

# **Smart Metering Implementation Programme**

A consultation on the detailed policy design of the regulatory and commercial framework for DCC

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The consultation and Impact Assessment can be found on DECC's website: <a href="http://www.decc.gov.uk/en/content/cms/consultations/cons\_smip/cons\_smip.aspx">http://www.decc.gov.uk/en/content/cms/consultations/cons\_smip/cons\_smip.aspx</a>

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# **Executive Summary**

The Smart Metering Implementation Programme is the central programme that has been established by Government to be responsible for overseeing the design and implementation of the arrangements necessary to facilitate the rollout of smart meters in Great Britain.

The Data and Communications Company ("DCC") is a key element of the Government's approach to rolling out smart meters in Great Britain. The principal role of DCC will be to communicate with smart meters at all domestic gas and electricity consumer premises. DCC will be appointed through a competitive process and will be responsible for contract managing the services which it needs to communicate with smart meters. These services will, in turn, be competitively procured by DCC, with the initial contracts being developed by Government as part of the Smart Metering Implementation Programme. The appointment of DCC and the establishment of its services are critical to the success of the smart metering programme. DCC will play an important role in ensuring the integrity of its communication services and in ensuring the protection of consumers' data.

The regulatory and commercial framework for DCC will sit within those of the existing gas and electricity industries. The DCC activity will be licensed, and regulated by Ofgem under these arrangements. The first licence will be awarded by the Secretary of State and subsequent licences by the Authority. DCC will be required to have in place a new Smart Energy Code ("SEC") under which it will provide smart metering data and communication services to gas and electricity suppliers and network operators, as well as other persons, such as energy services companies. The Government will use powers made available in the 2008 Energy Act to introduce these regulatory changes.

This consultation seeks views from stakeholders on the Government's detailed policy proposals underpinning the regulatory and commercial framework to support the establishment and licensing of a new DCC.

There are a number of key elements to establishing DCC which are covered by this consultation which include:

- proposals for how the role of DCC, a new licensable activity, will be established in gas and electricity legislation;
- proposals for the DCC licence conditions;
- DCC Performance incentives;
- DCC Cost Recovery and Charges;
- Wide Area Network requirements for the provision of the DCC Core Services;
- adoption of foundation stage communication contracts; and
- licence application process.

These are summarised in turn below.

# Proposals for how the role of DCC, a new licensable activity, will be established in gas and electricity legislation

This consultation explains that, as part of the regulatory framework for DCC, it is necessary to define a new licensable activity in both gas and electricity legislation (i.e. the Electricity Act

1989 and the Gas Act 1986). DCC will be granted a licence to carry out this activity and will be governed by licence conditions, and regulated by Ofgem. The approach that we propose to take in defining the licensable activity is set out in this consultation document. It is structured around the activity of DCC contracting to provide smart metering communication services to licensed suppliers in relation to smart meters at domestic premises in Great Britain. We have identified a number of potential changes to existing legislation and licences which are consequential upon the introduction of the new licensable activity and these are also described.

## Proposals for the DCC licence conditions

A broad range of licence conditions for DCC are described and views are invited on the approach that we propose to take.

We propose a number of general objectives for DCC including requirements to: develop, maintain and operate an efficient, coordinated and economical system; promote effective competition in the supply of electricity and gas, energy efficiency and metering services; ensure appropriate levels of security in its systems and processes; facilitate successful rollout of smart metering in accordance with Government policy; and to the extent not already covered by these other objectives, have due regard to the environment. We note that further objectives in relation to data privacy would also be appropriate and we will consider these in the context of future consultations on the privacy of data acquired from smart meters. DCC would be required to protect the interests of consumers by following these objectives in carrying out its business. We invite views on whether or not it is appropriate to include any statutory duties for DCC or whether DCC's duties can be dealt with in licence conditions alone.

DCC will be required by licence to have in place the SEC. We propose to structure the licence condition that requires this in a manner that does not limit the future scope of the SEC, i.e. it sets out a non-exhaustive list of contents for the SEC. A number of objectives by which future amendments to the SEC would be judged are also discussed and we propose to include the following objectives: the efficient, economic and co-ordinated provision of DCC data and communication services; promoting effective competition in the supply of gas and electricity and in the provision of energy efficiency services; having regard to the environment; and ensuring the maintenance of the security of the smart metering system. The SEC would protect the interests of consumers by being designed to meet these objectives. Again we note that further objectives in relation to data privacy would also be appropriate.

We propose to set down the following arrangements in relation to the services that DCC provides: first, that DCC, depending on the circumstances, should either be required or permitted to offer to provide smart metering communication services; second, DCC should also be permitted to provide any additional services which are set out in the SEC; third where permitted by the Authority, DCC will also be able to offer "value-added" services. These are services not related to the use of energy metering systems and not concerned with energy use which rely, to some extent, on the use of the systems and contracts that DCC has in place to provide core and elective services.

We consider that the way in which DCC delivers services to its users (energy suppliers, network operators and other authorised parties) will be materially affected by the nature of the contracts that it has in place with its own service providers and the way in which those contracts are managed. In procuring service providers we propose that DCC is subject to a number of objectives which, in addition to its general objectives, should include that: services procured fit together to form a coherent, functional and secure end-to-end solution; the way in which it procures services facilitates competition in the provision of those services to DCC; and

it achieves an appropriate level of flexibility in the services that it procures. We also propose that DCC ensures that service providers deliver continuity of service in the event of financial or operational failure on their part. Furthermore, we propose that DCC should produce and consult upon a procurement and contract management approach document. We seek views as to whether this would need to be approved by the Authority and/or the Secretary of State.

We consider that DCC needs to be sufficiently independent from those with vested interests in the activities that it undertakes and that the level of such independence requirements should be proportionate to the potential harm that might be caused were undue influence to be exercised over DCC, but should not be unduly restrictive as this may undermine competition between persons seeking to become DCC. A package of measures is set out which we propose to put in place to limit the relationship between DCC and both service providers and users of DCC services.

A set of financial constraints is described that we propose to apply to DCC in order to protect against the potential for financial failure. For example, this will include restrictions on activities undertaken, financial ring-fencing and restrictions on indebtedness. We also discuss why it may be appropriate to establish a special administration regime for DCC in order to protect against the consequences of DCC financial failure and recognise that additional legislation would be needed to implement such a regime.

We are considering whether the Government should require the successful DCC applicant to lodge some form of financial security that would be surrendered should the DCC licence holder give up the licence for any reason or should the licence be revoked due to material non-performance by the licensee.

We propose to issue the DCC licence for a fixed term of ten years with an ability for the Authority to extend this for up to five years. We also propose that DCC ensures that any service provider contracts that it enters into that are critical to the provision of DCC services should include terms that make them capable of being novated to a successor DCC. We propose that a repeated or material failure of DCC to meet its service levels should be capable of triggering a revocation of the DCC's licence.

Given the Government decision to transfer meter point/supplier registration activities to DCC two to three years after DCC's services are operational, the obligations for the DCC licensee that we propose to include in the licence to facilitate this are described.

## **DCC** Performance incentives

We consider it important to incentivise DCC to ensure that its performance is aligned with the interests of its users and its objectives as established by the Government, and that it should be incentivised to undertake effective and efficient procurement and management of its service providers, effective delivery of its own services and to ensure that costs incurred are efficient.

We propose to incentivise DCC on key performance indicators relating to the delivery of its own services and its procurement and contract management activities. We propose to invite DCC licence applicants to bid in the revenue that they are prepared to put at risk and the levels of key performance indicators. We propose to require DCC to furnish reports on its (and its service providers) performance on a regular basis and these reports will be monitored by the SEC Panel and Ofgem. In addition, we propose that DCC would be subject to independent reviews of its performance against its licence objectives. The reviews could be undertaken

periodically (e.g. annually) and/ or on an ad hoc basis when Ofgem has concerns about DCC's performance.

We propose to structure arrangements such that DCC is incentivised to incur efficient costs and that any savings that DCC achieves against a forecast of its internal costs should be shared with users. In addition, we propose to include a mechanism to share any efficiency savings made under DCC's service provider contracts with users.

## DCC Cost Recovery and Charges

We expect service providers to DCC to fund any required asset investment and recover such investment through amortised service charges over the term of their contracts. The speed at which such fixed costs are recovered once DCC services "go-live" is considered. We propose to enable the data service providers' costs to be recovered evenly over the remaining length of the service providers' contracts after "go-live" and to enable communication service providers' costs to be recovered in relation to the cumulative rollout profile of smart meters due to be installed during each year of the rollout period following "go-live".

The structure of charges designed to recover the established service provider costs among DCC service users during the mass rollout of smart meters is also considered. We discuss a number of options against the following objectives: that there is no disincentive on suppliers to rollout smart meters early; most efficient costs should be incurred by service providers and recovered from users; and, to the extent practicable, users should be charged only for costs they have caused and services that they have received. We consider that the analysis against the objectives indicates there is merit in charging suppliers based on their rollout plans. However, we acknowledge that there are some perceived deficiencies with this approach and intends to explore ways in which to improve this option. We propose to structure charges to suppliers for the recovery of data service provider costs during mass rollout based upon market share as full services will need to be available from "go-live". We propose to structure charges to network operators during the rollout period on the basis of their market share (measured by metering points on their network).

We propose to put in place arrangements that enable the DCC licensee to begin recovering its internal costs (as opposed to external service provider costs) from the award of its licence, rather than waiting until its data and communication services are operational. We consider that, prior to communication services becoming operational, these costs should be charged to suppliers based on market share. DCC will be providing services to these users in the run-up to data and communication services commencing, and we expect the provision of these services to reflect market share. However, we welcome views on whether network operators should also be charged a share of these costs in this period.

Once mass rollout has completed, DCC will be providing a set of core services to users. We propose to structure core service charges so that they are comprised of: a standing element which would recover a proportion of the service providers' fixed costs for providing core services to each smart meter and DCC's internal costs; and a volumetric element related to the volume of data transferred, which could be differentiated by time of day and, depending on the technology, a charge for the number of data transfers (i.e. the frequency of meter data access). We further propose to put in place arrangements such that core service charges should be the same irrespective of differences in the costs of serving the smart meter to which they relate i.e. they should be levied on a "postage stamp" basis.

We propose that charges for non-core services should be governed by the same objectives and principles as core services and that charges for non-core services should reflect the actual costs incurred in providing the services.

On an ongoing basis DCC will be required to ensure that the methodology that it derives for levying charges conforms with a set of objectives set down in its licence and the charging objectives that we propose to include in the DCC licence are set out in this document, including that the methodology: facilitates competition; does not restrict, distort, or prevent competition in the supply of energy, provision of energy related services or energy distribution; that DCC's charge for a core services will be the same for each customer irrespective of differences in supplying the service; results in charges that are predictable; and results in charges that are non-discriminatory. The charging methodology itself will form part of the SEC.

## Wide Area Network Services

A process to select the initial service providers that will be contracted to DCC is currently being undertaken by the Government. The right balance needs to be struck between the levels of service that are procured and the costs of providing such services to consumers. The level of service procured to meet the initial core services requirements will be determined by, amongst other things, the Wide Area Network (communication) requirements that they give rise to. Depending on the solution underlying these services procured, most of the Wide Area Network costs may be fixed and in aggregate these costs would need to be recovered from users irrespective of actual overall use. This document sets out our current thinking on the service requirements for the Wide Area Network to be procured for Day 1 and seeks views on the minimum core service requirements.

## Adoption of foundation stage communication contracts

We anticipate that suppliers will begin rolling out smart meters prior to the establishment of DCC's services, and that suppliers will enter into contracts with companies to communicate with smart meters during this period. Indeed some level of deployment during this phase is likely to be essential to achieve the objectives of the Foundation Stage. We propose that DCC guarantees the adoption of at least some of these communication contracts when it starts providing its smart meter communication services. In order to be adopted, contracts will need to meet pre-defined criteria, and there may also be a guaranteed adoption volume of smart metering systems that DCC would be required to adopt.

Setting the guaranteed adoption volume will involve a trade-off between the costs and benefits of early rollout and the impact on, for example, the economies of scale associated with procurement of communication solutions by DCC. We seek views on the relevant factors that will need to be taken into account in setting the guaranteed adoption volume. In addition DCC will have the discretion to adopt more communication contracts than provided for by the guaranteed adoption volume. While this will be a commercial decision for DCC, consistent with DCC's procurement strategy objectives and taking into account the impact on its contracts with service providers, it is for consideration whether additional obligations and incentives need to be provided to DCC under its licence to guide its assessment as to whether it should adopt contracts in excess of the guaranteed adoption volume.

The guaranteed adoption volume will need to be allocated between the different communication regions and between suppliers. We propose to allocate the volume to suppliers on the basis of a combination of market share and smart meters installed.

## Licence application process

A competitive process will be followed to identify the organisation that will be granted the initial DCC licence. The proposed process that will be run by the Secretary of State to grant the first DCC licence is described. We propose to conduct a four stage process for granting the initial DCC licence: first, a pre-qualification stage with hurdles based on responses to a prequalification questionnaire to enable the selection of applicants who are, in principle, able to fulfil the role of the DCC licensee; second, an invitation to apply stage with progression to the next stage based upon the application of weighted evaluation criteria; third, an optional best and final offer stage in the event that there are two or more similar applications; and fourth, a stage whereby one or more preferred applicants finalise the details of their proposal, culminating in the DCC licence being granted by the Secretary of State to the preferred applicant.

The need for a fast track process for the appointment of a temporary DCC in certain circumstances is also discussed.

## **General information**

This consultation is one of a number of documents being published by the Government as part of the regulatory framework to support the rollout of smart meters<sup>1</sup>.

An updated Impact Assessment which supports this consultation document (the "August Impact Assessment") has also been published and can be found at <a href="http://www.decc.gov.uk/assets/decc/11/consultation/smart-metering-imp-prog/2549-smart-meter-rollout-domestic-ia-180811.pdf">http://www.decc.gov.uk/assets/decc/11/consultation/smart-metering-imp-prog/2549-smart-meter-rollout-domestic-ia-180811.pdf</a>

## Purpose of this consultation

The purpose of this document is to set out proposals for and consult upon the regulatory and commercial framework that should apply to DCC, the process for appointing and awarding a licence to the initial DCC, the guidelines to apply to DCC in adopting communication contracts for compliant smart meters that were installed prior to DCC becoming operational and the establishment of the requirements for smart meter communication services to be provided by DCC at "go-live".

## How to respond

The Government invites and welcomes any comments including supporting evidence and arguments that you have on the proposals outlined in this consultation paper, including the consultation questions that have been asked. Your response is likely to be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Please send your response to <u>dccg@decc.gsi.gov.uk</u> This consultation closes on 24 November 2011.

Responses should be clearly marked "Smart Metering Implementation Programme: a consultation on the detailed policy design of the regulatory and commercial framework for DCC

<sup>&</sup>lt;sup>1</sup> [insert url link to website containing the other smart metering consultation documents]

(September 2011)". Responses and any enquiries related to this consultation, should be addressed to:

Smart Metering Implementation Programme – DCC Licensing Team Department of Energy and Climate Change 3 Whitehall Place London SW1A 2AW

Consultation Reference: URN: 11D/868

## Next Steps

We will continue to develop the detailed regulatory and commercial framework for DCC and will consider responses to this consultation in developing those details.

Following the consideration of responses to this consultation, the Government plans to issue further consultations setting out our conclusions on the matters contained in this document and on the draft DCC licence conditions, the draft Prohibition Order and the draft Licence Application Regulations.

Also following the consideration of responses to this consultation, the Government plans to set an initial guaranteed adoption volume for communication contracts relating to smart meters installed prior to DCC services becoming operational. We then propose to determine the final guaranteed adoption volume taking account of the information on the impact on the enduring DCC communication service providers, which will become available in the late stages of the DCC services procurement process. In so doing, the initial guaranteed limit will either be retained or increased.

The Government will continue to assess the potential cost impact on the Wide Area Network of proposed communication service requirements. Additional evidence may also be gained from interaction with communication service providers through the procurement process. This evidence will be used in conjunction with consultation feedback on the minimum core requirements for the Wide Area Network outlined in this consultation document to determine the requirements for the dialogue stage of the service provider procurement process.

Finally, it is also planned to issue a consultation on the key DCC provisions to be contained in the SEC.

## Additional copies:

You may make copies of this document without seeking permission. An electronic version can be found at <u>http://www.decc.gov.uk/en/content/cms/consultations/cons\_smip/cons\_smip.aspx</u>.. 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.

Issued: Thursday 29 September 2011

Respond by: Thursday 24 November 2011

#### Enquiries to:

Smart Metering Implementation Programme – DCC Licensing Team Department of Energy & Climate Change 3 Whitehall Place, London, SW1A 2AW Tel: 0300 068 4000 Email: dccg@decc.gsi.gov.uk Consultation reference UBN: 11D/868 – A consultation on the detail u

# Consultation reference URN: 11D/868 – A consultation on the detail policy design of the regulatory and commercial framework of the DCC

#### **Territorial extent:**

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

#### 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 <u>www.decc.gov.uk/en/content/cms/consultations</u>.

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 London SW1A 2AW Email: <u>consultation.coordinator@decc.gsi.gov.uk</u>

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## 1. Introduction

## Policy Context

- 1.1. The Government's vision is for every home in Great Britain to have smart meters, with businesses and public sector users also having smart or advanced electricity and gas metering suited to their needs. The rollout of smart meters will give people far better information about, and control over, their energy consumption and deliver other significant benefits to consumers. For example, it will bring an end to estimated billing and make it easier to switch energy supplier. The rollout of smart metering will also 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.
- 1.2. Realising this policy goal will be a major undertaking. Regulatory obligations will help to ensure that gas and electricity suppliers take the necessary steps to deliver the rollout of smart meters in a way that meets the Government's objectives for smart metering.
- 1.3. In March 2011, the Government, with Ofgem, published the Response to the Prospectus consultation (the Response)<sup>2</sup>, which set out the approach to determining the regulatory framework to facilitate the rollout of smart meters. The Response set down the key conclusions of the Government relating to the rollout of smart meters in Great Britain.
- 1.4. The Government also confirmed in the Response that the communication of data to and from smart metering equipment in the domestic sector will be managed centrally by a new organisation. This new organisation is referred to as the Data and Communications Company (DataCommsCo or "DCC").
- 1.5. In developing and implementing the regulatory framework for smart metering in Great Britain, the Government will deliver the required changes to the regulatory framework in a series of tranches. This approach is designed to give stakeholders time to input into and influence the detail of the framework. It will also reduce regulatory uncertainty in the period before mass rollout of smart meters commences: once issues have been considered and the detailed aspects of policy decided, the Government is committed to introducing the regulatory changes as quickly as possible, to give those parties responsible for installing smart meters as much advance notice of their new regulatory obligations as possible.
- 1.6. The first tranche of regulatory changes includes the overall rollout obligation that will be imposed on suppliers and the requirements for Smart Metering Equipment, which will be installed in consumer premises. A consultation was launched in August 2011<sup>3</sup> to consider draft licence conditions for gas and electricity suppliers relating to the rollout and the proposed process for establishing the technical specification for smart metering equipment. Such requirements are needed to give clarity to industry on the technical specifications for Smart Metering Equipment so that manufacturers can begin the process of designing and producing metering equipment which will deliver the functionality required.

