



Department
of Energy &
Climate Change

Smart Metering Implementation Programme

Consultation on the Regulatory Arrangements for Enrolment and Adoption of Foundation Meters

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General information

Purpose of this consultation:

This consultation will help inform the content of the fourth stage of the Smart Energy Code, which governs the end-to-end management of Smart Metering in Great Britain.

Issued: 16 December 2013

Respond by: 30 January 2014

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Territorial extent:

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

How to respond:

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

Responses to this consultation should be sent to smartmetering@decc.gsi.gov.uk no later than 30 January 2014.

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Confidentiality and data protection:

DECC intends to summarise all responses and place this summary on our website at www.decc.gov.uk/en/content/cms/consultations/. 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 Code of Practice on consultation, which can be found here:

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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1 Executive Summary

1.1 Purpose of this Document

- 1 An important task for the Data and Communications Company (DCC), its service providers, and energy suppliers will be to establish projects to develop or procure systems or services under which the DCC will enrol and operate SMETS1 meters installed during the Foundation Stage on behalf of suppliers.
- 2 The Government considers it important that an appropriate regulatory and governance framework is put in place to manage these projects and to provide assurance to stakeholders that the projects will be progressed in an effective manner. This document sets out proposals for a number of key elements of that framework.

1.2 Summary of consultation

- 3 **Section 3** considers the regulatory options that are available to give effect to Enrolment Projects and sets out proposals for certain key features of Enrolment Project governance, including:
 - The timing and approach for introducing regulation to support the process by which SMETS1 compliant Foundation metering equipment will be enrolled by the DCC (Enrolment Projects). Four options for introducing the detailed regulatory provisions to support enrolment and adoption are assessed and views sought on these. These include options under which these provisions could be introduced at an earlier or later point in time and/or with rights for the Secretary of State to direct elements of the process.
 - The body that should determine when the initial Enrolment Project is initiated and the factors to be taken into account when so determining. It is proposed that the Secretary of State should determine the point at which the initial Enrolment Project should commence.
 - The process under which the scope and approach for each Enrolment Project is established, and an authorisation process to then determine whether an Enrolment Project should proceed. It is proposed that the SEC Panel should have the power to authorise an Enrolment Project (by approving an “Enrolment Project Feasibility Report” produced by the DCC) and that SEC Parties should have the right to appeal the Panel’s decision to Ofgem.
 - The arrangements for testing and approval of the operational systems and processes developed as part of any Enrolment Project. It is proposed that the SEC Panel should approve Enrolment Project Systems Integration Testing and Interface Testing exit criteria; that the DCC should appoint an independent auditor to assess whether the Enrolment Project Systems Integration Testing (EPSIT) exit criteria have been met; that the DCC should

authorise its own exit from SIT when the auditor provides confirmation that testing has been satisfactorily completed and has met its objectives and exit criteria; and that the SEC Panel should determine whether the DCC has demonstrated that it has met the Enrolment Project Interface Test (EPIT) exit criteria. This is consistent with the approach to testing of the DCC's main systems.

- 4 **Section 4** considers the arrangements for assuring SMETS1 compliance for the purposes of inclusion of meters in Enrolment Projects. It is proposed that the DCC should receive a statement from each energy supplier confirming that the meters that it wishes to be enrolled are SMETS1 compliant. The supplier should retain evidence that supports this compliance statement, which must be made available upon request to the SEC Panel and/or Ofgem. It is proposed that a common form of the compliance statement to be provided by suppliers should be specified in the SEC. It is also proposed that the DCC should maintain and publish an Enrolled Products List for enrolled SMETS1 metering equipment.
- 5 **Section 5** sets out a small number of clarifications to:
 - the Adoption Criteria that Foundation communications contracts will need to meet if they are to be adopted by the DCC; and
 - SMETS1, which suppliers will be required to declare compliance with in order to include equipment in Enrolment Projects.
- 6 **Section 6** clarifies the manner in which the charging mechanism for allocating the on-going communications costs of enrolled SMETS1 metering equipment will be implemented. A clarification to the charging principle is proposed to confirm the intent that those parties who establish communications contracts that are more expensive than the charge for a SMETS2 meter operated through the Communications Service Provider (CSP) communications service should bear the additional costs that are incurred where they are also the party that is enrolling the meter.
- 7 **Section 7** discusses the arrangements for establishing the DCC communication services and service levels that will be available to DCC Users in respect of enrolled SMETS1 metering systems. It is proposed that the set of SMETS1 Service Requests and Service Responses is a subset of those available for SMETS2 and should be set out in the SEC. Views are sought on a proposed set of SMETS1 services based on an analysis of SMETS1 functions. It is also proposed that the target response times for each specific Enrolment Project should be defined by the DCC as part of the Enrolment Project Feasibility Report and that these may vary between specific cohorts of enrolled SMETS1 meters.

2 Introduction

2.1 Smart metering and the Foundation Stage

- 8 The Government's vision is for every home and smaller business in Great Britain to have smart energy meters. The roll-out of smart meters will play an important role in Britain's transition to a low-carbon economy and help to meet some of the long-term challenges in ensuring an affordable, secure and sustainable energy supply.
- 9 Most householders will have smart meters installed by their energy company between autumn 2015 and the end of 2020. From autumn 2015, we expect all major energy suppliers to be able to use the shared infrastructure provided by the Data and Communications Company (DCC). However, some energy companies are starting to install smart meters now and there will therefore be smart meters operating outside the DCC at the point at which the DCC's services become operational. This period before the start of Initial Live Operations is referred to as the "Foundation Stage".
- 10 The Foundation Stage provides an opportunity for the industry to gain valuable learning and experience, while at the same time bringing forward industry savings and customer benefits.
- 11 The Government believes there are important shared benefits from the DCC being able to enrol and adopt equipment and communication arrangements installed during the Foundation Stage. In particular, this will enable more efficient and effective switching for customers with such meters. It should also reduce the risk of these assets being replaced before the end of their operating lives.

