



Department  
of Energy &  
Climate Change

# Smart Metering Implementation Programme

A Consultation on New Smart Energy Code Content – January 2015

26 January 2015



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## General Information

### **Purpose of this document:**

This document sets out the Government's consultation on further Smart Energy Code (SEC) content.

**Issued:** 26 January 2015    **Closes:** 23 February 2015

### **Consultation responses and other enquiries related to this consultation to:**

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

### **Territorial extent:**

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

### **Additional copies:**

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Other versions of the document in Braille, large print or audio-cassette are available on request. This includes a Welsh version. Please contact us under the above details to request alternative versions.

### **Confidentiality and data protection:**

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

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

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

**Quality assurance:**

This consultation has been carried out in accordance with the Government's Consultation Principles, which can be found here:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/60937/Consultation-Principles.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60937/Consultation-Principles.pdf)

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

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## Table of Contents

<b>General Information.....</b>	<b>4</b>
<b>Table of Contents.....</b>	<b>6</b>
<b>1 Executive Summary.....</b>	<b>7</b>
<b>2 Introduction and Summary.....</b>	<b>8</b>
2.1 A New Industry Code .....	8
2.2 Content of this Consultation .....	8
2.4 The future.....	10
<b>Consultation on SEC Legal Drafting and Timing of Communications Hub activities .....</b>	<b>10</b>
<b>3 Notifying new commencement dates for SEC testing phases .....</b>	<b>10</b>
<b>4 Informal Testing.....</b>	<b>12</b>
<b>5 DCC Key Infrastructure Policy Management Authority (DCCKI PMA).....</b>	<b>16</b>
<b>6 Changes to when Communications Hubs can be ordered and associated forecasts are required to be submitted.....</b>	<b>18</b>
<b>7 Minor Consequential change to the electricity and gas supply licence conditions .....</b>	<b>20</b>
<b>8 Glossary.....</b>	<b>22</b>
<b>Annex A: Consultation Questions.....</b>	<b>29</b>
<b>Annex B: Draft SEC Legal Text.....</b>	<b>30</b>
<b>Annex C: Informal Testing draft text.....</b>	<b>30</b>
<b>Annex D: Minor consequential change to the electricity and gas supply licence conditions, draft legal text.....</b>	<b>30</b>



## 1 Executive Summary

- 1 The Smart Energy Code (SEC) is a new industry code concerning the arrangements for the provision of the smart metering communication service. It has been created through the Data Communications Company (DCC) Licence, and it was first designated on 23 September 2013. Further content of the SEC is being consulted upon and subsequently incorporated into the SEC in stages, based on when the arrangements embodied within that content need to be operational.
- 2 This consultation primarily sets out proposed new SEC content that arises as a consequence of previous consultations (SEC 4 and SEC 4A) and of the Data Communications Company's (DCC) consultation entitled 'Resetting the DCC Delivery Programme' published on 17 November 2014.<sup>1</sup> Draft legal text for the SEC and the gas and electricity supplier licence conditions as revised by the proposals set out in this consultation are annexed to this document.
- 3 Chapter 1 is this executive summary. Chapter 2 provides a general introduction and a more detailed summary of the main content of the consultation. The principal areas covered in this document are described further below.
  - Notifying new commencement dates for SEC testing phases – sets out the mechanism by which the DCC can be directed to re-notify a start date for a testing phase should this be required – **Chapter 3**
  - Informal Testing – Introduces provisions in the SEC to recognise the DCC's proposal to offer an informal testing service to users - **Chapter 4**
  - DCC Key Infrastructure Policy Management Authority (DCCKI PMA) – sets out the framework for the governance of DCCKI - **Chapter 5**
  - Changes to when Communication Hubs can be ordered – sets out proposals in respect of communications hub forecasting and ordering – **Chapter 6**
  - Minor consequential changes to the gas and electricity supply licence conditions – sets out the proposed consequential change to the definitions of 'Relevant Electricity Meter' and 'Relevant Gas Meter' in the supply licence conditions on roll-out reporting, setting and achieving annual milestones, and provision of information to the Authority – **Chapter 7**

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<sup>1</sup> [http://www.smartdcc.co.uk/media/14108/141117\\_dcc\\_plan\\_and\\_im\\_consultation.pdf](http://www.smartdcc.co.uk/media/14108/141117_dcc_plan_and_im_consultation.pdf)

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## 2 Introduction and Summary

### 2.1 A New Industry Code

- 4 Smart meters are the next generation of gas and electricity meters. They will offer a range of intelligent functions and provide consumers with more accurate information, bringing an end to the need for estimated billing. Consumers will have near real-time information on their energy consumption to help them control and manage their energy use, save money and reduce emissions.
- 5 On 23 September 2013, a new licensed entity, the Data and Communications Company (DCC), was established. The DCC will provide a smart meter communications service. The DCC will offer a means by which Suppliers, Network Parties and others can communicate remotely with smart meters in Great Britain.
- 6 The Smart Energy Code (SEC) is a new industry code which has been created through, and came into force under, the DCC Licence. The SEC is a multiparty contract which sets out the terms for the provision of the DCC's smart meter communications service, and specifies other provisions to govern the end-to-end management of smart metering.
- 7 The DCC, Suppliers and Network Parties are required by licence to become a party to the SEC and comply with its provisions. Other bodies who wish to use the DCC's services, such as energy efficiency and energy service companies will also need to become a party to the SEC and comply with its provisions.
- 8 Consistent with other industry codes, the SEC is self-governed, enabling participants to raise change proposals, debate issues, and resolve disputes without the need for day-to-day regulatory intervention. It is managed by a Panel drawn from SEC Parties, and is regulated by Ofgem.
- 9 SEC content is being introduced in stages, based on when the arrangements embodied within that content need to be operational. Stage 1 of the SEC (SEC 1) was introduced to deal with matters that were required to support the initial operations of the DCC. Stage 2 of the SEC (SEC 2) addressed a number of important areas required to aid design, build and test of systems in the run up to Systems Integration Testing (SIT). Stage 3 of the SEC (SEC 3) addressed specific issues relating to testing and security including introduction of the Smart Metering Key Infrastructure (SMKI). A consultation on Stage 4 of the SEC (SEC4) was published on 30 June 2014, covering a wide range of matters to support the continuing development of the DCC's services. A further consultation (SEC4A) on certain related issues was published on 17 November 2014 in parallel with conclusions on part of SEC4.