<sup>&</sup>lt;sup>2</sup> DECC/ Ofgem, Smart Meter Implementation Programme, Response to Prospectus Consultation, March 2011

<sup>&</sup>lt;sup>3</sup> http://www.decc.gov.uk/en/content/cms/consultations/cons\_smip/cons\_smip.aspx

- 1.7. In that consultation the Government explained that it plans to introduce the regulatory changes on a phased basis and would be considering a range of potential changes including:
  - regulatory changes required to establish and licence DCC;
  - privacy, consumer engagement and security policy;
  - a new Smart Energy Code to govern the overall arrangements for smart metering and in particular all interactions with DCC;
  - any additional regulatory requirements that are identified as necessary; and
  - any necessary consequential changes to existing legislation, licences and codes.
- 1.8. Further information on the overall implementation plan for the regulatory changes will be available on the smart meter pages of the DECC website (www.decc.gov.uk).
- 1.9. The purpose of this document is to consult upon the regulatory changes that are required to establish and licence DCC. This consultation takes the relevant Government conclusions from the Response document and presents the next layer of detail regarding the regulatory and contractual framework for DCC. An updated Impact Assessment which supports this consultation document (the "August Impact Assessment") has also been published and can be found at <a href="http://www.decc.gov.uk/assets/decc/11/consultation/smart-metering-imp-prog/2549-smart-meter-rollout-domestic-ia-180811.pdf">http://www.decc.gov.uk/assets/decc/11/consultation/smart-metering-imp-prog/2549-smart-meter-rollout-domestic-ia-180811.pdf</a>
- 1.10. This August Impact Assessment sets out the estimates for the total cost of the rollout programme and presents the business case for taking the Smart Metering Implementation Programme forward.
- 1.11. In setting down the regulatory and contractual framework and as set out in the Response, the Government will also establish a new industry code, the Smart Energy Code (the "SEC"), which will be a regulated contract governing, amongst other things, the provision of services by DCC to users. Although separate consultation exercises will be conducted on its detailed provisions in due course, this consultation introduces several aspects of the SEC.
- 1.12. In developing the framework for DCC, the Government considers it is important to ensure that it complies with Better Regulation principles and that the arrangements that are developed sit efficiently within and complement the existing regulatory frameworks for the gas and electricity sectors.
- 1.13. Following consideration of responses to this consultation, we will develop and issue for consultation the draft DCC licence conditions. We will also develop and issue for consultation the draft Prohibition Order that will, amongst other things, introduce the new DCC related licensable activity and associated draft licence application regulations.

## Overview of DCC

1.14. The new activity undertaken by DCC will be to provide a two-way communications channel between smart meters and a central data hub to which smart meter data users (energy suppliers, network companies and other authorised third parties) will have access for specified purposes.

- 1.15. Initially DCC's activities and services will be limited to those functions that are necessary and essential for the effective transfer of smart metering data, including secure communications, control of access to that data, scheduled retrieval of data from the meters and the necessary data translation services. It is considered that meter point/ supplier registration can be transferred to DCC within 2-3 years of DCC providing its initial services. Until then, DCC will access the existing registration systems to verify whether a party is authorised to access a specified meter or will have to rely on, for example, self-certification backed up by audit in the case of authorised third parties<sup>4</sup>. This will be important in ensuring that the services essential to the rollout of smart metering are provided in the first instance, while maximising the benefits of smart metering in the long-term.
- 1.16. The Government has concluded that, rather than providing the services itself, best value for the consumer will be ensured by requiring DCC to competitively procure the data and communication services it requires from external service providers.
- 1.17. DCC will be required to adopt certain communication contracts, entered into between suppliers and communication providers which are associated with compliant meters installed by suppliers before DCC services are available<sup>5</sup>. This will assist suppliers, if they so wish, in proceeding with installation of smart metering systems without delay, knowing that these smart metering systems and the associated arrangements for communicating with them will not be stranded when DCC services become available. However, a guaranteed adoption volume could be required on the number of such metering systems in order not to undermine the economies of scale that procurement of enduring communication solutions will bring. Also, the contracts will need to meet pre-defined adoption criteria. DCC will have the discretion to adopt contracts in excess of this volume where it is satisfied that this is consistent with the general objectives set out in its licence. This is discussed in more detail in chapter 8.
- 1.18. As it is proposed only to grant a single DCC licence, DCC will be in an exclusive position to provide communications access to smart electricity and gas meters within the domestic sector in GB, An incentive regime will be placed on DCC to promote cost efficiency and provide an appropriate level of performance to users of its services and thus ultimately to consumers.
- 1.19. DCC will be responsible for ensuring that its obligations are delivered efficiently. Ofgem as the regulator will undertake the role of enforcer should DCC fail to meet its licence obligations.

## Regulatory approach to establishing DCC

- 1.20. The regulatory framework for DCC will sit within the existing regulatory frameworks for gas and electricity. The main building blocks of the arrangements are as follows:
  - a new DCC-related licensable activity will be included in both the Gas Act 1986 and Electricity Act 1989. It will be prohibited to carry out this activity without a licence;

<sup>&</sup>lt;sup>4</sup> Please refer to DECC's Call for Evidence on Privacy and Data Access.

http://www.decc.gov.uk/en/content/cms/consultations/cons\_smip/cons\_smip.aspx

<sup>&</sup>lt;sup>5</sup> Some suppliers will start their rollout of smart meters in advanced of the DCC being established. Communication of data to and from those smart meters will be undertaken by suppliers in the interim (referred to as the "Foundation Phase") and responsibility for communicating with those smart meters will be transferred to DCC.

- a competitive process will be used to appoint the company that is to be licensed to carry out the DCC activity. New secondary legislation will be needed to put this process into place. The person identified will be granted a licence to carry out the DCC activity under both Acts;
- as with other gas and electricity licences, the DCC licence will include a number of conditions governing the behaviour of the licensee. Compliance with licence conditions will be overseen by Ofgem;
- one of the conditions of the DCC licence will require it to have in force and comply with the SEC. Many of the technical and commercial rules and obligations that govern participation in Great Britain's gas and electricity sector are set out in a series of multilateral codes The SEC will be a new multilateral code which will be made contractually binding between parties. This means that compliance with the code will be both a condition of relevant licences and a contractual requirement. The licences of other relevant gas and electricity industry participants, such as suppliers, will be modified to require them to sign up to the code and comply with it;
- amongst other things, the SEC will be the document under which DCC provides its services (e.g. communicating with smart meters) to users. Non-licensed DCC users will also sign up to the SEC in order to receive these services from DCC;
- DCC will be required to competitively procure the resources it needs to provide its services to users. The initial providers for data and communication services will be identified by the Government as part of the smart metering programme, however, thereafter they will be procured by DCC. Service providers will provide services to DCC who will in turn provide services to users.
- 1.21. A high-level overview of the legislative, licensing and contractual framework for DCC is shown diagrammatically below.



#### **Overview of DCC Regulatory framework**

## Overview of the Consultation Document

1.22. The structure of the document is as follows: Chapter 1 is this introduction; Chapter 2 explains in detail the Order that it is proposed that the Secretary of State will make to create the new licensable activities (the "Prohibition Order"); Chapter 3 describes the proposed terms and conditions of DCC licence; and Chapters 4and 5 set out matters relating to DCC's revenue requirements and the charging methodology to be applied to the provision of DCC's services. Chapter 6 discusses the WAN requirements related to the provision of DCC's core services. Chapter 7 considers performance incentives for DCC. Chapter 8 discusses the adoption of smart metering communication contracts that exist before DCC is operational. Chapter 9 discusses the process to be followed in awarding the first DCC licence. Chapter 10 outlines related matters that will be consulted upon in a future document.

## The Data and Communications Company Advisory Group

- 1.23. Since the publication of the Response document in March, we have been working to further develop the details of the commercial and regulatory framework to apply to DCC. To assist with this, we established the Data and Communications Company Advisory Group (DCCG). The DCCG has provided input into many of the issues discussed in this consultation. Its membership includes representatives from suppliers, network operators, shippers, energy service companies and consumer representatives.
- 1.24. The DCCG has established a number of working groups and subgroups:
  - Working Group 1 ("WG1") provides input into the development of DCC licence conditions, the licence application regulations and DCC cost recovery, incentive mechanisms and charging arrangements;
  - Working Group 2 ("WG2") provides input on the DCC related elements of the SEC;
  - Working Group 3 ("WG3") provides input into the development of DCC's service provider procurement strategy and the requirements for DCC's communications network; and
  - Working Group 4 ("WG4") provides input into the development of the adoption criteria and adoption limits to be applied by DCC for communication contracts which are being established for smart meters that were installed prior to DCC services becoming operational.
- 1.25. Terms of reference for the DCCG, its Working Groups and subgroups and associated papers and meeting minutes can be found at http://www.decc.gov.uk/en/content/cms/tackling/smart\_meters/dccg/dccg.aspx.
- 1.26. We would like to thank the members of the DCCG, its Working Groups and sub-groups for their contributions to this process.

## 2. Proposed Regulatory Approach to DCC

#### Background

- 2.1. The electricity industry is primarily governed by the Electricity Act 1989 and the gas industry primarily by the Gas Act 1986, both of which have been amended and supplemented by the Utilities Act 2000, the Energy Act 2004, the Energy Act 2008 and the Energy Act 2010 as well as by consequential amendments from other legislation.
- 2.2. The Acts prohibit the undertaking of certain activities ("licensable activities") except under licence. Examples of licensable activities include the generation of electricity, the shipping of gas and the supply of gas or electricity. Licences include conditions that the licensee must adhere to, which can be enforced by the Gas and Electricity Markets Authority (otherwise referred to as "the Authority", or "Ofgem"), as regulator.
- 2.3. Schedule 4 of the 2008 Energy Act amended both the 1986 Gas Act and the 1989 Electricity Act to provide the Secretary of State with the powers to introduce new licensable activities relating to smart metering. Such powers may also include the determination of any standard conditions that would apply to the new licensable activity, and consequential amendments to legislation or licences.
- 2.4. The Government intends to use these powers to introduce a new licensable activity relating to DCC. In this document the Order that will be used to do this is referred to as the "Prohibition Order". The powers introduced by the Energy Act 2008 require the Secretary of State to consult upon the contents of the Prohibition Order with the Authority and any other appropriate persons before laying a draft for approval in each House of Parliament.

## The "Prohibition Order" - introducing the DCC Licensable Activity

#### Discussion

- 2.5. The licensable activity is the DCC-related activity set out in the Gas and Electricity Acts that it will be prohibited to undertake without a licence. The principal purpose of the prohibition is to ensure that the person carrying out the DCC activity needs a licence, which then allows control to be exercised over the way in which it carries out the DCC activity through the application of licence conditions.
- 2.6. It is important to ensure that other persons carrying out smart meter related activities are not inadvertently captured by the way in which the DCC licensable activity is worded, otherwise, they would need a licence or an exemption to continue to carry out such activities.
- 2.7. It is also the case that the licensable activity does not have to describe everything that DCC will do. Legislation allows licence conditions to require licence holders to carry out a broader range of activities than just the licensable activity itself. This means that the definition of the licensable activity can be worded narrowly to avoid inadvertently capturing third parties but that, at the same time, the scope of DCC's regulated activities under its licence can be broader than this.
- 2.8. Since the publication of the Response document, in considering an approach to defining the licensable activity for DCC, we have considered what DCC, and only DCC, will do and how this can be captured meaningfully in a definition of the licensable activity. This analysis has suggested that it is preferable to base the licensable activity

definition around the services that DCC will be providing to users, rather than the procurement and contract management activity that DCC will be undertaking in order to provide that service. This is because the work to develop the initial DCC service provider contracts is being progressed by the smart metering programme prior to the establishment of the initial DCC and so DCC might not be caught by such a prohibition until it has been undertaking its activities for some time and therefore a licensable activity based on procuring these contracts would be unlikely to capture the initial DCC. Contract management reflects the activity that DCC is more likely to be carrying out at the initial phase of its existence. However, it is a largely colloquial concept and more difficult to capture in drafting terms - there is no simple way to define what it means to 'manage' a contract. Similarly, we do not consider that basing the licensable activity around communicating with smart meters is the best approach to take. This is because whilst DCC will be communicating with smart meters, it would be necessary to develop a very sophisticated definition of "communicating" to ensure that any licensable activity based upon doing this would capture DCC but would not capture consumers themselves or DCC's service providers.

- 2.9. In light of this, the proposed concept for the licensable activity is the activity of contracting with all licensed domestic gas/electricity suppliers in Great Britain to provide, in respect of every smart meter installed at every domestic premises which is supplied with gas/electricity by each such supplier, a service by virtue of which information may be communicated by and to that meter on behalf of the supplier.
- 2.10. Basing the licensable activity around contracting with gas and electricity suppliers does not mean that DCC will only be providing services to suppliers. Instead, it will be important for DCC to provide its services to other types of person, such as energy management companies etc. Similarly basing the licensable activity around suppliers of domestic premises does not mean that DCC cannot provide services in relation to non-domestic premises. However, it is proposed to refer only to licensed suppliers in relation to domestic premises in narrowly defining the licensable activity. In addition to having the benefit of keeping the definition as narrow as possible, using suppliers alone as the reference has an advantage in that the concept of supply is used in existing legislation.
- 2.11. The proposed form of the licensable activity is not just contracting with gas and electricity suppliers to provide communication services, but doing this with *all* licensed suppliers in respect of *every* domestic smart meter. The contract under which it is proposed that DCC will do this is the multilateral agreement underpinning the SEC. The reason all licensed suppliers and every domestic smart meter is used is to reduce the likelihood that the licensable activity will inadvertently capture anyone other than DCC. Given that DCC may not actually communicate with every domestic smart meter installed (for example because DCC's communication services may not provide 100% coverage), then appropriate adjustments will need to be made to the nature of the licensable activity as part of the process of drafting the prohibition.
- 2.12. There will need to be two licensable activities, one in the Electricity Act 1989 and one in the Gas Act 1986. However, it is envisaged that the activity in each case would be the same, save for the reference to gas or electricity suppliers as relevant. Furthermore, in practice there would be a single combined DCC licence document having effect for the purposes of both Acts, but (strictly speaking) incorporating two licences.

Proposals

- 2.13. We propose to structure the licensable activity around the activity of: contracting with all licensed domestic gas/electricity suppliers (as appropriate) in Great Britain to provide, in respect of every smart meter installed at every domestic premises which is supplied with gas/electricity (as appropriate) by each such supplier, a service by virtue of which information may be communicated by and to that meter on behalf of the supplier.
- 2.14. We will develop the specific wording of the prohibited activity in line with the concept outlined above, as well as the consultation responses received.

1.	Please provide views on the approach to basing the prohibition upon contracting with all licensed suppliers in respect of all domestic smart meters, and on the way in which the specific wording of the prohibition should be developed.
2.	Do you think there will be any persons other than DCC who might inadvertently

3. Do you have any other comments on the form of the licensable activity?

## Consequential Changes to Legislation

Discussion

- 2.15. As a consequence of introducing a new licensable activity, it is likely to be necessary to make a number of changes to legislation. This section sets out our initial high-level view of the changes that need to be made and a brief description of why the changes are needed. It should be noted that other consequential changes to legislation may need to be made as part of the wider implementation of smart metering and these are not the subject of this consultation.
- 2.16. The scope of legislation reviewed at a high-level at this stage has included the:
  - Gas Act 1986;
  - Electricity Act 1989;
  - Utilities Act 2000;
  - Enterprise Act 2002;
  - Energy Acts 2004, 2008 & 2010; and
  - Consumers, Estate Agents and Redress Act 2007.
- 2.17. We recognise that a wider review of other legislation that is likely to be affected also needs to be undertaken and that we will need to undertake this prior to finalising the proposed drafting of the prohibition order. We expect however, that the vast majority of the consequential changes will have been identified from the review of the most directly relevant legislation listed above. We also recognise that there is an Energy Bill which

is currently progressing through Parliament and that the scope of consequential changes required might also be affected if and when this becomes law.

