



# Reforming suppliers' meter inspection obligations

## Consultation

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### Overview:

Gas and electricity suppliers have a licence obligation to inspect their customers' meters at least every two years, unless we consent to other arrangements. We have reviewed this licence obligation's ongoing contribution to protecting consumer interests, in the context of the rollout of smart meters. We believe that other regulations and policies, including safety obligations and recently enhanced theft detection and billing accuracy obligations, protect consumers with traditional and smart meters more effectively than the existing meter inspection licence obligation.

This document sets out our review of the meter inspection framework and identifies changes needed to make the arrangements fit for purpose. We propose to repeal the meter inspection licence conditions, in line with the principles of better regulation.

We have developed our review in consultation with the Health and Safety Executive (HSE). Our review has also been informed by the views and work of a wide range of stakeholders represented in the Meter Inspections Subgroup. The Department of Energy and Climate Change established this work group in late 2014 to consider options for establishing an appropriate metering inspection framework in view of the smart meter rollout.

We are now seeking views on our proposal to repeal the meter inspection licence condition.

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## Context

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The gas and electricity supply licences contain obligations for suppliers in relation to two-yearly meter inspections. The scope of the inspection requirements covers safety checks, theft detection, and meter reading frequency.

We reviewed these obligations as part of our Supply Licence Review in 2006. During this review, we considered that the current obligations may be too prescriptive. In consultation with the Health and Safety Executive (HSE), we did not remove the obligations at that time. Instead, we introduced an express provision in the meter inspection licence obligations stating that we can consent to alternative arrangements.

In 2012, we received a request from British Gas to consent to operate alternative gas and electricity meter inspection arrangements. We considered British Gas' risk assessment and sought advice from the HSE in deciding to consent to alternative arrangements for British Gas.

When we announced our decision to allow British Gas to operate alternative meter inspection arrangements, we also signalled our intention to conduct a broader review of the meter inspections framework in the context of the rollout of smart meters. We wanted to ensure that our regulatory requirements were proportionate and necessary to protect consumers' interests.

Since we granted British Gas consent to operate alternative meter inspection arrangements, the HSE has provided further advice on the appropriateness of the meter inspection licence condition for addressing health and safety risks. We have also introduced new licence obligations for gas and electricity suppliers relating to meter reading frequency and theft detection activities.

The rollout of smart meters will reduce the need for suppliers to visit consumer premises to read meters as the meters will be capable of sending consumption information wirelessly to suppliers. The Department of Energy and Climate Change's (DECC) business case identified benefits associated with avoided site visits for inspecting smart meters. DECC established the Meter Inspections Subgroup in late 2014 under the auspices of its Smart Meter Delivery Group to consider options for establishing an appropriate metering inspection framework in view of the smart meter rollout.

In late 2014, we published our corporate strategy<sup>1</sup> which commits to us to regulating in a way that minimises the direct and indirect costs imposed on consumers and industry. The associated Forward Work Programme<sup>2</sup> set out an ambition for principles-based regulation to replace the more detailed and prescriptive standards currently used over time. Our review of the meter inspection licence conditions is very much in line with our corporate strategy.

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<sup>1</sup> <https://www.ofgem.gov.uk/ofgem-publications/92187/corporatestrategy.pdf>

## Associated documents

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- Consultation on British Gas's request for changes to its meter inspection licence obligations: <https://www.ofgem.gov.uk/publications-and-updates/british-gas-request-changes-its-meter-inspection-licence-obligations-0>
- Decision on British Gas's request for changes to its meter inspection licence obligations: <https://www.ofgem.gov.uk/publications-and-updates/british-gas-request-changes-its-meter-inspection-licence-obligations>
- Supply Licence Review - Final Proposals, Ofgem, June 2007 (128/07): <https://www.ofgem.gov.uk/ofgem-publications/41916/british-gas-request-changes-its-meter-inspection-licence-obligations.pdf>
- Tackling Electricity Theft – the way forward: <https://www.ofgem.gov.uk/publications-and-updates/tackling-electricity-theft-%E2%80%93-way-forward-0>

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## Executive Summary

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The rollout of smart meters will require suppliers to replace over 50 million traditional meters in domestic and small non-domestic sites. Smart meters will reduce the need for suppliers to visit consumer premises to read meters as the meters will be capable of sending consumption information wirelessly to suppliers.

Currently, gas and electricity suppliers have a licence obligation<sup>3</sup> to inspect their customers' meters every two years unless we consent otherwise. Suppliers must

- check for evidence of deterioration that might affect the safety or proper functioning of the meter,
- check for evidence of tampering or theft, and
- take a physical meter reading to ensure accurate customer bills.

We have reviewed the efficiency and effectiveness of the licence requirement in achieving its policy objectives for all meter types. We propose to repeal the meter inspection licence conditions, and are consulting on this policy position. We believe that other regulations and policies, including safety obligations and recently enhanced theft detection and billing accuracy obligations, protect consumers with traditional and smart meters more effectively than the existing inspection obligation.

In our approach to regulation, we must carefully consider whether any regulatory requirement is proportionate and necessary to protect consumers' interests. With this in mind, we have considered the extent to which other regulatory and legislative requirements on suppliers target the same policy objectives as the meter inspection licence requirements. We have considered whether these tools are more effective and proportionate for achieving the desired consumer outcomes of safety, theft reduction and accurate billing based on actual consumption.

In respect of safety concerns, we took into account the views of the HSE. Firstly, that suppliers are responsible for applying a risk-based approach to safety risks to comply with health and safety legislation, and secondly that the meter inspections licence obligations are not necessary and are potentially unhelpful in achieving this objective. On billing accuracy and theft detection, we recently introduced supplier licence obligations to obtain meter readings at least once a year and to detect and investigate theft. Our view is that these lead to superior consumer outcomes than the meter inspection requirements.

The main installation phase of smart meters will begin next year. Smart meters will remove the need for site visits to bill consumers accurately. They will also support theft detection and metering safety improvements through providing tamper alerts and access to detailed consumption data. The rollout of smart meters should therefore make it easier for any supplier to achieve the policy objectives of the current meter inspections licence condition. Retaining a licence requirement to

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<sup>3</sup> Gas Supply Standard Licence Condition (SLC) 12 and Electricity Supply SLC 12



## Reforming suppliers' meter inspection obligations

inspect meters with a minimum two-yearly frequency could therefore also impose additional costs and inconvenience on consumers.

DECC established the Meter Inspections Subgroup (MISG) to consider options for establishing an appropriate metering inspection framework in view of the smart meter rollout. This work group brought together industry parties (including gas and electricity suppliers, network operators and meter operators) and other stakeholders, including Electrical Safety First, Ofgem, DECC, and the HSE. We have developed our review through engagement with the MISG and considered the views and evidence provided by members in our policy assessment.

In July 2015, the Competition and Markets Authority (CMA), as part of its energy market investigation, identified a potential adverse effect on competition as a result of British Gas' consent to operate alternative meter inspection arrangements. It has published potential remedies<sup>4</sup> addressing this issue, with the objective of removing a barrier to effective competition in the retail energy market. We are supporting the CMA by providing them with information and expertise throughout their investigation.

The structure of the retail market has evolved since we granted British Gas consent to operate alternative meter inspection arrangements, with more independent suppliers operating in the market. We have recognised the potential impacts on competition of British Gas' meter inspection arrangements in our wider review of the meter inspection supply licence obligations and in our reform options to introduce the same meter inspection requirements for all suppliers.

Options for the meter inspection framework range from preserving prescriptive inspection obligations, to repealing the licence obligation altogether. We have assessed a range of policy options and consider that the licence condition is no longer necessary or sufficient to protect consumer safety, detect theft or make consumer bills more accurate.

Our preferred option is therefore to repeal the licence condition. We are seeking views on:

- Our identification of the relevant issues to consider in reforming the meter inspection arrangements (Chapters 1 and 3);
- Our suggested options for reform (Chapter 2);
- Our assessment of impacts on consumers and industry of the policy options (Chapter 4 and Appendix 2);
- Our preferred option to repeal the licence condition (Chapters 4 and 5).

Please send us your response no later than 18 September 2015, and refer to Appendix 1 for details of how to respond.

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<sup>4</sup> [https://assets.digital.cabinet-office.gov.uk/media/559aac8eed915d1592000023/EMI\\_Remedies\\_Notice\\_-\\_Final.pdf](https://assets.digital.cabinet-office.gov.uk/media/559aac8eed915d1592000023/EMI_Remedies_Notice_-_Final.pdf)

# 1. The policy issue

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**Chapter Summary:** we are reviewing suppliers' meter inspection obligations in response to developments in the energy sector. Our key drivers for review include changes to the regulatory landscape relating to theft detection and billing accuracy, improvements in metering technology and evolving energy sector competition.

**Question 1:** Do you agree with our assessment of the need for reform?

## The meter inspection arrangements

1.1. The Gas Supply Standard Licence Condition (SLC) 12 and Electricity Supply SLC 12 place an obligation on gas suppliers<sup>5</sup> and electricity suppliers<sup>6</sup> respectively to take all reasonable steps to inspect their customers' meters at least once every two years unless the Authority<sup>7</sup> otherwise consents.

1.2. We reviewed these obligations as part of the Supply Licence Review in 2006 during which we considered that the current obligations may be overly prescriptive. We therefore inserted the explicit flexibility for the Authority to consent to alternative arrangements into the meter inspection licence conditions.

1.3. The metering inspection licence obligations in both gas and electricity have a health and safety protection angle. The checks required by the licence conditions as part of a meter inspection also relate to theft detection and meter reading frequency for the purposes of billing accuracy.

1.4. As part of the gas metering inspection the supplier is required to inspect the meter and associated installation for evidence of tampering or theft, and look for evidence of deterioration, which might affect its safety or proper functioning. The supplier is also required to take a meter reading whilst inspecting the meter.

1.5. The gas metering inspection requirements apply to all meters. For gas suppliers, 'all reasonable steps' expressly includes trying to obtain a warrant<sup>8</sup>. When

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<sup>5</sup> Gas supply SLC 12.8 Inspection of Gas Meters  
<https://epr.ofgem.gov.uk//Content/Documents/Gas%20supply%20standard%20licence%20conditions%20consolidated%20-%20Current%20Version.pdf>

<sup>6</sup> Electricity supply SLC12.14 Inspection of Electricity Meters  
<https://epr.ofgem.gov.uk//Content/Documents/Electricity%20Supply%20Standard%20Licence%20Conditions%20Consolidated%20-%20Current%20Version.pdf>

<sup>7</sup> The Office of the Gas and Electricity Markets Authority (Ofgem) supports the Gas and Electricity Markets Authority ('the Authority') in its day-to-day work (in this document, 'we' and 'us' are used to refer to both 'Ofgem' and 'Authority').

<sup>8</sup> Under the Rights of Entry (Gas and Electricity Boards) Act 1954 (SLC 12.10).

a gas customer switches supplier, the two-yearly meter inspection obligation time-frame transfers to the new gas supplier, subject to a four month grace period<sup>9</sup>.

1.6. The scope of the electricity metering inspection requires the supplier to take a meter reading and carry out a visual inspection of any metering equipment to assess whether there has been damage to the metering equipment or to any electrical plant or electric line. The inspection checks for any interference that may prevent the meter from registering the quantity of electricity supplied; or deterioration that may affect its safety or proper functioning.

1.7. The electricity metering inspection requirements apply to meters capable of recording non-half hourly consumption only<sup>10</sup>. This means that the current licence requirements do not apply to smart and advanced electricity meters, and will become redundant for the vast majority of consumers as smart meters are rolled out. For electricity suppliers, the two-yearly meter inspection obligation also resets when a consumer switches supplier.

### Drivers for review

#### Health and safety regulation

1.8. The HSE advises that the prescriptive health and safety obligations can be removed entirely from the meter inspection supply licence conditions.

1.9. The HSE's view is that energy companies should take a risk-based, dynamic approach to fulfilling their statutory health and safety obligations in legislation such as the Health and Safety at Work etc Act 1974 and the Electricity at Work Regulations 1989<sup>11</sup>. These obligations apply regardless of the meter inspection provisions in SLC 12, and compliance with SLC 12 does not ensure compliance with health and safety legislation.

1.10. We have a statutory duty to work with the HSE on health and safety related policy, and work closely together through adherence to a memorandum of understanding. The HSE's views on health and safety regulation are a key input into our review of the ongoing relevance and appropriateness of the metering inspection licence conditions.

#### Changes in energy regulation

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<sup>9</sup> Gas Supply SLC 12.9

<sup>10</sup> This is presumed to be a proxy for domestic consumers.

<sup>11</sup> Section 3 of the Health and Safety at Work etc Act 1974 requires employers and the self-employed to conduct their undertakings to ensure so far as reasonably practicable that persons not in their employment who may be affected are not thereby exposed to risks to their health and safety. Regulation 4 of the Electricity at Work Regulations 1989 require employers, employees and the self-employed to maintain electrical systems so as to prevent danger as far as reasonably practicable.

1.11. Two of the three policy objectives of the metering inspection licence obligations are improving billing accuracy for consumers through increased meter reading frequencies, and detecting theft. We have recently targeted these policy objectives through other policy initiatives and licence reforms.

1.12. Specifically, there are now licence requirements for suppliers to obtain meter readings with a minimum frequency (Gas and Electricity Supply SLC 21B.4) and to implement our package of new theft detection and investigation initiatives (Gas and Electricity Supply SLC 12A).