2.2 Previous consultations and decisions

- 12 The Government has previously consulted on arrangements to facilitate the Foundation Stage of the smart metering roll-out¹ including the regulatory, commercial and operational arrangements to enable energy suppliers to enrol smart metering systems installed during Foundation such that these can be operated using the DCC's systems and services.
- 13 As a result of these previous consultations the Government has concluded that:

¹ "The Government's Final Response to the Consultation on the Foundation Smart Market" (24 July 2013)
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225054/Foundation_Smart_MarketFINAL.pdf

"The Government Response to the Consultation on the Foundation Smart Market and Further Consultation" (10 May 2013)
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225055/FSM_Consultation_Response_FINAL_0900_10-05-13.pdf

"Foundation Smart Market Consultation Document" (2 Nov 2012)
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66569/6860-foundation-smart-market-consultation-doc.pdf

- Suppliers will be able to choose to enrol smart meters installed during Foundation into the DCC;
 - All significant populations of meters installed during Foundation which comply with the relevant technical specifications (SMETS) will qualify for enrolment;
 - Enrolment of Foundation meters will be delivered through one or more Enrolment Projects to be managed by the DCC;
 - Subject to a process for determining the feasibility of an Enrolment Project, the DCC will be required to design or acquire a system or service to interface with each group of meters to be enrolled, and to adopt the relevant Foundation communications contract(s);
 - The costs of any system development or procurement incurred by the DCC to deliver an Enrolment Project will be spread across all DCC Users, in the same manner as the development cost of the main DCC systems; and
 - A supplier which establishes a communications contract that is more expensive than the charge for a SMETS2 meter operated through the CSP communications service should bear the additional costs that are incurred where they are the party that is enrolling the meter.
- 14 The proposals contained in this current consultation document do not change the above Foundation policy decisions.
- 15 The July 2013 Government publication on the second version of SMETS² recognised that suppliers are interested in the date after which new SMETS1 meter installations will no longer count towards their roll-out obligations. Our current expectation is that for a limited period, new installations of either SMETS1 or SMETS2 meters will count towards suppliers' roll-out targets. A notice period will be provided in advance of the date from which new SMETS1 installations will not count to the roll-out targets in order to: allow suppliers to manage their SMETS1 and SMETS2 stock; prepare their back office systems; and retrain their installers as necessary. Further work will be undertaken to develop the governance arrangements for determining this notice period, including options for which body will take and/or inform the decision, and any triggers or criteria that will be applied. The Government will consult on this issue in due course.

² "Government Response to the Consultation on the Second Version of the Smart Metering Equipment Technical Specifications (Part 2)" (1 Jul 2013)
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209840/SMIP_E2E_SMETS2_govt_consultation_response_part_2_final.pdf

3 Enrolment Projects – Regulatory and Governance Framework

3.1 Introduction

- 16 Suppliers can choose to enrol SMETS1 compliant meters into the DCC through an Enrolment Project. This will require the DCC to design or acquire a system or service to interface with a specific cohort of meters and to adopt the relevant communications contract(s).
- 17 The Government has previously concluded that: (i) all significant populations of such meters should be enrolled via Enrolment Projects; (ii) the first generation of enrolment should be undertaken as a single exercise to minimise costs, and (iii) the Enrolment Project development costs should be spread across all DCC Users.³
- 18 As set out in the Foundation policy consultation response of July 2013⁴, the DCC will call for expressions of interest from energy suppliers to enrol SMETS1 meters into an initial set of Enrolment Projects. Thereafter, further projects may be initiated as demand dictates.
- 19 This section considers the regulatory options that are available to give effect to these Enrolment Projects and sets out proposals for certain key features of Enrolment Project governance, including:
 - determination of the timing of the first enrolment project;
 - approval of Enrolment Project Feasibility Reports⁵; and
 - the testing of the systems and processes developed as part of the projects.

3.2 Implementation of the Regulatory Framework for Enrolment Projects

- 20 The DCC Licence contains provisions which oblige it to support Enrolment Projects. However, additional legal provisions will be needed to govern key elements of Enrolment Project process.
- 21 The Government is aware that codification of an Enrolment Project process in regulation may increase confidence that SMETS1 meters will be enrolled into the DCC. However, defining a detailed process at a point in time when little information is available regarding the number and type of meters that will be put

³ “The Government Response to the Consultation on the Foundation Smart Market and Further Consultation” (10 May 2013) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225055/FSM_Consultation_Response_FINAL_0900_10-05-13.pdf

⁴ “The Government’s Final Response to the Consultation on the Foundation Smart Market” (24 July 2013) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225054/Foundation_Smart_MarketFINAL.pdf

⁵ A report setting out the approach to each Enrolment Project, including technical options, risk assessments, test strategy and costs (see section 3.4 of this report)

forward for enrolment may constrain the industry to a mechanism that is sub-optimal and costly. The Government has therefore considered several options regarding the manner in which the enabling provisions can be set out in the SEC:

- **Option 1:** incorporate the full detail of the enrolment process and governance arrangements into the SEC at the earliest possible opportunity;
- **Option 2:** incorporate the full detail of the enrolment process and governance arrangements into the SEC at the earliest possible opportunity, with a transitional right for the Secretary of State to direct aspects of the process;
- **Option 3:** incorporate a specific requirement into the SEC or DCC Licence for the DCC to undertake an Enrolment Project (or related activities) at such time and in such a manner as directed by the Secretary of State. The detailed supporting process would be developed at a later point in time for incorporation into the SEC such that it could be used for future Enrolment Projects, if appropriate; and
- **Option 4:** incorporate the enrolment process and governance arrangements into the SEC at a later point in time using the existing powers vested in the Secretary of State.