- 2.18. The new licensable activity will be added to the list of licensable activities in the Gas and Electricity Acts and this means that most of the existing legislative provisions which apply to licensable activities will apply by default to the new licensable activity (and any licence relating to it). As a consequence, to the extent that the standard legislative provisions are appropriate for the new activity, we consider that the scope and nature of the legislative changes required are relatively limited.
- 2.19. We consider that the consequential changes to legislation that have been initially identified are relatively mechanistic in that they do not introduce any fundamentally new concepts into legislation to accommodate DCC.
- 2.20. In addition to the consequential changes to legislation set out below, this consultation document identifies two further areas of legislative change that might be appropriate as part of introducing DCC. These changes are ones that would need additional legislation to put in place, rather than being included in the consequential changes being made as part of the DCC prohibition order. These two matters are each discussed further in chapter 3 and include: the potential introduction of a special administration scheme for DCC; and including the DCC licence in the list of licences that can already be modified by the Secretary of State in order to implement the smart metering programme. These matters are highlighted in this section for completeness, but we invite specific views from respondents in chapter 3 where the proposals are discussed in context.

## Proposals

2.21. We propose to make the changes set out in Table 2.1 and Table 2.2 to the relevant Acts as part of the Prohibition Order. Please note that unless otherwise identified in the matrix below, where a section of the Act applies by default to all licensees, it is proposed that it would also apply to DCC by virtue of DCC also becoming a licensee.

Relevant section of Act*	Title	Description of Proposed Change
G5 &E4	Prohibition on unlicensed activities/ unlicensed supply etc.	To add the new licensable DCC activity to the list.
G6A & E5	Exemptions from prohibition	To add the DCC licensable activity to the list of activities in relation to which the Secretary of State may grant exemptions.
G7(A) & E6	Licences authorising supply, etc.	To add the DCC licensable activity to the list of activities in relation to which a licence may be granted. It is currently proposed that limitations on a person holding both a DCC licence and other types of licence (in particular supply) will be addressed in the licence rather than in legislation. We are also considering whether the holder of the gas DCC licence must be the holder of an electricity DCC licence and vice versa. It is also proposed that the Secretary of State would grant the initial DCC licence with the Authority granting the licence thereafter.
G7B & E6(A)	Licences General/Procedure for licence applications	It may be necessary to carve DCC out of this section because the procedure for DCC licence applications will be dealt with in secondary legislation under sections 41HC and 56FC of the Gas Act 1986 and Electricity Act 1989 respectively.
G7B & E7	Licences General/Conditions of licences: general	It may be appropriate to add DCC into the list of licences referenced in G subsection 5(b) and E subsection 3(A). This would extend the existing flexibility to DCC to include licence conditions which require the licensee to increase charges to raise amounts determined in the licence condition and to pay the amounts to other licensees as is determined.
G34 & E47	General functions	It may be appropriate to add DCC to the list of activities referred to in the Electricity Act to make it clear that the functions of the Director set out in this section also apply to DCC. In gas, given the reference back to licensed activities, DCC would, by default, be captured.
G41C & E56A	Power to alter activities requiring licence	Change to include activities related to DCC in the list in 41C(4) & 56A(4). This would extend the powers of the Secretary of State under these sections of the Acts also to alter activities requiring a licence if they are also connected with the DCC activity.
Other	Consequential changes	It may also be necessary to include a number of additional definitions to the legislation.

## Table 2.1 - Gas Act 1986 and Electricity Act 1989

\* For example E56A refers to section 56A of the Electricity Act 1989, G41C refers to section 41C of the Gas Act 1986.

Utilities Act 2000	Section 5(A) - Amendment to add DCC to list of activities referred to in relation to impact assessments on environmental and other matters which the Authority is required to carry out in relation to certain proposals.
	Possible additional consequential change to interpretation section (106).
Enterprise Act 2002	Possible consequential amendments to section 168 to include a modification to the DCC licence conditions in the list of matters which would be considered to be a relevant action for the purposes of Part 4 of the Enterprise Act 2000 (Market Investigations).
Energy Act 2004	Addition of DCC to Section 188 sub-sections 8(c) and (d) which sets out the scope of energy matters for which the Secretary of State may impose charges to fund its energy functions.
Consumers, Estate Agents and Redress Act 2007	Section 13 – possible change to add DCC to the list in the event that DCC disconnects a consumer without authorisation from the supplier/network operator. Section 25 - Possible consequential change to (gas) regulated provider. Section 42 – Consequential amendments to include DCC in list of gas and electricity licensees.
Energy Act 2008	No changes identified at present.
Energy Act 2010	Section 29 – possible change to include DCC in the definition of "relevant person" such that, in addition to network licensees, schemes to help disadvantaged customers of an energy supplier may include provision for the adjustment of charges by DCC.

## Table 2.2 - Possible Changes to Other Legislation

## **Consultation Question**

4. Please provide comments on the proposed changes to legislation identified in Table 2.1 and Table 2.2 and any other possible changes that you consider might be appropriate.

## Licence Conditions - General

Discussion

- 2.22. It is the Government's intention that a DCC licence would be granted to a successful applicant to carry out the licensable activity under each of the Gas Act 1986 and Electricity Act 1989. We expect that these two licences would be embodied in a single document, and that a single set of terms and conditions would apply to both licences.
- 2.23. In existing legislation, provisions exist for conditions to be either "standard" conditions or "conditions of a particular licence" (usually referred to as "special conditions").
- 2.24. One difference between standard and special licence conditions in the case of DCC is that any initial standard conditions for DCC need to be included as part of the DCC Prohibition Order. This means that if the DCC licence conditions are to be standard conditions the DCC Prohibition Order could not be finalised prior to the completion of the detailed legal drafting of the licence conditions. Conversely, treating them as special conditions would allow the DCC Prohibition Order to be made earlier and therefore expedite the timetable for the development of the associated licence application regulations, which set out the process for competitively appointing DCC.
- 2.25. More generally, the difference between standard and special conditions is the way in which they may be modified. Currently, under certain circumstances, the Authority may modify special conditions with the consent of the licensee. However, additional provisions apply to the modification of standard licence conditions which, in particular circumstances, only allow standard conditions to be modified with the consent of a majority of licensees to whom the condition applies.
- 2.26. In the case of DCC there would only be a single body licensed to carry out the DCC activity at any given time. For DCC, the distinction between standard and special licence conditions is therefore largely immaterial. In addition, changes to the way that licence conditions may be modified are contained in the draft Electricity and Gas (Internal Markets) Regulations 2011 which are currently before Parliament. These changes would result in a common modification process for all licence conditions (other than modification of special conditions relating to price controls) and would further remove the distinction between special and standard conditions.
- 2.27. In summary, treating the DCC licence conditions as special affords additional flexibility and, as a consequence of the fact that there will typically only be one DCC licence holder at any given time, does not result in any material differences.

#### Proposals

- 2.28. We propose to issue a single document to the first DCC licensee with a single set of terms and conditions that would apply to both the gas and electricity licences.
- 2.29. We propose to adopt an approach whereby the DCC licence conditions would be treated as "special" conditions. The "special" conditions that we propose to include in the DCC licence, are outlined in chapter 3 of this document.

#### **Consultation Question**

5.	Do you agree with the proposal to have a single document with a single set of licence conditions that apply to both licences?
6.	Do you agree with, and have any comments on, the proposed approach to establish all of the DCC licence conditions as "special" conditions?

## Consequential Changes to Other Licences

#### Discussion

- 2.30. The powers to make a new licensable activity for DCC through a Prohibition Order include the powers also to make changes to existing standard licence conditions of other licences that arise as a consequence of the introduction of the new licensable activity. We have undertaken a review of standard conditions of other licences and very few consequential changes have been identified, all of which are considered to be relatively mechanistic. The scope of the initial review has included standard conditions of gas shipper, supply and transportation licences and electricity supply and distribution licences.
- 2.31. It should be noted that other consequential changes to licences, for example obligations on suppliers to comply with the SEC, may need to be made as part of the wider implementation of smart metering and these are not the subject of this consultation. We do not consider such changes to be directly related to the introduction of the new licensable activity. The Government intends to separately identify these changes and, subject to further consultation, make them using powers under Section 88 of the Energy Act 2008.

## Proposals

2.32. We propose to make the consequential changes to other licence conditions set out in Table 2.3.

Licence	Condition	Description of Proposed Change
Electricity Supply	1 – Definitions	The definition of 'Authorised Electricity Operator' may also need to include the DCC licensee.
		If condition 2.5 is amended to include the DCC Licence (see below) a definition of DCC Licence will need to be included.
	2 – Interpretation of	For completeness, given that all other categories of electricity licence
	Standard Conditions	(including Interconnector Licence) are listed, it may be appropriate to include the DCC Licence in paragraph 2.5.
	26 – Services for specific Domestic Customer groups	Paragraph 26.7 requires the supply licensee to provide information to the relevant distributor about customers who require advance notice of interruptions to supply because of their sickness/disability. Given that the DCC licensee may in some way be able to 'interrupt' supply, it may be appropriate or necessary to consider whether suppliers should also 'share' such customer information with the DCC licensee. Alternatively, if DCC needs to be made aware of such matters, it may be more appropriate to address this under the Smart Energy Code.

## Table 2.3 – Proposed consequential changes

Electricity Distribution	<ul> <li>1 – Definitions for Standard Conditions</li> <li>2 – Interpretation of Standard Conditions</li> <li>10 – Special services</li> <li>37 – Provision of the Data Transfer Service</li> </ul>	<ul> <li>The definition of 'Authorised Electricity Operator' may need to include the DCC licensee.</li> <li>Also if condition 2.5 is amended to include the DCC Licence (see below) a definition of DCC Licence will need to be included.</li> <li>For completeness, given that all other categories of electricity licence are listed, it may be appropriate to include the DCC Licence in paragraph 2.5.</li> <li>Paragraph 10.6 requires the distribution licensee to inform the relevant supplier where a customer has asked to be on the licensee's priority services register. Consideration is required as to whether, if the DCC Licensee is also able to disconnect premises, the DCC Licensee should also be provided with this information.</li> <li>Consideration will be required as to whether a purpose of the Data Transfer Service (DTS), as set out in paragraph 37.4(b) has the potential to overlap or duplicate the purpose of DCC (and its activities).</li> </ul>
		<ul> <li>This is because paragraph 37.4(b) confirms that one of the purposes of the DTS is "to communicate Electricity Meter reading data and Electricity Meter standing data".</li> <li>It may be that no consequential changes are needed given the provisions of Condition 35 - under which the licensee is required to provide Data Services which includes Data Transfer Services. This is particularly so given that paragraph 35.13 confirms that Data Retrieval is excluded from Data Services. Data Retrieval is defined (in Condition 1) as "services comprising any or all of the following: the retrieval and verification of Electricity Meter reading data from Electricity Meters and the delivery of such data to any person for the purposes of Data Processing".</li> <li>However, a more detailed review and understanding of the terms (and services would be appropriate.</li> </ul>
Gas Supply	Condition 2 – Interpretation of standard conditions Condition 26 – Services for specific Domestic Customer groups	For completeness, given that all other categories of gas licence (including Interconnector Licence) are listed, it may be appropriate to include the DCC Licence in paragraph 2.5. Paragraph 26.7 requires the supply licensee to provide information to gas transporters about customers who require advance notice of interruptions to supply because of their sickness/disability. Given that the DCC licensee may in some way be able to 'interrupt' supply, it may be appropriate to consider whether suppliers should also 'share' such customer information with the DCC licensee. Alternatively, if DCC needs to be made aware of such matters, it may be more appropriate to address this under the Smart Energy Code.
Gas Shippers	11 – Supply and Return of, and Information etc. Relating to Gas Meters	Consideration will be required as to whether the provisions of this condition, particularly with regard to the exchange of information in relation to disconnection and connection of meters, need to reflect the role of DCC. In addition paragraph 4(g) refers to meter reading arrangements which may need to be amended to take account of DCC activity.
Gas Transporters		No potential consequential amendments identified.

## **Consultation Question**

- 7. Do you have any comments on the scope and nature of the consequential licence changes that we propose to make?
- 8. Are there any other consequential licence changes that you consider might be necessary as a result of the creation of the new licensable activity?

## Other Provisions of the Prohibition Order: Geographic Scope and Duration

- 2.33. In principle, the Prohibition Order provides the flexibility to allow licences to specify an authorised area and for this area to be capable of being modified. In the case of DCC the scope of the licensable activity for both the gas and electricity sectors will be Great Britain. The requirement to have a single licensee carrying out the activity across GB is also implicit in the conceptual approach being adopted to the form of the licensable activity. The Government will include within the Prohibition Order provisions regarding an authorised area for the licence and the ability to change this area if this is considered necessary in light of the scope of the licensable activity.
- 2.34. We propose to draft the Prohibition Order to require that any issuing of a licence and modification to it must be made in writing and that the period that the licence is to be in force may be specified in the licence.

## **Consultation Question**

9. Please provide any comments on the proposed approach in relation to geographic scope of the DCC licence and provisions relating to its duration.

## 3. DCC Licence Conditions

- 3.1. The DCC licence will place a number of conditions on the way that DCC undertakes its activities, including: the services it is required to provide; services it is not permitted to provide, how it procures the services it provides; the charges it may make on users; and the governance of these arrangements.
- 3.2. This chapter sets out the provisions that we propose to include in DCC's licence, whilst DCC's charging methodology is considered in chapter 5.

## General Objectives of DCC

Issue

3.3. DCC will play an important role in delivering the Government objectives in mandating the rollout of smart meters. This section sets out how obligations on DCC could be established in the regulatory framework and what DCC's high-level objectives should be.

## Discussion

- 3.4. In line with the existing arrangements for gas and electricity network licensees, some of the high-level objectives or duties of DCC could be included in legislation as general legislative duties on the DCC licence holder. Statutory duties on network licensees include those relating to the development and maintenance of efficient and economical systems; duties to promote competition in supply; and, for gas licensees, duties to avoid undue preference or discrimination.
- 3.5. However, as statutory duties are different in gas and electricity legislation and as it is intended that DCC will hold a licence under both acts, having a consistent set of duties for DCC would mean that DCC's statutory duties differ from those of existing licensees in one or both sets of legislation. To avoid this scenario, and the potential for confusion it would create, we are of the view that it may be appropriate not to have any general duties on DCC in legislation and, instead, we propose to address such matters in DCC's licence conditions.
- 3.6. When considering the general objectives that should be placed on DCC, one issue that arose in discussions with DCCG and its Working Groups was that in developing and maintaining its services, DCC should take into account the impact of any proposal on users' systems. We consider that such an obligation is implicit in the proposed requirement for DCC to develop and maintain and operate an efficient, coordinated and economical system, and consequently does not need to be separately stated.
- 3.7. We recognise that there is the potential for competition to emerge between distribution businesses, for example, as smart grid functionality develops. While we accept that it might be appropriate to include an obligation in the DCC licence to carry out its business in a manner that facilitates competition in this area, this should be considered alongside the development of any future arrangements to implement smart grids, rather than the initial DCC licence.
- 3.8. We also recognise that the way in which DCC carries out its business may have an impact on competitive arrangements other than just the supply of gas and electricity. For example the way in which DCC provides its services might affect competition in metering-related services and in energy efficiency services. The introduction of smart

metering is likely to have a significant impact on the provision of services in these areas and consequently, we are of the view that these matters should be included in the list of areas in which DCC should promote or facilitate competition when providing its services. Whether or not such matters would be implicitly captured in an obligation to promote or facilitate competition in supply will be considered in developing the detailed legal drafting of the licence. It is also for consideration whether it would be appropriate for the obligation on DCC in this area to be drafted instead to require DCC more generally to facilitate energy efficiency.

- 3.9. One of the primary roles of DCC is to provide access control to ensure that only those who are authorised can gain access to consumers' data and effect actions such as load control or disconnection. It is therefore proposed that DCC should have an obligation in relation to data privacy and security. The detail of the obligations on DCC in relation to these matters will be considered in light of the responses to DECC's Call for Evidence on Privacy and Data Access.
- 3.10. The relevant DCCG Working Group also questioned, how in practice, DCC would fulfil an obligation to protect the interests of consumers in providing its services (as the DCC is not intended to have a direct relationship with consumers). They argued that this requirement could put DCC in conflict with organisations that have a direct relationship with consumers (i.e. DCC's users). The Working Group proposed that it may be more appropriate for DCC to provide services to users in a manner that allows users to meet or protect the interests of consumers and that any such objective would sit better as an objective of the SEC rather than a DCC objective.
- 3.11. From a legal point of view it may not be appropriate to impose a consumer protection duty on DCC, given that the paramount statutory objective of the Authority, the enforcement authority for DCC licence, is to protect the interests of energy consumers.
- 3.12. However, even though DCC does not have any direct relationship with consumers, its actions for and on behalf of service users will clearly have the potential to impact on consumers. We therefore propose that the potential for such impact is recognised in the drafting of the general objectives of DCC but to stop short of imposing any explicit duty on DCC in this respect. This would be achieved by wording to the effect that DCC's compliance with its general objectives under the licence equates to the promotion of consumer interests.
- 3.13. We have also considered whether DCC should have a general objective to have due regard to its impact on the environment in carrying out its business. In discussions with DCCG and its Working Groups, one suggestion was made that the requirement to take into account environmental matters would be captured by an obligation to develop, maintain and operate an efficient, coordinated and economical system.
- 3.14. Finally, in recognition of the key role that DCC will undertake in the rollout of smart metering in GB, we also propose to include an objective on DCC requiring it to facilitate the successful rollout of smart metering in accordance with Government policy. This obligation may need to be transitional as it would apply only in the period until the mass rollout of smart meters was completed.

Proposals

- 3.15. We invite views on whether DCC should have any statutory duties in line with those of existing network licensees, or, alternatively, whether it is appropriate to deal with these matters solely within DCC's licence.
- 3.16. We propose to include the following objectives for DCC in the licence:
  - an obligation on DCC to discharge efficiently its obligations under the licence;
  - a requirement for DCC to develop, maintain and operate an efficient, coordinated and economical data and communications system;
  - an obligation on DCC to carry out its business in a manner that promotes or facilitates competition in the supply of gas and electricity and, if not implicitly captured within this obligation, energy efficiency services, metering services and other energy related services (for example services to encourage demand side solutions);
  - an obligation to have due regard for the environment, to the extent that this is not already captured by the first two objectives;
  - an obligation to facilitate successful rollout of smart metering in accordance with Government policy;
  - an obligation relating to security in the provision of DCC Services; and
  - a data privacy objective related to, or part of, the security objective.
- 3.17. DCC would be required to protect the interests of consumers by following these objectives in carrying out its business.
- 3.18. It is also for consideration whether DCC should have a separate general objective of promoting energy efficiency.