1.13. The current meter inspection obligations involve checking the safety of the meter. Health and safety obligations on energy companies relating to metering safety also sit within industry codes such as the Code of Practice for Gas Meter Asset Managers and the Meter Operation Code of Practice Agreement, and in health and safety legislation.

1.14. Therefore, there is potential for duplication between different regulatory requirements. We have reviewed our regulatory arrangements in the interests of ensuring that regulatory requirements are both proportionate and are necessary to protect consumers.

### **Competition context**

1.15. In December 2012, we granted British Gas consent<sup>12</sup> to their request to operate a more targeted regime for meter inspections and a minimum inspection period of five years for all meters. This consent (the "BG Consent") applies from 1 April 2013 – 31 March 2016.

1.16. We decided to grant the BG Consent after conducting a formal consultation, and analysis of an independent risk assessment<sup>13</sup> British Gas commissioned as evidence in support of their request.

1.17. At the time of granting the BG Consent, we considered there could be advantages in undertaking a wider review of the meter inspection framework. We wanted to ensure that the regulatory framework for the inspection of meters remains effective and proportionate.

1.18. We felt such a review was timely prior to the rollout of smart metering, which will enable suppliers to read meters remotely, and thereby enable reduced site visits.

1.19. Since April 2013, British Gas has operated alternative metering inspection arrangements. When we assessed the competition impacts of British Gas' request,

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<sup>12</sup> <https://www.ofgem.gov.uk/publications-and-updates/british-gas-request-changes-its-meter-inspection-licence-obligations>

<sup>13</sup> <https://www.ofgem.gov.uk/ofgem-publications/42019/report-gl-report-8933-slc12-risk-assessment.pdf>

we noted that other suppliers could also apply for consent to operate an alternative meter inspection regime. We also noted that the BG Consent could lead to meter inspection costs for other suppliers being brought forward but would not lead to new costs for British Gas' competitors. This phenomenon could occur when a British Gas customer switches to another supplier, if their gas meter has not been inspected in the last two years.

1.20. Since we granted the BG Consent, the structure of the retail energy market has evolved. In particular, we have observed the growth of independent suppliers. We have concerns that the impact of the BG Consent on other suppliers may have changed since the market has evolved, with potential adverse effects on competition.

1.21. In the interests of ensuring efficient regulatory arrangements and promoting competition, we have reviewed the relevance of the meter inspection requirements for all suppliers in the context of the broader regulatory framework.

1.22. The CMA's energy market investigation has also identified a potential adverse effect to competition as a result of British Gas' consent to operate alternative meter inspection arrangements. It published potential remedies<sup>14</sup> addressing this issue in July 2015 with the objective of removing a barrier to effective competition in the retail energy market. We are supporting the CMA by providing them with information and expertise throughout their investigation.

### **Smart meter rollout**

1.23. The rollout of smart meters by the end of 2020 is expected to significantly reduce the need for suppliers to make site visits as meters will be read remotely. DECC's smart metering impact assessment<sup>15</sup> captures expected benefits of around £2.8bn from avoided site visits. Most of these benefits are due to avoided meter read site visits. Without a change to the current meter inspection requirements, the full expected savings from avoided site visits would not be achievable.

1.24. There may therefore be grounds for relaxing metering inspection obligations to bring about potential cost-savings for consumers. This was one of the assumptions included in the Department of Energy and Climate Change's impact assessment on the rollout of smart meters<sup>16</sup>.

1.25. Smart metering technical requirements also contain features that aid the detection and reporting of incidents related to theft and safety. For example, smart meters will alert suppliers when the meter case has been removed which could indicate theft and a potential safety risk to the consumer. Smart meters will also

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<sup>14</sup> [https://assets.digital.cabinet-office.gov.uk/media/559aac8eed915d1592000023/EMI\\_Remedies\\_Notice\\_-\\_Final.pdf](https://assets.digital.cabinet-office.gov.uk/media/559aac8eed915d1592000023/EMI_Remedies_Notice_-_Final.pdf)

<sup>15</sup> [https://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](https://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)

<sup>16</sup> [https://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](https://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)

provide remote access to consumption data that could alert suppliers to metering safety and theft risks.

1.26. Moreover, the meter inspection licence condition *in electricity* only applies to non-half-hourly meters. Therefore, as suppliers roll out smart and advanced meters to domestic and smaller non-domestic consumers, the licence obligations would cease to be applicable for a growing proportion of electricity meters. This is another trigger for reviewing the appropriateness of the current meter inspection licence conditions.

### **Stakeholder views**

1.27. DECC established the MISG under the auspices of the Smart Metering Delivery Group (SMDG) to review current metering inspection arrangements. SMDG tasked the group with collating and considering evidence and reviewing the current meter inspection arrangements with a view to recommending options for establishing an appropriate metering inspection framework in view of the smart meter rollout.

1.28. We participated in this subgroup and gathered views from members to inform this consultation. The members included suppliers, distribution network operators (DNOs), the Association of Meter Operators, consumer advocacy groups, and the HSE.

1.29. Industry parties have expressed interest in reviewing the meter inspection licence conditions. Their objectives are to reduce their regulatory burden and to introduce the same meter inspection requirements for all suppliers.

1.30. DNOs and Gas Distribution Networks (GDNs) have been represented in this group. DNOs have had particular interest in this policy area as they use the requirements of SLC 12 to form part of their current risk assessments to fulfil their health and safety obligations. These include obligations to ensure the safety of their equipment within customers' premises under Electricity Safety and Quality Continuity Regulations 2002 (ESQCR) and Electricity at Work Regulations 1989 (EAWR).

## 2. Reform options

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**Chapter Summary:** We have focused on two policy options for reforming suppliers' meter inspection obligations: option A – amending the minimum inspection frequency in the supply licence conditions to five years; and option B – repealing the meter inspection supply licence conditions.

**Question 1:** Do you agree with the scope of our review?

**Question 2:** Do you think we have focused on the right options for reform?

### Scope

#### Meter types

2.1. The MISG came to the view that the new industry arrangements for meter inspections should cover all meter types. This includes traditional meters that cannot provide remote access to measured consumption data for multiple periods.

2.2. We agree with the group's view that the drivers for inspection are similar for smart and traditional meters.

2.3. The additional functionality of smart meters should make it more efficient and cost-effective for any supplier to achieve the policy objectives of the current meter inspections licence condition. For example, the rollout of smart and advanced meters would make the requirement to take a meter reading at sites redundant for most sites. It would also thereby facilitate the potential cost-savings from less frequent meter inspections as at present the incremental costs of carrying out a visual inspection when taking a manual meter read for traditional meters are believed to be minimal.

2.4. Smart meters should also make it easier to detect and investigate theft. This is due to the availability of accurate and granular consumption data and anti-tamper devices in the technical requirements of smart metering equipment<sup>17</sup>. Anti-tamper devices are designed to register interference with the aspects of the metering equipment and send an alert message to the supplier which should prompt investigation for damage and/or theft.

2.5. There are, however, other drivers for review such as the change in energy regulations and existing health and safety regulation set out in Chapter 1 which enable all of the policy objectives of the meter inspection licence requirements to be achieved for *all* meter types. The BG Consent also applies to traditional meters so there is a precedent for altering the obligations for all meter types.

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<sup>17</sup> Section 16 of Great Britain Companion Specification 0.8.1.

2.6. We are therefore reviewing the appropriateness of the meter inspection licence obligations for all meter types. Our reform options propose the same requirements for all meter types.

### **Industry practices**

2.7. The MISG agreed that it would be preferable for industry to have a consistent approach to inspecting meters. The MISG members have identified preliminary key risk categories for triggering a meter inspection site visit and the means through which these could be monitored. They have reflected on the broader implementation hurdles of developing and executing a collective framework for suppliers' own risk assessments.

2.8. We agree that this is a desirable objective for industry to work towards from the perspective of operational efficiency. The work of the group may provide a useful platform for achieving this objective. We are not reviewing or making recommendations for the commercial arrangements that industry parties have in place for inspecting their metering assets in this consultation.

2.9. Our consultation proposals address the appropriateness of the regulatory backstop requirement currently in place for suppliers to inspect their meters at least once every two years. These obligations and any changes made to them would not replace or override other regulatory requirements for energy suppliers to assess and address the health and safety risks presented by their equipment.

2.10. We are not proposing to introduce further prescriptive safety requirements for suppliers. We think the appropriate response to safety risks should depend on the situation, and suppliers' approaches to assessing the risks should be dynamic.

2.11. Information-sharing was also identified as a key objective of an appropriate meter inspection framework to allow suppliers and DNOs to manage risks effectively and efficiently, particularly as consumers switch between suppliers.

2.12. DNOs have highlighted that the two-year static inspection backstop requirements in SLC 12 form part of the current risk assessments they carry out to fulfil their health and safety obligations. As owners of distribution assets, DNOs are responsible for discharging their obligations to maintain the safety of their equipment. Regardless of which parties carry out work to check the assets, the DNOs should have their own assurances in place for this purpose. DNOs have stated that they do not currently have any formal arrangements in place with suppliers to routinely inspect service termination assets on behalf of DNOs.

2.13. A DNO has submitted a modification proposal (DCP 235) to the Distribution Connection and Use of System Agreement (DCUSA). This modification is designed to oblige suppliers or their agents to share data relating to service termination assets with DNOs. This obligation would apply when suppliers are replacing their traditional meters with smart meters.

2.14. We agree that industry parties should share information on meter inspections to help suppliers and distribution network companies to manage risks effectively and efficiently, particularly as consumers switch between suppliers.

2.15. There are a number of obligations on suppliers to share information on meter safety risks with DNOs within industry codes such as DCUSA and in regulations such as the ESQCR.

2.16. We are not reviewing the commercial arrangements that industry parties have in place for data-sharing in this consultation, and are not proposing further prescription on this matter.

2.17. We propose to maintain the licence obligation for gas suppliers to give details of each meter inspection carried out, including the date of inspection and findings, to the relevant gas shipper, for transmission to the relevant gas transporter, as soon as reasonably practicable<sup>18</sup>. We also propose to maintain the licence obligation for gas transporters to keep records of the last meter inspection it has been notified of for the past five years<sup>19</sup>.

### **Industry parties**

2.18. Our review is underpinned by the principle that all gas and electricity suppliers should face the same regulatory requirements regardless of the requirement we propose. This principle is informed by our drivers for review, identified in Chapter 1.

2.19. We consider that compliance with health and safety requirements in legislation and industry codes, the recent developments in supply licence obligations related to theft detection and billing accuracy, and the functionality of smart meters enable all suppliers to achieve the policy objectives of the meter inspections licence condition regardless of the reforms we propose to SLC 12. Therefore, the regulatory arrangements we propose should apply to all suppliers equally.

### **Options**

2.20. We considered the drivers for our review, and do not think the current two-yearly meter inspection licence conditions protect consumer interests. We have engaged with stakeholders through the MISG to develop our policy options.

2.21. We consider there to be two feasible policy options for reforming suppliers' meter inspection obligations in consumers' interests. We assess these options against the counterfactual in which no changes are made to the meter inspection licence conditions.

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<sup>18</sup><https://epr.ofgem.gov.uk//Content/Documents/Gas%20supply%20standard%20licence%20conditions%20consolidated%20-%20Current%20Version.pdf> Condition 17.12

<sup>19</sup>[https://epr.ofgem.gov.uk//Content/Documents/Gas transporter SLCs consolidated%20-%20Current%20Version.pdf](https://epr.ofgem.gov.uk//Content/Documents/Gas%20transporter%20SLCs%20consolidated%20-%20Current%20Version.pdf) Condition 8(f)

2.22. For completeness, we have also considered a 'minimal change' option to retain the two-yearly meter inspection licence conditions but align them between gas and electricity (presented in Appendix 2). In this option, the electricity licence obligations would then apply to half-hourly meters and non-half-hourly meters equally.

2.23. The 'minimal change' option is based on the premise that the current licence conditions are necessary to protect consumers' interests. In this scenario, they continue to remain necessary beyond the smart meter rollout when most meters will be capable of recording consumption half-hourly. We consider this to be a more relevant and feasible option than a 'do nothing' option in which no changes are made to the meter inspection licence conditions. This is because the 'do nothing' option would lead to the electricity supply licence obligations falling away for most meters as traditional meters are replaced with half-hourly meters. We agree with the recommendations of the MISG that the regulatory requirements for meter inspections should be the same for all meter types (as set out in the 'Scope' section above).

2.24. The 'do nothing' option would also fail to address the competition impacts of the BG consent since it was granted. We think all suppliers should face the same regulatory requirements for meter inspections (as set out in the 'Scope' section above).

### A) Five-yearly minimum frequency

2.25. This policy option amends the static interval for minimum meter inspection frequency in the current licence obligations from two to five years.

2.26. This option would maintain the definition of a meter inspection contained in the current licence provisions. It would also equalise the obligations on suppliers between gas and electricity by requiring suppliers to inspect half-hourly electricity meters.

2.27. This has precedent in the conditions of the BG Consent as British Gas is required to inspect its meters at least once every five years under its alternative meter inspection arrangements. Five years is also the assumed frequency of smart meter inspections when applying a risk-based framework in DECC's Smart Metering Impact Assessment. The five year interval would also neatly align with the end of the smart meter rollout, during which time a large mass of traditional meters would be inspected at least once more before being replaced.