- 22 The Government considers there are likely to be advantages in setting out the enrolment process in the SEC at an early stage, as this would provide industry with early clarity regarding the enrolment process.
- 23 Option 1 provides the greatest level of clarity at an early point in time regarding the manner in which an Enrolment Project will be conducted but has the disadvantage that it may result in a sub-optimal enrolment process due to the lack of information that is currently available regarding the cohort(s) of meters to be adopted.
- 24 As the Foundation Stage progresses more information will become available about the volumes and types of SMETS1 meters that are being installed. The DCC and its service providers will also be mobilising and industry (including suppliers and equipment manufacturers) will be continuing to implement their smart metering programmes and to develop products. Option 2 provides flexibility for aspects of the enrolment process to be directed by the Secretary of State in consideration of these factors (for example in relation to the timing and/or approval of projects) and to ensure that the timing and manner in which the initial project(s) progresses does not prejudice the overall Transition Objective⁶. However, Option 2 provides less clarity about the nature of the enrolment process.
- 25 Option 3 introduces regulation under which the DCC could be directed to undertake some preparatory work in readiness for the initiation of an Enrolment Project without the requirement to define the enrolment process in regulation. However, it provides less early clarity than Options 1 and 2 regarding the

⁶ Condition 13 of the DCC Licence (Arrangements relating to the Transition Objective) introduces the concept of a 'Transition Objective', which is the achievement of an efficient, economical, co-ordinated, timely, and secure process of transition to the Completion of Implementation.

process to be followed. However, this option is more likely to result in the development of an optimal enrolment process.

- 26 Option 4 is also more likely to result in the development of an optimal enrolment process, but it provides less certainty to suppliers and Meter Asset Providers regarding the manner in which enrolment will be conducted.
- 27 The Government can see merit in Options 1 to 4 and we would like to seek views on the regulatory options that are available to give effect to an Enrolment Project.

Q1	Which of the four options detailed above do you think is the most appropriate mechanism for enabling the Enrolment Project process in the SEC? Please provide an explanation for your answer.
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3.3 Commencement of the Initial Enrolment Project

- 28 The Government believes that several factors should be taken into account when determining the point at which the initial Enrolment Project should commence:
- Enrolment of meters will reduce the risk of asset stranding or a dispute following a change of supplier event and therefore there may be advantages in enrolling SMETS1 meters at the earliest possible opportunity.
 - Alternatively, delaying enrolment activity until there is a sufficient population of SMETS1 meters to be enrolled would provide clarity over the number and type of meters that will be eligible for enrolment and could ensure project costs are optimised and/or the number of separate projects is minimised.
 - The initial Enrolment Project should be undertaken at a point in time which does not present any risks to the development and implementation of the main DCC systems and services which enable enrolment of SMETS2 meters.
- 29 We have therefore considered which party is best placed to review these factors and initiate the enrolment activity, taking into account the interests of consumers and the industry.
- 30 The Government is minded to implement an arrangement under which the Secretary of State will determine the point (or earliest point) at which work on the initial Enrolment Project should commence. In reaching this decision the Secretary of State will be able to take account of the full range of factors identified above.
- 31 An alternative approach would be for the DCC to determine the point at which work on the initial Enrolment Project should commence. The DCC should be best placed to determine when work on Enrolment Projects can commence without placing the development and implementation of its main systems at risk. However, we do not believe that the DCC can take a view on the wider market issues that should be considered before initiating a

project and we believe that the Secretary of State is best placed to act in the interests of the industry and the consumer.

Q2 Do you agree with the proposal that the Secretary of State should determine the point at which the initial Enrolment Project should commence? If not, please provide an explanation for your answer.

3.4 Authorisation of the Enrolment Project Feasibility Report

32 The Enrolment Project process will require the DCC to produce an Enrolment Project Feasibility Report (EPFR) before work progresses on constructing the technical architecture to enrol SMETS1 meters. The EPFR will explain the approach to each Enrolment Project and provide assurance that the DCC has assessed all relevant factors in determining how the project should proceed. The information that the Government considers should be included in the EPFR is set out below:

- Details of the cohort of meters that will be included within the Enrolment Project, including firmware update plans for those meters that will be made compliant with SMETS1 prior to the date of enrolment;
- Confirmation that any Foundation communication contracts to be adopted are consistent with the Adoption Criteria set out in the SEC;
- The expected cost to deliver the Enrolment Project and to operate the enrolled meters;
- The proposed timetable for progressing the project, including an estimate of when the meters will be enrolled (including any controlled phasing of the meter migration);
- Evidence that the DCC has undertaken a comprehensive security risk assessment, taking into account information provided by suppliers and a view from the Security Sub-Committee that will be established under the SEC;
- Evidence that the DCC has assessed alternative technical and commercial options and demonstrated that the optimum option has been selected; and
- A strategy for testing that the systems and processes to be delivered by the project will meet all relevant requirements including functionality, security and service levels.

33 The Government considers that the SEC Panel should assess the EPFR against criteria that will be set out in the SEC, and that further work on an Enrolment Project should not proceed until such time as Panel authorisation has been provided. It is also proposed that an appeal process will be set out in the SEC whereby the SEC Panel decision can be appealed to Ofgem.