### 2.2 Content of this Consultation

- 10 This is primarily a consultation on new legal drafting, following on from previous consultations. The key sections of new draft legal text in the SEC



which are the subject of this consultation are summarised in the table below and described in further detail in Chapters 3 to 7 of this document.

Chapter	Summary
<b>3: Notifying new commencement dates for SEC testing phases</b>	Sets out proposals in respect of requirements for a mechanism by which the DCC can be required to re-notify a start date for a testing phase.
<b>4: Informal Testing</b>	Sets out our intended approach and rationale regarding whether and how we refer to informal testing in the SEC.
<b>5: DCC Key Infrastructure Policy Management Authority (DCCKI PMA)</b>	Sets out further proposals in respect of requirements for governance arrangements in relation to DCC Key Infrastructure.
<b>6: Change to when Communications Hubs can be ordered</b>	Sets out our intended approach for designating the date for the initial delivery of Communications Hubs, due to the need to revise the November 2015 delivery date. We also seek views on aligning the timings for the submission of forecasts for orders of communications hubs between the transitional and enduring periods.
<b>7. Minor consequential changes to the gas and electricity supply licence conditions</b>	Sets out the proposed consequential change to the definitions of “Relevant Electricity Meter” and “Relevant Gas Meter” in the supplier licence conditions on roll-out reporting, setting and achieving annual milestones, and provision of information to the Authority. Our proposed change is to correct an unintentional consequence of previous changes to the licence conditions, in order to revert to the original position that all advanced meters, current transformer meters and large gas meters that have been installed under the exceptions to the roll-out obligation should be encompassed.

### 2.3 Structure of each section

- 11 The sections of this consultation detailing these topics are each split into four parts as follows:
- the first part (**‘Description of the Issue’**) sets out the policy approach which provides the basis for the proposed legal text. We reference previous consultations where appropriate;
  - where legal text is being proposed,
    - the second part (**‘Translation into Detailed Requirements’**) summarises how each policy approach has been translated into the proposed legal requirements for consultation; and
    - the third part (**‘Legal Text’**) cross-references the proposed approach to the appropriate draft legal text of the SEC for ease of use; and
  - the fourth part (**‘Consultation Questions’**) sets out the questions inviting a response. A consolidated list of the questions is also at Annex A.

- 12 Annex B sets out legal text proposed in this consultation (marked up in red) that, following consultation, is expected to be laid in Parliament and incorporated into the SEC under the procedure in S88 and S89 of the Energy Act 2008. Annex C sets out the proposed form of draft direction letter for Informal Testing. Subject to consultation it is proposed that this text will be incorporated into the SEC via direct designation by the Secretary of State using powers under section X3 of the SEC.
- 13 Annex D sets out the proposed amendments to the electricity and gas supply licence conditions reflecting the amendment proposed in Chapter 7 of this consultation.
- 14 Every effort has been made to ensure that the explanatory text in the main body of this consultation document reflects the legal drafting included at Annexes B, C and D. We have sought to ensure that the explanatory text provides a clear and simplified overview of our proposals. However, the legal drafting should be treated as the definitive text. Where terms are capitalised in this consultation document they are SEC defined terms (other than in relation to Annex D in which they are terms defined in Supply Licences).
- 15 The broad requirements of this stage of the SEC are not new, so cost implications have generally already been considered in the Impact Assessment published in January 2014.

## 2.4 The future

- 16 Looking ahead, we have reviewed our plans for implementing the remainder of the initial drafting of the Smart Energy Code to ensure that it will be able to support any possible outcomes from the DCC's consultation 'Resetting the DCC Delivery Programme' published on 17 November 2014, and also that it remains fully aligned with the content and conclusions of the various consultations on subsidiary documents. Of the remaining material from the SEC 4 consultation and the further consultation published along with our SEC 4A response in November, we expect to conclude on much of it in March 2015. We also expect to conclude on the content of this consultation at that point. We expect to publish at the same time some further consultation questions. Conclusions wrapping up all the outstanding material from these consultations are expected later in the year.

## Consultation on SEC Legal Drafting and Timing of Communications Hub activities

### 3 Notifying new commencement dates for SEC testing phases

#### Description of the Issue

- 17 The DCC is developing and testing its services in accordance with its delivery plan. This plan sets out activities that the DCC needs to undertake in order to implement its smart metering communications service in a manner which will fulfil the Transition Objective, as set out in Condition 13 of the DCC Licence. The current DCC plan was submitted to the Secretary of State on 6<sup>th</sup> May

2014. The DCC has set out its view in the ‘Consultation on changes to the DCC plan and Implementation Milestones’<sup>2</sup> that the current DCC plan cannot be maintained and is therefore no longer suitable for the purpose of achieving the Transition Objective. On publication of the conclusion to its consultation, the DCC will submit a new plan to the Secretary of State for approval.

- 18 The SEC requires the DCC to notify in advance the start dates for Systems Integration Testing (SIT), Interface Testing, SMKI and Repository Testing (SRT Testing) and End to End Testing (E2E). DCC has already notified the start date for SIT in accordance with T2.11 of the SEC. However, should a new DCC delivery plan be approved by the Secretary of State, the anticipated start date for SIT is likely to change. For the purposes of the legal text therefore, new provisions would need to be included in the SEC to allow the Secretary of State to direct the DCC to notify a new start date for SIT.
- 19 More generally, however, we consider it would be prudent to provide the ability for the Secretary of State to direct the DCC to notify a new start date for any previously notified start date in relation to the aforementioned testing phases set out in the SEC. This would help provide flexibility and ensure that start dates for test phases in the DCC delivery plan could be amended when required.

