

# Smart Metering Implementation Programme

## Foundation Smart Market

Consultation document

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# Contents

<b>Smart Metering Implementation Programme.....</b>	<b>1</b>
<b>Consultation document .....</b>	<b>1</b>
<b>Contents.....</b>	<b>3</b>
<b>General information .....</b>	<b>4</b>
<b>1. Executive Summary.....</b>	<b>6</b>
Foundation Smart Market .....	6
Smart Change of Supplier .....	6
Enrolment and Adoption .....	7
Next Steps.....	7
<b>2. Smart Change of Supplier (Smart CoS) .....</b>	<b>8</b>
Introduction.....	8
Current market issues.....	8
Potential impact of market and programme evolution .....	9
Regulatory options.....	12
<b>3. Enrolment and Adoption .....</b>	<b>15</b>
Introduction.....	15
Data Enrolment and Full Enrolment .....	16
The case for and against an Enrolment Mandate.....	16
Enrolment and Adoption Process.....	19
Enrolment and Adoption Criteria .....	22
Cost Allocation.....	24
Regulatory Implementation .....	28
<b>4. Catalogue of consultation questions .....</b>	<b>30</b>
<b>5. Glossary .....</b>	<b>33</b>
<b>Annex .....</b>	<b>36</b>

# General information

## Purpose of this consultation

This consultation seeks views on two aspects of the roll-out of smart meters; how meters installed in the foundation stage will be enrolled and adopted into the enduring arrangements; and whether regulation is required to support smart change of supplier outcomes for meters installed during foundation.

**Issued:** 2<sup>nd</sup> November 2012

**Respond by:** 4<sup>th</sup> January 2013

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Consultation reference: URN 12D/373

## Territorial extent:

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

## How to respond:

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome. Responses to this consultation should be sent to [smartmetering@decc.gsi.gov.uk](mailto:smartmetering@decc.gsi.gov.uk). The consultation closes on 4 January 2013.

Responses should be clearly marked Foundation Smart Market (URN 12D/373). Responses and any enquiries related to the consultation, should be addressed to:

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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:**

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 want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. 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.

We will summarise all responses and place this summary on our website at [www.decc.gov.uk/en/content/cms/consultations/](http://www.decc.gov.uk/en/content/cms/consultations/). This summary will include a list of names or organisations that responded but not people's personal names, addresses or other contact details.

**Quality assurance:**

This consultation has been carried out in accordance with the Government's Code of Practice on consultation, which can be found here:

<http://www.bis.gov.uk/files/file47158.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:

DECC Consultation Co-ordinator  
3 Whitehall Place  
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Email: [consultation.coordinator@decc.gsi.gov.uk](mailto:consultation.coordinator@decc.gsi.gov.uk)

# 1. Executive Summary

- 1.1. 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 us meet some of the long-term challenges we face in ensuring an affordable, secure and sustainable energy supply.

## Foundation Smart Market

- 1.2. Smart meters will be installed in two stages: the Foundation Stage and Mass Roll-out Stage. The Foundation Stage started in April 2011 and will end with the start of mass roll-out in late 2014. On the basis of information received from suppliers, the Government expects a significant number of smart meters to be installed during the Foundation Stage.
- 1.3. The Government's April 2012 Programme Update (the April Update) confirmed the intention that equipment that complies with the version of the Smart Metering Equipment Technical Specification (SMETS) that is extant at the time of installation will count towards suppliers' roll-out obligations. In addition, meters installed prior to the designation of the first technical specification (SMETS1) that comply with SMETS 1 as designated will count towards suppliers' roll-out.
- 1.4. This consultation document addresses the issues identified in the April Update relating to change of supplier for customers with compliant smart meters, and the enrolment of Foundation Stage smart meters into the Data and Communications Company (DCC) service.
- 1.5. Objectives for the Foundation Stage include ensuring that consumers have a positive experience (whether or not they subsequently change supplier); that the organisations funding Foundation meters have appropriate economic and commercial incentives to support market development; and that the meters and communications arrangements can be easily transferred on change of supplier and, as far as possible, are appropriate to enable management by the DCC at a later date.

## Smart Change of Supplier

- 1.6. Successful development of the smart meter market will mean that consumers can generally keep their smart functionality if they choose to change supplier and that suppliers will pay a rent for the meter that reflects smart functionality when they gain a customer. The Government considers that a range of initiatives are likely to help deliver these desired outcomes such as:
  - the increasing technical and regulatory certainty around SMETS and the introduction of licence conditions and legislation confirming the Government's commitment to smart metering;
  - Ofgem's Effective Switching obligations that are designed to help domestic consumers understand if the smart services they are receiving will be maintained when they switch supplier. These rules will come into place in November 2012 and January 2013. This should facilitate the switching process for customers with smart meters.

- changes to industry processes under the relevant Industry Codes which industry is progressing.
- 1.7. The Government is considering whether further measures would be beneficial in delivering optimum outcomes during the Foundation period. This consultation document contains proposals to introduce two new licence conditions that, in combination, should provide greater clarity for suppliers and meter asset providers (MAPs) in relation to the process for agreeing rental terms or, if necessary, securing the return of a meter, when a consumer with a SMETS-compliant smart meter changes supplier.

## Enrolment and Adoption

- 1.8. In the enduring smart meter market, domestic meters and some non-domestic meters will have their communications managed centrally through the DCC. However, there will be meters installed during the Foundation Stage that will be operating outside the DCC at the point at which the DCC's services become operational. There are likely to be significant benefits to enrolling these meters. However, there are technical and commercial issues to be addressed. This consultation considers some of these commercial and technical issues and proposes a set of Enrolment and Adoption criteria for consultation. Where these criteria are met, and a supplier requests enrolment, the DCC will, subject to its licence conditions, be required to offer terms. The Government is consulting on the process for this.
- 1.9. Where a meter is enrolled and the communications contract is adopted by the DCC, there will be costs associated with this action. The Government is therefore consulting on the different options for allocating these costs.
- 1.10. The Government has considered the merits of regulating to mandate enrolment with the DCC of SMETS 1 meters installed during the Foundation Stage. We do not see a clear case for mandating enrolment at this time. However, the Foundation Smart Market is in its early stages and we will keep this position under review. The Government is seeking views on both the potential case for mandating enrolment and, if the case is made, the optimum timing for the completion of mandatory enrolment.

## Next Steps

- 1.11. The Government will consult for 9 weeks and then review consultation responses with the intention of issuing a Government response in the New Year. Any regulation identified will be included in licences and/or the Smart Energy Code (SEC) and will therefore be the subject of further consultation on the specific licence or code legal drafting.

# 2. Smart Change of Supplier (Smart CoS)

## Introduction

### Background and objectives

- 2.1. Government objectives for the Foundation Stage include the need to build positive consumer perceptions of smart meters and to prepare for mass roll-out by allowing for investment in, and installation of, smart meters. Parties funding smart meters should also be able to secure a reasonable commercial return on their investment. Without this, investment confidence will be lowered and this could impede, or increase the cost of roll-out of smart meters.
- 2.2. An aim of Smart CoS is that consumers who have begun to benefit from smart services should generally be able to continue to do so, if they wish, even if they choose to change to a new supplier. A loss of smart services and/or reversion to visits from meter readers and estimated bills could undermine consumer confidence in smart metering. The Government has previously set out an expectation that smart CoS as standard should take place from Quarter 3 2013.
- 2.3. In the Programme Update document published in April 2012, the Government stated that:  
*“Successful development of the smart meter market will mean that consumers can generally keep their smart functionality if they choose to change supplier and that suppliers will pay a rent that reflects smart functionality when they gain a customer.”*
- 2.4. Within the Foundation Smart Market, some suppliers have pursued a strategy of early installation of smart meters for their customers. These customers are free to change supplier during that period. They may choose a supplier who can operate their meter in smart mode, in which case they will continue to receive smart services. However, they may choose a supplier who cannot operate their meter in smart mode. In this case the meter will be operated in ‘dumb’ mode and will not offer smart services<sup>1</sup>.
- 2.5. The April Update document further noted that the Government is working closely with Ofgem and stakeholders to consider what industry or regulatory changes would be required and how quickly the payment of smart rent on change of supplier could be introduced as standard. The purpose of this section of the consultation is to consider whether existing market initiatives and drivers are sufficient to deliver Foundation objectives and if not whether further interventions are necessary.