Consultation Question	
10.	Do you agree with the proposed general objectives of DCC set out above?
11.	Do you think it is necessary to include any statutory duties on DCC in the Gas and Electricity Acts or is it appropriate address these issues in the DCC licence alone? Please provide the rationale for your views.
12.	Do you agree that any obligation to facilitate competition in the area of distribution should be considered as part of the implementation of any future smart grids related arrangements?
13.	Do you agree with the approach proposed in relation to the protection of consumers interests?
14.	Do you think DCC should have a separate objective to promote (or facilitate) energy efficiency?

## The Smart Energy Code Licence Condition

## Background

- 3.19. While DCC will be governed principally by its licence, the detail of its obligations to users in the gas and the electricity industry will be set out in the SEC. The SEC will be introduced as a new "industry code".
- 3.20. Several existing industry codes, for example the Balancing and Settlement Code provide the detailed rules that underpin the effective market operation of the gas and electricity sectors. Codes are established through requirements in gas and electricity licences. Typically, licensees are required to sign up to and comply with these codes in order to operate in the relevant sector of the gas and electricity markets.
- 3.21. The Government concluded in the Prospectus Response that the SEC would be established under a licence condition in DCC's licence.
- 3.22. The SEC will be a multilateral arrangement under which DCC will provide smart metering communications and related services to users. It is also likely to deal with matters between one user and another, for example between two individual suppliers. In line with many other codes, DCC and other relevant licensees will have a licence obligation to comply with the SEC and to enter into arrangements so that the SEC is contractually in force between them.
- 3.23. Non-licensed users of DCC will also be required to contractually comply with the SEC as a condition of receipt of services from DCC.
- 3.24. The SEC is anticipated to be the key regulatory document which sets out the rules underpinning the new end-to-end smart metering system. In addition to provisions relating to DCC services, the SEC could, for example, include requirements relating to privacy, system security and the interoperability of smart metering equipment.
- 3.25. Following the model set down in other industry codes, we propose to use DCC licence conditions to set out the scope, objectives and high level modification procedure of the SEC. DCC's SEC licence condition will describe the matters that can and/or must be included in the SEC (the scope), and what the SEC is intended to help accomplish (the objectives). The objectives will form the basis for assessing proposed modifications to the SEC.
- 3.26. We also propose that DCC's charging methodology will be set out in the SEC and that a set of principles will apply to this part of the SEC (see chapter 5 for charging proposals).
- 3.27. Our proposals for the detailed SEC governance arrangements (including the role and composition of the SEC Panel<sup>6</sup>), which will be informed by the findings and conclusions of Ofgem's Code Governance Review, will be subject to further consultation. Chapter 10 includes more information on plans for the development of the SEC.
- 3.28. The subject matter of the SEC will, in some instances, relate to areas that are of ongoing interest not only to the users of DCC's services and those representing consumer interests, but to the Government and Ofgem. Such areas include, for example, the security of the end-to-end smart metering system, appropriate consumer

<sup>&</sup>lt;sup>6</sup> The body that will be responsible for oversight of the procedure for code modifications.

protections relating to data access and any extension of the scope of DCC's activities. So, whilst in general it would be sensible to apply existing code governance arrangements to the SEC, in some instances it may be appropriate to develop bespoke governance arrangements that are suitable for the SEC circumstances. As the development of the SEC progresses we will consider the governance arrangements further and consult on specific proposals as part of the development of the SEC. The following section considers what matters the DCC licence conditions should include in relation to the SEC. The section is split to consider the following issues:

- the scope of the SEC set out in the DCC licence
- the applicable objectives of the SEC; and
- SEC modification arrangements

## Issue: The Scope of the SEC set out in the DCC licence

- 3.29. The scope of the SEC will be set out in a DCC licence condition. The following subsection considers what should fall within the scope of the SEC and whether this should be:
  - a) a limiting condition, i.e. setting out exhaustively what the SEC may contain; or
  - b) a permissive condition setting out non-exhaustively what the SEC may, or should contain and allowing other matters to be proposed as amendments to the SEC, as long as they facilitate the better achievement of SEC objectives.

## Discussion

- 3.30. The SEC will, at a minimum, set down arrangements to apply between DCC and relevant parties in relation to the smart metering system communications. Given that it is anticipated that the scope of DCC may expand over time (for example when DCC takes on the meter point/supplier registration activity (see paragraph 3.184), it may be appropriate that the scope of the SEC identified in the initial licence condition may include matters which are not initially covered in the SEC.
- 3.31. It was suggested in the Government's recent consultation on the draft licence conditions and technical specifications for the rollout of gas and electricity smart metering equipment, that the SEC may also provide the governance for the Smart Metering Equipment Technical Specification (SMETS). This will set out the technical specification for the equipment that suppliers will install in consumer premises. This would mean that even if suppliers of non-domestic sites do not elect to use DCC to communicate with smart meters, they may still be governed by the provisions of the SEC. Further analysis will be needed to determine where the SMETS should sit within the regulatory framework. Due consideration will also need be given to the implications of a role for the Authority in approving changes to the SMETS under the SEC.
- 3.32. It is also necessary to consider whether the SEC should also cover the responsibilities of suppliers at consumer premises. Existing responsibilities on suppliers in relation to equipment are set out across a number of different industry documents. The scope of matters that may need to be included in the SEC will need to form part of a wider framework setting out suppliers' responsibilities in relation to metering equipment in

general, which will need to be coherent with responsibilities in other industry documents.

- 3.33. As previously discussed, we propose to include a general objective on DCC related to ensuring that its systems and processes are appropriately secure. It is intended that the detailed obligations on security for DCC and its users would be set out in the SEC itself and that the licence would require them to comply with the security requirements set out in the code. The scope of the security requirements dealt with in the SEC will, however, be wider than just those applying to DCC itself and will need to take into account the security of users' systems interacting with DCC.
- 3.34. How the scope of the SEC should be specified in the SEC licence condition has been discussed with the Working Groups. They were in favour of the scope being set as a permissive condition. This would allow matters that the SEC should cover to be identified, but also allow the inclusion of additional matters if they facilitated the better achievement of the objectives. This would make it possible to deal with appropriate matters under the SEC that were not contemplated at the time that the initial SEC was designed, to the extent that their inclusion in the SEC facilitates the better achievement of the objectives or satisfies any other governance arrangements that are developed to support the extension of DCC's activities under the SEC.
- 3.35. It is also recognised that further modification of the SEC is likely to be needed when responsibility for registration transfers to DCC. In order to make the necessary changes to codes and other licences necessary to effect this transfer, it is anticipated that the Secretary of State will make modifications using powers under the Energy Act 2008 in relation to smart metering rather than necessarily relying on enduring code modifications.

## Proposals

3.36. We propose to draft DCC's SEC licence condition to provide that the SEC should encompass a list of initial matters and that the condition should also be drafted to provide flexibility for future changes in scope. This means that the SEC licence condition will be permissive and will not explicitly limit the scope of matters that may be included in the SEC. Instead it would place a reliance on the modification process and any other governance arrangements that are put in place to provide a limitation on these matters, i.e. that the proposed modifications would only be accepted if they meant that the SEC would better meet the objectives or any other tests that are set down.

## **Consultation Question**

15. Do you agree that SEC licence condition should be drafted so as to provide flexibility over the future scope of the SEC, i.e. that the scope of the SEC in the DCC licence condition should be drafted in a permissive manner?

## Issue: SEC Applicable Objectives

3.37. In line with other existing industry codes, it is proposed to develop a set of objectives (SEC Applicable Objectives) which would be used as the basis for assessing proposed

modifications to the SEC. The SEC Applicable Objectives are considered in this section.

#### Discussion

- 3.38. Existing industry codes provide a starting point for considering the objectives for the SEC. SEC Applicable Objectives might include:
  - a) the efficient discharge by DCC of the obligations imposed upon it by its licence;
  - b) the efficient, economic and co-ordinated provision of DCC services;
  - c) promoting effective competition in the supply of gas and electricity;
  - d) having due regard to the environment; and
  - e) promoting efficiency in the implementation of the administration of the SEC.
- 3.39. A key element of the Government's approach to smart metering is putting consumer interests at the heart of the Smart Metering Implementation Programme. This involves empowering consumers to better manage their energy use, engaging consumers to raise awareness and understanding of the benefits that smart metering will enable, and protecting their interests through introducing additional safeguards where necessary. The SEC is likely to have a direct or indirect impact on gas and electricity consumers so it is important to consider how this could be achieved by drafting appropriate Applicable Objectives.
- 3.40. SEC objectives linked to promoting efficiency or competition in the provision of the energy services, metering services and other energy services markets could support the Government's objectives of smart metering. These might include, for example, provision of energy efficiency advice which is informed by an analysis of a consumer's metered energy use or other services to encourage demand side solutions. It is not necessarily anticipated that the SEC will set out arrangements for competitive provision of such services. Instead, an objective could focus on designing the systems and processes established under the SEC so as to promote efficiency or competition in the provision of these services. Similarly, it may be appropriate that one of the objectives of the SEC is related to promote efficiency in energy networks (i.e. gas and electricity distribution).
- 3.41. DCC's systems and those of users of its services will also need to be protected against security breaches. We therefore propose to include a SEC Applicable Objective relating to the security of the end-to-end smart metering system as well as ensuring data security. This latter element of data security is linked more generally to the issue of data privacy.
- 3.42. The appropriate data privacy framework required to support smart metering is currently being developed and will be addressed in a separate consultation on this issue following on from the current Call for Evidence. Appropriate objectives on these matters will be progressed in light of how this policy develops.
- 3.43. Given that the arrangements established under the SEC will have an impact on the successful rollout of smart metering it should also be considered whether an objective of the initial SEC should be to facilitate rollout.

3.44. Finally, we are interested to receive views upon the way in which an SEC objective should be drafted around a requirement to have regard to the environment.

## Proposals

- 3.45. We propose to include the following matters in SEC Applicable Objectives in DCC's licence, recognising that there may be some scope for consolidation when developing the legal drafting of the licence conditions:
  - a) the efficient discharge by DCC of the obligations imposed upon it by its licence;
  - b) the efficient, economic and co-ordinated provision of DCC services;
  - c) promoting effective competition in the supply of gas and electricity;
  - d) promoting efficiency in the implementation of the administration of the SEC;
  - e) an objective related to having due regard to the environment;
  - f) an objective related to promoting or facilitating competition in energy efficiency, metering services and other energy related services; and
  - g) an objective related to maintaining data privacy and security, and security of the smart metering system.
- 3.46. It is also proposed that the transitional objectives of the SEC should include an objective related to facilitation of rollout of smart meters.
- 3.47. We will consider further whether to introduce an objective of the SEC to promote energy efficiency more generally. In line with the proposed treatment of consumer interests in the DCC's objectives, we propose that the SEC would protect consumers' interests by being designed to meet its applicable objectives, rather than having an explicit objective related to the protection of consumer interests.
- 3.48. We also propose to review the arrangements for the SEC to reflect any best practice introduced as part of any amendments to code and charging methodology governance arrangements made as part of the introduction of the Electricity and Gas (Internal Markets) Regulations 2011.

Consultation Question		
16.	What are your views on the SEC Applicable Objectives set out above?	
17.	Do you agree that the SEC should be designed to take into account consumers' interests by meeting its applicable objectives, rather than having a explicit objective related to the protection of the interests of consumers?	
18.	Should there be a SEC objective related to promoting (or facilitating) efficiency of energy networks?	
19.	Do you think the SEC should have a separate objective of promoting (or facilitating) energy efficiency?	

#### Issue: SEC Modification Arrangements

- 3.49. The DCC licence will include the key procedures for modifying the SEC. This section discusses, at a high level, the elements of the SEC modification arrangements that we consider should be included in DCC's licence.
- 3.50. More detail on the code modification processes will be outlined in the SEC itself which will be considered in a separate consultation on the more detailed SEC governance arrangements.

#### Discussion

- 3.51. We anticipate that a number of key requirements for the SEC modification procedure will be contained within the DCC licence. The DCC licence will outline the high level principles that the detailed SEC modification procedures should provide for. These could cover, but are not limited to, arranging a timely and efficient process for making, consulting and evaluating modification proposals.
- 3.52. We also anticipate that the high-level principles set out in the DCC licence will require the SEC modification arrangements to make provision for Ofgem's involvement through consultation and approval of relevant modifications. Ofgem's Code Governance Review principles require the SEC modification arrangements to make provision for different code modification processes (including modification without Ofgem's approval).
- 3.53. As set out earlier, as the subject matter of the SEC will, in some instances, relate to areas that are of ongoing interest not only to the users of DCC's services, those representing consumer interests and Ofgem, but also the Government, in some instances it may be appropriate to develop bespoke governance arrangements for elements of the SEC that are suitable for the subject matter at hand (e.g. security provisions or provisions relating to data access). As the development of the SEC progresses we will consider such arrangements further and consult on specific proposals in due course.

#### Proposals

3.54. We intend to progress these matters further as part of the detailed drafting of the DCC licence conditions and in light of the parallel development of the SEC.

#### Service Provision

#### Issue

- 3.55. DCC will be required to provide services to users, for which it will be entitled to charge. Thus, licence conditions will require DCC to offer terms for the provision of a service, define the nature of service it will offer, and determine the basis on which it will charge. Given that DCC is expected to also offer further services at a later date, provisions are required to determine how these services will develop.
- 3.56. This section sets out our views on how these matters should be dealt with in DCC's licence. Chapter 5 of this document discusses the appropriate content of licence conditions relating to the basis of charging for DCC's services.
# Previous Government Conclusions

- 3.57. Supporting document 4 of the Response stated that:
  - a) the scope of DCC activities should be developed in a phased manner, when DCC starts providing its services, the scope should cover secure communications, access control, translation, scheduled data retrieval and initial smart grid functions;
  - b) meter point/supplier registration of all metering points should be transferred to DCC within 2-3 years of DCC providing its initial services;
  - c) DCC may propose the launch of additional extra-industry services making use of DCC's communications contracts/services (referred to as value added services). To ensure that DCC remains focused on the delivery of high quality services to its users and to ensure that consumer interests and competition concerns are addressed, the DCC licence will oblige the licensee to seek permission from the Authority before offering any consumer value added services; and
  - d) suppliers and metering service providers in the non-domestic sector will not be obliged to use the services of DCC for meters with smart functionality. DCC will be obliged to offer terms for use of its services to non-domestic suppliers and metering agents, including with respect to advance meters. With respect to compliant smart meters in the non-domestic sector, the terms for use of core services should be offered on a similar basis as those offered for the same services in the domestic sector. Offers with respect to advance meters should be subject to the cost of providing a service, including the cost of any investigations to determine whether particular metering systems comply with the existing requirements."

#### Discussion

3.58. The services that it is envisaged that DCC will or may provide may be categorised as follows:

*Core services*: are key communication services with smart meters that will be defined in the SEC and which we have developed with prospective DCC users. The initial procurement of DCC services will support the provision of these core services by DCC. DCC would be required to provide core services to any authorised user.

*Elective services*: are additional communication services over and above core services, and which relate to energy use by consumers, for example more frequent meter readings that in the core service. DCC may offer to provide these services to users, or may be required to offer to provide them, depending on the metering type of metering system involved.

*Other SEC Services:* DCC may also provide other services to SEC parties as defined in the SEC. For example, if in the future DCC provides data collection and aggregation services they would be set out in the SEC.

*Value-added Services:* these are other non-energy related services. whose provision may impact the systems DCC uses to provide core and elective services to users. For example provision of communications for smart metering outside the energy sector.

Table 3.1: Sum	mary of DCC	<b>Services</b>
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	Description	Limitations/obligations on DCC
Core services, for example, basic periodic meter read.	A list of communication services identified in the SEC as being necessary from initial DCC operation. These will be supported by the initial DCC service provider contracts.	Required to provide to all authorised SEC parties.
Elective services, for example, more frequent meter readings	Communications related to energy use by consumers and that involve a smart metering system or other energy metering system with which DCC communicates.	Required to offer terms to all authorised parties.
Other SEC services, for example, data processing	Other services set out in the SEC.	Required or permitted to provide as set out in the SEC.
Value-added services, for example, communication with smart meters outside the energy sector	Services which rely on the systems that DCC has in place to provide core and elective services but which do not relate to energy metering systems or are not concerned with energy use.	Permitted to offer terms only with the consent of the Authority.
Other wholly unrelated services - e.g. catering services.	Any other service not falling into the above categories	Provision of such services will be limited to a de-minimis level for financial ring-fencing reasons.

- 3.59. We have considered what obligations should fall on DCC in relation to each of these services. For example, which services DCC should be required to provide or offer to provide, and to whom; and which services DCC is permitted to provide.
- 3.60. Where DCC offers terms for the provision of elective and value-added services, the detailed terms of these services could be made available to other DCC users. Alternatively, the information provided could be limited to what other users require to assess the impact on the services they receive from DCC, including any contribution to DCC's fixed costs from these services.
- 3.61. If the full details of all services are made available to all, then it is possible that this may stifle innovation because users may be reluctant to invest significant effort in defining new services if information on the services is readily available to their competitors. Conversely, if DCC does not disclose information about its services to users in general, then the DCC arrangements may lack transparency which may undermine the ability of users to scrutinise the operation of DCC's business. Even if information on the nature of such services is made generally available, it may be appropriate that the detailed commercial terms and conditions of DCC providing them should be kept confidential from other users.
- 3.62. Finally, whether the detailed terms and conditions of elective services (and possibly value-added services) should be required to be set out in the SEC needs to be considered. In each case, there may be standard conditions relating to security and accreditation etc. within the SEC which those receiving such services must be required to comply with. Such service recipients could either be required to comply with these conditions directly by becoming SEC parties or DCC could be required to enforce these

conditions on such parties. Furthermore any bespoke commercial terms for the provision of such services could be set out in the SEC itself or in bilateral agreements.