- 34 This approach has the advantage that the decision making process is consistent with the enduring SEC governance arrangements. The incorporation of criteria in the SEC against which the EPFR must be assessed will support the SEC Panel decision-making process. The Panel will have the ability to appoint an independent auditor or other technical advisors to review the report should it feel the need to do so.
- 35 Subject to the responses received on this issue, further work would be required to develop the EPFR authorisation criteria and/ or to define the process under which these will be established. The Government will consult further on this issue in due course.
- 36 An alternative approach would be for the DCC to authorise the EPFR and commence work without further approval or right of appeal for SEC Parties. However this would have the disadvantage that the DCC would be required to progress work that will incur charges for SEC Parties without an independent check of the acceptability of the EPFR. This could be viewed as a conflict of interest and may lead to disputes. We have therefore discounted this approach.

Q3	Do you agree with the proposal that the SEC Panel should approve the EPFR before work progresses to create the technical architecture to enrol meters and that the decision can be appealed to Ofgem? If not, please provide an explanation for your answer.
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3.5 Enrolment Project Testing

- 37 The DCC will be required to test the systems and processes delivered by the Enrolment Project to confirm that these operate correctly. This testing will be undertaken in accordance with the test strategy developed and approved as part of the EPFR.
- 38 The testing will include Enrolment Project Systems Integration Testing (EPSIT) to ensure that any new systems built or existing systems procured by the DCC function properly together and have been successfully integrated with the main DCC systems architecture.
- 39 There will also be a requirement for Enrolment Project Interface Testing (EPIT) to confirm that DCC Users can operate the enrolled meters using the relevant DCC services.
- 40 At the completion of testing, we propose that the DCC will be required to produce a test exit report, describing the outcome of EPSIT and EPIT testing and seeking authorisation to exit testing in order that meters can start to be enrolled in a live environment.

- 41 The Government considers that approval of the completion of EPSIT and EPIT should be undertaken in a manner that is consistent with the approach to testing the DCCs main systems.⁷ The Government therefore proposes that:
- the SEC Panel approves the EPSIT and EPIT exit criteria;
 - the DCC should appoint an independent auditor to assess whether the EPSIT exit criteria have been met;
 - the DCC should authorise its own exit from EPSIT when the auditor provides confirmation that testing has been satisfactorily completed and has met its objectives and exit criteria. The Panel is notified of the DCC and auditor's reports, but does not have a role in assessing whether the EPSIT exit criteria have been met; and
 - the SEC Panel will determine whether the DCC has demonstrated that it has met the EPIT exit criteria.

Q4	Do you agree that the approval of the completion of EPSIT and EPIT should be undertaken in a manner that is consistent with the approach to testing of the DCCs main systems? If not, please provide an explanation for your answer.
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⁷ For details see: "Smart Metering System & Equipment Testing – Consultation Response" (02 Dec 2013) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/262686/smip_system_equipment_testing_consultation_response.pdf

4 Assuring SMETS1 Compliance for purposes of Enrolment Projects

4.1 Introduction

42 In the July 2013 Foundation Smart Market consultation response, the Government clarified the enrolment criterion as follows:

“The minimum criterion for inclusion of metering equipment within the initial Foundation Enrolment Projects is that, **at the date of enrolment**, the meter is compliant with a version of SMETS.”

43 This change allows suppliers to enrol meters that become SMETS compliant after the meter is first introduced to the premises but before it is enrolled (for example, where the installation is later completed by way of a firmware upgrade).

4.2 Determining Compliance of Meters with SMETS1

44 The Government considers that an assurance regime should be established to ensure that the meters that suppliers wish to enrol through Enrolment Projects are SMETS1 compliant. The following options have been considered:

- **Option 1:** The DCC directly tests the compliance with SMETS1 of each meter type brought forward for enrolment at the point of enrolment;
- **Option 2:** The DCC receives a statement from the supplier that the meters that it wishes to enrol are SMETS1 compliant, together with test reports or other evidence to support the statement. The DCC reviews, and confirms the validity of, the compliance statement, test reports and other evidence; and
- **Option 3:** The DCC receives a statement from the energy supplier that the meter is SMETS1 compliant. The supplier retains evidence to support the statement, which must be made available upon request of the SEC Panel and/or Ofgem. However, the DCC accepts the compliance statement without confirming its validity.

45 Options 1 and 2 would impose a requirement on the DCC to either test (Option 1) or otherwise confirm (Option 2) the compliance of meters. This could be expensive and time consuming, and consideration would need to be given as to whether the limitations on DCC liabilities under the SEC afforded appropriate protection to suppliers. This approach would also reduce the responsibility of suppliers to ensure SMETS1 compliance of their equipment. The Government has therefore concluded that these options should not be taken forward.

46 The Government considers that Option 3 is consistent with its wider policy position that assuring SMETS compliance (in respect of all versions of the SMETS) is a matter for suppliers and is minded to implement Option 3.

- 47 The Government also proposes that a common compliance statement should be provided to the DCC by all suppliers that wish to enrol SMETS1 meters and that the form of this statement should be set out in the SEC.
- 48 We are of the view that this compliance statement approach, allied with the strong commercial incentives on energy suppliers and Meter Asset Providers to ensure that their equipment is SMETS1 compliant, should provide sufficient assurance without the requirement to mandate a specific certification scheme for the purposes of Enrolment Projects, or to place additional responsibilities on the DCC to test or assure SMETS1 equipment to be enrolled.

Q5	Do you agree that Option 3 should form the basis upon which assurance is provided that the meters that will be enrolled are compliant with SMETS1? If not, please provide an explanation for your answer.
Q6	Do you agree that a common form of compliance statement should be provided to the DCC by suppliers and that this should be set out in the SEC? If not, please provide an explanation for your answer.