2.28. This is not our preferred option as we share concerns with the HSE that including prescriptive and static meter inspection obligations on suppliers within licence conditions is inconsistent with our desired health and safety policy objective. It is also inconsistent with the requirements in health and safety legislation for suppliers to take a risk-based approach to assessing and addressing safety risks. We also feel this option is inconsistent with our approach to regulating only where proportionate and necessary to protect consumer interests given the safety requirements in legislation and industry codes.

2.29. We have analysed this option in detail against the policy objectives and consumer outcomes to ensure thorough consideration of its potential impacts (presented in Appendix 2).

### B) Repeal

2.30. This option would remove all the meter inspection provisions in the supply licence conditions 12.8-12.16 for gas and 12.14-12.16 for electricity. It would require all licensees to continue fulfilling their overriding regulatory obligations to assess the risks of their metering assets to consumers and employees.

2.31. This is our preferred option as it would remove prescriptive metering safety requirements in the supply licence conditions which obfuscate suppliers' requirements to take a risk-based approach to assessing and addressing safety risks. We also consider that this option would most effectively and proportionately protect and promote consumer interests given the related safety requirements in legislation and industry codes.

2.32. Analysis of this option is summarised in Chapter 4, with detail presented in Appendix 2.

## 3. Approach to assessment

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**Chapter Summary:** we have assessed the impacts of our policy options against policy objectives and other consumer outcomes using a predominantly qualitative approach. This approach is applied in the assessment summarised in Chapter 4 and detailed in Appendix 2.

**Question 1:** Are there any important impacts of reforming suppliers' meter inspection obligations that we have not identified?

### Approach

3.1. In assessing the impacts of the proposed options, we consider our principal objective to protect the interests of existing and future consumers. In discharging this duty, we have regards to promoting effective competition and ensuring consumers benefit through efficient market functioning. We also have regards to ensuring consumer protection from danger arising from conveying or using gas or electricity<sup>20</sup>.

3.2. In light of this, we assess our proposed options according to whether they protect consumer interests at least as well as the existing licence conditions, and the extent of benefits.

3.3. If other policies and regulations protect consumer interests as well as the licence conditions under review, we do not expect to put in place alternative obligations on licensees. We apply the principles of proportionate and efficient regulation in our assessment and recommendations.

3.4. In our consultation on whether to consent to British Gas' request to operate alternative meter inspection arrangements<sup>21</sup>, we proposed to assess the request against a set of considerations we identified as relevant. Consultation respondents agreed that these considerations were relevant and provided a robust framework for assessing the request.

3.5. Having reviewed these considerations, and tested them with the MISG, we are confident that they remain relevant and have therefore used them in this assessment. These can be categorised into impacts on the three policy objectives of the meter inspection licence conditions (health and safety, theft detection and billing accuracy), and impacts on broader consumer outcomes. The broader consumer outcomes identified are costs to consumers, impacts on competition between energy suppliers, and cross-party industry impacts.

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<sup>20</sup> <https://www.ofgem.gov.uk/ofgem-publications/39107/12491-electricity-act-statutory-duties.pdf>

<sup>21</sup> <https://www.ofgem.gov.uk/ofgem-publications/42018/consultation-british-gas-request-changes-its-meter-inspection-licence-obligations.pdf>

3.6. We have assessed the impacts of our policy options by following the process set out in our Impact Assessment Guidance<sup>22</sup>. Through this process we considered and decided the most proportionate and appropriate methods and approach for assessing the impacts of our policy options. Our approach is predominantly qualitative as the impacts of our policy options are hard to monetise. However, we have drawn upon previous impact assessments to quantify costs and benefits where possible and proportionate.

3.7. In considering the risks and unintended consequences of the policy options, we have considered the evidence and stakeholder views provided in our consultations on the BG Consent and Supply Licence Review, and the views of the HSE. The assessment summarised in Chapter 4, and detailed in Appendix 2 should be read together as our assessment of the impacts of different policy options on existing and future consumers.

### **Policy objectives**

3.8. For the three policy objectives, we have considered the changes to the regulatory landscape since the BG Consent was granted and the principle of applying regulation only where it is necessary to protect consumer interests.

3.9. We have reviewed other licence conditions, policy initiatives and obligations in industry codes to assess the extent of duplication between requirements in these and the meter inspection licence conditions. We reflect on the impact of the smart meter roll-out in these considerations.

3.10. We have also considered the requirements in health and safety legislation. With health and safety in particular, we have taken into account the HSE's advice on whether any revisions to the licence were consequential to either improvements in health and safety or detriment for consumers. We must also be satisfied of this through our own review of other licence conditions and industry codes that relate to meter safety. This is important because we have our own principal objective of protecting consumers' interests, and should have regards to their protection from danger in discharging this duty.

3.11. We have also considered how effective the meter inspection licence requirements are for achieving the three policy objectives, in the interests of ensuring the regulatory requirements are proportionate to the risks involved.

3.12. We revisited the evidence base used to inform the decision to grant the BG Consent. A significant proportion of metering stock in Great Britain is not currently subject to a two-yearly meter inspection obligation due to the BG Consent. So, the justification for this decision remains an important consideration for reviewing the industry-wide arrangements. However, we consider this evidence base alongside

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<sup>22</sup> <https://www.ofgem.gov.uk/publications-and-updates/impact-assessment-guidance>

developments in the regulatory landscape and market characteristics since that decision was made.

3.13. The approach to this assessment is qualitative as the impacts of reform on achievement of these policy objectives are hard to monetise. But, the assessment is informed by data reported under industry codes, and submitted by British Gas as a condition of the BG Consent, and our theft impact assessments<sup>23</sup>.

### **Other consumer outcomes**

3.14. The impact of the options on consumer bills is considered qualitatively and quantitatively.

3.15. The quantitative considerations of potential cost-savings available from reforming the meter inspection arrangements draw upon DECC's smart metering impact assessment.

3.16. The policy options could also create additional costs of compliance. Where these costs are the result of the options rather than other, existing requirements, they should be taken into account in our assessment of costs to consumers. These are more difficult to monetise as they may vary significantly between different industry parties with different portfolios of customers and approaches to managing risks. This is considered qualitatively in the assessment. The costs to consumers should be viewed broadly, considering the consequential impacts of the options on all industry parties who pass on costs to consumers.

3.17. We consider any specific distributional impacts, including the impacts on consumers who may need specific services to access the market and stay safe. Our approach to considering this is an extension of our approach to assessing the options against the policy objectives of the meter inspections licence condition. We have reviewed the existing licence conditions and policy initiatives that provide additional protections for these consumers for duplication with the meter inspection licence condition.

3.18. The impact of the options on competition is addressed qualitatively according to whether the options introduce the same meter inspection requirements for all suppliers as competition impacts are dynamic and hard to monetise. However, our assessment it is informed by our retail market monitoring data and data published by British Gas.

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<sup>23</sup> <https://www.ofgem.gov.uk/gas/retail-market/market-review-and-reform/gas-theft>  
<https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/electricity-theft>

## 4. The preferred option

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**Chapter Summary:** Our preferred option is to repeal the meter inspection supply licence conditions. This is because we think other regulations and policies, including safety obligations and recently enhanced theft detection and billing accuracy obligations offer more effective and proportionate protections for consumer interests.

**Question 1:** Do you agree with our assessment of the options?

**Question 2:** Do you have any evidence to support your views?

### Options assessment summary

4.1. Table 1 below summarises our assessment of the two policy options against the counterfactual in which no changes are made to the current meter inspection licence conditions. We have considered the options against the policy objectives, and other consumer outcomes, as outlined in Chapter 3. The detailed options assessment is presented in Appendix 2<sup>24</sup>.

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<sup>24</sup> This appendix also includes our detailed assessment of the 'minimal change' option.

**Table 1**

Policy options	Policy objectives			Other consumer outcomes	
	Health and safety	Theft detection	Billing accuracy	Competition	Cost
A) Five-yearly minimum frequency	<i>Effectiveness:</i> <b>Minimal change</b> , compliance with the meter inspection licence conditions would remain insufficient to address safety risks which are dynamic and case-specific	<b>Minimal change</b> , inspections uncover few leads for theft investigations	<b>Minimal change</b> , inspections are not the driver for obtaining meter reads	<b>Improvement</b> , introduces the same meter inspection requirements for all suppliers	
	<i>Efficiency:</i> <b>Minimal change</b> , licence conditions would continue to duplicate the policy objectives of other legal obligations industry must comply with	<b>Minimal change</b> , licence conditions would continue to duplicate the policy objectives of other legal obligations industry must comply with	<b>Minimal change</b> , licence conditions would continue to duplicate the policy objectives of other legal obligations industry must comply with		<b>Improvement</b> , potential cost-savings
B) Repeal	<i>Effectiveness:</i> <b>Improvement</b> , health and safety policy objective is met by existing industry codes and legislation. Potential obfuscation of suppliers' statutory obligations to apply a risk-based and dynamic approach to safety risks would be removed.	<b>Improvement</b> , enables suppliers to refocus resource on data-driven theft strategies	<b>Minimal change</b> , inspections are not the driver for obtaining meter reads	<b>Improvement</b> , introduces the same meter inspection requirements for all suppliers	
	<i>Efficiency:</i> <b>Improvement</b> , streamlines regulation	<b>Improvement</b> , streamlines regulation	<b>Improvement</b> , streamlines regulation		<b>Improvement</b> , potential for cost-savings, greater than or equal to option A

## The preferred option

4.2. Based on our assessment above, our preferred policy option is option B, to repeal the meter inspection provisions in the supply licence conditions 12.8-12.16 for gas and 12.14-12.16 for electricity.

4.3. Below, we present more detail on the conclusions of our assessment for the preferred policy option.

### Policy objectives

#### *Health and Safety*

4.4. There is no appropriate uniform solution we can prescribe to suppliers to manage safety risks as these risks are specific to each situation and suppliers' approaches to risk assessments ought to be dynamic. We therefore support the HSE's view that all suppliers should take a risk-based approach to detecting and preventing health and safety risks.

4.5. The HSE has indicated that compliance with health and safety legislation is the obligation of all duty-holders, and the licence condition does not improve or extend that obligation. We think the underlying health and safety policy objective of SLC 12 is met by health and safety legislation, and that SLC 12 is neither necessary nor sufficient to address metering safety risks.

4.6. We are also concerned that a static inspection interval in the supply licence conditions may be obfuscating industry's compliance with health and safety requirements in legislation. Therefore, we think removing the licence conditions will be an improvement for suppliers' risk-management practices and for achieving the health and safety policy objective.

4.7. Additionally, in the absence of meter inspection licence obligations, we have other potential routes to ensure compliance with meter safety obligations. These include the metering safety provisions of industry codes such as the Meter Asset Managers Code of Practice, and the supply licence obligations related to theft.

4.8. Therefore, we recommend repealing the meter inspection requirements in SLC 12. In following the principle of only regulating where it is necessary to protect consumer interests, we do not propose to replace these conditions with a new licence obligation requiring suppliers to comply with all other health and safety regulations.

#### *Theft*

4.9. Suppliers have had specific obligations to take all reasonable steps to tackle gas theft since January 2013 and electricity theft since July 2014. There are also new arrangements being implemented to facilitate this.

4.10. The theft arrangements are based on a shared understanding with industry on effective strategies for theft detection. These are based on a data-driven approach rather than a uniform and static approach.

4.11. Our analysis (presented in Appendix 2) shows that the licence obligation is no longer an effective or efficient tool for theft detection and the new theft arrangements will detect and prevent more cases of theft than meter inspections will.

4.12. In addition, suppliers are obliged to comply with the provisions in safety legislation over and above any licence requirement. This legislation protects consumers from serious metering safety risks that can arise from tampering, for example.

4.13. The smart meter rollout will make routine visual inspections even less valuable to achieving a policy objective of theft detection. This is due to the anti-tamper devices and access to granular consumption data that smart meters will provide.

4.14. Based on these considerations, our recommendation is to repeal the meter inspection requirements in SLC 12 provided that industry delivers on its duties to implement the package of theft policies the Authority directs in a timely manner.

4.15. We will be looking for progress on implementation of these theft policies, such as the Theft Detection Risk Assessment Service, before we come to a policy decision which we expect to make later this year.

### *Billing accuracy*

4.16. Supply SLC 21B requires bills to be based on meter readings. We consider that this duplicates the presumed consumer benefits of the meter reading requirement in the inspection licence condition. It also goes further in its requirements by requiring suppliers to take all reasonable steps to obtain a meter reading at least once a year. This has made the licence obligation to take a reading as part of a meter inspection at least once every two years redundant for traditional meters.

4.17. In future, smart meters will increasingly remove the need to visit sites to read meters manually for the purposes of ensuring billing accuracy.

4.18. Following better regulation principles, our recommendation is to repeal the meter inspection requirements in SLC 12.

## **Consumer outcomes**

### *Impacts on competition*

4.19. A principle underpinning our review is that the same requirements should apply to all suppliers. This is because we consider all suppliers as equally able to meet the policy objectives of the meter inspection licence condition, regardless of the reforms proposed to SLC 12. Following the expiration of the BG Consent, our policy options would introduce the same meter inspection requirements for all suppliers.

4.20. Suppliers are currently required to apply a risk-based approach to complying with health and safety legislation and the theft detection supply licence obligations, regardless of SLC 12. We do not therefore consider that entry costs for new suppliers and recent entrants to the market would be higher if there is no regulatory backstop on acceptable meter inspection intervals.