### Current market issues

- 2.6. It is generally the supplier’s responsibility to provide a meter to a customer. The meter will typically be financed and installed by a Meter Asset Provider (MAP), who will charge the supplier a rent for this service. The rent is proportionate to the cost and functionality of the meter. Smart meters are more expensive and have greater functionality than dumb

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<sup>1</sup> Note: smart prepayment meters may not be capable of dumb operation whilst retaining prepayment capability.

meters and hence command higher rents. In this document the terminology ‘smart rent’ denotes the rental paid for a smart meter and ‘dumb rent’ denotes the rental paid for a traditional meter.

- 2.7. In the current Foundation market, where a supplier chooses to install a smart meter, it will pay the MAP a smart rent. If it loses this customer to a supplier who cannot operate the meter, the gaining supplier typically offers a dumb rent because it is unwilling to pay for functionality that it cannot benefit from.
- 2.8. There are a number of other commercial and operational issues around change of supplier that are currently affecting the early smart meter market. MAPs have difficulties tracking their assets on change of supplier, and in securing a smart rent for their meters. The Government understands that, as a consequence, some suppliers have found difficulty raising sufficient funding for smart meter deployment or have faced increased risk premiums built into smart meter prices.

### Underlying causes

- 2.9. The factors that have been reported as being the most significant contributors to these problems include:
- diversity of the design and functionality of early smart meters due to the previous absence of an agreed technical specification;
  - suppliers not yet having the capability to operate inherited smart meters in smart mode (regardless of the design and functionality of these);
  - MAPs’ inability to directly access information relating to changes of supplier stored on industry registration systems<sup>2</sup>. As a result they can be unaware that a change of supplier event has taken place with respect to a meter that they own and are therefore unable to track their assets and negotiate a smart rent with the gaining supplier;
  - lack of certainty about whether smart meters inherited upon change of supplier will be capable of enrolment with the DCC at acceptable cost.

## Potential impact of market and programme evolution

### Market drivers

- 2.10. Smart metering creates opportunities for suppliers and metering equipment service providers. There are a number of natural market incentives in place that are created by these opportunities that are likely to drive participants to seek to develop appropriate commercial and operational arrangements. For example, suppliers may wish to retain inherited compliant meters to avoid replacement costs and improve the customer experience and this may influence their willingness to enter into commercial arrangements with the MAP.

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<sup>2</sup> Electricity Distribution Network Operators and Gas Transporters have regulatory obligations to maintain systems that record and update information relating to every meter point, including details of the supplier responsible for each of these. These systems support the change of supplier process.

## Specific actions to support the Foundation smart market

2.11. A number of regulatory and operational developments have been designed to support the Foundation Smart Market including:

- the confirmation that all SMETS compliant meters will count towards supplier roll-out obligations and the development of the SMETS1 and SMETS2 specifications;
- developments in the regulatory framework to support the roll-out of smart meters;
- Ofgem's introduction of the "Effective Switching"<sup>3</sup> supplier licence conditions and supporting changes to industry systems and processes under the relevant codes that reflect these conditions;
- the emergence of commercial "Smart Meter System Operators" (SMSOs); and
- further clarity on Enrolment and Adoption criteria as described later in this document.

2.12. These developments are described further below.

### Development of the SMETS 1 and SMETS 2 specifications

2.13. The SMETS 1 specification was notified to the EU in April 2012. No material concerns were raised by the EU and SMETS 1 will be mandated once the roll-out licence condition which is currently laying in Parliament has been made. A consultation on the SMETS 2 specification closed on 8th October and this provides further clarity on the required features and functionality of these meters and the associated certification and assurance regimes.

### Regulatory framework

2.14. Suppliers now have greater certainty about the enduring smart metering regulatory framework. The Government has developed supplier licence conditions to mandate the roll-out of smart meters and has consulted on further obligations in respect of use of their functionality. In particular two key conditions impact Smart CoS.

- the 'roll-out' licence condition – This provision is intended to take effect from 30th November 2012. All meters compliant with the version of SMETS extant at the time of installation inherited on change of supplier will count towards compliance with this condition, which means that suppliers should be incentivised to retain them and be prepared to pay a smart rent for them.
- the 'new and replacement' obligation – This requires that, from a date to be directed by the Secretary of State, all reasonable steps are taken to ensure that only SMETS compliant smart metering equipment is installed. The date when this obligation will come into force is being kept under review, but its should increase the perceived value of any inherited SMETS compliant meters during Foundation.

### The "Effective Switching" licence conditions and supporting industry developments

2.15. Ofgem has recently implemented a set of "Effective Switching" licence conditions which aim to help domestic customers understand if the advanced meter services they are

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<sup>3</sup> See: <http://www.ofgem.gov.uk/Markets/sm/metering/sm/Documents1/smart%20meters%20-%20effective%20switching.pdf>

receiving will be maintained when they switch supplier and to help gaining suppliers seeking to continue to support those services.

- 2.16. From 1st November 2012, suppliers installing Advanced Domestic Meters (ADMs) have to make consumers aware they may lose some advanced features if they subsequently change supplier and new suppliers must remind customers of this when taking on such a customer. From 1st January 2013, when suppliers with over 250,000 domestic customers or certain smaller suppliers lose an ADM-equipped customer, they will be obliged to offer the services that are reasonably required by the new supplier related to the functionality of the ADM.
- 2.17. Ofgem has stated that these conditions ‘will not guarantee that advanced meter services will be maintained by the new supplier, but they do remove some of the barriers that could prevent the new supplier from operating the meter if they wish to do so. The provisions will keep customers better informed about the choices available to them’.
- 2.18. The industry is currently taking forward work on changes to the existing industry operating model to support the Effective Switching provisions described above. These changes will inform suppliers of the identity of the installing supplier and meter functionality and enable the provision of smart services to gaining suppliers.
- 2.19. A number of Smart Meter System Operators (SMSO) are emerging and a number of larger suppliers are already in the process of, or have, appointed them. These service providers will remotely interact with meters on behalf of suppliers in order to provide reading and other services on a commercial basis. A gaining supplier can contract with the incumbent SMSO, appoint its own SMSO, or operate the meter in dumb mode.

### Clarification of Enrolment and Adoption Policy

- 2.20. Definition of the Government’s policy for Enrolment and Adoption (as discussed later in this consultation document) will increase certainty about the value of assets installed during Foundation and will be an important factor driving Smart CoS during Foundation.

### Will the market deliver Smart CoS during Foundation?

- 2.21. It is anticipated that the various market incentives and developments outlined above will combine over time to promote the conditions for Smart CoS to become standard during Foundation.
- 2.22. The combined effect of these measures could increase technical, regulatory and commercial certainty, increase investment confidence, lower operating costs for suppliers offering smart services and improve the consumer experience. This should increasingly incentivise participants to deliver Smart CoS.
- 2.23. A market-driven approach has benefits as it is simple to implement, does not require the introduction of additional regulation and removes the risk of market distortion. However, further evidence is required in order for the Government to fully assess whether the market will deliver, or whether such regulatory intervention is required.

