic Customer the opportunity to have an alternative to an In-Home Display provided to him,

the licensee must ensure that the offer of an alternative to an In-Home Display does not in any way detract from, or otherwise undermine, the offer of an In-Home Display.

#### **Exception to the general duty - Existing In-Home Display**

- 40.4 The licensee is not required to comply with paragraph 40.1 if a device has been provided by any person at the Domestic Premises which, on the date on which the Smart Metering System is installed at the Domestic Premises:
- (a) constitutes an In-Home Display; and
  - (b) operates, together with the Smart Metering System at the premises, so as to permit the intended use of the functional capability of that In-Home Display.

#### **The duty on request of Domestic Customers**

40.5 Where paragraph 40.6 applies, the licensee must take all reasonable steps to provide, at Domestic Premises in respect of which it is the Relevant Electricity Supplier, an In-Home Display which operates, together with the Smart Metering System at the premises, so as to permit the intended use of the functional capability of that In-Home Display.

40.6 This paragraph applies where:

- (a) the Domestic Customer at premises in respect of which the licensee is the Relevant Electricity Supplier makes a request for the licensee to provide an In-Home Display within the Relevant Period; and
- (b) prior to that request an In-Home Display has not been provided at the premises.

40.7 The requirement in paragraph 40.5 is subject to paragraphs 40.8 and 40.19.

#### **Exception to the general duty and the duty on request - Derogation from the Secretary of State**

40.8 The licensee is not required to comply with paragraphs 40.1 and 40.5 where the Secretary of State has given a derogation to the licensee under paragraph 40.9.

40.9 The Secretary of State may give a derogation to the licensee under this paragraph where the licensee submits, on or before 31 January 2017, an application to the Secretary of State for a derogation from the requirements in paragraphs 40.1 and 40.5 in respect of its proposal to offer an alternative to an In-Home Display.

40.10 Where the Secretary of State gives a derogation to the licensee under paragraph 40.9, the licensee:

- (a) is not required to comply with paragraphs 40.1 and 40.5 to such extent and subject to such conditions as specified in the derogation; and
- (b) must submit to the Secretary of State the evidence specified in the direction by the Relevant Date.

40.11 Paragraph 40.12 applies where, by virtue of a derogation given to it by the Secretary of State under paragraph 40.9, the licensee provides the Domestic Customer at the premises (the 'relevant premises') with an alternative to an In-Home Display.

40.12 Where this paragraph applies, the licensee must ensure that by no later than the Relevant Date it:

- (a) offers the Domestic Customer the opportunity to have an In-Home Display provided at the relevant premises; or
- (b) offers the Domestic Customer the opportunity to either have an In-Home Display provided at the relevant premises or to retain the alternative to the In-Home Display provided by the licensee by virtue of the derogation.

40.13 Where the Domestic Customer:

- (a) accepts the offer made by the licensee pursuant to paragraph 40.12(a); or
- (b) following the offer made by the licensee pursuant to paragraph 40.12(b), opts to have an In-Home Display provided at the relevant premises,

the licensee must ensure that it provides at the relevant premises an In-Home Display which operates, together with the Smart Metering System at the premises, so as to permit the intended use of the functional capability of that In-Home Display.

40.14 Where, following the offer made by the licensee pursuant to paragraph 40.12(b), the Domestic Customer opts to retain the alternative to the In-Home Display, the licensee must ensure that it provides the alternative to the In-Home Display to the Domestic Customer.

#### **The duty during the Relevant Period on and after provision of an IHD**

40.15 The licensee must take all reasonable steps to ensure that at each Domestic Premises in respect of which it is the Relevant Electricity Supplier and at which an In-Home Display has been provided, the In-Home Display continues during the Relevant Period to satisfy the requirements of the IHD Technical Specification applicable (in accordance with paragraph 53.12 of standard condition 53 (Technical Specifications)) at the date on which it was provided.