4.21. We consider that removing the meter inspection requirements in SLC 12 would require the same level of consideration from suppliers on how to assess risks and share information with each other to facilitate risk-assessments when there is customer churn.

4.22. On the basis of competition considerations, we view option B (to repeal the meter inspection provisions in the supply licence conditions) as an improvement on the status quo, and equal to option A (to amend the static interval for minimum meter inspection frequency in the current licence obligations from two to five years) .

### *Impacts on costs to consumers*

4.23. Qualitatively, repealing the meter inspection requirements in SLC 12 has the greatest cost-saving potential through allowing suppliers to inspect meters on a risk-basis. This removes the potential additional costs of inspection at static intervals, and helps to realise the full benefits of the smart meter rollout.

4.24. These cost-savings could be in the order of hundreds of millions of pounds in present value terms to 2030<sup>25</sup>. There may be costs to suppliers of gathering information and assessing metering safety risks to inform their risk-based inspection approach. However, these are costs of compliance with existing health and safety requirements rather than new or additional costs.

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<sup>25</sup> This estimated saving is based on indicative examples of meter inspection frequencies under different policy options, and the meter inspection cost data used in the DECC smart metering impact assessment. Full details of the assumptions and analysis are presented in Appendix 2.

## 5. Implementation

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**Chapter Summary:** There are consequential changes required to align licence conditions and industry codes with our preferred option. We welcome views on whether we have identified all of the required and potential consequential changes, and on our suggested approach to implementing these changes. We aim to issue a policy decision on a chosen option for reforming suppliers' meter inspection obligations later this year, after considering responses to this consultation. We aim to enact changes to the supply licence conditions, if necessary, by 1st April 2016.

**Question 1:** Do you think we have identified the consequent impacts of the preferred policy option?

**Question 2:** Do you see any issues with our implementation approach?

### Consequent impacts

5.1. Repealing the licence condition is our preferred option subject to any views and evidence provided by stakeholders against this.

5.2. Our preferred option would require the current provisions in SLC 12 to be removed in both gas and electricity standard SLCs.

5.3. We would need to remove reference to SLC 12 in gas SLC 17.12. This licence condition currently requires gas suppliers to give details of each inspection carried out under SLC 12.8-12.16, including the date of inspection and findings, to the relevant gas shipper for transmission to the relevant gas transporter.

5.4. We would also need to remove reference to SLC 12 in the gas transporter licence condition 8(g). This licence condition currently requires gas transporters to keep records as to the date of the most recent inspection of a gas meter pursuant to SLC 12 of which the licensee has been notified.

5.5. We propose to maintain the requirements in SLC 17.12 and in Condition 8(g) of the gas transporters licence without the references to SLC 12. We propose to refer instead to inspections carried out to ensure that appropriate maintenance is undertaken to keep the whole meter installation safe, accurate and in proper working order.

5.6. The obligation to ensure appropriate maintenance is undertaken to keep the whole meter installation safe, accurate and in proper working order is currently described within 12.2-12.3 of the Code of Practice for Gas Meter Asset Managers<sup>26</sup>. This code of practice is governed by the Supply Point Administration Agreement

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<sup>26</sup> <http://www.spaa.co.uk/upload/MAMCoP/MAMCoP%204.0.pdf>

which all domestic gas suppliers are required by their licence to accede<sup>27</sup>. We welcome views on this approach to updating cross-references to SLC 12 in other licence conditions.

5.7. The provisions of the Electricity Balancing and Settlement Code Procedure (BSCP) 502 may need to be amended to remove or relax the requirement to inspect most half-hourly settled meters annually or once every two years. The cross-reference to Electricity Supply SLC 12.14-16 for any half-hourly meters that are exempted from this inspection requirement within the BSCP 502 would need to be removed<sup>28</sup>. This would mean all meter types could be subject to the same meter inspection arrangements. We expect to set out an approach to amending the subsidiary documents to the BSC when we make a policy decision on reforming suppliers' meter inspection obligations in SLC 12.

5.8. We would expect licensees to continue complying with their obligations outside of the meter inspection requirements of SLC 12, including the licence conditions, industry codes and legislation referenced in this review.

5.9. We have also set out expectations that industry work towards implementing the new theft arrangements the Authority has directed, and any subsequent arrangements the Authority directs in a timely manner. Our timetable set out below allows for us to assess the progress made towards establishing the TRAS before making a decision on changes to the meter inspections licence condition.

5.10. We also expect for industry parties, including distribution network companies, to put in place the necessary commercial arrangements to discharge their related obligations where there are synergies in collaborating with regards to the risks and costs to consumers.

### **Market monitoring**

5.11. Improving the availability and quality of data items that are mutually beneficial to industry parties is an important objective for the industry. We consider the accurate and timely recording and transfer of metering details and the date of the last meter inspection on change of supplier, and the provision of this information to DNOs as a goal industry should work towards.

5.12. We remain open to considering monitoring suppliers' compliance with the obligations of SLC 21B in the future.

### **Next steps**

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<sup>27</sup> Gas Supply SLC 30

<sup>28</sup> [https://www.elexon.co.uk/wp-content/uploads/2015/06/BSCP502\\_v24.0.pdf](https://www.elexon.co.uk/wp-content/uploads/2015/06/BSCP502_v24.0.pdf)

5.13. We will consider all responses to this consultation, and expect to come to a policy decision later this year.

5.14. We plan to publish our policy decision alongside a statutory consultation on amendments to the standard supply licence conditions (if required). This would allow stakeholders to comment on the implementation of any changes required to licence conditions, as a result of this consultation, over a four week period.

5.15. Subject to comments received on the statutory consultation, we expect to publish a notice of changes to licence conditions in early 2016 such that the change would be effective by 1 April 2016.

# Appendices

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## Appendix 1: Consultation response and questions

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1.1. We would like to hear your views on any of the issues in this document

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter and which are replicated below.

1.3. Responses should be received by 18 September 2015 and should be sent to:

Pooja Darbar  
Smarter Metering  
Ofgem  
9 Millbank  
London  
020 7901 7499  
Email: [smartermarkets@ofgem.gov.uk](mailto:smartermarkets@ofgem.gov.uk)

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website [www.ofgem.gov.uk](http://www.ofgem.gov.uk). Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Once we have considered the responses to this consultation, we intend to publish a decision document by the end this year setting out our policy decision and how this should be implemented.

### **CHAPTER: One**

**Question 1:** Do you agree with our assessment of the need for reform?

### **CHAPTER: Two**

**Question 1:** Do you agree with the scope of our review?

**Question 2:** Do you think we have focused on the right options for reform?

**CHAPTER: Three**

**Question 1:** Are there any important impacts of reforming suppliers' meter inspection obligations that we have not identified?

**CHAPTER: Four**

**Question 1:** Do you agree with our assessment of the options?

**Question 2:** Do you have any evidence to support your views?

**CHAPTER: Five**

**Question 1:** Do you think we have identified the consequent impacts of the preferred policy option?

**Question 2:** Do you see any issues with our implementation approach?

## Appendix 2: Detailed options assessment

1.1. In this section we set out our detailed assessment of the policy options against our policy objectives. We address each of our policy objectives in turn, focusing on:

- The licence provisions for meter inspections in SLC 12
- Other licence provisions relating to the policy objective
- Other legislative and wider protections for consumers
- Our assessment of the impacts on consumers for each policy option.

1.31. We have also set out our assessment of each policy option in terms of their impact on competition and cost to consumers. This section should be read in conjunction with Chapter 4.

### Policy objectives

#### Health and Safety

##### *The meter inspection licence provisions*

1.32. **Error! Reference source not found.** below identifies aspects of the meter inspection licence conditions relating to health and safety assurance.

**Table 2**

Licence condition	Text of the provision	Relevance to health and safety
Electricity SLC 12.15	Meter inspections 'must be carried out by a person possessing appropriate skill and experience	Meter inspector must be able to identify health and safety risks and report appropriately.
Electricity SLC 12.16 (b) A visual inspection must assess whether	(i) there has been damage to the Metering Equipment or to any electrical plant or electric line; (ii) there has been interference with the Non-Half-Hourly Meter to alter its register or prevent it from duly registering the quantity of electricity supplied; or (ii) the Non-Half-Hourly Meter has deteriorated in any way that might affect its safety or proper	Damage, degradation or interference to the meter, or to associated infrastructure, can increase health and safety risks to consumers (and industry staff).

Reforming suppliers' meter inspection obligations

	functioning.	
Gas SLC 12.9 Where customers have switched suppliers in the last two years	'The period of two years ...will expire on a date specified in a notice given by the Relevant Gas Transporter ...at least four months in advance of that date.'	Unlike with electricity, gas suppliers must record the date of last inspection, and transfer this to the new supplier. The effect of this is that the two-yearly inspection obligation is transferred to the new supplier, albeit with a grace period of up to four months if the inspection is due imminently.
Gas SLC 12.10 In taking all reasonable steps to comply with the two-yearly inspection obligation,	"all reasonable steps" includes, in particular, trying to obtain a warrant under the Rights of Entry (Gas and Electricity Boards) Act 1954 in cases where the licensee could not otherwise comply with its obligation.'	
Gas SLC 12.12		As for Elec 12.15 above.
Gas SLC 12.13 Visual inspection must include	(b) inspecting the Gas Meter and associated installation for evidence of tampering;	As for Elec 12.16 (b)(i) and (ii)
	(c) inspecting the Gas Meter and associated installation for evidence that the meter has not continuously been in position for the purpose of registering the quantity of gas supplied;	As for Elec 12.16 (b)(ii) and (ii)
	(d) arranging for information in respect of any gas leakage identified in the vicinity of the Gas Meter to be passed on in accordance with the Gas Safety (Management) Regulations 1996 as if the licensee had been informed of that leakage;	Key requirement relating to health and safety, duplicating existing legislation.

	(e) inspecting the Gas Meter for any evidence of deterioration which might affect its safety or proper functioning;	As for Elec 12.16(b)(iii)
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*Other licence conditions relating to health and safety*

1.33. Gas SLC 29 obliges suppliers to carry out gas safety checks free of charge to homeowners who receive means-tested benefits (those who live with young children, pensioners or chronically ill, sick or disabled) if requested.

1.34. This licence condition has limited relevance to the meter inspection licence provisions under review as it only applies to appliances and gas fittings on the customer's side of the meter.

1.35. However, it may provide some level of health and safety protection, and have some connection to the incremental costs of meter inspection visits if suppliers use these visits to conduct other safety checks such as meter inspections. Any such overlap would only apply to a relatively small section of consumers.

1.36. Gas standard supply licence condition 12.5 requires suppliers to, on request from any of its consumers, remove the gas meter in order for it to be examined by a meter examiner in accordance with section 17 of the Gas Act 1986. The Gas Act 1986 requires approved meter examiners to inspect and stamp meters for compliance with metering standards, and provides for re-examination of meters that have already been stamped or periodic overhauling of meters.<sup>29</sup>

1.37. In gas, the Code of Practice for Gas Meter Asset Managers (MAMCoP)<sup>30</sup> is governed by the Supply Point Administration Agreement which all domestic gas suppliers and all gas transporters are required by their licence to accede<sup>31</sup>. This requires meter asset managers who work on behalf of a gas supplier, consumer or transporter to develop procedures to ensure that appropriate maintenance is undertaken to ensure that the whole meter installation is kept safe, accurate and in proper working order. The procedures must include, amongst other things, ensuring that risk assessments are available for the work intended<sup>32</sup>.

1.38. Specific and appropriate maintenance requirements must be described for meter installations, taking into account, amongst other things, an inspection for

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<sup>29</sup> <http://www.legislation.gov.uk/ukpga/1986/44/part/I/crossheading/supply-of-gas-by-public-gas-suppliers-and-others> Regulation 9

<sup>30</sup> <http://www.spaa.co.uk/upload/MAMCoP/MAMCoP%204.0.pdf>

<sup>31</sup> Licence Condition 30

<sup>32</sup> Condition 12.2

damage, leakage, corrosion and tampering.<sup>33</sup> A maintenance review should also be undertaken every three years or upon a major change of circumstance, if sooner.<sup>34</sup>

1.39. MAMCoP also requires meter asset managers to meet the requirements of legislation relevant to its procedures<sup>35</sup>, and in particular the Health and Safety at Work etc Act 1974 (HSWA). This requires "employers and the self-employed to conduct their undertakings to ensure so far as reasonably practicable that persons not in their employment who may be affected are not thereby exposed to risks to their health and safety"<sup>36</sup>.

1.40. There is direct overlap and duplication between the safety policy objective of the code provisions and the meter inspection licence provisions.

1.41. In electricity, the Meter Operation Code of Practice Agreement<sup>37</sup> (MOCO PA) is an agreement between electricity distribution businesses and electricity meter operators in Great Britain. It requires electricity distribution network companies to maintain all their apparatus in a satisfactory condition<sup>38</sup>.

1.42. The standard conditions of the Electricity Distribution Licence and the Electricity Supply Licence require distribution businesses and suppliers to be party to and comply with the Distribution Connection Use of System Agreement (DCUSA)<sup>39</sup>. DCUSA requires suppliers to procure meter operators that are party to and comply with MOCO PA, and requires distribution businesses to be party to and comply with MOCO PA.<sup>40</sup>

1.43. The standard conditions of the Electricity Distribution Licence also require distribution businesses to only enter into connection and use of system agreements if performance of their obligations under the agreements would not cause them to be in breach of any regulations made under section 29 of the Electricity Act 1989, or any other enactment that relates to safety or standards applicable to the licensee's distribution business<sup>41</sup>.