### Consultation Question

- |           |  |
|-----------|--|
| <b>1.</b> | <b>What are your views on whether the on-going programme and market evolution described above will deliver Smart CoS as standard during Foundation without</b> |
|-----------|--|

## further regulation?

Please highlight the factors that you consider to be most relevant to your assessment and provide evidence to support your answer.

## Regulatory options

- 2.24. There is a range of regulatory measures which the Government might consider introducing to increase the likelihood that the objectives of the Smart CoS policy will be met, while supporting flexibility for suppliers to invest during Foundation according to their own strategies to prepare for the mass roll-out. New licence conditions could be introduced through the fourth tranche of licence modifications, currently planned to come into effect for Q4 2013.
- 2.25. Three potential licence conditions that could be placed upon suppliers are considered below. These are not mutually exclusive, and some or all of these could be given effect in combination.

### Potential licence condition 1 – “MAP identity provision”

- 2.26. Under this option, the installing supplier and/or the current supplier of a SMETS compliant smart meter will be required to provide the gaining supplier, upon request, with the details of the MAP currently in place to allow the gaining supplier to initiate commercial discussions regarding transfer of the meter. This is analogous to industry changes to support the Effective Switching regime enabling the identity of the installing supplier to be made available to the new supplier. It would go some way to address the reported information issues faced by MAPs and suppliers in the current market.

### Potential licence condition 2 – “agree or return”

- 2.27. This option would place an obligation on gaining suppliers requiring that, where they acquire a SMETS compliant smart meter on change of supplier, they must either agree terms with the relevant MAP to pay an appropriate rent for the meter within a prescribed period, or return the meter to the MAP at the end of that period if such agreement has not been reached.
- 2.28. Following initial discussion with industry, the Government considers that an appropriate period within which to agree a smart rent for the purposes of this condition would be one month. However the Government would welcome views on this issue.

### Potential licence condition 3 – “no backward step”

- 2.29. Under this option, an obligation would be placed on the gaining supplier requiring that, if they replaced a SMETS-compliant smart meter on change of supplier during Foundation, they would have to take all reasonable steps to install one of equivalent functionality or better. This would not require the gaining supplier to operate the smart meter in smart mode, and nor would it require that the replacement meter had functionality over and

above the relevant SMETS specification<sup>4</sup>. It simply ensures that compliant smart meters are not replaced with non-compliant or dumb meters during Foundation.

- 2.30. This approach may discourage suppliers from prematurely removing a meter as they would still face the costs of purchasing and installing an equivalent smart meter. This could increase the incentive to negotiate commercial terms for the transfer of the meter with the relevant MAP. However, this option would not exclude the possibility of the meter being operated in dumb mode or being removed and not returned to the MAP.
- 2.31. This provision would no longer be required upon implementation of the “new and replacement” licence condition, as this will mandate that a supplier must take all reasonable steps to install only compliant meters from the point it comes into effect.

### Proposed approach

- 2.32. The Government proposes to introduce Conditions 1 and 2 as described above in paragraphs 2.25-2.27, in combination. It is proposed that these measures would apply beyond the end of Foundation into the enduring arrangements.
- 2.33. It is suggested that this combination of measures would help address the factors discussed above which can impair the confidence of suppliers installing SMETS-compliant meters and parties funding such investments. In particular these measures would provide significantly greater clarity to installing suppliers and MAPs as to how gaining suppliers would engage on inheriting a meter, and would facilitate asset tracking. Where it is not possible to reach agreement on a value for smart rent, the MAP would recover the metering asset, further reducing the stranding risk.
- 2.34. While this approach would not preclude smart for dumb meter replacement or operation in dumb mode, it should also, in a relatively light touch way, support the incentives on gaining suppliers to operate inherited smart meters as smart where they can.
- 2.35. In summary, the Government invites views on the case for further regulatory intervention to support smart change of supplier outcomes for compliant meters installed during Foundation. In particular views are invited on the two licence conditions proposed above.

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<sup>4</sup> Further consideration will need to be given to the drafting of the licence condition to address pre-payment meters as the SMETS1 specification does not standardise communications for pre-payment.

## Consultation Question

- |    |   |
|----|---|
| 2. | <p>Do you agree that a combination of proposed licence conditions 1 and 2 would most effectively support the desired aims and outcomes of Smart CoS described in this document? Please give detailed views where possible, including on:</p> <ul style="list-style-type: none"><li>• the advantages and disadvantages of the proposed option (condition 1 and condition 2 in combination) and the extent to which each condition would address the issues affecting Smart CoS;</li><li>• the operational impacts and viability of the proposed option, including whether any changes to industry systems or processes would be required;</li><li>• whether the proposed option should continue to be effective beyond the end of Foundation;</li><li>• what would be a reasonable period within which to require suppliers to agree terms with the MAP or return the meter under condition 2;</li><li>• the enforceability and oversight requirements of the proposed option.</li></ul> |
| 3. | <p>Please also give your views on:</p> <ul style="list-style-type: none"><li>• the advantages and disadvantages of proposed licence condition 3 (no backward step) and the extent to which it would, either in combination with or separately from conditions 1 and 2, support the desired aims and outcomes of Smart CoS described in this document;</li><li>• the operational impacts and viability of condition 3, including whether any changes to industry systems or processes would be required;</li><li>• the enforceability and oversight requirements of condition 3.</li></ul>   |

## 3. Enrolment and Adoption

### Introduction

- 3.1. Significant numbers of SMETS compliant metering systems are expected to be installed during the Foundation Stage. There are likely to be material benefits in having as many of these as is practicable connected using part or all of the DCC service in terms of economic efficiency and broader consumer and network operator benefits, in particular facilitating change of supplier. It is therefore important to facilitate Enrolment and Adoption, which is the process by which meters and their associated communications contracts would migrate to the DCC service. It is expected that it will be technically feasible to enrol SMETS 1 compliant metering systems, subject to meeting security requirements, which may require implementation of certain additional DCC security controls and/or the potential need to upgrade specific functionality in the DCC.
- 3.2. This document does not cover the enduring processes for Enrolment of SMETS 2 meters after the start of mass-market roll-out.

### Overview of this section

- 3.3. Two classes of Enrolment have been identified:
  - Data Enrolment under which the Foundation communications contract is adopted by the DCC; and
  - Full Enrolment under which the full service would be provided by the DCC.
- 3.4. Given the benefits of Enrolment, the Government recognises that there may be a case that the Enrolment of meters installed during Foundation should be mandatory, although to date it has not seen sufficient evidence to support this. Certain advantages and disadvantages of such a mandate are identified, and views are sought on whether or not there is a case for a mandate and if so, the timing of when it should apply.
- 3.5. There is a need for a clear process for Enrolment and Adoption. An outline for such a process is proposed, together with a process for dispute resolution. Views are sought on the adequacy and appropriateness of these processes.
- 3.6. The process for Enrolment and Adoption needs to be supported by an agreed set of criteria for both Enrolment of meters and Adoption of the associated communications contracts. Potential criteria have been discussed with market participants, and these are outlined in this document. Views are sought on the adequacy and appropriateness of the proposed criteria.
- 3.7. There will be costs for Enrolment and Adoption. We propose how these might be allocated between market participants and seek views on these proposed allocations.
- 3.8. The regulatory framework will reflect the Enrolment and Adoption policy. This will be dependent on final policy resolution. We set out the proposed high level approach.