3.63. Finally, the Response concluded that registration could be transferred to DCC within 2-3 years of DCC providing its initial services DCC.

Proposals

- 3.64. We propose to include the following matters in DCC's licence in relation to service provision:
  - a) DCC will either be required or permitted to offer terms to provide core and elective services. Whether it is required or permitted to offer terms depends on the nature of the metering system concerned.
  - b) DCC will also be permitted (or required) to provide additional services which are set out in the SEC. Where these are not included in the initial SEC, a code modification approved by the Authority would be needed before DCC can provide the service.
  - c) DCC will initially provide translation and secure access control. Communication services will include core services which will be defined in the initial SEC and elective services, i.e. services that the user can elect to seek from DCC.
  - d) The DCC licence will include conditions that require DCC to offer terms for the provision of core and elective services in relation to:
    - compliant smart metering systems associated with a supply to a consumer premises; and
    - certain non-compliant metering systems associated with a supply to a consumer premises (e.g. AMR meters).

In the case of compliant smart meters, it is intended that the offer of terms for provision of core services will be conditional only upon the person seeking services complying with the SEC and, where necessary, being properly authorised by the consumer to receive those services. Hence, so long as the user is an appropriately authorised party, DCC will be required to provide the relevant core services in accordance with the SEC. The precise scope of meters which falls into the non-compliant category requires further consideration.

- e) DCC should be permitted to offer terms for core and elective services in relation to:
  - other non-compliant metering systems where the metering system is associated with a supply to a consumer premises; and
  - any compliant smart meter which is not associated with a supply to a consumer premises.

Again, the precise scope of the other "non-compliant" metering systems to which this applies will require definition in order that the obligations on DCC can be clearly defined.

f) The scope of the elective services that DCC can or must offer to the parties outlined in the preceding paragraph should be, at least initially, limited to metering those which:

- involve the use of a the relevant metering system; and
- are concerned with energy use by the consumer.
- 3.65. DCC will therefore provide a range of services which includes core and elective services and potentially other services as defined in the SEC. DCC will be required to have in place systems and processes in order to provide these services to users. Where permitted by the Authority DCC may also offer "value-added" services.
- 3.66. We will consider further what information should be provided by DCC to other DCC users, where it offers terms for the provision of elective and value-added services, .
- 3.67. The DCC licence will also include conditions for seeking approval and publishing a statement of charges compliant with the charging methodology set out in the SEC.
- 3.68. A further condition would oblige DCC to provide registration services, with this condition coming into effect only on direction by the Authority and/or the Secretary of State. Please refer to the section on "Requirement to provide additional services in the future" for a further discussion of this (see paragraphs 3.179 to 3.186).

Consultation Question	
20.	Do you agree with the definitions of the services that DCC should be required or permitted to provide?
21.	In relation to which non-compliant metering systems should DCC be <i>required</i> to offer services?
22.	In relation to which non-compliant metering systems associated with energy supply at consumer premises should DCC be <i>permitted</i> to offer services?
23.	<ul> <li>What information should be made available to all users about: <ul> <li>elective services;</li> <li>value-added services?</li> </ul> </li> <li>Should information be restricted to that required to assess the impact on other users of DCC services or should there be full transparency? Should DCC be required to make available the detailed commercial terms and conditions of such services?</li> </ul>
24.	Do you think the detailed terms and conditions for elective and value-added services should be set out in the SEC or included in bilateral agreements between DCC and persons to whom it is providing services?
25.	Are there any other matters that we have not addressed related to the nature of services provided by DCC? (Note that provisions addressing independence and non-discrimination in the provision of DCC services are covered in paragraphs 3.119 to 3.120).

# Procurement

Issue

- 3.69. The Government concluded in the Response that DCC will be a "thin" organisation, responsible for procuring the bulk of its services from external service providers rather than self-provision.
- 3.70. This section considers the licence conditions that will be required to specify and govern those activities that DCC must procure externally and those that may be performed in house, and to place appropriate constraints on the manner in which DCC undertakes procurement.

#### Previous Government Conclusions

- 3.71. Paragraph 5.9 of the Response concludes that, "DCC should be responsible for procuring the necessary equipment and services to provide WAN communications, including the WAN modules".
- 3.72. Paragraph 3.13 of the supporting document on Central Communication and Data Management states that DCC will procure the bulk of the services and that "*this approach has a number of benefits including:* 
  - offering greater flexibility: This should be especially valuable with respect to future evolution of the smart metering market
  - allowing DCC to concentrate on procuring best value services from the market and hence provide best value services to its users
  - enabling more efficient allocation of risk, including passing the investment risk to individual service providers."
- 3.73. Paragraph 3.15 states, "The Government has confirmed the Prospectus position that DCC should be independent from data and communication service providers. This should provide confidence that DCC does not favour any organisation to which it may be associated through the award of service provision contracts."

# **Resources to be Procured**

- 3.74. Given that DCC will procure externally the bulk of the resources that it requires in order to provide DCC Services to users, we consider it appropriate to include conditions governing the manner of that procurement.
- 3.75. Where material benefits would arise from DCC externally procuring the resources it needs to provide services to users, DCC should be required to undertake an external procurement rather than providing them in-house. Nevertheless, we expect that DCC may provide certain services in house, such as service provider management and procurement functions, and financial and personnel services.
- 3.76. We propose to introduce a condition to define the activities that can be carried out internally by DCC and the activities that must be procured from external providers. The definition could be expressed in terms of either:

- the activities that it must procure, which gives it the option to procure or undertake internally all other activities; or
- the activities that it may self-provide, which implies that all other activities must be procured; or
- setting out high-level principles in the licence by which the delineation may be determined.
- 3.77. The relevant DCCG Working Group considered that a combination of (a) and (c), whereby the DCC licence would include general principles for when DCC should procure externally or self-provide resources and, in addition, a specific list of resources that DCC *must* externally procure would also be included.

# Proposals

3.78. We propose to set out in the legal framework applying to DCC a list of specific services that DCC must externally procure in addition to a set of high-level principles which will determine what other services DCC must also externally procure.

# Consultation Question

# 26. Do you agree that DCC should be required to externally procure specific services and have principles that determine what other services it should externally procure?

# Procurement Objectives and Approach to Procurement

- 3.79. While the initial procurement of service providers is being progressed by Government, DCC will be required to procure additional contracts to provide additional services or to replace the initial service provider contracts as their duration comes to an end. It will be important that DCC follows best practice in its procurement activities in order to ensure that its users, and ultimately consumers, benefit from well-run competitive procurement processes.
- 3.80. Therefore, in addition to its general objectives we consider that DCC should also be required to have regard to a number of specific objectives relating to its procurement of external services.
- 3.81. DCC will be required to competitively procure certain services externally rather than undertake the activities itself. This is likely to be achieved by procuring services from a number of different service providers. DCC will need to ensure that the services procured from individual service providers fit together to form a coherent, functional and secure end-to-end solution.
- 3.82. To deliver value for money for DCC users, we consider it appropriate to oblige DCC to facilitate competition in the procurement of its services. This does not mean that DCC should be under an obligation to foster competition more generally in the markets from which it procures its services (for example, the telecommunications market), but that it

should seek to facilitate competition more specifically in the services that it is seeking to procure.

- 3.83. Furthermore, DCC will be required to build an appropriate level of flexibility into the services it procures. While placing an obligation on DCC to deliver an efficient, economic and co-ordinated system *over time* might be capable of being interpreted as requiring DCC to consider flexible solutions, it may be appropriate to make the requirement explicit. An alternative approach may be to require DCC to take into account the needs of future users as well as current users.
- 3.84. It is important that DCC's procurement objectives should be such that a service provider is not able to submit what appears to be an initially low bid for service provision and introduce additional costs later on in the life of the contract. Equally, a service provider should not be able to extract profits from the services being provided to DCC in earlier years and fail to provide services towards the end of the contract term. DCC will therefore be required to demonstrate the financial viability of a service provider over the life of the contract it awards.
- 3.85. There are a number of other matters relating to the procurement of resources from service providers that it may be appropriate to require of DCC, for example:
  - establishment of appropriate business continuity arrangements;
  - ensuring that service providers do not act to cause DCC to discriminate in its service provision to users; and
  - introducing appropriate performance incentives and liabilities.
- 3.86. Furthermore, in order to ensure that DCC has regard to certain principles when undertaking its procurement and contract management activity, we propose that DCC should be required to develop a "procurement and contract management approach" document, which should set out DCC's approach to procurement and contract management. This document will need to be consistent with DCC's general objectives and its procurement objectives.
- 3.87. The procurement and contract management approach document would need to be revised and consulted upon from time to time, either annually or on an ad-hoc basis. It may also be appropriate for the licence to provide for the document to be subject to approval by the Authority and/or the Secretary of State as it would be important that the DCC procurement approach takes into account the impact of broader public policy objectives and initiatives relevant to its business.
- 3.88. When developing obligations for DCC relating to the objectives and principles governing its procurement and contract management activities, as the detail of those obligations are developed, we will consider further whether it is appropriate for such requirements to be enshrined in licence conditions, or whether some of the requirements are better provided for in the SEC or some other part of the legal framework.

# Proposals

3.89. We propose to include the following provisions in the legal framework applying to DCC:

- In addition to its general objectives, the procurement objectives for DCC should be designed to ensure that:
  - the services procured from individual service providers fit together to form a coherent, functional and secure end-to-end solution;
  - the way in which it procures services from third parties facilitates competition in the provision of services to DCC;
  - DCC achieves an appropriate level of flexibility in the services that it procures; and
  - DCC adopts, where relevant, best industry practice approaches to the procurement and management of its service provider contracts.
- a requirement that service provider contracts should include provisions relating to the continuity of service in the event of financial or operational failure of a service provider; and.
- an obligation on DCC to produce, consult upon and comply with a procurement and contract management approach document that is designed to achieve the procurement objectives:

The procurement and contact management approach document would be required to be produced by DCC and be consistent with its general objectives and procurement objectives. Views are invited upon whether the DCC licence should provide that the document is required to be submitted for approval by the Authority or the Secretary of State to ensure that it takes into account the impact of broader public policy objectives and relevant initiatives.

- 3.90. We will consider further how best industry procurement practice should be incorporated into DCC's licence obligations
- 3.91. See also paragraphs 3.121 to 3.155 for a further discussion of matters relating to the financial viability and business continuity of service providers. Please also refer to paragraphs 7.21 to 7.25 for a discussion of the audit arrangements relating to DCC procurement activities.

Consultation Question	
27.	Do you agree with the procurement objectives for DCC identified above?
28.	Do you agree that DCC should be required to produce a procurement and contract management approach document?
29.	We seek your views as to whether the procurement and contract management approach document should be required to be submitted for approval by the Authority and/or the Secretary of State.

# Independence

Issue

- 3.93. We recognise the importance of DCC providing its services in a manner that does not unduly discriminate between users, and that DCC is managed in a way that provides assurance of its ongoing ability to provide those services.
- 3.94. A duty of independence would require that DCC be non-discriminatory in its provision of services to users. In order to promote best value for users and, ultimately, the consumer, it may also be appropriate to prohibit DCC from undertaking other activities which could compromise its perceived if not actual independence.

Previous Government Conclusions

3.95. The Prospectus Response states that:

"5.10 ... Given DCC's position in the domestic market, its ability to offer energy management services to domestic or non-domestic consumers will be restricted by the terms of its licence"; and

"5.13 ... appropriate controls will need to be considered during the development of the DCC regulatory framework to provide confidence that any user or group of users do(es) not have the ability to exert undue influence over the activities of DCC. ... The licence is expected to be granted for a fixed term. Ofgem will be responsible for regulation of this new licensed entity and will be able to take action if DCC fails to meet its licence obligations".

3.96. The Response supporting document on Central Communication and Data Management further states that:

*"2.79... to facilitate the ongoing evolution of the market for energy management and energy efficiency services, DCC's ability to offer these services should be limited."* 

"3.15. The Government has confirmed the Prospectus position that DCC should be independent from data and communication service providers. This should provide confidence that DCC does not favour any organisation to which it may be associated through the award of service provision contracts""

- 3.97. There are a number of potential issues related to the independence of DCC which fall into a number of categories, including:
  - non-discrimination by DCC in the provision of its services;
  - independence of DCC from service providers;
  - independence of DCC from users;
  - independence of service providers from users;
  - restrictions on the use of confidential information; and
  - the use of DCC infrastructure to provide other value-added services.

- 3.98. There is also the issue of the scope of any restrictions on these matters, in particular whether they apply only to DCC or whether they apply also to:
  - an affiliate, being any holding company of the licensee, any subsidiary of the licensee or any subsidiary of a holding company of the licensee;
  - a related undertaking, being a company over which the licensee holds a share of 20% or more; and
  - a relevant associate, being an affiliate or related undertaking of the licensee in which the licensee hold shares or other investments.

# General Prohibition on Discrimination

- 3.99. Non-discrimination conditions in other energy licences are typically limited to the services that they provide rather than to all aspects of their business. For example, Standard Condition C7 of the Electricity Transmission Licence states, "*In the provision of use of system or in the carrying out of works for the purpose of connection to the national electricity transmission system,* the licensee shall not discriminate as between any persons or classes of persons."
- 3.100. In line with the Prospectus Response it is proposed that conditions in DCC's licence that would explicitly require it not to unduly discriminate between users, at least in respect of the provision of services under the SEC.
- 3.101. The non-discrimination provisions would not necessarily apply in respect of other aspects of DCC's activities. For instance, an obligation of non-discrimination would be owed to service providers, and the telecommunications and IT industries from which they will be drawn, only to the extent required by separate licence conditions to promote, in the way that services are procured, competition in the provision of services to DCC.
- 3.102. We will consider further whether the scope of DCC's non-discrimination obligations should extend also to Value Added Services. Given that the types of service that may become Value Added is unknown, it may be appropriate to make provision for Authority to decide whether to impose any further non-discrimination obligations on DCC when deciding to permit DCC to provide any such services.

# DCC prevented from being a service provider

- 3.103. We propose that DCC will be subject to a general obligation to ensure that its services are developed and maintained in an efficient and economical manner. In principle, this should mean that DCC would be required to procure services externally rather than self-provide where it would be more efficient and economical to do so.
- 3.104. Notwithstanding these obligations, there would be a clear conflict of interest were DCC to both compete to provide and procure such services and we intend to put in place measures to prevent this.

# DCC prevented from being a user

3.105. We have also considered the extent to which DCC should be limited from competing with its users, i.e. those who receive data and communication services from DCC (service recipients). Users will include: gas and electricity suppliers; shippers; DNOs;

gas transporters; ESCOs; etc. Were DCC to be in competition with such users, it might derive an advantage by also undertaking the DCC role.

3.106. In order to prevent DCC from being a user it may be appropriate to include a licence condition prohibiting DCC from undertaking any of the activities of users or of receiving services from itself.

# Use of Confidential Information

3.107. We consider that DCC should not be automatically permitted to use confidential information it has access to by virtue of carrying out the DCC role for the provision of services other than those which it is explicitly permitted to provide under its licence. DCC would not, for example, be permitted to make use of consumer data collected from energy smart meters.

# Use of DCC infrastructure to provide other services

- 3.108. We considered whether DCC should be permitted to use the infrastructure it has in place by virtue of it being DCC to provide services in markets other than gas and electricity, such as in the telecommunications sector. If this did not impact adversely on gas and electricity consumers, providing such other services might bring some benefits to the extent that any additional revenues reduced the cost of providing services to users.
- 3.109. There are many issues to be considered in this area, such as: any impact on services provided by DCC to users as a result of DCC leveraging off its smart metering communications arrangements to provide services in other areas; the financial arrangements needed to ensure that users do not cross-subsidise these other activities; etc.

# Affiliations between DCC and users and service providers

- 3.110. In addition to restrictions on DCC, it may also be appropriate to impose restrictions on its affiliates and its related undertakings (and potentially others in which DCC holds an interest). Options in this area include:
  - extending the constraints preventing DCC from being a user or service provider to all its affiliates, related undertakings;
  - adopting an approach similar to that applying to Distribution Network Operators ("DNOs"), Transmission Owners ("TOs") and Gas Transporters ("GTs"), whereby affiliates are not prevented from carrying out activities (although there may be additional requirements for business separation from such affiliates); or
  - some other approach.
- 3.111. It could be argued that the ability for DCC to favour an affiliate who supplies electricity or gas, is no more or less an issue than a DNO or gas distributer who can favour an affiliate who supplies electricity or gas. On that basis, it might be considered appropriate that constraints on independence should be imposed that are similar to those that apply to DNOs and Gas Transporters, specifically that there must be business separation between DCC and its affiliates but that the activities of affiliates are not limited.