1.44. Schedule 7 of the Electricity Act 1989 requires suppliers and customers to ensure that meters are kept in proper order at all times for correctly registering the quantity of electricity supplied<sup>42</sup>.

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<sup>33</sup> Condition 12.3

<sup>34</sup> Condition 12.1

<sup>35</sup> Condition 3.2.2

<sup>37</sup> <http://www.mocopa.org.uk/images/documents/documents/MOCOPA-v3.6.pdf>

<sup>38</sup> Condition 6

<sup>39</sup> Condition 20.3

<https://epr.ofgem.gov.uk/Content/Documents/Electricity%20Distribution%20Consolidated%20Standard%20Licence%20Conditions%20-%20Current%20Version.pdf>

<sup>40</sup> <http://www.dcuca.co.uk/DCUSA%20Document%20Public%20Version/DCUSA%20v7.2%20Section%202A.pdf> Condition 27

<sup>41</sup> Condition 7.6

<sup>42</sup> <http://www.legislation.gov.uk/ukpga/1989/29/schedule/7> Regulation 10.2

1.45. DCUSA requires suppliers and their agents to report potential dangers they are alerted to in relation to the supply or distribution of electricity through the distribution system to the relevant distribution network operator.<sup>43</sup>

1.46. DCUSA also requires that any connection contracts entered into by distribution business do not create obligations causing *either party* to the contract to be in breach of the requirements of the Electricity at Work Act 1989 or of the ESQCR<sup>44</sup>.

1.47. The Electricity at Work Regulations 1989 require employers, employees and the self-employed to maintain electrical systems so as to prevent danger as far as reasonably practicable.<sup>45</sup> They also require anyone engaged in any work where technical knowledge or experience is necessary to prevent danger to be appropriately trained or supervised<sup>46</sup>. Regulations under ESQCR require DNOs to ensure that their equipment on consumers' premises not under the control of the consumer is suitable for purpose and maintained so as to prevent danger.<sup>47</sup> The Regulations under ESQCR also require distributors to inspect the network with sufficient frequency so that they are aware of the actions they need to take to ensure compliance with the Regulations<sup>48</sup>.

1.48. There is overlap with the meter inspection licence provisions regarding visual inspection of the meter and any surrounding cables which could include apparatus of the distribution network company.

1.49. In electricity, the Balancing and Settlement Code Procedures (BSCP) also contain requirements for electricity suppliers to inspect half-hourly settled meters annually or once every two years<sup>49</sup>. Suppliers of certain consumers who have elected to be settled half-hourly are exempted from these inspection requirements but are required to nonetheless comply with the meter inspection licence conditions in Electricity Supply SLC 12 as if the conditions applied to them, according to these procedures.

#### *Evidence from British Gas risk assessment*

1.50. The independent risk assessment British Gas commissioned noted that the two-yearly meter inspection removes an 'extremely low' amount of risk, and referenced an earlier report that said it 'makes a negligible contribution to safety'.

1.51. The most significant risk identified of creating serious hazards was the risk of tampering of meters and energy theft. Therefore, an enhanced theft detection and

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<sup>43</sup> Condition 30.5

<sup>44</sup> Section 9, Schedule 2B italics added for emphasis.

<sup>45</sup> <http://www.legislation.gov.uk/ukxi/1989/635/part/II/made> Regulation 4

<sup>46</sup> IBID Regulation 16

<sup>47</sup> <http://www.legislation.gov.uk/ukxi/2002/2665/regulation/24/made> Regulation 24

<sup>48</sup> <http://www.legislation.gov.uk/ukxi/2002/2665/regulation/5/made> Regulation 5

<sup>49</sup> With the exception of three-phase connections which have distinct annual inspection requirements. Paragraph 4.1.8 of BSCP502: [https://www.elexon.co.uk/wp-content/uploads/2015/06/BSCP502\\_v24.0.pdf](https://www.elexon.co.uk/wp-content/uploads/2015/06/BSCP502_v24.0.pdf)

prevention strategy was the key mitigating factor in reducing health and safety risks to consumers. Further consideration is presented in the section below on *Theft*.

### *Health and safety legislation*

1.52. Regardless of any licence conditions, suppliers must comply with legislation. The relevant legislation includes: the Health and Safety at Work Act 1974, Electricity at Work Regulations 1989, Management of Health and Safety at Work Regulations 1992, Electricity Safety, Quality and Continuity Regulations 2002, Electricity Act 1989, Gas Safety (Installation and Use) Regulations 1998, and Gas Act 1986.

1.53. As part of the MISG deliverables, some members reviewed health and safety obligations in legislation, and identified overlap with the meter inspections licence provisions. The contributors concluded that SLC 12 did not impose further legal obligations on licensees over and above requirements in legislation.

1.54. In the energy sector, as with elsewhere, the burden of compliance is squarely on the duty-holders (suppliers, distribution network companies and other parties).

1.55. The HSE expects all companies to have appropriate procedures in place to fulfil their statutory health and safety obligations. For example, under the Health and Safety at Work etc Act 1974, employers are responsible for ensuring the safety and health of their employees and also the public, if they are at risk from those work activities, including electrical safety.

1.56. The HSE holds companies to account for compliance, investigating instances that are brought to its attention by exception and enforcing the law. It also produces guidance on safety risk assessment and risk management, specific to electrical safety.

1.57. The HSE's position is that suppliers and other duty holders such as DNOs, should not rely on the current meter inspection arrangements in SLC 12 to fulfil their statutory health and safety requirements. For example, HSE states that duty holders should apply a risk-based, dynamic and case-specific approach to assessing and addressing health and safety risks (rather than relying on a static inspection interval).

1.58. It also states that all duty holders must satisfy themselves that they have addressed the health and safety risks of their assets appropriately even if the work done to check the assets is contracted to a third party. This is particularly relevant for DNOs who use SLC 12 to form part of their current risk assessments.

### *Options assessment*

1.59. We consider a minimal change option (to retain the two-yearly meter inspection licence conditions but align them between gas and electricity) would not improve health and safety risk management.

1.60. This is because we support the HSE's view that a risk-based approach to detecting and preventing health and safety risks should be taken by all duty-holders. We are also concerned that a static inspection interval in the supply licence conditions may be obfuscating industry's compliance with health and safety requirements. This is a particular issue for the wider industry's compliance with health and safety requirements, as DNOs have referenced SLC 12 in their safety compliance strategies.

1.61. Moreover, the burden of compliance rests with duty-holders to satisfy themselves that they adequately manage safety risks. As we move into a world with more smart meters, the safety risks of meters will change as meters are installed complying with new technical standards.

1.62. There are features of the smart metering design that should support improvement of metering safety risks. For example, smart metering equipment will contain an anti-tamper device which remotely alerts suppliers to unauthorised physical interference with aspects of the equipment such as removal of the meter cover, terminal cover or batter cover. This enables the supplier to investigate and take action which could detect theft, and also deter theft (and the associated safety hazards).

1.63. Consumption data from smart meters will also help suppliers to detect unusual patterns of consumption, and could prompt investigation into potential unsafe situations caused by theft.

1.64. Smart electricity meters will also have the functionality to send remote messages to suppliers when the current and voltage measured exceed certain thresholds. This should help them to investigate issues before potential damage to the meter occurs.

1.65. Other metering safety risks will still apply once smart meters are rolled out. For example, corrosion or aging of the meter will be delayed by the installation of new meters but will remain relevant. The variables involved in risk-assessments and risk areas of focus may change over time as more evidence is gathered of smart meter operation. There is no appropriate uniform solution we can prescribe to suppliers to manage safety risks as these risks are specific to each situation and suppliers' approaches to risk assessments ought to be dynamic.

1.66. Additionally, in the absence of meter inspection licence obligations, we have other potential routes to ensure compliance with meter safety obligations. These include the metering safety provisions of industry codes such as the Meter Asset Managers Code of Practice, and the supply licence obligations related to theft.

1.67. On this basis, we do not consider policy option A (a five-yearly meter inspection obligation) to be an improvement to safety risk management either. This would maintain a static inspection interval and would not encourage licensees to adopt a risk-based and proactively responsible approach to maintaining the safety of their assets.

1.68. The five-year option may have some benefits in providing a regulatory backstop for meter inspections. Given that the smart meter rollout will last around five years, it could also provide an opportunity to review the impacts of the amended licence obligations at the end of the rollout.

1.69. However, we do not think this option would reduce the likelihood or severity of health and safety risks. Suppliers should be applying a risk-based approach to effectively address safety risks and comply with health and safety legislation, and metering safety risks will remain dynamic and case-specific. Therefore, compliance with a supply licence requirement modelled on option A would be ineffective for achieving the health and safety policy objective.

1.70. Moreover, we are concerned that the current prescription and regulatory backstop for minimum inspection frequency in the supply licence requirements is obfuscating suppliers' requirements to apply a risk-based approach to metering safety inspections.

1.71. Our recommended option would be option B, to repeal the 'Inspection of Electricity Meter' licence conditions (12.14-12.16) and 'Inspection of Gas Meter' licence conditions (12.8-12.16).

1.72. The HSE has indicated that compliance with health and safety legislation is the obligation of all duty-holders, and the licence condition does not improve or extend that obligation. HSE has signalled that any challenges duty-holders face relating to compliance with the legislation are a matter for HSE and industry parties to address outside of our review.

1.73. One option for implementing an alternative licence condition would be to introduce a licence condition on suppliers to comply with all health and safety regulations. This option would be a duplication of existing obligations on licensees and would not achieve our objective of only regulating where it is proportionate and necessary to protect consumers.

1.74. Another option would be to impose a licence condition on suppliers to take all reasonable steps to develop an agreed risk-based framework by a certain date and resolve industry data-sharing issues to facilitate industry-wide health and safety compliance. This option would only provide regulatory assurance for consumer outcomes if the Authority directly involved itself in assessing and approving the framework. In this case, we would be interpreting health and safety legislation and creating a plan to help industry achieve compliance.

1.75. We do not think that this is appropriate role to play given the HSE's role in enforcing health and safety law and providing guidance on risk-assessment. This approach would also remove the onus from duty-holders to satisfy themselves that they are compliant.

1.76. Our preferred option is to consider whether consumer safety is harmed or can be improved within the remit of our role in our proposals. We have taken HSE's

advice into account in this consideration, and we believe that consumer safety will be improved through industry adopting a risk-based approach to achieve compliance with health and safety obligations.

1.77. We expect industry parties to ensure they have a risk-based approach to inspecting meters to comply with their broader health and safety legal obligations. Industry parties should have this type of approach in place regardless of the licence condition provisions. As part of this approach, we recommend that duty-holders consider the data-sharing requirements needed to facilitate a risk-framework.

## Theft

### *The meter inspection licence provisions*

1.78. **Error! Reference source not found.** below identifies aspects of the meter inspection licence conditions relating to theft.

**Table 3**

Licence condition	Text of the provision	Relevance to theft
Electricity SLC 12.16 (a) Gas SLC 12.13 (a) An inspection must include	Taking a meter reading	Provides an indication that consumption has been recorded within a given period. Very low consumption or variations could indicate theft.
Electricity SLC 12.16 (b) A visual inspection to assess whether	(i) there has been damage to the Metering Equipment or to any electrical plant or electric line;  (ii) there has been interference with the Non-Half-Hourly Meter to alter its register or prevent it from duly registering the quantity of electricity supplied;	May indicate that the meter has been bypassed, so it does not register consumption.  Indicates that the meter has been sabotaged and is not recording consumption.
Gas SLC 12.13 Visual inspection to include	(b) inspecting the Gas Meter and associated installation for evidence of	As for 12.16 (b) above.

	<p>tampering;</p> <p>(c) inspecting the Gas Meter and associated installation for evidence that the meter has not continuously been in position for the purpose of registering the quantity of gas supplied;</p>	
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*Other licence conditions relating to theft*

1.79. Gas and electricity standard supply licence conditions 12A require suppliers to take all reasonable steps to not only detect and investigate theft but also to prevent theft. This obligation on suppliers has been in place since January 2013 in gas, and July 2014 in electricity.

1.80. SLCs 12.A.7 require suppliers to take all reasonable steps to ensure that the 'theft arrangement' that the Authority may direct is implemented by such a date as the Authority may direct.

1.81. The licence conditions have been introduced to link to Authority directions on a package of policy initiatives we have developed to improve industry performance on theft. These policies specifically address the financial disincentive that suppliers face to expend resources consistently to detect and investigate any suspected incidents of theft.

1.82. Under SLC 12A, we have directed electricity and gas suppliers to establish a Theft Risk Assessment Service (TRAS) by February 2016<sup>50</sup>. This is a service across both electricity and gas, which uses industry data to identify potential thefts. The contract to operate the TRAS has been awarded to Experian. Licensees are responsible for this service, and must cooperate by providing data and acting on leads generated. In May 2015, we approved the industry modification proposals to the Supply Point Administration Agreement (SPAA) and DCUSA required to establish the TRAS<sup>51</sup>.

1.83. Under SLC 12A, the industry and individual suppliers are also required to maintain at least the same performance of theft detection until the TRAS is operational.