40.16 The requirement in paragraph 40.15 is subject to paragraph 40.19.

#### **The duty to deal with IHD faults**

40.17 Where:

- (a) the licensee is notified that there is a fault in an In-Home Display provided at a Domestic Premises in respect of which it is the Relevant Electricity Supplier;

- (b) the consequence of the fault is that the In-Home Display no longer satisfies the minimum requirements of the IHD Technical Specification applicable at the date on which the In-Home Display was provided;
- (c) the Smart Metering System at the Domestic Premises was installed:
  - (i) on or after the Smart Metering Designated Date; and
  - (ii) no more than 12 months prior to the date on which the licensee is notified of the fault; and
- (d) the licensee is in its reasonable opinion satisfied that the fault in the In-Home Display is not due to a failure by the Domestic Customer to take all reasonable steps to keep the In-Home Display in good working order,

the licensee must take all reasonable steps to repair or replace the faulty In-Home Display.

40.18 The requirement in paragraph 40.17 is subject to paragraph 40.19.

#### **Exceptions**

40.19 Paragraphs 40.7, 40.16 and 40.18 apply:

- (a) in all cases in respect of any Domestic Premises at which the licensee installed or arranged for the installation of the Smart Metering System; and
- (b) in any other case, only from such date and to such extent as specified in a derogation issued by the Secretary of State under this sub-paragraph.

#### **Definitions**

40.20 For the purposes of this condition:

**Relevant Date** means the date specified, in the derogation given to the licensee by the Secretary of State under paragraph 40.9, as the date by which the licensee must submit to the Secretary of State the evidence specified in the derogation.

**Relevant Period** means, in respect of a Smart Metering System installed on or after the Smart Metering Designated Date, the period which commences on the date on which the Smart Metering System is installed at the Domestic Premises and ends 12 months after that date.

## Gas

### Condition 34. Provision of an In-Home Display

#### The general duty

- 34.1 The licensee must, where it installs or arranges for the installation of a Smart Metering System at any Domestic Premises on or after the Smart Metering Designated Date, ensure that it:
- (a) provides to the Domestic Customer at the premises complete and accurate information, which does not mislead the Domestic Customer, concerning the availability and benefits of an In-Home Display;
  - (b) communicates that information in plain and intelligible language;
  - (c) offers the Domestic Customer the opportunity to have an In-Home Display provided at the Domestic Premises from no later than the date the Smart Metering System is installed; and
  - (d) where the Domestic Customer accepts the offer, provides at the premises from no later than that date an In-Home Display which operates together with the Smart Metering System at the premises, so as to permit the intended use of the functional capability of that In-Home Display.
- 34.2 The requirement in paragraph 34.1 is subject to paragraphs 34.4 and 34.8.

### Duty in relation to the Offer of an In-Home Display

- 34.3 Where:
- (a) pursuant to its obligation in paragraph 34.1, the licensee offers the Domestic Customer the opportunity to have an In-Home Display provided at the Domestic Premises; and
  - (b) at the same time as making that offer the licensee also offers the Domestic Customer the opportunity to have an alternative to an In-Home Display provided to him,
- the licensee must ensure that the offer of an alternative to an In-Home Display does not in any way detract from, or otherwise undermine, the offer of an In-Home Display.

### **Exception to the general duty - Existing In-Home Display**

- 34.4 The licensee is not required to comply with paragraph 34.1 if a device has been provided by any person at the Domestic Premises which, on the date on which the Smart Metering System is installed at the Domestic Premises:
- (a) constitutes an In-Home Display; and
  - (b) operates, together with the Smart Metering System at the premises, so as to permit the intended use of the functional capability of that In-Home Display.

#### **The duty on request of Domestic Customers**

- 34.5 Where paragraph 34.6 applies, the licensee must take all reasonable steps to provide, at Domestic Premises in respect of which it is the Relevant Gas Supplier, an In-Home Display which operates, together with the Smart Metering System at the premises, so as to permit the intended use of the functional capability of that In-Home Display.
- 34.6 This paragraph applies where:
- (a) the Domestic Customer at premises in respect of which the licensee is the Relevant Gas Supplier makes a request for the licensee to provide an In-Home Display within the Relevant Period; and
  - (b) prior to that request an In-Home Display has not been provided at the premises.
- 34.7 The requirement in paragraph 34.5 is subject to paragraphs 34.8 and 34.19.