4.3 Enrolled Products List

- 49 SMETS2 meters that meet the requirements of Protocol and CPA certification will be placed upon a Certified Products List that is maintained by the SEC Panel.
- 50 The Government has considered the requirement for a products list for enrolled SMETS1 meters and proposes that the DCC should maintain and publish an Enrolled Products List for meters in respect of which suppliers have confirmed that SMETS1 compliance testing has been completed and which have been enrolled through Enrolment Projects.
- 51 A key benefit of this approach would be to reduce the risk that meters are replaced or commercially stranded upon change of supplier prior to enrolment, by giving clarity to the gaining supplier that the gained meter type is capable of enrolment and operation by the DCC.

Q7	Do you agree with the proposal that the DCC should maintain and publish an Enrolled Products List? If not, please provide an explanation for your answer.
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5 Clarifications

5.1 Adoption Criteria

- 52 Meters that are eligible for enrolment and adoption must have an active communications contract in place that meets the adoption criteria that will be set out in the SEC. These adoption criteria have been consulted upon previously.
- 53 The Government has undertaken a further review of the criteria and considers that some aspects require clarification, as set out below.
- **Core Services** - The SEC will contain a set of core services for SMETS2 meters and these will be provided by the DCC User Gateway Interface Specification and DCC User Gateway Code of Connection. However these requirements do not necessarily reflect the functionality of SMETS1 meters. The Government has therefore proposed in Section 7 of this consultation document that a set of exemptions to SMETS services in regard to SMETS1 meters should be set out in the SEC and that the adoption criteria should be clarified to replace the term 'core services' with 'services applicable to SMETS1 meters as defined in the SEC'.
 - **Novation Clause** - The criteria as currently stated require that the SMETS1 communications contract includes a novation clause that makes the contract capable of adoption by the DCC. We believe that this adoption criterion should be clarified such that individual communication contracts that are incorporated into an Enrolment Project are not required to be novated on the same date.
 - **Termination Notice Period** - The adoption criteria set out in the May 2013 consultation included that the notice period for termination of communications to an individual connection point should be a minimum of 3 months. We would like to change this to a maximum of 3 months rather than a minimum of 3 months such that the DCC can terminate the adopted contract and establish a new communications contract in a timely manner, should it be beneficial to do so.
 - **Termination for Material Breach and Liability, Loss and Disaster Recovery Provisions** - We confirm that these provisions should be consistent with those which the DCC is already subject to under the SEC.
- 54 The adoption criteria are set out in Annex 2, with the effect of the changes described above highlighted.

Q8	Do you agree with the changes that are proposed to the adoption criteria? If not, please provide an explanation for your answer.
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5.2 SMETS1 Requirements

- 55 It is proposed that suppliers will be required to declare that their equipment is compliant with SMETS1. To support this, we consider it helpful to take this opportunity to clarify a small number of SMETS1 requirements. While we do not believe this is strictly necessary, clarifying these requirements is in keeping with our aim to increase industry confidence that SMETS1 equipment can be enrolled with DCC.
- 56 We propose to make the following amendments to SMETS1 (with key changes highlighted):

Current SMETS1 drafting	Proposed updated drafting	Rationale
<p>§ 4.3.1/5.3.1</p> <p>The Clock forming part of a GSMS/ ESMS shall be capable of operating so as to be accurate to within 10 seconds of UTC at all times.</p>	<p>The Clock forming part of GSMS/ ESMS shall be capable of operating so as to be accurate to within 10 seconds of UTC <u>under normal operating conditions.</u></p>	<p>This drafting reflects that time will be synchronised across the Wide Area Network.</p>
<p>§ 4.4.3</p> <p>A GSMS shall be capable of executing Commands immediately on receipt (“immediate Commands”)</p>	<p>A GSMS shall be capable of executing Commands <u>within 30 minutes of their receipt</u> (“immediate Commands”).</p>	<p>This drafting reflects the likelihood that a gas meter will only ‘wake up’ every 30 minutes under normal operating conditions.</p>
<p>§ 4.4.3</p> <p>A GSMS shall be capable of executing Commands at a future date (“future dated Commands”). A future dated Command shall include a date and time at which the Command shall be executed by the GSMS</p>	<p>A GSMS shall be capable of executing <u>certain Commands</u> at a future date (“future dated Commands”).</p>	<p>It is not necessary that all commands be executable at a future date.</p>
<p>6.3.2.2/ 6.3.3.2 Aggregate Debt</p> <p>The sum of all time-based and payment-based debt registers when GSMS/ ESMS is operating in Prepayment Mode.</p> <p>6.3.2.3/ 6.3.3.3 Aggregate Debt Recovery Rate</p> <p>The sum of the Time-based Debt Recovery rates when GSMS/ ESMS is operating in Prepayment Mode.</p>	<p>6.3.2.2/ 6.3.3.2 Debt <u>Either Aggregate Debt, or Time-based Debt and Payment-based Debt</u> on the ESMS/GSMS operating in Prepayment Mode.</p> <p>6.3.2.3/ 6.3.3.3 <u>Debt Recovery Rate</u></p> <p><u>Either Aggregate Debt Recovery Rate or each Time-based Debt Recovery rate</u> on the ESMS/GSMS operating in Prepayment Mode.</p>	<p>It is possible that presenting the information in disaggregated form will be more useful to the consumer.</p>

- 57 It is proposed that the Secretary of State will use his existing power provided in the electricity and gas supply licence conditions to direct that the SMETS1 is amended to reflect these changes. Any meter installed to date or installed when SMETS1 remains in force that complies with the updated requirements will be considered SMETS1 compliant. These amendments would not be subject to further notification to the European Commission as they do not add further requirements to the existing SMETS1, which was notified to the European Commission in 2012.