- 3.112. However, many of the existing potential conflicts of interest in the electricity and gas sectors have arisen as a consequence of historical industry structures, such as the combination of distribution and supply businesses in the Public Electricity Suppliers. Business separation has been introduced as supply competition has developed, and in response to new EU Directives. In the case of DCC and its service providers, there are no pre-existing structural arrangements that need to be accommodated. Nevertheless, a blanket restriction on any form of affiliations between DCC and users, or service providers and users, could limit the number and types of organisation that could compete to be DCC or a service provider.
- 3.113. In discussions with DCCG Working Group it was generally accepted that there should be no affiliations between DCC and its service providers. They argued that DCC would have a material influence on who was to be appointed to provide services and so a separation was needed to avoid perceived and actual conflicts of interest. Nevertheless, the DCCG Working Group accepted that it would probably not be practicable or appropriate to prohibit any form of relationship whatsoever, and that some form of de minimis affiliation should be permissible.
- 3.114. We also consider that potential harm could result were undue influence to be exerted over DCC by a user operating in a competitive environment (for example, a supplier or an energy services company). However where a user operates in a monopoly environment (for example, a network operator), we do not consider that any significant harm would result from the exercise of influence over DCC. Therefore any restriction on relationships between DCC and companies that are users operating in a monopoly environment would be considered disproportionate, although some business separation requirements may still be appropriate.
- 3.115. We suggest that no individual user that operates in a competitive environment (which may include all prospective users other than monopoly network licensees) should be permitted to have more than a 20% control in DCC. This is the level at which it might be considered that the individual user would potentially have an undue influence over DCC.
- 3.116. While a de minimis affiliation between DCC and service providers may be permitted, and any affiliation with a user operating in a competitive environment would be limited to 20%, we propose that DCC and any of its subsidiaries should be prohibited from holding shares in either users or service providers (or their affiliates or related undertakings). Preventing such holdings would help to ensure DCC independence without inappropriately limiting the scope of organisations that might wish to compete to become DCC.
- 3.117. We also considered whether any constraints should apply on affiliations between DCC service providers and DCC users, e.g. whether a supplier could be affiliated with a company that provides telecoms services to DCC.
- 3.118. This issue was discussed with the DCCG Working Group. They considered that DCC could provide oversight of service providers to ensure that discrimination was not occurring. In this instance, the degree of challenge and oversight that DCC could exercise over service providers coupled with transparency measures and competition in this sector might be sufficient to address any concerns over affiliations between service providers and users. It was noted that any constraints imposed on DCC service providers must apply over the lifetime of any contract and not just at the time

that contracts were struck. The DCCG Working Group members suggested that the degree of permitted affiliation might be dependent upon the nature of the service that a party was providing and how significant the effect of any discrimination might be.

Proposals

3.119. We propose to include the following package of constraints in DCC's licence:

- a prohibition on undue discrimination by DCC between users or classes of users;
- a prohibition on DCC, its affiliates or related undertakings being service providers, subject to a permissible de minimis level of affiliation;
- a requirement that no more than 20% of the shares or controlling interest in DCC can be owned (directly or indirectly) by any individual user operating in a competitive environment (i.e. shippers, suppliers, ESCOs);
- no explicit constraint on monopoly licensees (GTs, DNOs or transmission licensees) owning DCC, although, if any one of these licensees holds a greater than 20% share or controlling interest additional ring-fencing provisions may need to be considered;
- a prohibition on DCC or its subsidiaries owning any shares in users or service providers or their affiliates or related undertakings;
- a prohibition on the use of confidential information by DCC for any purpose other than for activities that it is explicitly permitted to undertake under its licence (where this will extend to a contractual restriction on the use of such information by its service providers also);
- a prohibition on DCC itself holding a gas or electricity supply licence, a shipper licence or a transmission, transportation or distribution licence;
- a prohibition on DCC competing with users in the activities that they undertake where such activities can only be undertaken using the services that DCC provides. It may be possible to achieve this simply by limiting the purposes for which DCC can use any data received or sent to smart metering systems to DCC Services and other services provided by DCC; and
- the standard provisions in relation to appointment of a Compliance Officer to apply to DCC in order to help secure compliance with these independence requirements as relevant.
- 3.120. It is not considered necessary to introduce any specific requirement on DCC to enforce any particular business separation requirements between service providers and users. However, it is expected that DCC will need to manage its service provider contracts to ensure that services are provided to users in a manner that does not discriminate between users or classes of users.

# **Consultation Question**

30. Is the scope of the proposed prohibition on discrimination, which is limited to undue discrimination between uses or classes of users, adequate?

31.	Are any specific provisions needed which require DCC not to discriminate between service providers? Or is it sufficient to rely on obligations on DCC to maintain and develop an economic system and, in the procurement of DCC services, to promote competition in the provision of such services?
32.	Do you agree that DCC should be independent of service providers? Do you agree that a de minimis level of affiliation between DCC and service providers should be permissible?
33.	What level of affiliation do you consider should be set for the maximum level of shareholding or control of any individual service provider may have in DCC?
34.	Do you agree with the business separation between DCC and users that is proposed? More specifically, do you agree that no DCC user that operates in a competitive environment should be permitted to have more than a 20% shareholding or control in DCC, and that DCC and its subsidiaries should not be permitted to have any shareholdings in users or service providers?
35.	Do you agree that it is not necessary to explicitly require business separation between DCC users and DCC service providers?
36.	Should DCC be prohibited from using confidential information for any purpose other than the licensed DCC activity? Should DCC be obliged to impose this restriction on service providers contractually?

# Financial Viability of DCC, Business Continuity and Special Administration

Issue

3.121. To ensure DCC's ability to fulfil its license obligations is not jeopardised by the provision of unlicensed services, it may be appropriate to financially ring-fence DCC and limit the extent of its other activities. This section considers the appropriate set of restrictions that should apply to DCC to ensure that the financing of its licensable activity is sufficiently safeguarded.

# Previous Government Conclusions

3.122. In the Response it was stated that in order to address risks associated with business continuity, DCC should have sufficient financial security to provide assurance of delivery against its obligations.

# Discussion

# Financial Ring-Fencing and Business Continuity for DCC

- 3.123. Existing gas and electricity network licences contain financial ring-fencing conditions and Ofgem is currently considering changes to these arrangements<sup>7</sup>.
- 3.124. We consider that the proposed and existing constraints applying to network licensees and set out in Ofgem's consultation are desirable in principle, for DCC with the following exceptions:
  - credit rating requirements imposed on network licensees might not be readily applicable to DCC given that it may be a new "start-up" organisation and given that it is intended to be a "thin" organisation.;
  - further consideration of the independence requirements that should be imposed on the composition of the DCC board is required.
- 3.125. In applying ring-fencing conditions to DCC it will be necessary to consider their detailed application in the particular context of DCC as the detail of the licence is drafted and in light of Ofgem's conclusions on the consultation.
- 3.126. We note that DCC will differ from existing network licensees in that it is expected to be a "thin" organisation that will not itself own substantial assets but will instead contract with third parties to procure services. As this is the case, a "traditional" credit rating based assessment might not be appropriate for DCC. It is also possible that, unless specific requirements are placed on DCC, the value of the equity in the company might be small. This could be a concern because it is intended that DCC will be subject to certain performance incentives and it would not be desirable to create a situation where, if DCC performs poorly, it is in the greater interests of the shareholders to cease operating the company rather than redress poor performance.
- 3.127. One solution might be to seek some form of financial security from DCC shareholders with the amount being linked to the amount that DCC might be expected to lose if it performs poorly over a particular period. This would be intended to provide an incentive to improve, rather than to cease DCC operations. However a balance needs to be struck such that any financial security requirements are set at a level that is sufficient to deter DCC from "walking away" where it is performing poorly, but not so high that it unnecessarily limits potential applicants for the DCC role.
- 3.128. Where an early licence revocation takes place (for example, where the DCC licence is revoked for material breach, etc., but not in the case where the Authority and DCC agree that the licence should be terminated early) we consider that it may be appropriate for DCC to be liable for a fee which reflects some or all of the costs of the licence application process that would need to be run in order to appoint a successor DCC. It is also necessary to consider whether the financial security provided by DCC shareholders would need to cover this amount.
- 3.129. It is already the case that certain network licence conditions are drafted to provide the ability for the Authority to approve alternatives to credit ratings as a form of guarantee.

<sup>&</sup>lt;sup>7</sup> "Proposed Modification to Ring-Fence Conditions in Network Licences", Ofgem, March 2011

For example standard condition E11 applicable to offshore electricity transmission licences states that:

"The licensee may propose to the Authority alternative financial arrangements which may include, but is not limited to, providing a security, for example in the form of a deposit or an unconditional irrevocable letter of credit, the latter being exercisable under English law within GB drawn on a bank with a credit rating equivalent to at least "A-" with a credit rating agency recognised by Ofgem (i.e. Standard & Poors, Moodys, Fitch) residing in a country with a credit rating of at least "A" to a value equal to twelve months gross operating expenditure. Such a proposal by the licensee shall contain sufficient information to enable the Authority to consider whether the proposed alternative financial arrangements demonstrate sufficient financial standing."

- 3.130. Rather than being prescriptive as to what alternative arrangements might be required, it may be appropriate to allow DCC to put forward alternative financial security arrangements for the approval of the Authority.
- 3.131. Where an alternative approach to simply requiring a particular credit rating is adopted, the level of financial security required should be based on an assessment of the possible level of unpaid DCC debt. This, in turn is dependent upon a number of factors including:
  - the detailed cashflow arrangements for DCC. It is currently anticipated that DCC would receive revenues from users on average around one month prior to making payments to service providers, although this needs to be considered in detail in the development of the SEC;
  - the arrangements for the appointment of a special administrator in the event that a special administration scheme is capable of being introduced;
  - the level of any limits on indebtedness that are imposed on DCC;
  - any reductions in revenue that might arise from DCC's performance incentive scheme (to the extent not already taken into account in the above); and
  - any charges that may be levied on DCC as a consequence of an early licence revocation.
- 3.132. In addition, it will be important to take into account the fact that DCC is expected to be a relatively "thin" organisation, with relatively modest internal costs, and relatively low capitalisation. This might place a limit on the level of any financial guarantee that it is reasonable to expect DCC to provide. It is also the case that the level of potential bad debt that DCC might be exposed to under the contractual arrangements (i.e. a combination of the SEC and the service provider contracts) will need to be carefully considered as part of the drafting of the contracts themselves. For example it may to be appropriate to ensure that DCC is not unduly exposed to volume risks that it could not control. In developing the SEC and service provider contracts, consideration will also need to be given to whether users of DCC services should be required to provide any security cover, how any bad-debts owed to DCC by its users will be treated and to the relative timing of the receipt of revenues by DCC and the payments that DCC must make to service providers under the service provider contracts.

# Special Administration

- 3.133. In addition to financial ring-fencing protections, existing energy network licensees are also covered by a special administration regime. Consideration should be given as to whether it would be appropriate to seek also to make DCC the subject of special administration arrangements.
- 3.134. Part 3, Chapter 3 of the Energy Act 2004<sup>8</sup> provides for Energy Administration Orders (EAOs) to be made by a court in relation to a "protected energy company" (in this case network licensees in gas and electricity). These orders may direct that the business and property of the energy company are to be managed by a person (an energy administrator) appointed by the court.
- 3.135. The underlying effect is to allow for an administrator to "step-in" and manage a financially failing licensee and for financial support to be provided.
- 3.136. Section 168 also provides for the Secretary of State to make modifications to special or standard conditions of any licence where they consider it appropriate to do so in connection with the provision made by Chapter 3. Section 169 makes it clear that these modifications may include provisions to require licensees to modify their charges so as to raise amounts to meet the expenses of an energy administration order.
- 3.137. Chapter V of the 2010-11 Energy Bill includes clauses that provide for a special administration regime to apply also to gas and electricity suppliers.
- 3.138. In discussions with the DCCG Working Groups, the potential consequences of a DCC failure were identified to include the following:
  - DCC being wound up and its assets distributed to its creditors;
  - DCC's licence may be revoked; and/or
  - In the absence of sufficient funds for DCC to pay its creditors, some service providers may withhold their services from DCC.
- 3.139. While the Authority would need to take into account its duty to protect the interests of consumers, it remains the case that DCC's ability to continue to provide services to users could be jeopardised in the event that DCC faces financial difficulties.
- 3.140. It was also identified that the consequences of a withdrawal of DCC's services following a financial failure might include:
  - the inability of suppliers to send or receive communications (via DCC) to the smart metering systems of their consumers, resulting in the inability of suppliers to, amongst other things:
    - accurately bill their consumers;
    - upload new tariff information;
    - arrange for the information to be sent into the wholesale settlement process; and

<sup>&</sup>lt;sup>8</sup> From Section 154

- remotely administer pre-payment meters, including crediting the meter with pre-payment top-ups).
- the inability of other DCC users to communicate (via DCC) with smart metering systems, resulting in:
  - loss of ESCO services which rely on smart metering communications; and
  - loss of general distribution network operational capability and/or smart grid services which rely on smart metering communication.
- 3.141. The consequences of such a failure, particularly if for an extended period could be relatively severe. In the short term, possibly the most important adverse impact would be in relation to pre-payment customers and, whilst it is expected that smart meters will be capable of supporting local credit top-up of pre-payment meters in the event of a WAN failure, it is unlikely that this functionality would deliver a robust solution to widespread (or total) withdrawal of WAN functionality for any extended period. If WAN based communications are to be used to support smart grid functionality then over time, the financial failure of DCC could have adverse consequences for control of the distribution networks.
- 3.142. In order to protect against these consequences in the event of a financial failure of DCC, it might be appropriate for a special administration regime to apply
- 3.143. Furthermore, it might be appropriate to consider whether any special administration should be capable of being triggered by a licence revocation event arising from DCC materially or consistently failing to meet its service levels so as to ensure that users are also appropriately protected in such circumstances. Whether or not this may be necessary might depend upon the speed with which a successor DCC could be appointed under a fast-track licence application process in such circumstances. Please refer to chapter 9 for a further discussion of this.
- 3.144. In order for a special administration regime to be applied to DCC, it would be necessary for additional primary legislation to be enacted.

# Financial Ring-Fencing and Business Continuity for DCC service providers

- 3.145. In addition to considering financial ring-fencing of DCC, it is necessary also to consider financial ring-fencing and business continuity for DCC service providers.
- 3.146. Whilst, in principle, the failure of a major service provider could be as severe as a financial failure of DCC itself, the practicalities of extending a special administration regime to service providers who, in general, would not themselves be gas or electricity licensees and who may themselves rely on sub-contractors (who could themselves fall into financial difficulty) may be significant, and may have a materially adverse impact on the ability of DCC to competitively procure its services.
- 3.147. Rather than seeking to impose an equivalent range of financial constraints on service providers, we consider that any obligations upon DCC designed to ensure uninterrupted service provision might be more appropriately structured around an obligation to ensure that service providers can provide continuity of service and the requirements on DCC to demonstrate this.
- 3.148. In certain circumstances, it may also be appropriate for DCC to take step-in rights whereby DCC or a person nominated by DCC could take over the management of

failing service provider services. The requirement to include such provisions for critical services could be included in DCC's licence.

# Proposals

- 3.149. We propose to introduce a package of financial constraints to be applied to DCC, which should mirror those placed on network licensees. We will examine the requirements that apply to network licensees before identifying an appropriate equivalent requirements for DCC. The detailed arrangements will be refined in light of the outcome of Ofgem's consultation on proposed financial ring-fence conditions in network operator licence conditions. Subject to this, and drawing on the current constraints imposed in existing network licences, we propose to include conditions regarding:
  - disposal of relevant assets
  - restriction of activity and financial ring-fencing
  - availability of resources
  - undertaking from the ultimate controller
  - restriction on indebtedness
- 3.150. In relation to the credit rating of the licensee, we propose to adopt a flexible approach, as is applied to offshore transmission owners, whereby DCC can put forward alternative security arrangements to Ofgem.
- 3.151. Where an alternative approach is adopted, we propose that the amount of financial security provided by DCC should be linked to the level of potential financial exposure that the DCC could have at any point in time. The level of exposure will depend upon the detail of the SEC and service provider contracts. In setting the level of security required, it will also be necessary to take into account the fact that DCC is expected to be a relatively "thin" organisation with a modest level of internal costs.
- 3.152. We also invite views on whether DCC should be liable to pay a proportion of the additional costs of running a new DCC licence application process in the event that the DCC's licence was revoked early, and whether any security from DCC would need to cover this potential liability.
- 3.153. We also invite views on whether a special administration regime should be capable of being applied to DCC to provide protection against financial failure of DCC. It is noted that in the event that it is decided that a special administration regime should apply to DCC, additional legislation will be needed to put this in place, and any such regime would therefore be dependent upon these legislative changes being made.
- 3.154. In relation to service providers, we propose to include the following requirements on DCC:
  - include financial standing of major service providers as a key procurement criterion;
  - be required to monitor and report on the financial standing of service providers; and
  - require service providers to have in place appropriate business continuity plans.

3.155. It is also for consideration whether DCC needs to include in its service provider contracts any further protections which help to secure against, or mitigate the consequences of, a financial failure of a major service provider.

Consultation Questions	
37.	To what extent do you believe that the existing financial ring fencing provisions (and those proposed by Ofgem in its recent consultation on this issue) should be included in DCC's licence?
38.	Do you agree that a flexible approach to financial security should be adopted and, if a financial security is required, what level of financial security should be provided?
39.	What are your views on whether it would be appropriate to require DCC to pay for a proportion of the costs of appointing a new DCC in the event of an early licence revocation? Do you think that this potential liability should be reflected in the level of financial security required from DCC?
40.	Are there any other conditions that you consider should be imposed in DCC's licence to ensure its continued financial viability?
41.	Would it be appropriate for a special administration scheme to apply to DCC?
42.	Do you agree with that DCC should be required to ensure business continuity of service providers and should monitor the provisions that they have in place to deliver business continuity?
43.	Do you believe that DCC needs to include in its service provider contracts any further protections which help to secure against, or mitigate the consequences of, a financial failure of a major service provider? Please provide examples of any additional protections you consider suitable.

# Initial DCC licence Duration and Appointment of a DCC Successor

Issue

3.156. The Government has previously concluded that the DCC licence term should be fixed, with a successor DCC potentially being appointed to take on the role at the end of the term. There are also circumstances in which the licence of an incumbent DCC might be revoked. In either event, it is considered that DCC's licence will need to include provision for dealing with a transfer of responsibilities from the incumbent DCC to a successor.

#### Discussion

3.157. The Government expectation to grant the DCC licence for a fixed term reflects the desire to appoint DCC through a competitive process. It is intended that the initial DCC

should have sufficient time to fully establish the initial DCC service and potentially undertake a re-procurement exercise.