#### **Exception to the general duty and the duty on request - Derogation from the Secretary of State**

- 34.8 The licensee is not required to comply with paragraphs 34.5 and 34.6 where the Secretary of State has given a derogation to the licensee under paragraph 34.9.
- 34.9 The Secretary of State may give a derogation to the licensee under this paragraph where the licensee submits, on or before 31 January 2017, an application to the Secretary of State for a derogation from the requirements in paragraphs 34.1 and 34.5 in respect of its proposal to offer an alternative to an In-Home Display.
- 34.10 Where the Secretary of State gives a derogation to the licensee under paragraph 34.9, the licensee:
- (a) is not required to comply with paragraphs 34.1 and 34.5 to such extent and subject to such conditions as specified in the derogation; and
  - (b) must submit to the Secretary of State the evidence specified in the derogation by the Relevant Date.

34.11 Paragraph 34.12 applies where, by virtue of a derogation given to it by the Secretary of State under paragraph 34.9, the licensee provides the Domestic Customer at the premises (the 'relevant premises') with an alternative to an In-Home Display.

34.12 Where this paragraph applies, the licensee must ensure that by no later than the Relevant Date it:

- (a) offers the Domestic Customer the opportunity to have an In-Home Display provided at the relevant premises; or
- (b) offers the Domestic Customer the opportunity to either have an In-Home Display provided at the relevant premises or to retain the alternative to the In-Home Display provided by the licensee by virtue of the derogation.

34.13 Where the Domestic Customer:

- (a) accepts the offer made by the licensee pursuant to paragraph 34.12(a); or
- (b) following the offer made by the licensee pursuant to paragraph 34.12(b), opts to have an In-Home Display provided at the relevant premises,

the licensee must ensure that it provides at the relevant premises an In-Home Display which operates, together with the Smart Metering System at the premises, so as to permit the intended use of the functional capability of that In-Home Display.

34.14 Where, following the offer made by the licensee pursuant to paragraph 34.12(b), the Domestic Customer opts to retain the alternative to the In-Home Display, the licensee must ensure that it provides the alternative to the In-Home Display to the Domestic Customer.

#### **The duty during the Relevant Period on and after provision of an IHD**

34.15 The licensee must take all reasonable steps to ensure that at each Domestic Premises in respect of which it is the Relevant Gas Supplier and at which an In-Home Display has been provided, the In-Home Display continues during the Relevant Period to satisfy the requirements of the IHD Technical Specification applicable (in accordance with paragraph 47.12 of standard condition 47 (Technical Specifications)) at the date on which it was provided.

34.16 The requirement in paragraph 34.15 is subject to paragraph 34.19.

#### **The duty to deal with IHD faults**

34.17 Where:

- (a) the licensee is notified that there is a fault in an In-Home Display provided at a Domestic Premises in respect of which it is the Relevant Gas Supplier;

- (b) the consequence of the fault is that the In-Home Display no longer satisfies the minimum requirements of the IHD Technical Specification applicable at the date on which the In-Home Display was provided;
- (c) the Smart Metering System at the Domestic Premises was installed:
  - (i) on or after the Smart Metering Designated Date; and
  - (ii) no more than 12 months prior to the date on which the licensee is notified of the fault; and
- (d) the licensee is in its reasonable opinion satisfied that the fault in the In-Home Display is not due to a failure by the Domestic Customer to take all reasonable steps to keep the In-Home Display in good working order,

the licensee must take all reasonable steps to repair or replace the faulty In-Home Display.

34.18 The requirement in paragraph 34.17 is subject to paragraph 34.19.

#### Exceptions

34.19 Paragraphs 34.7, 34.16 and 34.18 apply:

- (a) in all cases in respect of any Domestic Premises at which the licensee installed or arranged for the installation of the Smart Metering System; and
- (b) in any other case, only from such date and to such extent as specified in a derogation issued by the Secretary of State under this sub-paragraph.

#### Definitions

34.20 For the purposes of this condition:

**Relevant Date** means the date specified, in the derogation given to the licensee by the Secretary of State under paragraph 34.9, as the date by which the licensee must submit to the Secretary of State the evidence specified in the derogation

**Relevant Period** means, in respect of a Smart Metering System installed on or after the Smart Metering Designated Date, the period which commences on the date on which the Smart Metering System is installed at the Domestic Premises and ends 12 months after that date.

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