Q9	Do you agree with the clarifications that are proposed to SMETS1? If not, please provide an explanation for your answer.
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6 Enrolment Projects – Charging Arrangements

6.1 Introduction

- 58 This section summarises the Government’s established charging approach for enrolled SMETS1 metering equipment and explains how this approach will be implemented in the SEC. In so doing, it focuses on the practical treatment of the various costs associated with enrolling SMETS1 metering equipment into the DCC which are:
- the one-off costs of creating Enrolment Projects and building or procuring systems or services to enrol meters;
 - on-going fixed costs to manage these systems or services; and
 - on-going operational costs associated with sending and receiving messages to and from enrolled SMETS1 meters.

6.2 Foundation Charging Approach

- 59 The Government has previously determined that the common benefits associated with enrolling SMETS1 compliant metering equipment into the DCC justifies spreading the one-off development costs across all users.
- 60 Thus these one-off and any associated on-going fixed costs will be recovered within the existing budgetary process consistent with the existing charging principles in the DCC Licence and the associated detailed mechanism in the SEC. As such, no changes are required to the SEC to recover these costs.
- 61 The Government noted in the July 2013 Foundation Smart Market Consultation Response that gaining energy suppliers have no visibility or control over the on-going communications costs that they may inherit on a change of supplier event.
- 62 The intent of the Foundation charging approach is to ensure that those parties who establish communications contracts that are more expensive than the charge for a SMETS2 meter operated through the CSP communications service should bear the additional costs that are incurred where they are the party that is enrolling the meter.
- 63 We therefore concluded that the additional on-going communications costs will be paid by the supplier responsible for the meter, as long as that supplier is the supplier which installed the SMETS1 meter. If the meter has churned, the gaining supplier will pay the same charges as for a SMETS2 meter operated through the CSP communications service.
- 64 However, the Government has become aware through further analysis that the gaining supplier may choose to establish a new communications contract prior to enrolling a SMETS1 meter. The cost of this new contract may still be greater

than the charges for a SMETS2 meter operated through the CSP communications service.

- 65 The Government is therefore minded to clarify the Foundation charging approach such that:

*The additional on-going communications costs will be paid by the supplier responsible for the meter, as long as that supplier is the supplier which **established the adopted communications contract** prior to the date of adoption. If the meter has churned, a supplier gaining a **SMETS1 meter and a communications contract which it did not establish** will pay the same charges as for a SMETS2 meter operated through the CSP communications service.*

- 66 We would also like to clarify the following points:

- a) post change of supplier, the supplier that has gained the meter and the communications contract will pay the same charge for an enrolled SMETS1 meter as for a SMETS2 meter regardless of whether the churn has occurred before or after enrolment;
- b) post enrolment, the charge for a SMETS2 meter will be applied to all enrolled SMETS1 meters that churn, regardless of whether they churn back to the supplier that established the Foundation communications contract;
- c) an enrolling supplier will pay the same charges as for a SMETS2 meter operated through the CSP communications service if this is higher than the cost of the Foundation communications contract (i.e. there will be no reduction in charges if the Foundation contract cost is lower);
- d) any incremental costs associated with adopted Foundation communication contracts that are not being recovered from the suppliers who established those contracts (i.e. after the meter has churned) will be socialised in accordance with the standard DCC charging methodology.

- 67 The charging objectives in the DCC Licence and algebra within the Charging Methodology that is detailed in Section K of the SEC may need to be amended to reflect the requirements detailed above and any changes will be consulted upon in due course.

Q10

Do you agree with the clarification that is proposed to the principle for charging the on-going communications costs after enrolment of a SMETS1 meter as set out in paragraph 65? If not, please provide an explanation for your answer.

7 DCC Services for Enrolled Smart Metering Systems

7.1 DCC Communication Services

- 68 The DCC and DCC Service Users will communicate through a series of Service Requests and Service Responses that are set out in the SEC. These will define the common services and common service standards that all users will receive in respect of SMETS meters.
- 69 SMETS1 meters will generally benefit from the full set of DCC services. However, the functionality defined in SMETS1 and SMETS2 is different and, while the majority of the service requests and service responses apply to both, some are not supported in the SMETS1 specification.
- 70 We therefore consider that it is appropriate to define a set of exemptions to DCC service requests and responses in respect of SMETS1 meters. These service requests and exemptions would be specified in the SEC. The proposed exemptions list is set out in Annex 3.
- 71 The exemptions to SMETS Service Requests will clarify the minimum service that should be delivered through the Enrolment Projects in respect of SMETS1 meters and will form the basis upon which the DCC can design the Enrolment Project technical architecture.

Q11	Do you agree that a set of SMETS1 Service Requests and Service Responses should be set out in the SEC? If not, please provide an explanation for your answer
Q12	Do you agree that the Requests and Responses that are set out in Annex 3 define the service to be provided by the DCC in respect to SMETS1 meters? If not, please provide an explanation for your answer

7.2 Service Delivery

- 72 The DCC is obliged under the provisions of its Licence to support the relevant service requests and service responses against target response times that are set out in the SEC.
- 73 While it is possible to define these target responses times for SMETS2 meters, we do not believe the same approach can be taken to the operation of SMETS1 meters. This is because it is likely that performance levels specified within different adopted communications contracts will differ across the different cohorts of SMETS1 meters.

74 We therefore propose that the target response times for each specific Enrolment Project should be defined by the DCC as part of the Enrolment Project Feasibility Report and that while we expect that the DCC should endeavour to establish common response times, these may vary between specific cohorts of enrolled SMETS1 meters.