## Data Enrolment and Full Enrolment

### Data enrolment

- 3.9. Under Data Enrolment, data services are provided by the DCC, but the communications service is provided to the DCC by the Foundation communications provider under an adopted communications contract. In order for this to work, the DCC will need to replace or adapt the intermediate IT infrastructure and software that processes messages to and from the meter to a format that can interface with the suppliers' systems. This infrastructure and software is referred to in this document as the 'head-end', although it is recognised that there is no generally accepted definition for this term.
- 3.10. The main activities for Data Enrolment are:
- the DSP develops their head-end such that it can operate the Foundation meters using standard DCC User Gateway commands received from suppliers and other DCC users;
  - the Foundation communications contract is novated to and managed by the DCC;
  - the messages are routed to the supplier via the DCC's systems provided by the DSP;
  - the SMSO contract is terminated by the supplier.

### Full Enrolment

- 3.11. Under Full Enrolment, both data and communications services are provided by the DCC. The main activities are:
- the supplier installs a new communications hub (if necessary);
  - the meter is upgraded as needed to read and produce GB Companion Specification format messages, obviating the need for the SMSO head-end or a replacement;
  - the new comms hub can connect to the CSP WAN, obviating the need for the Foundation communications;
  - the messages are routed to the supplier via the DCC;
  - the SMSO and foundation communications contract can be terminated by the supplier.

## The case for and against an Enrolment Mandate

- 3.12. As noted above, there are expected to be significant benefits in maximising the number of Foundation meters that are enrolled to DCC services. While suppliers have generally indicated that it is their intention to seek to enrol their Foundation meters, there is no guarantee that they will do so if this is left to market forces. This raises the question of whether or not Enrolment should be mandatory and, if so, how and when the mandate should apply.
- 3.13. The Government has given preliminary consideration to this issue, but has not yet seen sufficient evidence to support a mandate. However, it wishes to keep this under review, and wishes to receive views on whether there is a case to mandate either Data Enrolment or Full Enrolment, and if so when such a mandate should apply.

- 3.14. The Government stated in its April 2012 Programme Update that ‘while it is the Government’s objective that domestic smart meters are managed through the DCC, it will not place obligations on suppliers to enrol meters with the DCC at this point and does not intend to apply such obligations retrospectively’.

### Benefits of Enrolment

- 3.15. Data Enrolment of all meters into DCC would bring benefits to consumers, allow network operators and authorised third parties to access data and deliver overall economic benefit.
- 3.16. Benefits to consumers would arise from all suppliers being capable of managing smart meters in smart mode through the DCC. Not all suppliers will necessarily be able to interface their systems with Foundation SMSOs and as a result, not all suppliers will be able to continue to offer smart services for non-Enrolled Foundation meters. There are expected to be economies of scale for DCC and streamlining of industry processes through incorporating Foundation meters into DCC’s services. Suppliers will also avoid the cost of managing Foundation SMSO contracts, including any overhead associated with customers serviced under those contracts changing supplier.
- 3.17. The DCC will be able to manage the adopted Foundation communications contracts as a single entity, rather than each supplier having its own version of such contracts.
- 3.18. Full Enrolment would bring potential benefits. In particular, consumers and DNOs would get access to a fuller range of functions and benefits, and there would be potential economies of scale under the CSP contracts.

### Costs of Enrolment

- 3.19. Both Data Enrolment and Full Enrolment will incur costs. These costs are considered in greater detail later in this section. Given that these costs may be significant, any mandate would be subject to the DCC acting in a manner consistent with the requirement that its procurement activity is economic and efficient as required in its draft licence.
- 3.20. The main cost for Data Enrolment is likely to be that for replacement of the head-end. There will also be some on-going costs.
- 3.21. The main cost for Full Enrolment will be for replacement of the communications hub. The need to replace the communications hub will also impose a requirement for a site visit, which may inconvenience consumers.

### Market or Mandate Approach for Enrolment

- 3.22. For the purpose of this consultation, an Enrolment mandate is a requirement to either Data Enrol or Fully Enrol all Foundation SMETS meters subject to technical feasibility and the licence requirement that DCC procurement is economic and efficient.
- 3.23. It is clear that there will be advantages for suppliers that will arise from Enrolment. However, there will also be costs, and those costs will not necessarily lie with the parties gaining most benefit. Further, while there will be benefits for suppliers in ensuring that their customers do not suffer inconvenience and that gained customers will continue to benefit from smart services, suppliers may not fully value the economic benefit of these

factors. As a result, the market may not fully deliver Enrolment of Foundation SMETS meters.

- 3.24. A mandate would ensure that all Foundation SMETS meters would be put forward for Enrolment, and that there could be a full economic evaluation of the costs and benefits in all cases. However, it would represent additional regulatory intervention, and may impose additional costs to complete full economic cost benefit analyses in all cases. Further, depending on the timing for any mandate, it may divert effort and attention from delivery of the overall mass roll-out of smart meters.
- 3.25. Assuming that a mandate would not apply to meters installed before it came into effect, the earlier a decision is taken to impose a mandate, the smaller the number of Foundation meters installed that would not be covered by it. Nevertheless, as noted above, the Government has not yet seen sufficient evidence to support a mandate for Data Enrolment. It will keep this under review.
- 3.26. There are both additional benefits from Full Enrolment and certain disadvantages, including the need to visit customers' premises to install a new communications hub. The benefits of Full Enrolment are not expected to outweigh the costs in every case, so the Government is of the view that there is unlikely to be a case to mandate for Full Enrolment at the current time, but invites views on this issue.

### Timing for any Potential Enrolment Mandate

- 3.27. Three options on timing for completion of an enrolment mandate are considered below: as the first stage of DCC Go Live; 18-24 months after DCC Go Live and in tandem with the completion of mass roll-out in 2019. These are considered below.
- 3.28. **Enrolment as the first stage of DCC Go Live:** under this approach, there would be a mandate to enrol all meters before DCC Go Live. DCC would work with suppliers to enrol meters and this would form the initial basis for DCC operations.
- 3.29. This would bring all SMETS meters under DCC management from the earliest possible date. This would simplify the Data Enrolment process, maximise DCC efficiency and provide the best basis for DCC to manage the future extension or transition of communications contracts. It would also ensure that consumers with Foundation smart meters should be able to have a wide choice of new suppliers without facing the risk of losing smart functionality.
- 3.30. However, this would be a diversion from DCC's core goal of establishing a stable set of processes and systems for SMETS 2 meters. It may also constrain Foundation activity, with suppliers unwilling to invest in required systems and commercial arrangements and SMSOs unwilling to provide services for such a short time.
- 3.31. **Enrolment 18-24 months after DCC Go Live:** Under this approach, there would be a mandate to data enrol all meters 18-24 months after DCC Go Live. This would allow the DCC 18 months to stabilise its systems and processes and ensure a resilient service for SMETS 2 meters prior to commencing Data Enrolment.
- 3.32. This would mean that DCC efficiency would be achieved early and the DCC would gain control of the communications contracts and be well placed to manage these as they approach their renewal period.
- 3.33. The main disadvantage is that the risk that consumers with Foundation smart meters would lose smart functionality on change of supplier risk would continue for up to 2 years following DCC Go Live.