**Translation into Detailed Requirements**

- 20 We propose to introduce into the SEC an obligation on the DCC to give notice of a new commencement date to that which it has previously notified for the start of SIT, IT, E2E and/or SRT, if directed to do so by the Secretary of State.

**Legal Text**

**Summary of new SEC Provisions**

<b>Changes to Section T</b>	<ul style="list-style-type: none"> <li>• T2.11 has been amended to require the DCC to give notice to Registration Data Providers of a revised SIT commencement date where directed to do so by the Secretary of State.</li> <li>• T3.13 has been amended to require the DCC to give notice to other Parties of a revised IT commencement date where directed to do so by the Secretary of State.</li> <li>• T4.9 has been amended to require the DCC to give notice to Testing Participants of a revised E2E Testing commencement date where directed to do so by the Secretary of State.</li> <li>• T5.11 has been amended to require the DCC to give notice to other Parties of a revised SRT commencement date where directed to do so by the Secretary of State.</li> </ul>
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**Notifying new commencement dates for SEC testing phases**

<sup>2</sup> [http://www.smartdcc.co.uk/media/14108/141117\\_dcc\\_plan\\_and\\_im\\_consultation.pdf](http://www.smartdcc.co.uk/media/14108/141117_dcc_plan_and_im_consultation.pdf)

Q1	Do you agree with our proposal and legal drafting to introduce into the SEC a mechanism for the Secretary of State to request from the DCC a new commencement date for SIT, IT, E2E or SRT Testing? Please provide a rationale for your response.
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## 4 Informal Testing

### Description of the Issue

- 21 As part of the DCC's 'Consultation on changes to the DCC plan and Implementation Milestones'<sup>3</sup>, the DCC proposed offering an 'informal testing service'. The Smart Energy Code does not currently refer to this informal testing service in any form, and we have considered whether the DCC should be subject to any rights or obligations to provide this service.
- 22 Subject to a decision on a revised DCC delivery plan, we see merit in providing for this activity in the SEC. By doing so, the DCC is provided a clear and unambiguous reference within the legal framework to offer this service to prospective participants.

#### The nature of the informal testing service:

- 23 DCC's Informal Testing service is comprised of two parts:
- Pre-User Integration Testing (pre-UIT): the provision of access to a DCC (DSP) test environment (including a CSP test stub) via a DCC Gateway Connection. This will enable prospective Users to send a limited number of Service Requests and receive responses; and
  - GBCS Interface Testing (GIT) for Industry (GFI): a message generating tool (for messages emerging from the Communications Hub), which would be available to Suppliers and Device manufacturers and would allow them to test their implementation of the GBCS protocol.
- 24 Pre-UIT testing provides a facility for testing participants to gain greater confidence in their systems which previously would not exist until End to End testing.. Similarly, GFI could be a useful tool in enabling manufacturers to gain greater confidence that their devices implement GBCS messages in the same way as the DCC. We support the proposal that the DCC provides these, recognising that, whilst useful, they should not compromise formal testing undertaken by DCC (SIT and IT).

#### Limitations to the provision of informal testing

- 23 Whilst supporting the provision of an informal testing service, we recognise the limitations that accompany the provision of a pre-UIT test environment at such an early stage in the design and build process, and recognise the difficulty, at this stage, in describing the service in a detailed manner, as what

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[http://www.smartdcc.co.uk/media/14108/141117\\_dcc\\_plan\\_and\\_im\\_consultation.pdf](http://www.smartdcc.co.uk/media/14108/141117_dcc_plan_and_im_consultation.pdf)

can be offered by the DCC is dependent on a number of factors. Similarly, we recognise that the development of GFI by the DCC is dependent on the support of third party device manufacturers, who are neither SEC Parties, nor service providers to the DCC, through the provision of prototype meters or test stubs that the DCC needs to develop the GFI tool. It should also be noted that the participation in informal testing is voluntary and is not intended to replace or replicate participation in any other period of testing.

#### Proposed approach to reflecting informal testing in the SEC

- 24 Recognising these limitations, we propose that the DCC is obliged to take **reasonable steps** to provide informal testing (both pre-UIT testing and GFI). The intention of applying the 'reasonable steps' requirement is that DCC should continue with its intention to provide the service, but, if as part of its work to prioritise core deliverables DCC later decides that this is not the most appropriate way forward and should be deprioritised (having regard to the other activities that it needs to undertake and in light of the objectives that it is subject to in the SEC and its Licence), it may decide not to provide some or all aspects of informal testing. As an example, a scenario where this might occur would be in circumstances where the provision of informal testing requires resource support from the DCC that would result in consequential delays to formal testing or other important aspects of the Programme. For GFI, a decision to not provide the service may occur where no third party device manufacturer offers the support the DCC needs to offer the service and any alternative means of support would not be cost effective or would comprise formal testing activities.
- 25 For both pre-UIT testing and GFI, we propose that the obligation to take reasonable steps to provide the service is further limited to the functionality that the DCC is able to provide at the time. This recognises that the informal testing service will be offered at a stage where elements of a mature testing service will not have been built and when the DCC will be preparing for SIT.
- 26 In discussions with DCC, we considered whether, for GFI, the DCC should be given a right to provide this service at its discretion, as opposed to an obligation, given that it is reliant on device manufacturers in order to offer it. However, we support the proposal to provide GFI and recognise the value it offers to meter manufacturers and Suppliers. On that basis our view is that a 'reasonable steps' obligation provides the correct requirement on DCC, although we welcome stakeholders' feedback on this analysis.
- 27 We propose that DCC and test participants are required to undertake their respective activities in relation to the provision/use of informal testing in accordance with good industry practice, as is the case under the End to End and enduring testing arrangements. Accordingly we propose that the same liability regime applies to informal testing as does to End to End and enduring testing, being the regime set down in Section M2 of the SEC. Broadly speaking, this means that parties will use the informal testing services at their own risk, and liability for physical damage (including data loss) only accrues to the extent that such physical damage occurs as a result of a party not behaving in accordance with good industry practice. We would also expect, that by providing the service in accordance with good industry practice the

DCC will ensure that necessary and proportionate change control and issue resolution processes are in place. We do not expect the DCC to provide any form of warranty with this service.