<sup>50</sup> <https://www.ofgem.gov.uk/publications-and-updates/direction-under-paragraph-8-condition-12a-standard-conditions-gas-supply-licence-introduce-theft-risk-assessment-service-0>

<sup>51</sup> SPAA CP15-292 and DCUSA DCP225, respectively.

1.84. The theft detection targets placed on industry and individual suppliers will be adjusted in line with a methodology to be developed by the TRAS within 12 months of its operation to ensure they remain at a cost-effective level.

1.85. In addition to this, our decision documents<sup>52</sup> have also proposed a financial incentive scheme for suppliers to encourage performance above the target levels. A new 24 hour theft reporting hotline is also due to be put in place this summer.

#### *Evidence from British Gas' risk assessment*

1.86. British Gas implemented an enhanced theft detection and prevention strategy as part of its alternative meter inspection arrangements. British Gas identified tampering and theft as the key drivers of safety risks associated with meters. Meter inspection visits were estimated to contribute very infrequently (around 5%) to the leads for theft investigation identified through operating a risk-based theft detection approach.

1.87. As part of the BG Consent, we set obligations for British Gas to detect a minimum number of instances of theft. We set these obligations in gas and electricity based on the levels of theft detection identified in its risk-assessment from operating a risk-based approach. British Gas has complied with this obligation since the BG Consent was granted based on our review of data reported from April 2013 up until January 2015.

#### *Theft legislation*

1.88. The Gas Act 1986 (Schedule 2B)<sup>53</sup> sets out the rights of gas transporters to disconnect the consumer's premises if a consumer improperly uses gas so as to interfere with its efficient conveyance.

1.89. The Electricity Act 1989 (Schedule 7)<sup>54</sup> sets out the rights of suppliers to discontinue to supply where evidence of interference with the meter has been identified, and provides for prosecution of culprits.

#### *Options assessment*

1.90. Preventing theft is an important objective for suppliers to keep the costs of energy down for consumers. It is also an important objective for protecting consumers from danger given the causal link between tampering with metering equipment and health and safety hazards.

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<sup>52</sup> <https://www.ofgem.gov.uk/publications-and-updates/tackling-gas-theft-new-requirements-gas-suppliers> <https://www.ofgem.gov.uk/ofgem-publications/86504/electricitytheft-decisionfinalv1.pdf>

<sup>53</sup> <http://www.legislation.gov.uk/ukpga/1986/44/schedule/2B#commentary-c1444064>

<sup>54</sup> <http://www.legislation.gov.uk/ukpga/1989/29/schedule/7>

1.91. Provisions in the meter inspection licence obligations directly refer to checking for tampering. However, suppliers have detected a small fraction of suspected thefts through meter inspections, despite the long-running presence of these licence conditions.

1.92. We have a strong indication that the licence obligation is an ineffective and inefficient tool for theft detection considering the costs of site visits. By comparison, where suppliers have used data-driven approaches they have detected far higher volumes of theft.

1.93. Recent theft reporting to SPAA shows that meter inspections contributed less than 4% of suspected theft of gas incidents suppliers reported last year. 85% of the suspected incidents were discovered through tip-offs and the suppliers' own analysis. This is an extremely low return on mandated meter inspections.

1.94. The theft arrangements have moved on significantly since the requirements of the meter inspection licence condition were last reviewed for British Gas' request to operate alternative meter inspection arrangements. Suppliers have had specific obligations to take all reasonable steps to tackle gas theft since January 2013 and electricity theft since July 2014. There are also new arrangements being implemented to facilitate this.

1.95. The theft arrangements are based on a shared understanding with industry on effective strategies to theft detection. These are based on a data-driven approach rather than a uniform and static approach. The industry will be focusing its theft resources on the most economically efficient and effective lines of enquiry.

1.96. We consider that shared industry intelligence theft risk indicators will enable licensees to apply a risk-based approach to detecting theft. This should improve industry performance in successful detections of theft through a targeted revenue protection strategy.

1.97. Both the minimal change option and policy option A would be desirable for the purposes of theft detection if mandated meter inspections detected more theft than the new arrangements. Equalising the requirements between electricity and gas would also help to rectify the limitation of the inspection obligations in electricity. Currently, the inspection interval resets on change of electricity supplier, allowing consumers committing electricity theft acts to easily circumvent inspection by frequently changing supplier. However, our analysis shows that the new theft arrangements will detect and prevent more cases of theft than meter inspections will.

1.98. In addition, suppliers are obliged to comply with the safety provisions in the Electricity Act 1989 and health and safety legislation. This includes the Health and Safety at Work Act 1974, and the Electricity at Work regulations 1989 which require them to take a proportionate, risk-based approach to detecting and preventing health and safety risks (such as tampering with equipment). These requirements apply over and above any licence requirement, and would remain in force regardless of any change to SLC12.

1.99. Based on these considerations, our recommended option is option B, to repeal 'Inspection of Electricity Meter' licence conditions (12.14-12.16) and 'Inspection of Gas Meter' licence conditions (12.8-12.16). Our recommendation is subject to industry delivering on its duties to implement the package of theft policies the Authority directs in a timely manner.

1.100. We will be looking for progress on the implementation of the TRAS and the new suspected theft reporting channels before we publish our decision document later this year.

### Billing accuracy

#### *Meter inspection licence conditions*

1.101. **Table 4** identifies aspects of the meter inspection licence conditions relating to billing accuracy.

**Table 4**

Licence condition	Text of the provision	Relevance to billing accuracy
Electricity SLC 12.16 (a) Gas SLC 12.13 (a)	An inspection must include taking a meter reading	Provides an indication that actual consumption has been recorded within a given period.
Electricity SLC 12.16 (b) A visual inspection to assess whether	(i) there has been damage to the Metering Equipment or to any electrical plant or electric line;  (ii) there has been interference with the Non-Half-Hourly Meter to alter its register or prevent it from duly registering the quantity of electricity supplied;	May indicate that the meter has been bypassed, so it does not register consumption.  Indicates that the meter could be faulty or has been sabotaged and is not recording consumption properly <sup>55</sup> .

<sup>55</sup> SLC 12 does not require a meter accuracy check. The National Measurement and Regulation Office is responsible for electricity and gas metering accuracy.

<p>Gas SLC 12.13</p> <p>Visual inspection to include</p>	<p>(b) inspecting the Gas Meter and associated installation for evidence of tampering;</p> <p>(c) inspecting the Gas Meter and associated installation for evidence that the meter has not continuously been in position for the purpose of registering the quantity of gas supplied;</p>	<p>As for 12.16 (b) above.</p>
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*Other licence conditions related to billing accuracy*

1.102. SLC 21B.1 in gas and electricity provides that where a customer provides a meter reading to the licensee that it considers reasonably accurate, the licensee must take all reasonable steps to reflect this reading within the next bill or statement of account.

1.103. SLC 21B.2 requires licensees to take all reasonable steps to obtain a new meter reading from the consumer if they consider the reading provided to be inaccurate.

1.104. Two new conditions (21B.4 and 21B.5) came into force on 31 December 2014. These additions followed engagement with DECC in order to implement the electricity and gas billing requirements of the European Union Energy Efficiency Directive into licence conditions in Great Britain.

1.105. SLC 21B.4 requires licensees to take all reasonable steps to obtain a meter reading (including any remote reading or read provided by the consumer) at least once every year unless the consumer has a prepayment meter.

1.106. SLC 21B.5 requires licensees to provide consumers with a bill or statement of account at least twice yearly and at least quarterly to anyone who requests it, provided that the consumer does not have a prepayment meter, smart meter or unmetered supply.

1.107. SLC 31A requires suppliers to provide all domestic consumers with their annual consumption details on every bill or statement of account. Annual consumption details must be calculated using an actual meter read obtained in the last 12 months including meter reads provided by the customer and agreed by the supplier according to SLC 21B or an estimate where the customer has been with that supplier for less than 12 months or no meter reading has been obtained which can reasonably be considered to cover the whole of that 12 month period.

Vulnerable consumers

1.108. SLC 26.1(c) in electricity and gas requires licensees to read the meters of consumers who are of pensionable age, disabled or chronically sick at least once each quarter if the consumer informs them that no occupants within their premise are able to read the meter.

1.109. SLC 26.4 in electricity and gas obliges licensees to establish and maintain a Priority Services Register (PSR) for all domestic customers who are of pensionable age, disabled or chronically sick who have requested this or had a person request this on their behalf.

1.110. SLC 26.5 requires licensees to inform and advise customers of the services available to them because of their age, disability or chronic sickness when their name is added to the PSR.

1.111. SLC 26.6 requires licensees to take all reasonable steps to inform its domestic customers of the existence of the PSR and of how to become listed on it, at least once each year.

1.112. In June 2014<sup>56</sup>, Ofgem conducted a review of the PSR. As part of the wider Consumer Vulnerability Strategy, Ofgem consulted on proposals to require suppliers to broaden the scope of these additional protections and move to a 'needs-based' eligibility model for PSR services.

1.113. In March 2015<sup>57</sup>, we set out proposals requiring suppliers to take all reasonable steps to identify people who are more likely than a typical consumer to experience problems with communication, safety and supply (amending SLC 26.4). The proposal retains certain core groups of consumers who are deemed to be at greater risk under the eligibility criteria for safety-related PSR services who are deemed to be at greater risk (i.e. consumers aged 75 and over, disabled consumers, chronically sick, pregnant women and children under 5).

1.114. Suppliers will be required to offer these consumers non-financial services based on their needs (amending SLC 26.1). There will be a set of prescribed services that should be offered to consumers eligible for PSR services but licensees are expected to identify and assess the needs of vulnerable consumers whose needs are not met by prescribed services; and to offer additional services to them.

1.115. When this change is enacted, any consumers in premises where there are no occupants able to provide reads will be entitled to have their meter reads at least once every quarter if they are identified as benefitting from this service on suppliers' PSR.

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<sup>56</sup> <https://www.ofgem.gov.uk/publications-and-updates/review-priority-services-consultation>

<sup>57</sup> <https://www.ofgem.gov.uk/publications-and-updates/review-priority-services-register-update-and-next-steps>

## Settlement codes

1.116. SLC 11.2D in electricity requires all suppliers to be party to the Balancing and Settlement Code (BSC). The BSC Annex S-1<sup>58</sup> requires that at least 97% of non-half hourly electricity is settled on the basis of actual metered data by the time of Elexon's final volume allocation run (i.e. within 14 months). There is therefore a knock-on requirement for suppliers to obtain meter reads at least once every 14 months through site visits or reads provided by consumers. If suppliers fail to meet this performance level, they are liable to pay charges as a financial penalty.

1.117. In gas, the estimated annual consumption (Annual Quantity) is used by the gas transporters' agent (Xoserve) to invoice energy gas shippers. At present, for small supply points, the Annual Quantity can only be adjusted once a year. This can lead to a prolonged period before any change in consumers' energy consumption measured by more recent meter reads is recognised and allocated to the Annual Quantity. The potential mismatch effect is compounded as there is currently no mechanism to reconcile this difference for individual smaller supply points.

1.118. The central gas systems that cover functions such as settlement are in the process of being replaced through Project Nexus. In February 2014, we accepted a modification<sup>59</sup> to the Uniform Network Code (UNC) that will allow for the Annual Quantity of all supply points to be re-calculated on a rolling basis, as valid meter readings are provided. The new arrangements will also provide for all sites to be individually reconciled. This will reduce shippers' exposure to energy imbalances by effectively utilising frequent meter read data.

### *Evidence from British Gas' risk assessment*

1.119. The analysis of British Gas' request to operate a risk-based meter inspection arrangement with a five-year backstop recognised that some consumers' bills could become less accurate.

1.120. Specifically, consumers who do not provide their own reads; those who refuse access to meter readers or have not been present to give access to meter readers during their site visits; and those who have not been targeted for an inspection on a risk-basis.

1.121. British Gas' commercial practice of gathering meter reads through site visits (more regularly than meter inspection visits), engagement with customers, and remote reads was analysed as part of a risk-assessment. British Gas' data showed that an increasing proportion of customers were willing to provide regular meter reads themselves. As part of Ofgem's consultation on the British Gas' request to

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<sup>58</sup> [https://www.elexon.co.uk/wp-content/uploads/2013/12/bsc\\_section\\_s\\_annex\\_s-1\\_v8.0.pdf](https://www.elexon.co.uk/wp-content/uploads/2013/12/bsc_section_s_annex_s-1_v8.0.pdf) paragraph 2.2.1

<sup>59</sup> UNC432: [Project Nexus - gas settlement reform](#)

operate alternative meter inspection arrangements, other suppliers also identified this trend in their own customer base.

1.122. Suppliers also stated that commercial drivers led them to obtain meter readings more frequently than the meter inspection licence condition requires.

1.123. However, in order to reduce the risk of the number of meter reads obtained falling due to the BG Consent, the Authority imposed a condition requiring British Gas to take all reasonable steps to obtain a meter reading at least once every two years.

1.124. It also imposed a condition requiring British Gas to continue inspecting the meters of consumers registered on the PSR at least once every two years. The rationale for this condition was that vulnerable consumers, proxied by registration on the PSR, may be less able to provide their own meter readings and the impact on them of inaccuracies in billing could be much greater. There were no concerns raised around higher health and safety or theft detection risks for vulnerable consumers.

1.125. British Gas is required to report on the meter reads it collects and method of obtaining reads as part of the BG Consent. We have analysed this reporting data and have not found any evidence of detriment to consumer billing accuracy as a result of British Gas' risk-based approach to inspecting meters with a five-yearly minimum inspection frequency.