- 3.34. **Enrolment by end of 2019:** Under this approach, there would be a mandate to data enrol all meters by the end of 2019. This would achieve Data Enrolment in tandem with the end of mass rollout.
- 3.35. The advantages of this approach are that it should ensure an overall stable and consistent market and consumer experience. It would not create any barriers to Foundation rollout.
- 3.36. The key disadvantage is that the benefits of Enrolment may not be realised until that date, and the risk of consumers with Foundation smart meters losing smart functionality on change of supplier would remain until the end of 2019.

Consultation Questions	
4.	<b>Do you consider there is a case for considering a Data Enrolment mandate and do you have evidence to support this case?</b>
5.	<b>When do you consider any Data Enrolment mandate would be most sensibly applied and do you have evidence to support this analysis?</b>
6.	<b>Do you agree that there is not a strong case for considering a Full Enrolment mandate and do you have evidence to support this, or the contrary, position?</b>
7.	<b>In the event that a Full Enrolment mandate was to be applied, what do you consider an appropriate effective date would be?</b>

## Enrolment and Adoption Process

- 3.37. The DCC will manage the process for Enrolment and Adoption of meters. Assuming that there is no mandate, it is proposed that, subject to certain qualification criteria discussed below, all suppliers will have the right to request terms for Enrolment, and provided the Enrolment and Adoption criteria are met, the DCC will be obliged to offer terms to those suppliers. Suppliers will be free to decide whether or not to accept the terms.
- 3.38. This process may give rise to disputes between suppliers and the DCC, or between suppliers. Options for dispute resolution are identified below.
- 3.39. Views are sought on both the Enrolment and Adoption process and the potential dispute resolution processes.
- 3.40. There are core elements of the Enrolment and Adoption process, but in practice it will vary according to the differing meter and associated equipment configurations and these are considered separately below.

### **SMETS 2 Meter without DCC Compliant Communications Hub**

- 3.41. This situation may occur where SMETS 2 meters are available and installed before the associated compliant communications hubs, and as such the party would have a

Foundation communications contract. In these circumstances the process steps are proposed to be:

- the supplier seeks permission to enrol and request terms from the DCC;
- the DCC verifies that the metering system(s) meets the Enrolment Criteria;
- the DCC verifies that the communications contract meets the Adoption Criteria;
- the DCC offers terms for Enrolment and Adoption to the supplier(s), and the suppliers either accept those terms or choose not to proceed;
- the supplier/DCC/communications provider novates the communications contract;
- the DCC will enable Enrolment subject to any final connection tests agreed as part of the overall assurance framework.

3.42. Full Enrolment would follow this process without the stages associated with adoption of the Foundation communications contract, but with replacement of the communications hub should this prove necessary.

### **SMETS 1 Meter**

3.43. This situation will occur where SMETS 1 meters are installed using a Foundation communications contract. In these circumstances the process steps are proposed to be:

- the supplier(s) seeks permission to enrol and requests terms from the DCC;
- the DCC verifies that the metering system(s) meets the Enrolment Criteria;
- the DCC verifies that the communications contract meets the Adoption Criteria;
- the supplier facilitates discussions between DCC/DSP and the SMSO to agree the approach to head-end enhancement;
- the DCC assesses the overall cost of Enrolment and offers terms for Enrolment and Adoption to the supplier(s), and the suppliers either accept those terms or choose not to proceed;
- the DCC manages the head-end enhancement;
- the supplier/DCC/comms provider novates the communications contract;
- the DCC manages migration of the meters into DCC, subject to any final connection tests agreed as part of the overall assurance framework.

3.44. There are three core scenarios for suppliers approaching the DCC to initiate the Enrolment process:

- a group of suppliers who are all using an SMSO contract approach the DCC to agree Enrolment. In this case, any costs of Enrolment will be set against the full set of meters. The process will continue as above.
- an Installing Supplier using an SMSO contract approaches the DCC to agree Enrolment. In this case, the Installing Supplier will have the majority of meters. Where there are a substantial number of meters in respect of which there has been a change of supplier, the DCC and Installing Supplier may seek to include those suppliers in the original assessment and manage as scenario 1 above.
- a supplier who has gained meters under an SMSO contract approaches DCC to agree enrolment. In this case, the supplier will have the minority of meters and the DCC may

approach the Installing Supplier or other suppliers using that SMSO contract to seek to increase the number of meters for Enrolment.

### Consultation Question

- 8. Do you agree with the core Enrolment and Adoption process set out? If not, please explain why not and propose changes to address the issues identified.**

### Enforced movement from Data to Full Enrolment

- 3.45. Foundation communications contracts will periodically come up for renewal. Where an extension has not been negotiated, a second visit will be needed. It is important that the DCC takes account of the full range of costs in reaching any decision on extension, and ensure that their decision is both economic and efficient, in line with their licence obligation.
- 3.46. It is envisaged that the DCC will agree any termination with the SEC Panel and will seek to agree an appropriate termination period to ensure suppliers have adequate time to manage site visits.

### Consultation Question

- 9. Do you agree with the approach to adopted Foundation communications contracts that may be approaching renewal/termination?**

### Enrolment and Adoption Dispute Resolution

- 3.47. The DCC will have an objective under its licence:
- “to carry on the Mandatory Business in the manner that is most likely to ensure the development, operation, and maintenance of an efficient, economical, and co-ordinated system for the provision of Mandatory Business Services under or pursuant to the Smart Energy Code.”
- 3.48. The DCC will have a degree of discretion in negotiating terms for one-off work and for adoption of the communications contract.
- 3.49. Suppliers may consider that the cost proposed by the DCC for Enrolment of a particular meter or group of meters is excessive, or is not compliant with their licence conditions. It is proposed that the dispute resolution process set out in the DCC licence makes adequate provision for this.
- 3.50. There is potential for disputes to arise between suppliers through the Enrolment and Adoption process. In particular, the interests of an Installing Supplier may vary from those of Current Suppliers for a given group of meters. We invite views on whether there is a need for a process to resolve such disputes to deliver overall benefit from enrolment of the relevant meters. Further we invite views on whether or not such a dispute

resolution process should be included within the SEC, and what guidelines, if any, should be specified for its implementation.

Consultation Question	
10.	<b>Do you agree that the DCC Licence, as currently drafted, should be sufficient to ensure that the DCC will act to achieve an appropriate economic outcome for Enrolment and Adoption including ensuring that the terms it offers will be reasonable?</b>
11.	<b>Do you consider that relying on the disputes resolution process in the DCC Licence is sufficient in order to resolve disputes between suppliers and the DCC on Enrolment and Adoption?</b>
12.	<b>Do you consider that there is a need for a dispute resolution process to cover supplier to supplier disputes arising through the Enrolment and Adoption process within the SEC, and if so what guidelines if any there should be for its application?</b>

## Enrolment and Adoption Criteria

### The Aims and Requirements of the Criteria

3.51. The Enrolment and Adoption Criteria will establish obligations on the DCC. Where the criteria are met, it is proposed that the DCC will be required to offer terms to suppliers for the Enrolment of their metering system and/or Adoption of the communication services contract. The aims of these criteria are to:

- maximise the opportunity for Enrolment, while protecting the DCC from undue technical, security and commercial risk; and
- provide appropriate certainty to suppliers who are investing in smart metering capability now, but anticipating future enrolment into the DCC.

3.52. The Government has considered the specific criteria required to fulfil these aims through technical and commercial analysis, complemented by discussions with stakeholder groups, Foundation service providers, and DSP/CSP bidders.

### Enrolment Criteria

3.53. The Government has identified three broad categories for Enrolment Criteria. The metering system must be compliant; it must meet security requirements; and it must have the capability to interact with the DCC.