#### Capturing detailed requirements

- 28 Usually, we would require that the description of any detailed arrangements supporting the provision of a service by the DCC are set out in a subsidiary document, or in the case of transitional testing, a document created and governed by a process set out in regulation. In discussion with DCC, we acknowledge that requiring such an approach for the detailed arrangements supporting the provision of an informal test service may be difficult because, given the date by which the informal test service is to be offered, it will be difficult for the DCC to produce, consult upon and submit a such a document in the requisite timescales.
- 29 We also acknowledge that use of these informal test services by parties is voluntary. We further note that the informal test service may have a limited life span, as more developed testing services will be available once the End to End testing phase commences. We therefore consider that providing for the details of these testing arrangements to be set down in a regulated subsidiary document is not necessary.
- 30 We note that the DCC has been working closely with stakeholders already through their Technical Design and Execution Group (TDEG), discussing the likely nature of the service, and consulting with TDEG members on options for delivery, to ensure that the service is able to be of use to prospective users. Taking these issues into consideration, we propose that the SEC should contain a requirement for parties using the informal testing service to comply with any detailed requirements relating to informal testing that DCC determines outside the SEC, provided that these requirements are not inconsistent with any other provisions of the Code that are in effect. We note that the DCC is proposing to put such requirements in an informal testing guide for users.
- 31 We understand that the DCC may have security requirements applying to parties accessing any testing services via a DCC Gateway Connection (whether that is during informal testing, IT, End to End testing or enduring testing). As these requirements will endure, such security requirements may be documented in a first version of the Enduring Test Approach Document (see the 'Test Certificates', Chapter 3 of the January 2015 SEC Government Response).

#### Mechanism for delivering changes to the SEC

- 32 We propose using powers in section X3 of the SEC to introduce the aforementioned provisions in relation to informal testing. Section X3, enables the Secretary of State to designate the time from which certain SEC provisions will be effective, and in so doing, to make transitional variations. The Secretary of State therefore plans to designate a date from which DCC will be required to take 'reasonable steps' to offer a limited form of 'Device and User System Testing' (described in section H14.31 of the SEC), such



date to be specified once any decision has been taken on the DCC's consultation on changes to the DCC Plan.

- 33 However, it should be noted that, whilst section H14.31 of the SEC relates to what will become the End to End testing service that the DCC is required to offer, proposed transitional variations to this section to enable informal testing to take place in the meantime do not mean that End to End testing will be offered earlier than it would otherwise be. Instead we are providing the flexibility for DCC to provide a more limited set of testing services that represent a step along the way to the provision of Device and User System Testing of the SEC (of which End to End testing will form part). As section X3 of the SEC enables the Secretary of State to amend drafting by direction we are consulting on the letter of direction to be issued by the Secretary of State, as opposed to marked-up changes to the SEC itself.

**Translation into Detailed Requirements**

- 32 The draft direction to amend the SEC is set out in full at Annex C. In summary, it includes a provision to activate Device and User System Testing in the SEC, specifically activating H14.31(a) of the SEC – covering the interoperability of devices – to correspond with GFI, and H14.31 (b) – testing the interoperability of User Systems – to align with pre-UIT testing. Alongside these provisions the following aspects of H14 are activated to support informal testing:

H14.2(a): DCC shall provider informal testing in accordance with Good Industry Practice, and in accordance with the Enduring Test Approach Document.

H14.5: each party undertaking informal testing must also do so in accordance with Good Industry Practice.

H14.6 describes that the DCC is liable for any loss of or damage to any equipment within its possession or control, unless such loss or damage occurs as a result of a testing participant breaching any requirements in the SEC.

H14.7: requires DCC to enter into bilateral agreements regarding the provision of service to non-SEC Parties.

H14.11: that the DCC must make available any test certificates as are reasonably needed for informal testing.

**Informal Testing**

Q2	<p>Do you agree with the proposed provisions for informal testing in the SEC? Please provide a rationale for your views.</p> <p>a) Whether you agree with the strength of the obligation on DCC to offer the service.</p> <p>b) Whether you agree that DCC can determine the detailed rules to apply to use of the service.</p>
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Q3	Do you agree with the proposed SEC amendments for informal testing as set out in the letter of direction? Please provide a rationale for your views
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## 5 DCC Key Infrastructure Policy Management Authority (DCCKI PMA)

### Introduction

- 33 As part of its design, the DCC is proposing that communications across DCC Gateway Connections relating to a number of its services should be subject to specific Transport Layer Security (TLS) protection. This will apply for example to communications between DCC and DCC Users in relation to Service Requests and associated Service Responses. The DCC has specified a DCC Key Infrastructure (DCCKI) to be used to establish this TLS security and also for the purposes of authentication to the Self-Service Interface (SSI). The SEC4A consultation proposed a number of provisions relating to the establishment and governance of DCCKI.
- 34 Given the different purposes of DCCKI and SMKI, we proposed different governance arrangements for DCCKI as opposed to SMKI (as discussed at a high-level with the Transitional PMA Group). We outlined that we did not think it appropriate for the SMKI PMA to explicitly approve relevant DCCKI documentation. Instead we proposed that the SMKI PMA review the effectiveness of the DCCKI Document Set and propose changes to the DCC where it considers these must be made for the DCC to meet its obligations as specified in Section G. .
- 35 We will conclude on the proposed DCCKI, IKI and SMKI-related SEC amendments proposed in the SEC4A consultation in future SEC conclusion documents.