- 3.158. In light of this, our current view is that the duration of the initial DCC licence should be a period of ten years. This will allow the initial DCC to establish steady-state services.
- 3.159. While consideration is still being given to the structure and duration of the initial DCC service provider contracts, it is envisaged that the initial DCC data contacts will run for seven to nine years and the communication contracts for nine to fifteen years with options to extend the contracts by three and five years respectively. Even with a ten year licence term, given the durations and extension options for initial service provider contracts that are being considered, it remains possible that clashes could arise where a major service provider procurement exercise needs to be undertaken at same time that a replacement DCC needs to be appointed. In order to provide flexibility to avoid such clashes, we propose to allow for the duration of the initial DCC licence to be capable of being extended for a period of up to an additional 5 years.
- Any decision to extend the duration of the DCC licence, including the duration of any 3.160. extension, would be taken by the Authority in light of decisions taken over whether or not to exercise options to extend the service provider contracts. Applicants seeking to become the DCC licensee would be expected to submit cost forecasts covering this potential extension period as part of the licence application process. These would be taken into account in assessing the relative merits of applications to become DCC. In the event of a licence period extension, the costs submitted would be reflected in allowable DCC revenues. Given the timescales involved, it may also be appropriate to provide for these costs to be reviewed in the event that there had been material changes to any assumptions underpinning the original cost submissions and in which case any allowable revenue adjustments needed to reflect the consequences of any such material changes would need to be determined by the Authority. If the DCC licensee did not agree with any adjustments proposed by the Authority, there would be the opportunity for these matters to be referred to the Competition Commission, i.e. a process akin to a price control would apply to any adjustments.
- 3.161. At the end of a DCC licence term, it is intended that service provider contracts will be transferred from an incumbent DCC to its successor. Legal issues over transfers could arise if DCC entered into any contracts with third parties that were critical to DCC's operation and which did not explicitly include provisions for their transfer to a DCC's successor. This is because it would not be possible, through licence conditions alone, to oblige such third parties to agree to a transfer of the contract without their agreement. Consequently, we propose to require DCC to include provisions in service provider contracts which provide for the transfer of critical service provider contracts to a successor DCC. Furthermore, where DCC holds any intellectual property rights necessary for the operation of its business, these would also be required to be transferred to a successor DCC.
- 3.162. While licence obligations would need to be placed on DCC requiring it to ensure that any major service provider contracts can be transferred to its successor, it may not be practicable or desirable for DCC to negotiate such terms for each and every minor contract that it enters into. For example, a DCC licensee would be expected to have, or be able to readily acquire its own offices etc. and it would probably not be necessary to require DCC to include transfer provisions in contracts of this nature. Hence obligations to include such conditions in DCC contracts could be limited to contracts of

a critical nature in relation to services that could not readily be acquired at a competitive price on the open market, or where DCC has incurred material fixed costs in the procurement of a service which have not been fully depreciated.

- 3.163. At the time of transfer from one DCC to its successor, it may be necessary to transfer accrued rights and liabilities under ongoing service provider contracts and the SEC from the incumbent DCC to its successor. Payments may need to be made between incoming and outgoing DCC's to support the transfer arrangements.
- 3.164. While it is proposed to grant the initial DCC licence for a period of ten years (with a possible 5 year extension), it is also considered appropriate to be able to revoke the licence in the event that DCC materially or consistently fails to meet service levels. In this case, it would be possible for a successor DCC to be appointed prior to the expiry of the ten year period.

#### Proposals

- 3.165. Our current view is that the DCC licence should be issued for a fixed term of ten years with an ability to extend this for up to five years. Any decision to extend the duration of the licence would rest with the Authority.
- 3.166. We propose that where DCC enters into any contracts for the procurement of services that are critical to the provision of DCC services to users, these should be capable for being transferred to any successor DCC. This would include all major service provider contracts but need not apply to relatively minor services that an incoming DCC could readily procure at a competitive price on the open market.
- 3.167. We will consider further the list of matters that needs to be included in DCC's licence conditions relating to transfer to a successor and is likely to include some or all of the following matters:
  - novation of service provider contracts to the successor DCC (including a requirement that any DCC service provider contracts include terms that allow them to be transferred);
  - novation of accrued rights and liabilities under the SEC/service provider contracts;
  - matters relating to the transfer of contracts associated with value-added services (to the extent that these are dealt with outside the SEC);
  - arrangements to ensure that IPR associated with the design of systems, software etc. can be transferred to the incoming DCC;
  - arrangements to ensure the incoming DCC is covered by any relevant licences (such as software licences);
  - any payments that may need to be made between the incumbent and successor DCC in relation to the transfer. Possibly including transfer of any over- or underrecoveries of user charges at the time of the transfer;
  - arrangements for the resolution of any disputes associated with the transfer and/or transfer of responsibility for dealing with outstanding disputes;

- potentially, the requirement for the incumbent DCC to enter into a contract with the successor to deal with the contractual transfer of rights from incumbent to successor;
- obligations on the incumbent to provide information and assistance to new applicant DCCs in support of the replacement DCC licence application process; and
- transfer of all relevant data and records.
- 3.168. We propose to provide for arrangements which allow a repeated or material failure to meet service levels to be capable of triggering a licence revocation.

Consultation Question	
44.	Do you agree that it is appropriate to grant the initial DCC licence for a ten year period?
45.	Do you agree that flexibility for the Authority to decide to extend the initial DCC's licence by up to 5 years would be desirable?
46.	Do you agree with the approach described for the treatment of DCC internal costs for any extension period?
47.	Do you agree that DCC should be required to ensure that any critical services can be transferred to a successor?
48.	What scope of matters governing the handover to a successor do you think need to be included in DCC's licence?
49.	Do you agree that DCC's licence should be capable of being revoked in the event of a repeated or material failure to meet service levels?

# Foundation and Subsequent Rollout Obligations

Issue

3.169. Specific activities might need to be undertaken by DCC in the foundation stage of the Smart Metering Implementation Programme, i.e. the period of time up to the switch-on of DCC services. It may also be appropriate for DCC to have additional obligations in the period from when it commences service provision to the completion of mass smart meter rollout. This section considers if provisions relating to these activities should be included with the DCC licence.

Previous Government Conclusions

3.170. The Response stated that:

"it is expected that a broad range of provisions dealing with transition to switching on DCC services and supporting the rollout of smart meters will need to be put in place to support the next stages of the programme, including the SEC's ongoing development."

- 3.171. It is envisaged that DCC would be subject to a number of obligations relating to the period from its appointment through to the establishment of its initial services. These may include:
  - obligations governing the requirement for and criteria governing the adoption of communication contracts in relation to smart meters installed prior to DCC communication services becoming operational;
  - continued establishment and integration of DCC systems and services based primarily on the initially procured services;
  - establishment of additional DCC self-provided services (e.g. helpdesk);
  - carrying out activities required to ensure compliance with its licence conditions (e.g. producing a charging statement, and other statements and documents required of it under licence);
  - putting in place similar arrangements where it is required to do so under the service provider contracts and SEC and potentially other codes to which it is required to be a party;
  - testing and trialling of DCC systems, users' systems and service providers' systems;
  - take-on of (some) smart metering systems installed prior to DCC being appointed; and
  - interim charging arrangements
- 3.172. We also propose to include an obligation on DCC to sign the initial service provider contracts.
- 3.173. Furthermore, in the period between the start of the provision of operational services by DCC and completion of rollout, we consider that additional obligations may need to include:
  - information provision relating to availability of DCC services as they are established and their capacity increases to meet rollout requirements; and
  - reporting on progress of rollout.
- 3.174. We recognise that these obligations will need to be developed as more detail of the requirements in the foundation and rollout stages of the programme become known. It is also noted that some of these obligations might benefit from also being contractually binding, for example in the initial SEC.
- 3.175. Furthermore, the detailed interactions between parties involved in such processes might best be capable of enforcement by the parties themselves in the first instance, rather than requiring the involvement of Ofgem in detailed matters. Enshrining many of the detailed arrangements in a code would also more easily allow those directly involved to develop and implement the necessary detail and would potentially provide for more flexible change mechanisms than delivering the obligations through licence conditions.

3.176. Finally, in the foundation and subsequent rollout period, it will be necessary to consider the extent to which the Secretary of State will need to be involved in defining and overseeing the detailed obligations necessary to ensure the successful establishment of DCC and ongoing smart-meter rollout. For example, the timing and nature of testing and trialling obligations will need to be co-ordinated with the establishment of DCC and its service providers; both of which are being progressed by the Smart Metering Implementation Programme. We consider that it will be appropriate for the Secretary of State to be responsible for decisions over certain matters in this period, whilst recognising that Ofgem will continue to have an ongoing parallel regulatory role. These matters will be considered further as part of the development of the detailed drafting of licences and the SEC.

# Proposals

- 3.177. We propose to include in the DCC licence a condition which gives it a high-level obligation in relation to its activities in the foundation period, i.e. those required to be undertaken by DCC prior to its provision of operational smart meter communication service ("go-live"). We propose that the detailed obligations required to support this should be dealt with in more flexible subsidiary documents which we will develop as part of the Smart Metering Implementation Programme. Compliance with these should be a requirement of the licence.
- 3.178. Similar arrangements should apply to additional obligations required to cover the period between the establishment of the initial DCC services ("go-live") and the completion of mass rollout, although specific issues (for example reporting) may be dealt with directly in DCC's licence.

# **Consultation Question**

50. Do you agree that the DCC licence should contain a condition which gives it a high-level obligation in relation to foundation and subsequent rollout, activities and that the detailed obligations can be dealt with as part of the development of the SEC?

# Requirement to provide additional services in the future

Issue

3.179. This section considers the way in which the requirement to provide meter point/supplier registration services in the future should be captured in the DCC licence.

Previous Government Conclusions

3.180. Supporting document 4 of the Response stated:

"The Government has also concluded that meter point/supplier registration of all metering points should be transferred to DCC. This will allow the change of supplier process to be streamlined delivering consumer benefits. It is considered that registration can be transferred to DCC within 2-3 years of DCC providing its initial services, during which period DCC will access the existing registration systems to verify whether a party is authorised to access a specified meter. Detailed work will be undertaken by the programme and working group representatives to establish the most appropriate approach and timetable for this transfer.

Transferring data processing, aggregation and storage to DCC may have an impact on competition for these services and could raise data privacy issues. Further work is needed prior to drawing conclusions in these areas."

Discussion

- 3.181. Given that DCC will, at some point after its initial licence grant, be required to provide meter point/supplier registration services, we consider it appropriate to include provision for this in the licence. However, the precise scope and detailed nature of the services that DCC will be required to provide, and the impact that this will have on existing obligations on gas transporters and electricity distribution licensees, needs to be further defined.
- 3.182. DCC would not be required initially to provide registration services and consequently a mechanism for switching on DCC's obligations and switching off corresponding obligations on electricity distributers and gas transporters would need to be provided for. Turning these obligations on and off would require changes to both licence conditions and industry codes. Prior to switching on DCC's obligation to provide registration services and discontinuing or amending obligations on DNOs and Gas Transporters to do so, it will be necessary to develop further the detail of precisely what registration services DCC will provide. It will also be important to understand how the transfer of responsibility for registration will interact with smart meter rollout as well as ongoing registration of non-smart meters. Developing this detail will require input from industry, Ofgem and other relevant stakeholders. The decision to switch on obligations on DCC will need to be made by either the Secretary of State or the Authority in light of this further detail. We recognise that further planning and detailed consideration of these issues will need to be progressed in due course.
- 3.183. We are also assessing options by which suppliers, network operators and other authorised parties will pass data to and receive data from DCC. The options include extending one or more of the existing industry data transfer networks (i.e. DTS for electricity and IX for gas). Such options could be of particular relevance during the Foundation Stage and the initial phase of DCC operation, prior to registration being transferred to DCC. These networks currently support the change of supplier processes so when registration is transferred to DCC it will be appropriate to conduct a full review of the options for interchanging information between industry parties.

# Proposals

- 3.184. We propose to include DCC licence conditions in relation to registration, that provide for a high level licence obligation on DCC covering its future provision of registration services, and referring to the SEC for the detail of the services to be provided. It is expected that this condition would initially be "switched off".
- 3.185. It would also be necessary to make changes<sup>9</sup> to gas transporter and electricity distribution licences that provide the ability to discontinue the obligations on those licensees to provide the registration services that transfer to DCC. Accompanying changes to relevant industry codes will also be made.

<sup>&</sup>lt;sup>9</sup> It is currently proposed that any such changes to other licences would be made using powers under Section 88 of the Energy Act 2008, rather than as part of the DCC prohibition order.

3.186. Furthermore, we propose to include a condition would be included in all relevant licences (gas and electricity suppliers, distribution licensees and gas transporters) requiring the license to take steps to facilitate the switch on of the DCC registration condition and the discontinuation of the other licensee obligations in relation to registration.

Cons	Consultation Question	
51.	Do you agree that DCC should have a high-level obligation, albeit initially "switched off", relating to the provision of meter point/supplier registration services?	
52.	Do you agree that conditions should be introduced in other licences providing the ability to release other licensees from the requirement to provide meter point/supplier registration services at some point in the future?	
53.	Do you agree that DCC and other relevant licensees should be subject to an obligation requiring the licensee to take steps to facilitate the transfer of meter point/supplier registration activities to DCC?	

# Determination of Disputes

- 3.187. Licence conditions can require that where disputes arise between a licensee and another person, the Authority can determine the outcome of the dispute. These determinations might not be binding on unlicensed parties, but they can set the approach that the licensee is required to take in the dealings with such parties. Typically, for example where an energy licensee is required to offer terms to third parties to provide services, the Authority is empowered to be able to determine disputes over such offers of terms. More generally there is a variety of dispute resolution mechanisms that are used in various areas of the gas and electricity industry.
- 3.188. Two circumstances where there is the potential for disputes to arise have come to light in considering the content of the DCC's licence. The first arises when DCC makes offers of terms, for example, for the provision of elective services. In this case there is the potential for a dispute over the terms offered to arise between DCC and the relevant user. The second circumstance arises from the fact that it may be necessary to provide for arrangements covering the handover between DCC and its successor, including requiring DCC and its successor to agree on a number of matters relating to the handover of the licensed activity. Again, disputes could arise between the incumbent DCC and its successor, for example over the steps that the incumbent DCC should take in order to assist its successor in taking over the DCC activity. It is necessary to consider what resolution process should apply to any disputes arising in this area.

# Proposals

3.189. We propose to include provisions in DCC's licence which provide for the resolution of disputes, which could include, for example, disputes between DCC and users over offers of terms, and DCC and its successor in relation to the hand-over process.

# **Consultation Question**

54. What dispute mechanism would be appropriate to apply to disputes involving DCC and who should be enabled to determine such disputes ?

# Other Licence Conditions

# Discussion

3.190. Existing licences contain a number of miscellaneous conditions intended to facilitate regulation and to impose general obligations. This section considers these miscellaneous conditions for the DCC licence. Conditions in existing network operator licences have been used as a starting point.

# Proposals

# Distortion of competition

3.191. Depending upon the construction of the general objectives of DCC, it may be appropriate to consider a condition requiring DCC to operate its business in a way that does not restrict, prevent or distort competition in the supply of gas or electricity. We invite views on whether the scope of matters referred to should also encompass the shipping of gas, the generation of electricity and participation in the operation of an interconnector. Views are also invited on whether this obligation should also include a requirement not to restrict, prevent or distort competition in meter operation and the provision of energy services.

# Licensee's payments to the Authority

3.192. We propose to include a condition requiring DCC to pay fees to Ofgem with drafting based on the approach in other energy licences. Whether or not any actual fees would be levied on DCC would be for Ofgem to determine in developing its licence fee cost recovery principles in light of the introduction of DCC.

# Provision of information

3.193. We propose to include a condition with drafting based on the standard approach in other energy licences, requiring the licensee to provide information to Ofgem. The DCC may also be required to provide information to the Secretary of State in relation to the progress of smart meter rollout.

#### **Compliance with Core Industry Documents**

3.194. Whether or not it is necessary for DCC to be required to become party to and comply with existing core industry documents, such as the Uniform Network Code, independent Gas Transporter Uniform Network Code, the Balancing and Settlement Code, the Master Registration Agreement, the Supply Point Administration Agreement,

etc. remains to be considered once further detail on the drafting of the SEC has been progressed. We propose to revisit this issue once further detail on the drafting of the SEC and any associated changes to other codes have been further developed.

# Theft damage and meter interference

3.195. It is for consideration whether DCC should have any specific licence obligations relating to theft, damage and meter interference. The view of the relevant DCCG Working Group on this issue was that, for the initial DCC at least, such obligations would be inappropriate as they would, for example require DCC to seek to analyse the data received from smart meters and/or interpret the significance of various communications to or from smart meters, and that this was not within the scope of DCC's activities. We agree that it is not appropriate to include such an obligation on DCC.

# **Regulatory Accounts**

- 3.196. Network licensees are typically required to provide accounting information to Ofgem for regulatory purposes. While DCC will be different from network licensees in that some of its costs, at least, are expected to be determined from the costs that it submits under the licence application process, it is likely that Ofgem will need to understand the various costs of DCC including the actual internal and external costs incurred, revenues received for value-added services, etc.
- 3.197. We therefore propose that DCC should be required to submit accounts to Ofgem for regulatory purposes and that consequently a licence condition based on those applying to existing network licensees is likely to be needed.

# **Business Carbon Footprint Reporting**

3.198. We propose to develop business carbon footprint reporting obligations on DCC, including those arising from its services provided by service providers as part of the development of the detailed drafting of the DCC licence.

# Reporting of Revenue Restriction Revenue information and Revenue Restriction Cost Information

3.199. We propose to develop reporting obligations relating to revenue restriction information as part of the development of the detailed drafting of the DCC licence.