### *Options assessment*

1.126. Suppliers can read smart meters remotely, so they should no longer need to visit the site to bill consumers accurately once consumers have a smart meter installed.

1.127. However, we are proposing changes to apply to traditional and smart meters during 2016 when most consumers will not have smart meters. Furthermore, a small proportion of sites may not have a remote connection by the end of 2020 due to connectivity issues. We therefore need to satisfy ourselves that suppliers have alternative means and incentives to provide accurate bills.

1.128. Suppliers have indicated that commercial incentives are such that meter reads are obtained more frequently than the current meter inspection obligations require. Any irregularities in recorded consumption patterns have been identified by the MISG as a key indicator for deciding to inspect a meter using a risk-based approach as they may be evidence that a customer is unable to read their meter properly.

1.129. However, we must consider risks of removing a potential regulatory consumer protection for consumers with traditional meters. From a risk mitigating perspective, a minimal change option (to retain the two-yearly meter inspection licence conditions but align them between gas and electricity) would only be desirable if it provided a protection for consumer billing accuracy over and above other licence conditions and obligations on suppliers.



## Reforming suppliers' meter inspection obligations

1.130. Policy option A is unlikely to be preferred for the purposes of billing accuracy given the backstop it would provide for a meter reading would relate to a long period of time (5 years).

1.131. We consider that SLC 21B duplicates and enhances the presumed policy intention of the meter reading requirement in SLC12.

1.132. SLC 21B.4 goes further than the 12.16a/12.13a in that it requires licensees to take all reasonable steps to obtain a meter reading at least once every year. This is a more onerous obligation than the meter inspection provisions.

1.133. SLC 21B.4 also goes further than the meter inspection licence obligations in achieving the objective of consumer billing accuracy. It obliges licensees to provide consumers with a bill at least once every six months.

1.134. SLC 21B.4 also provides a stronger requirement in electricity for licensees to obtain a meter read than the meter inspection licence condition where there has been frequent change of supplier.

1.135. Importantly, SLC 21B.4 is an outputs-based requirement. It gives suppliers the flexibility to use the most efficient way of billing consumers accurately. It does not mandate the method of compliance as the current meter inspection licence conditions do.

1.136. There could be some risks for consumer billing accuracy of the principles-based approach taken in SLC 21B.4, Self-reads from consumers and remote reads are permissible, for example, while under 12.16a/12.13a, the operative carrying out the meter inspection on behalf of the licensee is required to take the meter read.

1.137. Self-reads could be less accurate than reads obtained by trained meter inspection operatives. However, there is no evidence available to suggest that this is the case and condition 21B.2 protects both licensees and consumers from inaccurate self-reads.

1.138. The reasonable steps licensees are required to take in condition 21B.4 do not expressly include obtaining a warrant. In gas, the protections for consumers with traditional meters who are unable or unwilling to provide their own reads related to billing accuracy may be strengthened in practice by the presence of the meter inspection requirement.

1.139. We do not currently have evidence of industry-wide compliance with SLC 21B or with SLC 12. However, as we have set out, we consider SLC 21B offers better protection for consumer billing accuracy than SLC 12. If licensees were found to be non-compliant with SLC 21B, we would consider the appropriate regulatory response for that particular case of non-compliance. We do not think retaining the meter inspection licence conditions would be an effective or efficient solution. We also note that smart metering will increasingly provide a more efficient means for suppliers to bill accurately without requiring a meter reading site visit.

1.140. As part of our duties, we must have specific regards to the needs of protected groups of consumers. As per Table 3, there are no specific obligations in the meter inspection licence provisions related to protected groups of consumers but the blanket obligation could provide protection to them if they are unable to provide self-reads and are not receiving the targeted quarterly meter reading services under SLC 26.1.

1.141. Our recommended option based on these considerations is option B, to repeal 'Inspection of Electricity Meter' licence conditions (12.14-12.16) and 'Inspection of Gas Meter' licence conditions (12.8-12.16).

1.142. In assessing the risk to vulnerable consumers, we must note that SLC 21B.4 already provides a stronger obligation than the meter inspection licence condition does in relation to meter reading for all consumers.

1.143. Through the PSR Review, we proposed that suppliers must take all reasonable steps to proactively identify consumers who may need additional safety, access and communication services. We added that suppliers should update this information on their customers in vulnerable situations regularly as part of their existing licence conditions, and proposed that suppliers should offer them needs-based services. We also proposed to enable data sharing with consent of the consumer between energy suppliers and network companies. Industry is working towards developing consistent codes to identify different consumer needs to facilitate this data-sharing.

1.144. Energy companies already have incentives to improve their identification of consumer needs and to service them. Electricity and gas distribution networks have financial incentives through the RIIO price control model, and suppliers have compliance monitoring. For the latter, we expect suppliers to report on their performance through specific and broader annual social obligations reporting. We expect to publish details of suppliers' performance.

1.145. A static meter inspection obligation may provide some protection for some consumers against estimated reads. This could be the case if suppliers are not taking all reasonable steps to comply with SLC 21B.4 (billing based on meter readings). It could also be the case where consumers who are not able to provide self-reads are not being targeted through the PSR for quarterly read services. However, the proposed changes to the PSR put the onus on suppliers to proactively identify and offer non-financial services that would be reasonably beneficial for any consumers using a needs-based approach.

1.146. We could consider an alternative option of imposing a condition in an amendment or repeal of the rest of SLC 12 requiring suppliers to maintain two-yearly meter inspections for vulnerable consumers as identified on their PSR. This would be akin to the condition British Gas must meet as part of the BG Consent. However, this would only provide limited additional protections for consumers. It would only be relevant for consumers on the PSR who are unaware that they can request quarterly reads if unable to provide self-reads. It would also provide more limited protection than SLC 21B.4 which requires suppliers to obtain a meter reading at least once a year.

1.147. Broadly, a regulatory backstop for meter inspections could provide a point of contact with vulnerable consumers that helps to identify any additional needs they have. However, we consider the obligations on suppliers that specifically target this behaviour to be the appropriate policy tool for protecting consumer interests.

1.148. Our recommended option based on these considerations remains option B, to repeal 'Inspection of Electricity Meter' licence conditions (12.14-12.16) and 'Inspection of Gas Meter' licence conditions (12.8-12.16).

## Consumer outcomes

### Impacts on competition

#### *The BG Consent*

1.149. In our decision to grant the BG Consent, we considered the impacts on competition. We considered the BG Consent may (a) reduce operational costs for British Gas, and (b) bring forward the compliance costs of other suppliers who gain gas consumers from British Gas with meters that have not been inspected in the past two years<sup>60</sup>.

1.150. However, in our decision, we recognised that firstly, all suppliers were free to apply for their own consent to reduce their operational costs in a similar manner to British Gas. Secondly, British Gas' arrangements would not impose new costs for competitors but bring them forward.

1.151. Since we granted the BG Consent in 2012, the structure of the retail energy market has changed with the growth of independent suppliers. During this time, there has also been a trend of increasing churn away from British Gas. This may have changed the impact of effect (b) on competing suppliers.

1.152. In DECC's smart metering impact assessment, meter operators reported that the typical cost of a meter inspection for routine inspections is £3 per meter. Using this figure, we have considered the potential impacts on inspection cost profiles for suppliers gaining customers from British Gas in different scenarios.

1.153. In the counterfactual case, where all suppliers are bound by the two-yearly meter inspection licence provisions, gas meter points that British Gas lost may have been inspected at any time during the past two years. Assuming that the average meter would have been inspected in the last year in absence of the BG Consent, then the costs to gaining suppliers of the BG Consent would have been brought forward. The costs would have been brought forward on average by 8 months and at most by 20 months for gas meters British Gas lost that had not been inspected in the past two years due to the BG Consent.

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<sup>60</sup> In electricity, the meter inspection window resets on change of supplier.

1.154. In a high impact scenario, we could assume that British Gas had not inspected any of the meter points it lost to competitors within the past two years. The reduction in meter points and customer accounts reported by British Gas Business and British Gas Residential respectively from 31 December 2013- 31 December 2014 is available in their annual report.<sup>61</sup> This would equate to a £1.3m meter inspection costs for the gaining suppliers to incur on aggregate within four months of the consumer switch dates during that year.

1.155. In a more likely scenario, we assume that of the gas meter points lost by British Gas over the year, a smaller proportion had not been inspected for more than two years. This is more likely given that the BG Consent only came into effect in April 2013.

1.156. If we assume that 15% of gas meter points lost to competitors had not been inspected in the past two years, this would bring less than £195,000 of meter inspection costs forward. The gaining suppliers would incur these costs on aggregate within four months of the consumer switch dates during that year.

1.157. These costs would be incurred by the gaining suppliers regardless of the BG Consent. The effect of the consent is to bring the costs forward, and real terms the maximum impact on costs to gaining suppliers is the discount rate over the two-year inspection interval. In economic terms, this may be a small impact but this could be considered material in commercial terms by smaller suppliers gaining consumers rapidly.

1.158. Our range is large; our upper estimate is more than five times our base case estimate. We have received some data from one of the larger independent suppliers on the last meter inspection dates of gas meter points it gained from British Gas over the period since April 2013. However, the examples we have presented above are only illustrative and do not intend to model the reality of inspection cost profiles for British Gas' competitors as these will differ between suppliers according to their customer acquisitions and risk-assessment strategies.

1.159. We do not have evidence of other suppliers' compliance with the two-yearly meter inspection licence obligations. We have however received expressions of interest from other suppliers to apply to us for consent to operate their own alternative meter inspection arrangements. These indicate their view that the impacts of BG Consent could be important for their competitiveness.

1.160. We are not clear on whether smaller suppliers view the impacts of secondary effect (b) as material for their cash-flow positions. However, we are mindful of our objective to promote effective competition in consumers' interests. We plan to take a decision on industry-wide arrangements for meter inspections and implement this by

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<sup>61</sup> [http://www.centrica.com/files/reports/2014ar/Centrica\\_AR2014\\_Annual\\_Report.pdf](http://www.centrica.com/files/reports/2014ar/Centrica_AR2014_Annual_Report.pdf) pg. 25. In reality, British Gas may have lost more meter points to competitors when taking into account gains from other suppliers over the period, and some losses may not have been related to gas. This assumption has been made as a simplification for modelling purposes.

the expiration of the BG Consent on 31 March 2016. This will avoid the potential for further differences between the regulatory requirements for meter inspections faced by individual suppliers which a 'do nothing' option could create.

### *Options assessment*

1.161. Policy options A and B and the minimal change option would introduce the same meter inspection requirements for all suppliers at the expiration of the BG Consent.

1.162. However, there could be an additional consideration with option B to repeal the licence condition. In absence of a mandated regulatory interval for inspecting meters, suppliers would need to apply a risk-based approach to inspecting meters. They would need to take account of their obligations to detect theft, obtain meter readings, and protect consumers and their employees from health and safety risks posed by their metering assets.

1.163. Applying this approach carries costs for suppliers of assessing risks and gathering information required to support this assessment. Assessing risks and gathering information could be more difficult for gaining suppliers when there is no regulatory backstop on acceptable meter inspection intervals. This could raise entry costs for new suppliers and act as an indirect barrier to competition.

1.164. However, suppliers have requirements to carry out this risk-based approach to comply with health and safety legislation and theft detection licence obligations regardless of any inspection licence condition provisions. SLC 12 only provides for a minimum level of inspection frequency.

1.165. We consider both of the policy options should require the same level of consideration from licensees on how to assess risks and share information to facilitate meter inspections when there is churn.

1.166. For example, there is currently no provision in the industry arrangements for facilitating change of supplier in electricity requiring the losing supplier to provide the date of last meter inspection to the gaining supplier. Even a minimal change option would still require information-gathering and risk-assessment by suppliers to be compliant with health and safety legislation and the meter inspection licence provisions.

1.167. On the basis of competition considerations, our recommended options weigh in favour of A or B.

### **Impacts on costs to consumers**

#### *Suppliers' costs*

1.168. We expect that suppliers would benefit from reduced operating costs if we relax the meter inspection licence provisions. This is particularly the case for smart

meters as suppliers would be able to obtain meter readings remotely for these meters and so they would not need to make site visits to read meters.

1.169. It is difficult to quantify the potential cost-savings accurately. The scale of these savings would depend on how often suppliers would inspect smart meters applying a risk-based approach. If this leads to inspecting some meters less frequently than the two years mandated by the current licence condition (the counterfactual case), we expect suppliers to benefit from cost-savings.

1.170. DECC's smart metering impact assessment was informed by data-points provided by meter operators providing metering services to suppliers on the costs of successful meter reads.

1.171. The assessment assumed that a successful regular inspection with the rollout of smart meters would cost £3 per meter using an area-based approach to site visits. DECC assumed that suppliers would use this approach for 90% of meters classified as 'low-risk'. The assessment also assumed that a successful inspection for 10% of meters classified as 'high-risk' would cost £17.50 per site with the rollout of smart meters using an approach of scheduled appointments.<sup>62</sup>

1.172. Meter inspections have no specific marginal costs in the assessment without the smart meter rollout. Suppliers reported that they read traditional meters through a successful site visit every 6 months, and the incremental cost of an inspection is considered negligible when already on site.

1.173. The assessment assumed that with the smart meter rollout and with a risk-based approach to inspecting meters, low-risk meters would be inspected once every five years and high-risk meters would continue to be inspected once every two years.