### Description of the Issue

- 36 In the SEC4A consultation we set out proposals for the establishment of DCCKI. We proposed that the governance arrangements should slightly differ from those applying to SMKI with the DCC effectively being responsible for ensuring the DCCKI arrangements were fit for purpose, but also providing for a review of the arrangements by the SMKI PMA.
- 37 The DCC has indicated that it proposes to establish a separate DCCKI PMA function to oversee DCCKI as part of its overall PKI implementation, and it is considered appropriate to recognise these arrangements in the SEC. Consequently, we are proposing a further modification to Section L of the SEC to incorporate provisions which recognise the establishment of the DCCKI PMA function. It is proposed therefore to require DCC to establish the DCCKI PMA function to keep the DCCKI arrangements under review. Where the DCCKI PMA identifies the need for changes to the DCCKI-documents, the DCC will be required to consider whether it should submit a Modification Proposal in light of such advice. For the purpose of Transition, the DCC will

notify the Secretary of State of any such proposed modification. This would allow the Secretary of State to ensure that any changes were consulted upon and coordinated with other SEC changes prior to completion of implementation.

- 38 Where the DCCKI PMA notifies the DCC of any matter, or makes any recommendation with regard to the compliance by the DCC with its obligations under Section G (Security), we consider it appropriate that where the Security Sub-Committee (SSC) and the SMKI PMA requests to be provided with any such notification or recommendation from the DCCKI PMA to the DCC, that such information should be provided (given that DCCKI is an element of the wider smart metering security arrangements governed by the SSC and the SMKI PMA).

**Translation into Detailed Requirements**

- 39 We propose to require the DCC in the SEC to establish the DCCKI PMA Function, to be carried out by one or more senior individuals of the DCC and/or its Service Providers to perform the following:
- i. Periodically review the effectiveness of the DCCKI Document Set and identifying whether it is consistent with the SEC Objectives including whether changes should be made to it so the DCC meets its obligations under Section G (Security) of the SEC.
  - ii. As soon as practicable review the DCCKI Certificate Policy and DCCKI Registration Authority Policies and Procedures (DCCKI RAPP) following their incorporation into the SEC (or modification in accordance with S88 of the Energy Act 2008)
  - iii. Have regard to any notification from the SMKI PMA acting in accordance with L1.17(e) of the SEC.
  - iv. Perform any other duties defined elsewhere in the SEC, for example with respect to the DCCKI Document Set.
- 40 Where the DCCKI PMA notifies the DCC of any matter, the DCC is required to consider whether it needs to submit a Modification Proposal in the interest of continuing to comply with its obligations under Section G (Security) and the SEC Objectives. For the purposes of transition, the DCC will notify the Secretary of State of any such modification required (Section X3 has been amended accordingly).
- 41 The draft legal text also sets out that where requested to do so by the SSC or the SMKI PMA, the DCC shall make available to them any notification or recommendation made by the DCCKI PMA to the DCC.

**Legal Text**

Summary of new SEC Provisions	
<b>Changes to Section A</b>	<ul style="list-style-type: none"> <li>• A definition for the DCCKI PMA Function has been added as having the meaning ascribed to it in Section L13.55.</li> </ul>

<b>Changes to Section L</b>	<ul style="list-style-type: none"> <li>• L13.54 sets out that the DCC must set up the DCCKI PMA Function including at least 1 senior member of DCC (or DCC Service Provider) personnel.</li> <li>• L13.55 outlines the DCCKI PMA Functions duties, including the review of documents and assessing whether the DCC continues to comply with its Section G (Security) obligations and notifying the DCC if that is not the case.</li> <li>• L13.56-57 sets out duties of the DCC, including having regard to DCCKI PMA's recommendations and considering Modification Proposals, as well as providing the SSC and SMKI PMA with information if requested to do so.</li> </ul>
<b>Changes to Section X</b>	<ul style="list-style-type: none"> <li>• X3.2(h) has been proposed so that Section L13 will have effect upon designation into the Code.</li> <li>• X3.5(b) has been inserted so as to state that Section L13.56 will be modified so that the DCC is obliged to notify to the Secretary of State of the Modification Proposals that the DCC would otherwise be required to raise under that Section.</li> </ul>

### DCC Key Infrastructure Policy Management Authority (DCCKI PMA)

Q4	Do you agree with our proposals and legal text in relation to the DCCKI PMA Function? Please provide a rationale for your response.
Q5	Do you agree that, for the purposes of transition, any proposed modification to the SEC proposed by the DCC in the interest of continuing to comply with the SEC Objectives and its obligations under Section G (Security) should be directed to the Secretary of State? Please provide a rationale for your response.

## 6 Changes to when Communications Hubs can be ordered and associated forecasts are required to be submitted

### Description of the Issue

- 42 We set out in Part A of the Government response to the SEC 4 Consultation <sup>4</sup>that, based on the Joint Industry Plan at that time, the first date which Parties could receive deliveries of Communications Hubs was expected to be 1 November 2015, but that the Secretary of State could specify a later date if this proved necessary. This date was chosen as the initial delivery date on the basis that DCC live operations would commence in December 2015.

<sup>4</sup> <https://www.gov.uk/government/consultations/new-smart-energy-code-content-stage-4>

Transitional arrangements in respect of this initial delivery date were provided for in relation to the timing of the first Communications Hubs forecast, deliveries and orders. The legal drafting laid before Parliament on 17<sup>th</sup> November 2014 (and which came into force on 14 January 2015) for Section X3.3 of the SEC provides for these arrangements.