3.54. **Compliance.** The meter must be compliant with a version of SMETS, and in the case of a SMETS 1 meter must also meet protocol certification as noted below. Enrolment of non-compliant meters may potentially be offered by the DCC as an elective service, but this is outside the scope of this consultation.

- 3.55. **Security requirements.** The meter and associated equipment must pass security certification (e.g. CPA). It is proposed that where SMETS 1 meters do not pass security certification there should be an assessment of the areas of shortfall, and of additional controls required to mitigate those risks. These additional controls may impose certain constraints on Enrolment of particular meters.
- 3.56. **Interaction with the DCC.** the Foundation communications contract must meet the Adoption Criteria. The metering system must either be compliant with the Companion Specification in force at the time of Enrolment for message formats or (subject to the Government’s consideration of responses to the SMETS 2 consultation) use ZigBee and DLMS for electricity and Zigbee for gas and the IHD over 2.4 GHz.
- 3.57. The Government considered a number of other potential areas for Enrolment Criteria, but concluded that no additional criteria were required in these areas. These included:
- Head-end separability: there are a number of options for replacement of the head-end or its transfer to the DCC or DSP. These will impact the cost of Enrolment, and the DCC will need to consider the most economic option on a case by case basis. In light of this there is no need for a separability to be a specific criterion.
  - Cost limits: this is a matter of commercial judgement for the parties involved, and will be influenced by the cost allocation proposals set out later in this document.

### Consultation Question

13. **Do you agree with the proposed Enrolment Criteria, and if not what changes would you propose? Please provide detail to support any proposed changes to the proposed criteria.**

### Adoption Criteria

- 3.58. The Government has identified four broad Adoption Criteria. The contract must be capable of supporting the key services required for a metering system; have a reasonable price; have terms and conditions that are fair and reasonable and will enable DCC to manage the contract in the best interests of consumers and the overall market; and support additional sundry requirements such as provision for change of control. The table in the Annex provides more detail on these.
- 3.59. **Communications contract cost.** The cost associated with the Foundation communications contract may be greater than the equivalent price of DCC communications services. The question is whether a specific limit should be applied, or whether a more flexible principle based approach can be used. Given that the final decision on whether or not to proceed will rest with suppliers, it is proposed that the commercial criterion on price be “a justifiable variance to the CSP price, taking into account the overall costs and benefits for the DCC and suppliers.”
- 3.60. Subject to conclusions on the case for a mandate, the decision on whether or not to proceed will then be a matter for commercial judgement on the part of the suppliers, in line with the Enrolment and Adoption process.
- 3.61. **Communications contract term.** The residual term of Foundation communications contracts at the time of proposed Adoption will vary. If the remaining term is relatively short, then it may be difficult to justify the one-off costs of Enrolment and Adoption. On the other hand, a relatively long residual term may result in the DCC being tied into a contract with restrictive or otherwise somewhat unattractive terms for a long period. What

is reasonable will vary from contract to contract depending on the overall impact of all other contract terms and the one-off costs of Enrolment.

- 3.62. For this reason it is proposed that the Adoption term criterion be “a reasonable term remaining on the contract, or a clause allowing rollover of the contract by mutual consent, which the DCC will factor into its economic view of whether or not to adopt the contract”.

Consultation Question	
14.	<b>What are your views on the overall approach and the full list of Adoption Criteria proposed in the Annex? Is the list comprehensive? Are there any of marginal importance that should be excluded?</b>
15.	<b>Are there any additional Adoption Criteria that should be included?</b>
16.	<b>What evidence do you have to assist in the evaluation of the economic viability of Adoption?</b>

## Cost Allocation

- 3.63. There will be initial (one-off/capital) and on-going (operating) costs incurred in Data and Full Enrolment. This section considers what these costs are; to what parties the costs could be allocated; and what principles should be used in allocating the costs.

### The costs of enrolment

- 3.64. The initial and on-going costs incurred for data enrolment are set out in the table below. These primarily relate to the need to integrate Foundation communications, the need to build a head-end to translate messages to SMETS 2 Companion Spec format and any resultant increase in on-going operational cost.

**Table 5.1 – Cost elements for data enrolment**

Data Enrolment	
One-off/Capital Expenditure	
Cost type	Description
Integration of adopted communications solutions	The communications feed from adopted contracts will need to be integrated into the DSP systems. The DSP will either need to build a new integration function or adapt an existing function.
Head end	The DSP may need to build or purchase a head-end to translate messages from the supplier’s metering systems into the standard Companion Spec format.
Secure area	The DSP may need to create a secure area for management of Foundation meters potentially with additional security processing.
Lifecycle management	Management of full development lifecycle to final acceptance, including design, testing, acceptance.

Data migration	Meters will need to be migrated from the Foundation systems to DCC.
Contract novation	Management and legal time for both the supplier(s) and DCC will be incurred in managing contract novation.
<b>On-going/Operational Expenditure</b>	
Opex - data	The enrolled meters will be in a different environment, with a bespoke head-end and potentially different service levels that need to be monitored. This will incur some additional operational expenditure.
Opex - communications	The communications contracts may be higher cost than the standard CSP contracts.
DCC Management	There will be DCC management overhead in managing the novated contracts and monitoring DSP performance on the variant solution.

3.65. The initial and on-going costs incurred for Full Enrolment are different from those for Data Enrolment, and are set out in the table below. These primarily relate to the need to replace the communications hub, which will incur the need for a second customer visit and potentially associated stranding costs.

**Table 5.2 – Cost elements for Full Enrolment**

<b>Full Enrolment</b>	
<b>One-off/Capital Expenditure</b>	
<b>Cost type</b>	<b>Description</b>
Communications hub	New physical compliant communications hub (unless compliant communications are already in place)
Communications hub - stranding	Stranding costs associated with early retirement of the Foundation communications hub (economic loss rather than incremental expenditure)
Customer site visit	Customer site visit arranged by current supplier to install the new communications hub
New IHD	New IHD may be required to communicate with new communications hub
<b>On-going/Operational Expenditure</b>	
There should be no additional operating expenditure. Standard DSP and CSP pricing should apply <sup>5</sup> .	

<sup>5</sup> Note it is assumed the meter will be upgraded to Companion Spec compliance by firmware upgrade and no head-end translation will be required.

## Consultation Question

17.	<b>Do you agree with the type of costs that will be incurred by the DCC in enrolling Foundation meters and adopting communications contracts? Is the list comprehensive?</b>
18.	<b>Do you have evidence that will assist in assessing the scale of these costs?</b>

### Which parties could bear the costs of Enrolment and Adoption?

3.66. Having established potential areas of costs, we need to consider the options for which parties might bear those costs. The potential options are:

- **Installing supplier:** Under this option, the supplier who originally installed the Foundation meter – ‘the Installing Supplier’ - would bear the cost of enrolment.
- **Current supplier:** Under this option, the supplier who currently serves the customer with the Foundation meter would bear the cost of enrolment.
- **Socialisation:** Under this option, the costs of enrolment would be paid directly by the DCC, which would recoup them by socialising them across its users according to its charging methodology.
- **Hybrid:** Under this option, the costs would be split between the Installing Supplier and socialisation, pro rata to the number of meters retained. For example:
  - Supplier A installs 1 million Foundation meters;
  - 250,000 meters churn to other suppliers prior to Data Enrolment;
  - DCC assesses the cost of Data Enrolment as £1 million;
  - Supplier A bears £750,000 of this cost; DCC socialises £250,000.