1.174. We do not have evidence to support this assumption on inspection frequency in a smart world using a risk-based approach. The inspection frequency for individual meters would vary depending on the areas of risks identified in the risk-assessment which could have many variables.

1.175. An effective risk-based regime would focus on the areas of most risk with inspection frequencies determined on the basis of evidence. The risk areas and inspection frequencies determined should be dynamic as conditions change. In reality, we would therefore expect that the average inspection frequencies for smart meters decline over time as more evidence is gathered of their operation and safety performance.

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<sup>62</sup> This results from using the current commercial rate of £10 for an appointed special visit and reflecting that first time access rates will be below 100%. Only 50% of premises are expected to provide access at the first attempt, with 25% of premises each requiring a second and third visit.

1.176. However, we have used the cost data gathered by DECC to illustrate the range of potential cost-savings available if meter inspection obligations are relaxed<sup>63</sup>. These indicative examples adopt a range of assumptions on the average meter inspection frequency from the present day to 2030.

1.177. As explained in the competition impacts section above, we also consider the options to be neutral in implementation costs. This is because suppliers already have to assess safety risks according to health and safety legislation, and have incentives to share information and adopt a consistent approach.

### *Interaction with DNOs*

1.178. In assessing the costs to consumers, we must be mindful of the cross-party impacts and the total industry costs of any changes to the licence condition provisions for suppliers. These costs will ultimately be borne by consumers.

1.179. DNOs have highlighted that the static inspection backstop requirements in SLC 12 form part of the current risk assessments they carry out to fulfil their health and safety obligations under ESQCR. The main ESQCR requirement related to inspections requires distributors to inspect the network with sufficient frequency so that they are aware of the actions they need to take to ensure compliance with the Regulations<sup>64</sup>. Other Regulations under ESQCR require DNOs to ensure that their equipment on consumers' premises not under the control of the consumer is suitable for purpose and maintained so as to prevent danger.<sup>65</sup>

1.180. DNOs have expressed that relaxing the meter inspection licence obligation may require them to change their approach to managing their assets within consumers' premises on an ongoing basis. This may result in a cost for network companies that they are not currently bearing.

1.181. ESQCR already obliges suppliers to share information with DNOs. Suppliers must share any information they collect on site visits that relates to the DNOs' assets, to help them meet their safety obligations<sup>66</sup>. MOCOPA also obliges any parties working on or near electricity distribution assets to do the same<sup>67</sup>. There are also obligations under DCUSA for any supply parties or their agents that are alerted to potentially dangerous situations in relation to the supply or distribution of electricity in the company's distribution services area through the distribution system to notify the distribution company.

1.182. As owners of these assets, DNOs are responsible for discharging their obligations to maintain the safety of their equipment. Regardless of which parties carry out work to check the assets, DNOs should have their own assurances in place

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<sup>63</sup> The price year for DECC's smart meter impact assessment was 2011.

<sup>64</sup> <http://www.legislation.gov.uk/uksi/2002/2665/regulation/5/made> Regulation 5

<sup>65</sup> <http://www.legislation.gov.uk/uksi/2002/2665/regulation/24/made> Regulation 24

<sup>66</sup> <http://www.legislation.gov.uk/uksi/2002/2665/regulation/4/made> Regulation 4

<sup>67</sup> Condition 7

for this purpose. DNOs do not currently have any formal arrangements in place with suppliers to routinely inspect service termination assets on behalf of DNOs<sup>68</sup>.

1.183. Regardless of the meter inspection licence obligations on suppliers, DNOs may find that they need to inspect their equipment in consumers' premises for effective functioning and safety predictably and less frequently than suppliers need to inspect their meters. If this is the case, there may be cost-efficiencies and consumer benefits available from suppliers carrying out a combined inspection and sharing the information with the DNOs.

1.184. This would be the case if the information DNOs require to manage their assets can be obtained during suppliers' meter inspection site visits at little to no extra cost. The combined inspections could also reduce the inconvenience of site visits for consumers.

1.185. We expect suppliers to comply with their obligations under the ESQCR to report any faults they find with DNOs assets. However, cross-party arrangements for site visits and the allocation of associated operating costs are considerations for industry parties to take in developing detailed industry arrangements. The Authority would consider consumers' interests in making any approval decisions on code modification proposals.

1.186. We therefore do not consider the costs to DNOs of gathering information on their assets and inspecting them according to their risks as a new cost of compliance created by our policy options.

#### *Options assessment*

1.187. Using the qualitative approach above, we consider that a minimal change option (to retain the two-yearly meter inspection licence conditions but align them between gas and electricity) would provide the least benefit to consumers.

1.188. Suppliers have indicated that the two year interval in the current licence condition is arbitrary, and we consented to the largest gas supplier operating alternative meter inspection arrangements on the basis of evidence provided that the two-yearly mandated meter inspections do little to lower risks to consumers.

1.189. As we move into a world with smart meters, we think there is potential to save costs through avoided meter readings and inspecting site visits using a risk-based approach without harming other consumer interests.

1.190. Using the approach taken by DECC in the smart metering impact assessment, the marginal costs of inspecting traditional meters can be seen as negligible while

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<sup>68</sup> A DNO has submitted a modification proposal (DCP235) to the Distribution Connection and Use of System Agreement (DCUSA). This modification is designed to oblige suppliers or their agents to share data relating to service termination assets with DNOs. This obligation would apply when suppliers are replacing their traditional meters with smart meters.

these meters are being read manually. The counterfactual in our analysis assumes that smart meters continue to be rolled out as currently planned.

1.191. The meter inspection costs for traditional meters would be neutral across the policy options because regardless of how frequently meter inspections occur, these inspections can be rolled into a site visit to read a meter with negligible additional costs.

1.192. For smart meters, there is a distinct cost for inspecting the meter, and therefore the inspection costs modelled are sensitive to the frequency meters are inspected. The meter inspection costs modelled are therefore the costs of inspecting smart meters only<sup>69</sup>.

1.193. The data-point for high-risk meter inspection costs is a cost per site. Therefore, no incremental cost is modelled for inspecting an electricity meter if a scheduled 'high-risk' inspection is successfully completed for the gas meter at the same site, for example.

1.194. We simplify our illustrative cost examples to focus on the cost of inspections for smart meters, using the aggregate rollout profiles of the largest six suppliers and applying this to the whole meter population in Great Britain<sup>70</sup>.

1.195. Using the same assumptions on the cost of smart meter inspections, and the proportion of meters falling into a high-risk and low-risk category as in the DECC impact assessment, we provide some indicative examples of the costs of a minimal change option and the two policy options under review in Table 5 below.

1.196. In reality, meters, sites and consumers with different characteristics would be inspected at different frequencies on a risk-basis.

**Table 5**

Options	Present value benefits from 2015 ('base year') to 2030 <sup>71</sup>
Minimal change (two-yearly minimum frequency, equalised between gas and electricity)	£-270m
Policy option A (five-yearly minimum frequency)	£120m
Policy option B (repeal)	£195m

<sup>69</sup> This understates the true costs of inspecting traditional meters but in absence of data, it is used as an assumption for modelling purposes in the DECC smart metering impact assessment, and the indicative cost examples presented in this appendix. The price year for the meter inspection costs is 2011.

<sup>70</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/384190/smip\\_smart\\_metering\\_annual\\_report\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/384190/smip_smart_metering_annual_report_2014.pdf).

<sup>71</sup> The Social Time Preference Rate or discount rate used is 3.50%.

1.197. In the counterfactual base case, all gas meters and non-half-hourly electricity meters are inspected at least once every two years. In absence of data, we apply a simplifying assumption that these meters would be inspected exactly once every two years, and that half-hourly electricity meters are inspected on a risk-basis.

1.198. The inspection profile for meters on a risk-basis with no regulatory backstop is assumed to be once every two years for high-risk meters (10% of meters) and once every seven years for low-risk meters (90% of meters). Seven years is chosen as an assumption for in the base case as a mid-point between the five-year minimum inspection interval that currently applies to traditional meters operated by British Gas and the common meter certification life of ten years.

1.199. With the minimal change option, in the base case, all meters including half-hourly electricity meters are assumed to be inspected once every two years from 2016 onwards<sup>72</sup>.

1.200. **Minimal change:** there would be a net cost of this option compared with the counterfactual because half-hourly electricity meters would require inspection once every two years and carry an incremental inspection cost (unless they are high-risk meters at dual fuel sites). These meters would not carry incremental inspection costs if the licence condition in electricity was left unchanged.

1.201. In present value terms, this option would cost an additional £270 million in present value terms to 2030 relative to the counterfactual.

1.202. **Option A:** this could result in cost-savings relative to the counterfactual if, on a risk-basis, some meters would be inspected less frequently than the current regulatory backstop of two years.

1.203. If we assume that all low-risk meters are inspected once every five years (90% of meters) and high-risk meters are inspected once every two years on a risk-basis (10% of meters)<sup>73</sup>, then in present value terms, £120 million could be saved in present value terms to 2030 relative to the counterfactual.

1.204. **Option B:** this could save more than option A in present value terms to 2030 relative to the counterfactual if low-risk meters would be inspected less frequently than once every 5 years on a risk-basis.

1.205. If we assume low-risk meters are inspected once every seven years, whilst high-risk meters continued to be inspected once every two years, option B would save £195m in present value terms to 2030 relative to the counterfactual.

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<sup>72</sup> 2016 is assumed to be the implementation year of policy change. In all policy options, in 2015, half-hourly electricity meters are assumed to be inspected once every seven years on a risk-basis unless otherwise stated.

<sup>73</sup> This is the assumption made for modelling purposes in the DECC smart metering impact assessment.

1.206. The indicative cost-savings are sensitive to the proportions of meters judged to be 'high' and 'low' risks and change the frequency of inspections using a risk-based approach.

1.207. For example, for option A, if we maintain the assumption that high-risk meters continue to be inspected once every two years but change the proportion to 25%, £100 million would be saved in present value terms to 2030.

1.208. The greater sensitivity is to the assumption made on the frequency of meter inspection under a risk-based approach. If we assume that low-risk smart meters are inspected once every three years on a risk-basis and are 90% of the meter population, then option A and option B produce £95m worth of cost-savings in present value terms to 2030.

1.209. If we assume that low-risk smart meters are inspected once every ten years on a risk-basis, then option B leads to £220m worth of cost-savings in present value terms to 2030<sup>74</sup>.

1.210. Our recommended option on the basis of costs to consumers would be option B, to repeal 'Inspection of Electricity Meter' licence conditions (12.14-12.16) and 'Inspection of Gas Meter' licence conditions (12.8-12.16) to produce the greatest possible savings in operating costs of potentially hundreds of millions of pounds.

### *Distributional impacts*

1.211. The main groups we have identified as having potentially being impacted on differently to others are consumers with traditional meters, and vulnerable consumer groups.

1.212. In Chapter 2, we set out the scope of our review as covering both consumers with traditional and smart meters.

1.213. Based on our assessment of the options against the policy objectives, we do not think there are additional material risks to health and safety, theft detection and billing accuracy for consumers with traditional meters of any of the options, provided that licensees comply with the other regulatory measures in place to achieve these objectives.

1.214. The main risk to vulnerable consumers of relaxing the meter inspection licence obligations relates to billing accuracy. This risk could persist for vulnerable consumers with traditional meters who are less able to provide self-reads. We have

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<sup>74</sup> The magnitude of the change in cost-savings modelled to the frequency of inspections assumed is driven by the assumption that in the counterfactual case, half-hourly meters are inspected on a risk-basis and the inspection cost for low-risk meters is a per meter cost. This means that there is an incremental cost to inspecting a smart electricity meter when a similar inspection is being done at the same site for a gas meter.



## Reforming suppliers' meter inspection obligations

addressed this concern in our assessment of the options against the billing accuracy policy objective.

## Appendix 3: Glossary

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### A

#### Authority

The Gas and Electricity Markets Authority

#### Advanced meters

Advanced meters are meters able to provide measured consumption data for multiple time periods (at least half hourly for electricity and hourly for gas) and to provide the supplier with remote access to that data.

### D

#### Department for Energy and Climate Change (DECC)

The UK government department responsible for energy and climate change policy

#### Domestic consumer

A customer that uses energy for non-commercial purposes

### G

#### Great Britain Companion Specification (GBCS)

The GBCS describes the detailed requirements for communications between Devices in consumers' premises, and between Devices and the Data and Communications Company (DCC).

### O

#### Ofgem

Office of Gas and Electricity Markets

### S

#### Smart meter

Smart meter is a meter which, in addition to traditional metering functionality (measuring and registering the amount of energy which passes through it) is capable of providing additional functionality, for example two way communication allowing it

to transmit meter reads and receive data remotely. It must also comply with the technical specification set out by the Smart Metering Programme.

### SMETS

Smart metering equipment technical specifications set out requirements of the smart metering equipment to be installed

### T

#### Traditional meter

A gas or electricity meter that cannot provide either on its own or with any ancillary device that has been installed, remote access to measured consumption data for multiple periods.

## Appendix 4: Feedback questionnaire

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1.2. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.3. Please send your comments to:

**Andrew MacFaul**  
Consultation Co-ordinator  
Ofgem  
9 Millbank  
London  
SW1P 3GE  
[andrew.macfaul@ofgem.gov.uk](mailto:andrew.macfaul@ofgem.gov.uk)