- 43 Since the publication of the SEC 4 consultation it has become clear that the 1<sup>st</sup> November date for the first delivery of communications hubs will need to be revised as the December 2015 date for DCC live operations is no longer feasible. The DCC's recent consultation entitled 'Consultation on changes to the DCC plan and Implementation Milestones'<sup>5</sup> sought views on options for its revision. Once a date for DCC live operations has been agreed ('DCC Live'), the Secretary of State will consult on the designation of a new Initial Delivery Date as well as the date for the entry into force of Section F5 of the SEC which sets out regulation for the forecasting and ordering of communications hubs. It is our intention that the Delivery Date will be approximately one month prior to the 'DCC live' so that Parties will have possession of communications hubs in sufficient time for them to be able to commence installation to coincide with DCC live operations. We intend for the new Initial Delivery Date to be designated and F5 to be in force reasonably in advance of when Parties will be required to submit their first forecasts for communications hubs.
- 44 In the SEC Stage 4 consultation we had set out that the first forecast would be submitted during the month ending nine months in advance of the start of the month in which the Initial Delivery Date occurs, whereas for all subsequent forecasts a forecast will be submitted during the month ending 10 months in advance of the relevant delivery month. The reason for this difference was that there had not been sufficient time to implement the regulation requiring the first forecast 10 months in advance of the initial delivery month, when this was expected to be on 1<sup>st</sup> November 2015. This will no longer be the case and therefore this provides the scope for this aspect of the forecasting arrangements to be standardised between the first and subsequent forecasts which should enable a more efficient implementation. Section X3.3 of the SEC allows the Secretary of State to direct this change on designating the date from which Section F5 is to have effect.

### Translation into Detailed Requirements

- 45 The draft designation and direction to amend the Initial Delivery Date and require the first forecast to be submitted 10 months in advance will be issued and consulted upon following any decision on DCC's revised delivery plan. Consequently no legal text is included for comment at this time.

### Change to when Communications Hubs can be ordered and associated forecasts are required to be submitted

Q6 Do you agree that the period for the submission of the first forecasts of

<sup>5</sup> [http://www.smartdcc.co.uk/media/14108/141117\\_dcc\\_plan\\_and\\_im\\_consultation.pdf](http://www.smartdcc.co.uk/media/14108/141117_dcc_plan_and_im_consultation.pdf)

communications hubs orders by SEC Parties should be aligned with those for subsequent forecasts, such that the initial forecast is submitted during the month ending 10 months in advance of the relevant delivery month?

## 7 Minor Consequential change to the electricity and gas supply licence conditions

### Description of the Issue

- 46 We are seeking views on a consequential change to the definitions of “Relevant Electricity Meter” and “Relevant Gas Meter” in the standard condition of electricity and gas supply licences relating to “Roll-out Reporting, Setting and Achieving Annual Milestones, and Provision of Information to the Authority” (standard licence condition 44 of the electricity supply licence conditions and standard licence condition 38 of the gas supply licence conditions). This change is required to correct an unintentional effect of previous changes made on 21 March 2014 which aimed to clarify the provisions for the installation of advanced meters under the exception to the roll-out obligation<sup>6</sup>. These previous changes had the effect of limiting the scope of these licence conditions, which meant that the information requirements ceased to apply to those current transformer meters, advanced meters and large gas meters that had been installed under the exceptions to the roll-out obligation. This was not the intention.
- 47 The consequential change we are now proposing would correct the unintended effects of the changes made in March 2014 by amending the definition of the terms “Relevant Electricity Meter” and “Relevant Gas Meter” in the respective licence conditions in order to revert to the original position by encompassing all current transformer meters, advanced meters and large gas meters that have been installed under the exceptions to the roll-out obligation.

### Legal Text

- 48 The proposed amendments to the electricity and gas supply licence conditions are set out in Annex D.

### Summary of proposed legal text

<sup>6</sup> [www.gov.uk/government/publications/modifications-to-the-smart-energy-code-smart-meter-communication-licences-and-the-standard-conditions-of-electricity-and-gas-supply-licences-no-1-o](http://www.gov.uk/government/publications/modifications-to-the-smart-energy-code-smart-meter-communication-licences-and-the-standard-conditions-of-electricity-and-gas-supply-licences-no-1-o)



<p><b>Electricity Supply licence condition amendment (corresponding amendment for the gas supply licence)</b></p>	<p>The definitions of the terms “Relevant Electricity Meter” and “Relevant Gas Meter” in the respective licence conditions have been amended to refer to all exceptions in the relevant roll-out licence condition so that the term “Annual Milestone” reverts to including the number of advanced meters, current transformer meters and large gas meters that have been installed under the exceptions to the roll-out obligation.</p>
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**Minor consequential change to the electricity and gas supply licence conditions**

<p>Q7</p>	<p>Do you agree with the consequential changes we are proposing to electricity and gas supply licence conditions on information requirements by Ofgem for monitoring and evaluation?</p>
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## 8 Glossary

This section provides a glossary of the principal terms used in SEC consultation and Government response documents.

A complete set of definitions and interpretations of terms used in the SEC can be found in Section A of that document.

The definitions in this glossary are not intended to be legally precise, but instead to assist in understanding the consultation document.

### **Alert**

A message from a Device or from DCC and sent to a DCC User across the DCC User Interface.

### **Command**

A message sent by the DCC to a Device over the SM WAN (or to a DCC User over the DCC User Interface to be executed locally) in order to instruct the Device to carry out an action.

### **Commissioned**

A Device status recorded in the Smart Metering Inventory. The steps a Device must go through to be Commissioned vary by Device type, but essentially this status is achieved when: the Device has been added to the Smart Metering Inventory; it has been demonstrated that DCC can communicate with it (and vice versa) over the SM WAN; and its relationship with either the Communications Hub Function or a Smart Meter has been established.

### **Communications Hub**

A device which complies with the requirements of CHTS and which contains two, logically separate Devices; the Communications Hub Function and the Gas Proxy Function.

### **Communications Hub Function**

A Device forming part of each Smart Metering System which sends and receives communications to and from the DCC over the SM WAN, and to and from Devices over the HAN.

### **Communications Hub Technical Specifications (CHTS)**

A document (which is to form part of the SEC) which sets out the minimum physical, functional, interface and data requirements that will apply to a Communications Hub.

### **Communications Service Provider (CSP)**

Bodies awarded a contract to be a DCC Service Provider of communications services to DCC as part of DCC's Relevant Services Capability. Arqiva Limited and Telefónica UK Limited have been appointed to provide these services.