### What principles should be applied in assessing options for allocating costs?

3.67. The draft DCC Licence includes the following relevant policy objectives for the DCC’s charging methodology. That they:

- do not deter the full and timely installation by Energy Suppliers of Smart Metering Systems at Energy Consumers’ premises in accordance with their obligations under the Energy Supply Licence; and
- are non-discriminatory and cost reflective, as far as is reasonably practicable in all the circumstances of the case, having regard to the costs of implementing the charging methodology.

3.68. In line with this, the Government proposes the following principles for allocation of the costs of Enrolment and Adoption:

- **Impact.** The allocation must be economically efficient, and support development of the smart market.
- **Cost reflectivity.** The allocation must be fair and non-discriminatory.

- **Practicality:** The chosen allocation must be readily capable of implementation.

### Consultation Question

**19. What comments do you have on the principles proposed to assess options for cost allocation?**

#### How should costs best be allocated to achieve the policy outcomes?

3.69. This section assesses the potential cost allocation options against the principles to consider how the costs should be allocated. For clarity, this is considered separately for Data and Full Enrolment and for one-off/capital and on-going operational expenditure respectively, although there is some overlap.

#### Data Enrolment – Cost Allocation – One-off/Capital

3.70. Overall, it is proposed that the Hybrid model represents the best balance because:

- the Installing Supplier will have put in place the Foundation communications contract, and will need to support the DCC negotiation with that contractor. As identified above, it is this contract and the need to replace the head-end IT infrastructure and software that will drive the major part of the cost for Data Enrolment. All current suppliers will benefit from the streamlining of arrangements that will result from Enrolment.
- all data required to implement a hybrid allocation should be readily available.

3.71. The Government notes that the one-off costs of Data Enrolment may be challenging for small suppliers, since they are likely to have relatively small numbers of Foundation smart meters. The Government recognises that in some cases these costs are likely to be disproportionate, so is seeking views on whether measures should be taken to address this. One option might be to put in place a cap to limit or eliminate the share of one-off costs that they would bear as Installing Supplier. This could be a cap on numbers of customers, i.e. that suppliers with less than the specified number of customers would have all one-off costs socialised. Alternatively, it could be a cap on the charge per meter to be paid by smaller suppliers.

#### Data enrolment – Cost Allocation – On-going/Operational Costs

3.72. It is proposed that the on-going costs relating to Enrolment should be socialised because they are likely to be similar to those for DCC's services, and this will reduce administrative complexity for the DCC.

#### Full Enrolment – Cost Allocation – One-off/Capital

3.73. It is proposed that the current supplier should bear the installation cost of the communications hub required for Full Enrolment, with the DCC providing and recovering charges for the hub in line with the enduring arrangements.

## Full Enrolment – Cost Allocation – On-going Operational Costs

3.74. There should be no additional on-going operational costs that result from Full Enrolment.

### Summary

3.75. In summary, the proposals for Enrolment and Adoption cost allocation are:

- the one-off/capital costs of Data Enrolment should be allocated using a hybrid model where the current supplier pays a pro rata charge for sites where it is also the installing supplier; the cost of other sites is socialised via DCC charging.
- the Government is considering an exception to this for small suppliers based on a cap – in this case some or all costs would be socialised.
- the on-going costs arising from Data Enrolment would be socialised via DCC charging.
- the one-off/capital costs of Full Enrolment, and in particular the cost of installing a communications hub if this is required, would be borne by the current supplier; the capital cost of the hub itself would be borne by DCC and recovered through normal charges.

### Consultation Question

20.	<b>Do you agree with the proposed cost allocations for both one-off and on-going costs for Enrolment and Adoption? Please explain your reasons for each category of costs.</b>
21.	<b>Do you consider that small suppliers should have some or all of their one-off/capital Data Enrolment costs socialised? Please explain your reasons</b>
22.	<b>What do you consider is an appropriate mechanism or threshold for a cap for socialisation of small suppliers' one-off/capital Data Enrolment costs?</b>

## Regulatory Implementation

3.76. The changes to the regulatory framework that may be required to implement the Government's final position on Enrolment and Adoption will be dependent on decisions to be made following this consultation. The Government currently anticipates the following broad approach:

- the Smart Energy Code (SEC) is likely to contain the Enrolment and Adoption criteria, the process to be followed to assess Enrolment requests, and any process for supplier to supplier dispute resolution. Any legal drafting covering Enrolment and Adoption aspects of the SEC will be the subject of consultation in future;
- the agreed cost allocation principles for Enrolment and Adoption would be implemented via the charging methodology within the SEC and may also require

consequential changes to the charging objectives within the DCC's licence to ensure regulatory consistency;

- any mandate for either Data Enrolment or Full Enrolment could be enacted through a licence condition. This could specify a completion date, or give the Secretary of State a power to introduce a mandate at some point after a specified notice period;
- the details of specific measures will be consulted upon in due course.

# 4. Catalogue of consultation questions

## Chapter 2 – Smart Change of Supplier

- |    |   |
|----|---|
| 1. | <p><b>What are your views on whether the ongoing programme and market evolution described above will deliver Smart CoS as standard during Foundation without regulation?</b></p> <p><b>Please highlight the factors that you consider to be most relevant to your assessment and provide evidence to support your answer.</b></p>   |
| 2. | <p><b>Do you agree that the proposal to put in place a combination of proposed condition 1 and proposed condition 2 would most effectively achieve the desired aims and outcomes of Smart CoS described in this document? Please give detailed views where possible, including on:</b></p> <ul style="list-style-type: none"><li>• <b>the advantages and disadvantages of the proposed option (condition 1 and condition 2 in combination) and the extent to which each condition would address the issues affecting Smart CoS;</b></li><li>• <b>the operational impacts and viability of the proposed option, including whether any changes to industry systems or processes would be required;</b></li><li>• <b>whether the proposed option should continue to be effective beyond the end of Foundation;</b></li><li>• <b>what would be a reasonable period within which to require suppliers to agree terms with the MAP or return the meter under condition 2</b></li><li>• <b>the enforceability and oversight requirements of the proposed option.</b></li></ul> |
| 3. | <p><b>Please also give your views on:</b></p> <ul style="list-style-type: none"><li>• <b>the advantages and disadvantages of condition 3 (no backward step) and the extent to which it would, either in combination with or separately from conditions 1 and 2, address the issues affecting Smart CoS;</b></li><li>• <b>the operational impacts and viability of condition 3, including whether any changes to industry systems or processes would be required;</b></li><li>• <b>the enforceability and oversight requirements of condition 3.</b></li></ul>   |

## Chapter 3 – Enrolment and Adoption

- |    |   |
|----|---|
| 4. | <p><b>Do you consider there is a case for considering a Data Enrolment mandate and do you have evidence to support this case?</b></p> |
|----|---|

5.	<b>When do you consider any Data Enrolment mandate would be most sensibly applied and do you have evidence to support this analysis?</b>
6.	<b>Do you agree that there is not a strong case for considering a Full Enrolment mandate and do you have evidence to support this, or the contrary, position?</b>
7.	<b>In the event that a Full Enrolment mandate was to be applied, what do you consider an appropriate effective date would be?</b>
8.	<b>Do you agree with the core Enrolment and Adoption process set out? If not, please explain why not and propose changes to address the issues identified.</b>
9.	<b>Do you agree with the approach to adopted Foundation communications contracts that may be approaching renewal/termination?</b>
10.	<b>Do you agree that the DCC Licence, as currently drafted, should be sufficient to ensure that the DCC will act to achieve an appropriate economic outcome for Enrolment and Adoption including ensuring that the terms it offers will be reasonable?</b>
11.	<b>Do you consider that relying on the disputes resolution process in the DCC Licence is sufficient in order to resolve disputes between suppliers and the DCC on Enrolment and Adoption?</b>
12.	<b>Do you consider that there is a need for a dispute resolution process to cover supplier to supplier disputes arising through the Enrolment and Adoption process within the SEC, and if so what guidelines if any there should be for its application?</b>
13.	<b>Do you agree with the proposed Enrolment Criteria, and if not what changes would you propose? Please provide detail to support any proposed changes to the proposed criteria.</b>
14.	<b>What are your views on the overall approach and the full list of Adoption Criteria proposed in the Annex? Is the list comprehensive? Are there any of marginal importance that should be excluded?</b>
15.	<b>Are there any additional Adoption Criteria that should be included?</b>
16.	<b>What evidence do you have to assist in the evaluation of the economic viability of Adoption?</b>