Q13	Do you agree that the DCC should set the Target Response times for specific cohorts of SMETS1 meters as part of the Enrolment Project Feasibility Reports? Or do you believe that a common Target Response Time should be set for all SMETS1 meters? If the latter, how should this be defined? Please provide an explanation for your answer.
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8 Glossary

This section provides a glossary of the principal terms used in this document.

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.

Adoption

The process by which a Foundation communications contract is novated from the supplier who entered into it to the DCC for on-going management.

Adoption Criteria

The criteria which a Foundation communications contract must meet to be eligible for Adoption by the DCC.

Communications Service Provider (CSP)

Bodies awarded a contract to be a service provider of the DCC's communications services. Arqiva Limited and Telefónica UK Limited have been appointed to provide these services.

Data and Communications Company (DCC)

The holder of the Smart Meter Communication Licence, Smart DCC Limited.

Data Services Provider (DSP)

Body awarded the contract to deliver systems integration, application management and IT hosting services to the DCC. CGI IT UK Limited has been appointed to provide these services.

DCC User

A SEC Party who has completed the User Entry Processes and is therefore able to use DCC Services in a particular User Role.

Enrolment

The process of incorporating a meter into management by the DCC's DSP, including commercial negotiation.

Enrolment Criteria or Criterion

The criteria or criterion which a meter must meet to be eligible for Enrolment.

Enrolment Project

A project through which SMETS1 compliant Foundation metering equipment will be enrolled by the DCC.

Foundation (or the Foundation Stage)

The period prior to the start of Initial Live Operations

Foundation Meters

Smart Meters installed during the Foundation Stage.

Initial Live Operations

The expectation that the DCC will have built and tested its systems for SMETS2 equipment and be operationally ready; all of the Large Suppliers will be ready to use the DCC Services, start installing SMETS2 meters and offer basic services to both credit and pre-payment customers; the DNOs will be ready to support smart meter installation; and the Electricity DNOs ready to use the DCC Service to improve network management. Currently, this is planned to be September 2015

Meter Asset Provider (MAP)

Under the competitive metering market arrangements, Meter Asset Providers fund meters and seek to recoup the asset value of each meter from whichever energy supplier is currently using it to supply energy at premises at which it is installed.

Ofgem

Office of Gas and Electricity Markets. In this document, references to Ofgem are to be taken as references to the Gas and Electricity Markets Authority which is the governing body for Ofgem. The Gas and Electricity Markets Authority has objectives and powers under the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998 and the Enterprise Act 2002.

SEC Panel

Panel established to oversee the Smart Energy Code with powers and duties as set out in Section C of the SEC.

Smart Energy Code (SEC)

The SEC, as designated by the Secretary of State under Condition 22 of the DCC Licence, and setting out, amongst other things, the contractual arrangements by which DCC provides services to users as part of its Authorised Business. The SEC needs to be read alongside the DCC Licence, which sets out the high-level obligations for this new licensed entity. The DCC, energy suppliers and network operators are required through conditions in their licences to become parties to the SEC.

Smart Meter

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 readings and receive data remotely.

Smart Metering Equipment Technical Specification (SMETS)

The document designated by the Secretary of State and forming part of the SEC which describes the minimum technical requirements of smart metering equipment (other than Communications Hubs which are separately dealt with in CHTS).

Smart Metering Equipment Technical Specification version 1 (SMETS1)

The first version of the Smart Metering Equipment Technical Specification which was designated by the Secretary of State on 18 December 2012.

Smart Metering Equipment Technical Specification version 2 (SMETS2)

The second version of the Smart Metering Equipment Technical Specification which will be designated by the Secretary of State at a later time.

Smart Metering Implementation Programme (SMIP or the Programme)

The overall programme to deliver smart metering in Great Britain put in place following the Government's December 2009 response to consultation. The SMIP is overseen by DECC.

Supplier

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

Annex 1: Consultation Questions

3.2 Implementation of the Regulatory Framework for Enrolment Projects	
Q1	Which of the four options that are detailed above do you think is the most appropriate mechanism for enabling the Enrolment Project process in the SEC? Please provide an explanation for your answer.
3.3 Commencement of the Initial Enrolment Project	
Q2	Do you agree with the proposal that the Secretary of State should determine the point at which the initial Enrolment Project? If not, please provide an explanation for your answer.
3.4 Authorisation of the Enrolment Project Feasibility Report	
Q3	Do you agree with the proposal that the SEC Panel should approve the EPFR before work progresses to create the technical architecture to enrol meters and that the decision can be appealed to Ofgem? If not, please provide an explanation for your answer.
3.5 Enrolment Project Testing	
Q4	Do you agree that the approval of the completion of EPSIT and EPIT should be undertaken in a manner that is consistent with the approach to testing of the DCCs main systems? If not, please provide an explanation for your answer.
4.2 Determining Compliance of Meters with SMETS1	
Q5	Do you agree that Option 3 should form the basis upon which assurance is provided that the meters that will be enrolled are compliant with SMETS1? If not, please provide an explanation for your answer.
Q6	Do you agree that a common form of compliance statement should be provided to the DCC by suppliers and that this should be set out in the SEC? If not, please provide an explanation for your answer.
4.3 Enrolled Products List	
Q7	Do you agree with the proposal that the DCC should maintain and publish an Enrolled Products List? If not, please provide an explanation for your answer.
5 Clarifications	
Q8	Do you agree with the clarifications that are proposed to the adoption criteria? If not, please provide an explanation for your answer.