### **Core Communication Services**

The services associated with processing a specific set of Service Requests set out in the DCC User Interface Services Schedule in a manner that involves communication via the SM WAN, but excluding the Enrolment Services.

### **Correlate**

A check, to be carried out by DCC Users, to ensure that the Pre-Command created by DCC after transforming a Critical Service Request (as defined in Section A of the SEC) is substantively identical to the original Service Request.

### **CoS Party**

A separate part of the DCC, responsible for signing critical Commands to update a Supplier's Security Credentials on a Device following the submission of a 'CoS Update Security Credentials' Service Request by an incoming Supplier to the DCC.

### **Data and Communications Company (DCC)**

The holder of the Smart Meter communication licence, Smart DCC Ltd.

### **Data Service Provider (DSP)**

The company awarded a contract to be a DCC Service Provider of data services to DCC as part of DCC's Relevant Services Capability. CGI IT UK Limited has been appointed to provide these services.

### **DCC Licence**

The licence awarded under section 7AB of the Gas Act 1986, and the licence awarded under section 5 of the Electricity Act, each authorising Smart DCC Ltd to undertake the activity of providing a Smart Meter communication service.

### **DCC Service Providers**

Companies or persons from whom DCC procures Relevant Services Capability; principally the DSP and the CSPs.

### **DCC Systems**

The systems used by the DCC and its DCC Service Providers in relation to the Services and / or the SEC, including the SM WAN but excluding the Communications Hub Functions.

### **DCC Total System**

All DCC Systems and Communications Hub Functions within the control of DCC.

### **DCC User**

A SEC Party who has completed the User Entry Processes (as defined in Section A of the SEC) and is therefore able to use DCC's Services in a particular User Role.

### **DCC User Interface**

The communications interface designed to allow appropriate Smart Metering communications to be sent between DCC Users and the DCC.

### **DCC User Interface Services Schedule**

This refers to the SEC Subsidiary Document identified as the 'DCC User Gateway Interface Specification'.

### **Device**

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One of the following: (a) an Electricity Smart Meter; (b) a Gas Smart Meter; (c) a Communications Hub Function; (d) a Gas Proxy Function; (e) a Pre-Payment Interface; (f) an Auxiliary Load Control; or (g) any Type 2 Device (e.g. IHD).

### **Distribution Network Operators (DNOs)**

Holders of electricity distribution licences.

### **Elective Communications Services**

The services associated with processing of Service Requests that are (or are to be) defined in a Bilateral Agreement (rather than the DCC User Gateway Services Schedule) in a manner that involves communication via the SM WAN (provided that such Service Requests must relate solely to the Supply of Energy or its use).

### **Electricity Smart Meter**

A Device meeting the requirements placed on Electricity Smart Metering Equipment in the SMETS.

### **Eligible User**

A DCC User who, acting in a particular User Role, is eligible to receive particular DCC Services, including in relation to a particular Device.

### **End-to-End Smart Metering System**

Any DCC System, Smart Metering System, User System or RDP System.

### **Enrolled**

The status of a Smart Metering System when the Devices which form part of it have all been Commissioned.

### **Enrolment Services**

Services associated with the processing of Service Requests that are involved in the commissioning of Devices in the Smart Metering Inventory, and establishing their inter-relationships, and which ultimately result in the Enrolment of Smart Metering Systems ready for communication via DCC over the SM WAN.

### **Foundation stage**

The period prior to the start of the mass roll-out stage.

### **Gas Proxy Function**

The functionality in the Communications Hub specific to its operation as a data store of the gas meter's operational data.

### **Gas Smart Meter**

A Device meeting the requirements placed on Gas Smart Metering Equipment in the SMETS.

### **GB Companion Specification (GBCS)**

A document setting out amongst other things, the detailed arrangements for communications between the DCC and Devices and the behaviour required of Devices in processing such communications.

### **Hand Held Terminal (HHT)**

A HAN-connected Device used by authorised personnel for meter installation and maintenance purposes.

### **Home Area Network (HAN)**

The means by which communication between Devices forming part of Smart Metering System takes place within a premises and which is created by the Communications Hub Function.

### **In-Home Display (IHD)**

An electronic Device, linked to a Smart Meter, which provides information on a consumer's energy consumption and ambient feedback.

### **Mass roll-out stage**

The period between the date at which the DCC starts providing Core Communication Services and the fulfilment of the roll-out obligation as specified in the roll-out licence conditions.

### **MPAN**

The Meter Point Administration Number, being a unique reference number for each metering point on the electricity distribution network and allocated under the Master Registration Agreement (defined in Section A of the SEC).

### **MPRN**

The Meter Point Reference Number, being a unique reference number for each metering point on the gas distribution network and allocated under the Uniform Network Codes (defined in Section A of the SEC).

### **MPxN**

A collective reference to the MPAN and MPRN.

### **Network Operators**

A collective term for holders of electricity distribution licences and gas transportation licences.

### **Outage Detection**

The ability for an electricity supply interruption to be identified and communicated to the SM WAN.

### **Parse**

The conversion of Service Responses and Alerts received from the DCC over the DCC User Interface into a more user-friendly format.

### **Parse and Correlate Software**

Software to be provided by the DCC which enables the carrying out of the Parse and Correlate activities.

### **Party (SEC Party)**

A person that has agreed to be bound by the requirements of the SEC.

### **Pre-Command**

A message generated as part of the processes of converting of Service Requests into Commands, i.e. after Transformation by DCC. For Critical Service Requests, Pre-Commands are returned to the DCC User for correlation and signing after DCC has transformed the Service Request.

### **RDP System**

The systems used by, or on behalf of a Network Operator for the collection storage, back-up, processing, or communication of Registration Data (defined in Section A of the SEC) prior to being sent to DCC.

### **Registration Data Provider (RDP)**

A person nominated by a Network Operator to provide Registration Data to DCC under the SEC.