17.	<b>Do you agree with the type of costs that will be incurred by the DCC in enrolling Foundation meters and the adoption of communications contracts? Is the list comprehensive?</b>
18.	<b>Do you have evidence that will assist in assessing the scale of these costs?</b>
19.	<b>What comments do you have on the principles proposed to assess options for cost allocation?</b>
20.	<b>Do you agree with the proposed cost allocations for both one-off and on-going costs for Enrolment and Adoption? Please explain your reasons for each category of costs.</b>
21.	<b>Do you consider that small suppliers should have some or all of their one-off/capital Data Enrolment costs socialised? Please explain your reasons</b>
22.	<b>What do you consider is an appropriate mechanism or threshold for a cap for socialisation of small suppliers' one-off/capital Data Enrolment costs</b>

## 5. Glossary

### Adoption

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

### Adoption Criteria

The criteria a communications contract must meet to be eligible for Adoption

### Advanced Meter

A meter which, either on its own or with an ancillary device, stores measured electricity or gas consumption data for multiple time periods, and provides remote access to such data by the licensee.

### Application Layer

The application layer is the language the meter uses to communicate with supplier systems. Typical languages are Zigbee, DLMS and M-BUS.

### Communications Hub

A device located at the consumer's premises which will have the capability to communicate and transfer data between smart metering equipment and the smart metering WAN.

### Communications Service Provider (CSP)

Bodies awarded a contract to be a service provider of the DCC's communications services.

### Data and Communications Company (DCC)

The new entity that will be licensed to deliver central data and communications activities.

### Data Services Provider (DSP)

Body awarded the contract to deliver systems integration, application management and IT hosting services to the DCC.

### Data Enrolled

Data services are provided by the DSP. Communications services are provided by a Foundation communications provider via an adopted contract and using a communications hub provided by the supplier.

### Device Language Message Specification (DLMS)

An Application Layer protocol.

### Distribution Network Operators (DNOs)

Companies that are licensed to take electricity off the high-voltage transmission system and distribute it, over low-voltage networks, to consumers.

### Dumb Meters

Traditional electricity and/or gas meters without smart functionality.

### Enrolment

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

### **Enrolment Criteria**

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

### **Foundation Meters**

Smart Meters installed during the Foundation Stage.

### **Foundation Stage**

The period prior to the start of the Mass Roll-out stage.

### **Foundation Smart Market**

During the Foundation Stage, the Government envisages a 'Foundation Smart Market' wherein consumers who wish to receive a smart meter and suppliers who wish to offer one can do so, with appropriate consumer protection, risk allocation and without market distortion.

### **Fully Enrolled**

Data services are provided by the DSP. Communications services are provided by the CSP.

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

An electronic device, linked to smart metering system, which provides information on a consumer's energy consumption.

### **Mass Roll-out stage**

The period between the date at which the DCC starts providing core communications services and the fulfilment of the roll-out obligation as specified in the roll-out licence conditions.

### **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.

### **Smart Change of Supplier (Smart CoS)**

The situation where, upon change of supplier events, the consumer generally retains smart functionality and SMETS compliant smart meters command a smart rent, irrespective of whether they are operated in smart mode.

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

The Code, spanning gas and electricity, which will be established to provide arrangements for the introduction and ongoing operation of the End-to-end Smart Metering System. Among other things, the Code will detail the relationships between the DCC and the users of its data and communications services. Suppliers, network operators and other users of the DCC's services will need to comply with the Code.

### **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 to describe the minimum capabilities of equipment installed to satisfy the roll-out licence conditions placed on suppliers.

### **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.

### **Smart Meter System Operator (SMSO)**

In the Foundation market, ahead of the establishment of the DCC, companies that are offering data and/or communications services on a commercial basis.

### **Wide Area Network (WAN)**

The network that is used for two way communication between smart metering systems in consumers' premises and the DCC.

### **ZigBee**

An application layer standard, administered by the ZigBee Alliance.

# Annex

## Adoption Criteria

Requirement	Criteria
<b>Core Services</b>	Must support the provision of the relevant core set of communications services by DCC and meet Code of Connection requirements
<b>Price</b>	No more than a <i>justifiable</i> premium over or a discount to the confirmed CSP price, taking into account overall costs and benefits for DCC and suppliers
<b>Terms and Conditions</b>	<b>Reasonable Ts and Cs as defined below</b>
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
Termination	<p><i>Reasonable</i> term remaining on the contract, or a clause allowing rollover of the contract by mutual consent, which the DCC will factor into its economic view of whether to adopt the contract</p> <p>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</p> <p>Notice period for DCC terminating provision of communications to an individual connection point should be 3 months maximum</p> <p>DCC will have immediate right of termination for material breach of contract</p> <p>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</p>
Liability	Liability limit for communications provider proportionate to the value of the contract, as would be <i>reasonably</i> expected in this market
Loss	Contract addresses communications provider liability for loss and requirement for <i>appropriate</i> insurance cover
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	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
Disaster recovery and business continuity and incident management	Contract has clear responsibilities and plans for Disaster Recovery. Also contains <i>appropriate</i> provisions with regard to risk management, business continuity and incident management
Intellectual Property Rights	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
Service Level Agreement - Availability - Fault Resolution - Network performance	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 Novated SLAs can be maintained under a DCC environment with penalties for poor performance
Transparency and compliance	The contract contains nothing that would put the DCC in breach of its regulatory obligations
Independence	Contract does not conflict with licence requirement that DCC is independent of its service providers
<b>Additional Requirements</b>	<b>Additional requirements that will need to be included in the contract between DCC and the communications provider are set out below</b>
Change of control	Novation terms agreed must include the ability to novate to a successor DCC licensee and not to contain any restrictions on change of control to DCC or successor
Provision of information to DCC	Supports the provision of information to DCC to help DCC discharge its obligation to produce a development plan. Supports the provision of information to DCC where DCC is required to provide it due to a request from Government/Ofgem.
Liability or sums owing	Accrued rights and liabilities do not transfer to the DCC
Reasonable payment terms	Payment terms from DCC to communications provider must be a workable period in arrears, consistent with DCC's arrangements for invoicing under the SEC
Performance Monitoring	Obligation to report on performance of services, including sub-contractors, that support DCC fulfilling its reporting obligations under its licence and the SEC.
Dispute or poor performance resolution	DCC is satisfied that there are no material disputes outstanding between communications provider and supplier, the outcome of which will need to be reflected in the communications provider contract with the DCC May need the ability to join certain disputes under the contract with SEC disputes on equivalent matters that have been referred to the Authority/independent arbitration (policy depends on the approach adopted by SEC, DCC and ESPs)

Words in italics acknowledge that for many criteria the DCC will be required to negotiate with suppliers and form a view as to whether enrolment is beneficial. This may require dispute resolution as a last resort if parties are unable to reach agreement.

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