Q9	Do you agree with the clarifications that are proposed to SMETS1? If not, please provide an explanation for your answer.
6.2 Foundation Charging Approach	
Q10	Do you agree with the clarification that is proposed to the principle for charging the on-going communications costs after enrolment of a SMETS1 meter as set out in paragraph 65? If not, please provide an explanation for your answer.
7.1 DCC Communication Services	
Q11	Do you agree that a set of SMETS1 Service Requests and Service Responses should be set out in the SEC? If not, please provide an explanation for your answer.
Q12	Do you agree that the Requests and Responses that are set out in Annex 3 define the service to be provided by the DCC in respect to SMETS1 meters? If not, please provide an explanation for your answer.
7.2 Service Delivery	
Q13	Do you agree that the DCC should set the Target Response times for specific cohorts of SMETS1 meters as part of the Enrolment Project Feasibility Reports? Or do you believe that a common Target Response Time should be set for all SMETS1 meters? If the latter, how should this be defined? Please provide an explanation for your answer.

Annex 2 – Adoption Criteria

The changes and additions highlighted in the table below reflect the changes and clarifications described in Section 5 of this document.

Core Services <u>SMETS1 services as defined in the SEC</u>	Must support the provision of the core communications services by DCC relevant to SMETS1 meters (for example this excludes certain capabilities of SMETS2 meters related to load control and data on maximum and minimum demand)
Terms and Conditions	Reasonable Terms and Conditions, as defined below
Novation Clause	Satisfactory clause to enable adequate contract novation to the DCC, or an agreement at the time of enrolment to enter into a contract with the DCC on equivalent terms. <u>Where more than one contract is being novated, each novation does not need to occur on the same date.</u>
Termination	Reasonable term remaining on the contract, or a clause allowing rollover of the contract by mutual consent. The only right of termination by the communications provider must be for non-payment and this would be on similar terms to those envisaged for the CSP contracts Notice period for DCC terminating provision of communications to an individual connection point should be 3 months minimum <u>maximum</u> DCC will have immediate right of termination for material breach of contract, <u>consistent with the relevant provisions in the SEC</u> No right for the service provider to receive compensation at the natural expiry of the contract or in the event that the contract is terminated for default on the part of the service provider
Liability	Liability limit for communications provider proportionate to the value of the contract, as would be reasonably expected in this market <u>and is consistent with the relevant provisions in the SEC</u>
Loss	Contract addresses communications provider liability for loss and requirement for appropriate insurance cover <u>and is consistent with the relevant provisions in the SEC</u>
Exclusivity and restrictive terms	Any restrictive terms relating to the energy supplier and the communications provider will need to fall away at the point of novation

Data ownership and security	<p>Contract includes an undertaking to not process data in a way that would put DCC in breach of the obligations that it owes to SEC parties under data protection legislation</p> <p>Contract imposes obligations upon the communications provider that are required to support DCC's discharge of the obligations it faces under the SEC in relation to end to end security</p> <p>Contract doesn't attempt to absolve the communications provider from liability with respect to security breaches; penalties sufficiently incentivise the communications provider to comply with security requirements</p>
Confidentiality	<p>Contract must contain confidentiality provisions consistent with the DCC's obligations under SEC, such as those that restrict use of information other than for the purposes of this agreement</p>
Disaster recovery and business continuity and incident management	<p>Contract has clear responsibilities and plans for Disaster Recovery. Also contains appropriate provisions with regard to risk management, business continuity and incident management <u>and these are consistent with the relevant provisions in the SEC</u></p>
Intellectual Property Rights	<p>Contract must provide for the transfer, or royalty free licensing, of IPR for IP developed in the entering into or performance of the foundation contract</p>
Service Level Agreement - Availability - Fault Resolution - Network performance	<p>SLAs exist and as a minimum provide service level expectations and incentives related to network availability, resolution of faults and network performance characteristics that are commensurate with the needs of the core service</p> <p>Novated SLAs can be maintained under a DCC environment with penalties for poor performance</p>
Transparency and compliance	<p>The contract contains nothing that would put the DCC in breach of its regulatory obligations</p>

Annex 3 – SMETS Service Exemptions in Respect of SMETS1 Meters

It is proposed that the following Service Requests will be expected to return an error message if applied to SMETS1 meters.

Request ID	Request Name
1.7	Reset Tariff Block Counter Matrix
3.1	Display Message
3.4	Update Supplier Name
3.5	Reset Customer PIN
4.14	Retrieve Prepayment Daily Read Log
4.12	Read Maximum Demand Values
4.16	Read Active Power Import Register
4.17	Retrieve Daily Consumption Log
6.17	Issue Security Credentials
6.18	Reset Maximum Demand Registers
6.19	Set Device Configuration (local time calendar)
6.20	Set Device Configuration (MPxN)
6.21	Request Handover of DCC Controlled Device
6.22	Configure Event Behaviour
6.24	Retrieve Device Security Credentials
7.1	Enable Supply
7.5	Activate Auxiliary Load Control
7.6	Deactivate Auxiliary Load Control
7.7	Read Auxiliary Load Control Switch Configuration
7.8	Reset Auxiliary Load Control Switch

Request ID	Request Name
7.9	Add Auxiliary Load to Boost Button
7.10	Remove Auxiliary Load from Boost Button
7.11	Read Boost Button Details
7.12	Set Randomised Offset Limit
8.7	Join
8.8	Unjoin
8.9	Read Device Log
8.10	Update Public Security Credentials
8.11	Update HAN Device Log
8.12	Restore HAN Device Log
8.13	Update HHT Response
9	Customer Consent
11.3	Activate Firmware
14.1	Record Network Data (GAS)

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