### **Release Management**

The process adopted for planning, scheduling and controlling the build, test and deployment of releases of IT updates procedures and processes.

### **Relevant Services Capability**

The internal and external resources which the DCC relies upon in order to provide services as part of its Mandatory Business (defined in the DCC Licence).

### **SEC Panel**

A Panel of persons drawn from the energy industry and consumer organisations who oversee governance of the Smart Energy Code, subject to the regulatory oversight of Ofgem.

### **SECAS**

The company appointed and contracted to SECCo to carry out the functions of the Code administrator and the Code Secretariat - Gemserv.

### **SECCo**

A company established under the SEC, owned by SEC Parties and which acts as a contracting body for the SEC Panel.

### **SEC Subsidiary Documents**

Documents that are referenced by and forming part of the SEC, and thus subject to the SEC modification process.

### **Service Request**

A communication to the DCC over the DCC User Interface (and in a form set out in the DCC User Interface Specification) that requests one of the Services identified in the DCC User Interface Services Schedule (or, in future an Elective Communications Service).

### **Service Response**

A message sent from DCC to a DCC User over the User Interface (and in a form set out in the DCC User Interface Services Schedule) in response to a Service Request.

### **Services**



This refers to the services provided or that will be provided by the DCC pursuant to the requirements in the SEC (including the bilateral agreements).

### **Smart Energy Code (SEC)**

The Code designated by the Secretary of State pursuant to Condition 22 of the DCC Licence and setting out, amongst other things, the contractual arrangements by which DCC provides services to DCC Users as part of its Authorised Business (defined in the DCC Licence).

### **Smart Meter**

A Gas Smart Meter or an Electricity Smart Meter.

### **Smart Metering Equipment Technical Specifications (SMETS)**

A specification (which is to form part of the SEC) of the minimum technical requirements of Smart Metering equipment (other than Communications Hubs which are separately dealt with in CHTS).

### **Smart Metering Inventory**

An inventory of Devices which comprise Smart Metering Systems which are (or are to be) Enrolled with DCC. The Smart Metering Inventory also holds information about Devices and their inter-relationships.

### **Smart Metering System (SMS)**

A particular collection of Commissioned Devices installed in a premises:

- a Gas SMS comprises a Communications Hub Function, a Gas Smart Meter, a Gas Proxy Device and any additional Type 1 Devices (as defined in the SEC); and
- an Electricity SMS comprises a Communications Hub Function, an Electricity Smart Meter and any additional Type 1 Devices.

### **Smart Metering Wide Area Network (SM WAN)**

The network that is used for two way communication between Communications Hub Functions and the DCC.

### **Supplier**

The holder of a gas supply licence or an electricity supply licence.

### **Technical Architecture**

The DCC Systems and the Smart Metering Systems together, including as documented in the Technical Specifications (defined in Section A of the SEC).

### **Transformation**

The conversion, by DCC, of a Service Request into an associated Pre-Command - the format ultimately required in order for the Command to be executed by a Device.

### **User Role**

One of a number of different capacities in which a User may (if appropriately authorised and having gone through the necessary User Entry Processes) act, including: Import Supplier; Export Supplier; Gas Supplier, Electricity Distributor, Gas Transporter or Other User.

## User System

Any Systems (excluding any Devices) which are operated by or on behalf of a User and used in whole or in part for:

- constructing Service Requests;
- sending Service Requests over the DCC User Gateway;
- receiving, sending, storing, using or otherwise carrying out any processing in respect of any Pre-Command or Signed Pre-Command;
- receiving Service Responses or alerts over the DCC User Gateway;
- generating or receiving Data communicated by means of the Self-Service Interface
- communicating with the SMKI or Repository Services.

## Annex A: Consultation Questions

<b>Notifying new commencement dates for SEC testing phases</b>	
Q1	Do you agree with our proposal and legal drafting to introduce into the SEC a mechanism for the Secretary of State to request from the DCC a new commencement date for SIT, IT, E2E or SRT Testing? Please provide a rationale for your response.
<b>Informal Testing</b>	
Q2	Do you agree with the proposed provisions for informal testing in the SEC? Please provide a rationale for your views. <ul style="list-style-type: none"> <li>a) Whether you agree with the strength of the obligation on DCC to offer the service</li> <li>b) Whether you agree that DCC can determine the detailed rules to apply to use of the service and</li> </ul>
Q3	Do you agree with the proposed SEC amendments for informal testing as set out in the letter of direction? Please provide a rationale for your views
<b>DCC Key Infrastructure Policy Management Authority (DCCKI PMA)</b>	
Q4	Do you agree with our proposals and legal text in relation to the DCCKI PMA Function? Please provide a rationale for your response.
Q5	Do you agree that, for the purposes of transition, any proposed modification to the SEC proposed by the DCC in the interest of continuing to comply with the SEC Objectives and its obligations under Section G (Security) should be directed to the Secretary of State? Please provide a rationale for your response.
<b>Changes to when Communications Hubs can be ordered</b>	
Q6	Do you agree that the period for the submission of the first forecasts of communications hubs orders by SEC Parties should be aligned with those for subsequent forecasts, such that the initial forecast is submitted during the month ending 10 months in advance of the relevant delivery month?
<b>Minor consequential change to electricity and gas supply licences</b>	
Q7	Do you agree with the consequential changes we are proposing to electricity and gas supply licence conditions on information requirements by Ofgem for monitoring and evaluation?

## Annex B: Draft SEC Legal Text

The associated SEC legal drafting will be published separately alongside this document.

## Annex C: Informal Testing draft text

The associated legal drafting to support Informal Testing is published separately alongside this document.

## Annex D: Minor consequential change to the electricity and gas supply licence conditions, draft legal text

The associated legal drafting to support the proposed minor change to the electricity and gas supply licence conditions is published separately alongside this document.

These documents can be found on the following webpage:

<https://www.gov.uk/government/consultations/new-smart-energy-code-content-january-2015>

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