# Performance Principles/Indicators and Monitoring

3.200. Matters relating to the incentive regulation of DCC, setting performance principles and indicators and performance monitoring are to be considered further as part of the package of incentive arrangements for DCC and are discussed further in chapter 4.

**Consultation Question** 

55. Do you believe that DCC should be required to operate its business in a way that ensures it does not restrict, prevent or distort competition in gas shipping, the generation of electricity and participation in the operation of an interconnector?

56. Do you have views on the additional conditions discussed above?

57. Are there any additional conditions that you would wish to see included?

# Modification of DCC Licence Conditions

# Discussion

- 3.201. Section 88(1) of the Energy Act 2008 allows the Secretary of State to make modifications to standard and particular conditions of supply, distribution, transportation and shipper licences for the purpose of implementing the smart metering programme<sup>10</sup>. Parliament is currently considering the 2010-11 Energy Bill which includes, in clause 72, a proposal to extend the scope of this power also to include electricity transmission licences and to extend the duration of the power to end on 1 November 2018.
- 3.202. It is for consideration whether it is desirable for the Secretary of State to have these powers in relation to the DCC licence as it does for other electricity and gas licences. It is possible therefore that if any changes to energy licences in general need to be made to implement smart metering, this will include the need for changes to DCC's licence.

#### Proposals

- 3.203. Consideration should be given to extending the Secretary of State's powers under section 88 of the Energy Act 2008. These extended powers would enable the Secretary of State to modify conditions of the DCC licence at any time in the period between the grant of the DCC licence and November 2018. Any such power would be limited by purpose and duration in the same way as the powers under section 88 (as it is anticipated they will be amended subject to the passing of the 2010-11 Energy Bill). In order to confer this additional power on the Secretary of State, it would be necessary to make additional changes to legislation, and consequently the ability to introduce these arrangements is dependent upon this legislation being put in place.
- 3.204. If such powers are made available, we propose to include in DCC's revenue restriction conditions a term that permits DCC to recover any additional material costs arising as a consequence of the exercise of such powers.

# **Consultation Question**

58. Is it appropriate to consider extending the Secretary of State's powers to provide equivalent powers to modify DCC's licence conditions as it does for other energy licences for the purposes of implementing smart metering?

<sup>&</sup>lt;sup>10</sup> More precisely for the purposes of requiring the holder of a licence to provide or install, or facilitate the provision, installation or operation of, meters of a particular kind, or to make arrangements related to these matters.

# Data Privacy

- 3.206. The role of DCC in providing secure access control is key in helping to ensure that consumers' data is appropriately protected.
- 3.207. It is not currently envisaged that DCC will store any personal consumer data but, depending on the detail of how services are delivered, there may be temporary data files that would need to be managed securely.
- 3.208. Further work will be undertaken on clarifying DCC's role in handling of data and whether it should be considered as a data processor or data controller for the purposes of the Data Protection Act.
- 3.209. DECC's Call for Evidence on Privacy and Data Access explores some of these issues and more detailed proposals on DCC's role in protecting consumers data will be forward in a separate consultation in light of the responses to this.

# 4. **Revenue Requirements**

# Introduction

- 4.1. The Government has confirmed that DCC will be a monopoly provider of smart metering data and communication services to the domestic sector. Consequently an important aspect of the licence will be conditions to restrict DCC's revenue to cover its own costs. DCC total costs (being the total of its own and service provider contracted costs), together with any allowances in relation to performance incentives, are to be recovered through charges to users.
- 4.2. The Response clarified that, DCC should be established as a commercial business, accountable and financially incentivised to achieve service standards. It stated that during the next phase the Government, in consultation with stakeholders, would develop DCC's licence obligations, including its service obligations and operating principles, procurement objectives and any necessary conditions to counteract the monopoly position of DCC.
- 4.3. This chapter provides further discussion on DCC's cost recovery mechanisms and sets out our proposed position on the following issues:
  - DCC and service providers' revenue streams;
  - adjustments to DCC's revenue stream for its internal costs; and
  - revenue recovery over the rollout period.

#### Revenue stream

- 4.4. DCC will be responsible for recovering, subject to any performance incentives, its own internal costs and the contracted costs of its service providers. DCC will have an allowed revenue, which covers its internal costs and profit margin. DCC's cost base will be small relative to its service provider contracts, and variations in its internal costs will likely be driven by the level of tendering activities and change management processes in any given year. Also the nature and number of amendments that are proposed to the services that it is required to provide to users under the SEC will have an impact on DCC's costs. The assumptions around DCC's work load will be set out in the licence application documentation.
- 4.5. Service providers' contracted costs will need to be recovered over the length of the service providers' contracts. An explicit revenue allowance for service provider contracts will be made in relation to the services that DCC is required to procure externally as a condition of its licence and these costs will be passed-through to users subject to any incentive payments or penalties. There may be other activities that DCC decides to outsource, however these costs would be funded under the revenue allowance relating to DCC's internal costs.
- 4.6. DCC will need to recover the revenue required to fund the management of the SEC (including the SEC Panel and secretariat costs) through its service charges. It is expected that an explicit allowance or pass-through mechanism will be required for DCC to recover this revenue.

4.7. DCC may be able to achieve efficiency savings in both its internal costs and service provider contracted costs, through its contract management and procurement activities. It is expected that these savings will be shared with users through an incentive mechanism. This is discussed further in chapter 7.

#### Proposals

- 4.8. The DCC licence will set out DCC's internal allowed revenue over the duration of its licence. Our proposal is that the allowed revenue stream for DCC internal costs will reflect the DCC licensee's costs as they are estimated to be incurred.
- 4.9. The DCC licence revenue restriction will set out the 'pass-through' conditions for the recovery of DCC's service providers' contracted costs. DCC will recover its own allowed revenue and service providers contracted costs through its charges to users.
- 4.10. We propose that the revenue required to fund the activities of bodies needed to manage the SEC, for example the SEC Panel and the Secretariat, will be treated as a pass-through in DCC's revenue restriction.

# Adjustments to DCC's revenue stream for its internal costs

- 4.11. As an asset-light entity DCC will need to recover its efficiently incurred costs in order to remain a viable entity, i.e. it may not be able to sustain losses. Mechanisms that allow adjustments to be made to DCC's allowed revenues during the licence period reduce the DCC licensee's uncertainty in relation to recovering any costs that cannot be predicted in advance. Options to reduce the uncertainty to the DCC licensee, and hence reduce the uncertainty premium in its bid, include providing revenue reopeners, volume drivers or cost pass-through mechanisms for specific cost areas. Logging-up mechanisms, where unpredictable costs are logged up and assessed by the Authority at a given point(s), for reducing the DCC licensee's uncertainty are not viable as DCC will not be able to "carry" these costs.
- 4.12. Revenue for service providers, and any revenue adjustments that may be required, will be set out in their contracts with DCC.
- 4.13. The DCC licence applicants will bid on the basis of a set of assumptions set out in the application documents. However, at the time of licence award it is considered that there are some activities around which uncertainty in relation to the volume and/ or timing of them occurring will exist, e.g. meter point/supplier registration adoption and activities required of DCC to support proposed amendments to the SEC.
- 4.14. It is currently considered that there will be two categories of uncertain activities/ events DCC is likely to face during the first generation of the licence:
  - *Planned developments*. These are activities/ events that are predictable at the time of the licence award but with uncertainty around the timing and/ or volume.
  - Unplanned developments. These are events or activities which are unpredictable and outside of reasonable managerial control and result in material changes in DCC operating costs.

# Planned developments

- 4.15. For the purpose of this consultation it is considered that the key *planned developments* that create uncertainty for DCC relate to meter point/supplier registration and other SEC modifications.
- 4.16. The Government has concluded that DCC will take on responsibility for managing meter point/supplier registration, however the precise timing of this occurring is uncertain. An option to ensure that sufficient revenue would be available to DCC for its internal activities associated with meter point/supplier registration, could be for a set amount of revenue to be allowed when DCC begins this activity (i.e. revenue driver). The DCC licence applicants could be invited to 'bid' a fixed revenue amount for completing the activity, thereby removing the uncertainty risk from DCC. It is noted, however, that sufficient information may not be available to applicants to achieve this. If this is the case, providing a specific revenue reopener may be a more appropriate approach.
- 4.17. It is considered that treating uncertainty around DCC's internal costs for SEC modifications via a *pass-through* mechanism or *volume driver* are possible and viable options given an asset-light entity. These options are discussed below.
- 4.18. A pass-through mechanism would allow DCC to recover its full costs associated with SEC modifications from users. A risk associated with using a *pass-through* mechanism is that while a rate card can be requested as part of the licence application process DCC is not incentivised to minimise the volume of work it undertakes to implement each modification. One way around this is for the SEC Panel (although the SEC governance is still being developed) to review DCC's proposed costs for completing the modification. However users on the SEC Panel may not have an incentive to ensure DCC internal costs are efficient as they are likely to be more concerned with service quality, particularly given costs are likely to be evenly spread across users. This may be mitigated by the Authority having final sign-off of modifications, but this may place a significant burden on it to undertake impact assessments for each modification. Although 'trivial' SEC modifications may not require approval from the Authority.
- 4.19. The alternative option, a 'volume driver', would allow DCC to recover its internal costs for SEC modifications based on a cost estimate 'bid in' by the licensee, as part of the licence application process, for implementing different work load categories of SEC modifications. For example, DCC licence applicants would bid in an average cost for undertaking SEC modifications that would require a minor, moderate, or significant amount of work. In this example, a SEC modification that does not require DCC to engage with its service providers is likely to fall into the minor amount of work category. A SEC modification requiring DCC to procure new services or to undertake substantial amendments to existing contracts with service providers would fall into the significant amount of work category.

# Unplanned developments

4.20. There is a risk of unknown or unpredictable events (or activities) occurring which have a material impact on DCC's internal costs. Unpredictable events could include, for example, DCC licence modifications or the procurement of a new service provider due to poor performance. It may be appropriate for a revenue adjustment mechanism (i.e. revenue reopener) to be included in the DCC licence to limit DCC's exposure to these

events. The revenue reopener would allow the Authority to 'reopen' DCC's revenue allowance. Specific conditions would need to be included in the DCC licence setting out the criteria an event would need to meet in order to trigger a reopener, e.g. internal costs arising from the revenue adjusting event are more than 10% of DCC's annual revenue allowance.

# Proposals

- 4.21. If DCC internal activities in relation to taking over meter point/supplier registration are reasonably clear during the licence application process applicants could be required to provide their internal costs for managing these activities. Otherwise, a specific revenue reopener mechanism may be required.
- 4.22. We consider that both the cost pass through and volume driver options have merit and can reduce cost recovery uncertainty for DCC arising from SEC modification, but further consideration needs to be given as to whether this might impede negatively on development of the SEC or whether these options would deter potential DCC applicants. This consideration is needed before a final decision can be made.
- 4.23. Our proposal is that a general revenue reopener should be included in DCC revenue restriction. The revenue reopener that would be triggered if DCC costs exceed (or are below) a materiality threshold. DCC would be required, in the case of the threshold being exceeded, to demonstrate that the costs were outside of its control or unforeseeable. The general reopener would exclude costs covered by any specific revenue reopeners.

# **Consultation Questions**

59.	Do you consider that it is practicable for DCC licence applicants to provide costs for undertaking meter point/supplier registration? Or is it more appropriate to include a specific reopener for DCC's costs of undertaking meter point/supplier registration?	
60.	Do you have views on the relative benefits of the two options (cost pass through and volume drivers) for recovery of DCC internal costs associated with SEC modifications?	
61.	Do you have a view on the appropriate materiality threshold (trigger) for the revenue reopener?	
62.	Do you consider that any other cost areas may require mechanisms to deal with uncertainty?	

#### Revenue recovery during rollout

- 4.25. A cost recovery mechanism needs to be applied to the rollout period. There are two types of costs for which recovery mechanisms for the rollout period need to be identified: DCC internal costs, and DCC service provider costs.
- 4.26. It is expected that the necessary elements of the SEC will be introduced to the legal framework once the DCC licence has been granted. DCC itself will begin preparations to start providing services to users from the award of its licence, for example organising and running tests and trials. However, data and communication services ("DCC services") will not be available to users until "go-live", which is expected to be in 2014.

# DCC internal costs

#### Discussion

- 4.27. The recovery of DCC internal costs over the rollout period from licence award to 2019 has been discussed with stakeholders. The broad consensus amongst stakeholders was that the DCC licensee should be able to charge users for its internal costs from the start of its licence as it will be providing essential services to users. We consider that it is appropriate for DCC to charge as costs are incurred in the delivery of its own services.
- 4.28. In addition, as DCC will be providing these services to all suppliers over this period charges to suppliers could be based on their market shares (i.e. share of total MPANs and/ or MPRNs with respect to which suppliers are mandated to install smart metering systems). There is an issue in that market share based on meter points mandated to receive smart metering systems will exclude suppliers who only supply larger non-domestic customers (not mandated to receive smart meters), however these suppliers may still benefit from receiving DCC's services.
- 4.29. Whether network operators should be charged for DCC's internal costs pre-"go-live" needs to be considered as network operators' revenue is restricted via a price control and they may be unable to recover these costs. Conversely, during the rollout period network operators are likely to be supplying services and information (e.g. meter registration services, etc) to DCC and consideration needs to be given as to whether the network operators should charge DCC for these services. There is also a risk of unintentionally setting a precedent if network operators do not charge for such services.
- 4.30. Charges to ESCOs can only be applied once they have signed-up to the SEC and begin to receive core services.

#### Proposals

4.31. We propose that the DCC licensee should be able to begin recovering its internal costs from the award of its licence as it will be delivering essential services to users. We consider that these costs during rollout should be charged to suppliers based on market share. However, we welcome views on whether network operators should be charged a share of these costs from licence grant and whether network operators should charge DCC for services supplied to DCC.
Cons	Consultation Questions					
63.	Do you agree that market share should be based on MPANs and MPRNs that are mandated to receive smart metering systems, rather than all MPANs and MPRNs?					
64.	Do you have a view on whether suppliers of only larger non-domestic customers should be charged a proportion of DCC internal costs?					
65.	We welcome views from stakeholders in regards to charges on network operators for DCC internal costs pre-"go-live" and whether they should charge DCC for services provided to DCC.					

## Service provider costs

- 4.32. DCC's service providers are likely to incur fixed costs associated with establishing the data services and installing/ upgrading the communications infrastructure. The size of these fixed costs will be dependent on the technological solutions procured. The Project Information Memorandum (PIM) stated that service providers will be expected to fund any asset investment required over the term of their contracts and recover such through amortised service charges.<sup>11</sup> Responses to the PIM did not take a negative view on this proposal.<sup>12</sup>
- 4.33. There are two key issues associated with the recovery of fixed costs and cost recovery over the rollout period: the speed of cost recovery and the allocation of costs across users.
- 4.34. Our current view is that amortised costs should not be charged to users before data and communication services are delivered.

## Speed of cost recovery

- 4.35. In relation to the speed at which service providers' fixed costs should be recovered DCC could:
  - recover these costs evenly over the length of the service providers' contracts from "go-live" (e.g. straight-line depreciation); or
  - profile costs on the basis of a forecast rollout of smart meters. The profile of cost recovery would be on the same basis as that used for the service provider procurement. A forecast would need to be generated from the best available information at the time of the procurement, including projections from suppliers of their rollout plans over the period to 2019.

<sup>&</sup>lt;sup>11</sup> PIM, page 24, paragraph 4.39.

<sup>&</sup>lt;sup>12</sup> SMIP Working Group 3 Minutes.

- 4.36. Communication service providers are likely to ramp-up capacity over time against the aggregate rollout plan. While the extent to which fixed costs will relate to this profile will be dependent on the technology solution some cost profiling against the number of connections for all technologies is expected. Profiling and recovering costs evenly over the length of the communication service providers' contracts, rather than in line with incurred costs, may result in users, and ultimately consumers, paying for services that they have not yet received.
- 4.37. In contrast data services will need to be fully available from "go-live" in order to supply core services to users and therefore the data service provider's costs may not be 'profiled' in the same way as communication services, e.g. the data service provider incurs a large upfront cost prior to "go-live" with maintenance and overhead expenses on an ongoing basis.
- 4.38. In practice over the length of the contracts the difference between the two options will likely be minimal for users. However, if fixed costs are not profiled in relation to the overall services delivered to users consumers may ultimately pay for services they do not receive at the time of cost recovery.

## Proposals

- 4.39. We propose that the cost recovery for communication service providers' amortised fixed costs be profiled during rollout based on the cumulative aggregate rollout plan of smart meters. It is expected that costs recovered under this approach will be more reflective of the communication services delivered than recovering costs evenly over the length of the service provider contracts.
- 4.40. However, we consider that it may be more appropriate to recover data service provider's amortised fixed costs evenly over its contract (e.g. straight-line) as it will be supplying full services from "go-live".

## **Consultation Questions**

- 66. Do you agree that DCC should only begin to charge users for communication service providers' costs from "go-live"? Please provide reasons as to why this is or is not appropriate.
- 67. Do you have a view on whether the data service provider(s) should be treated differently from communication service providers and be allowed to recover its fixed costs evenly over the length of its contract from "go-live"? Please provide reasons why this is or is not appropriate.

## Allocation of fixed costs across users

- 4.41. In relation to the allocation of fixed costs across users during rollout it is considered that there are three options on which this can be based:
  - Actual installed smart meters. Charges would be based on the actual number of smart meters installed and connected to DCC communication and data services.

This would include compliant meters migrated to DCC. Charges would need to be scaled in each period to ensure the recovery of the total costs set out in the service provider contracts. Reconciliation between charges and actual smart meters installed would be needed at the end of each month/ year.

- **Rollout plans plus actual smart meters installed.** Suppliers would be required to periodically (e.g. annually) provide rollout plans on which DCC's charges would be set. Suppliers would be set a charge for DCC services that they have forecast they will require for the year (based on actual installations and forecast rollout for the year), regardless of whether in practice they achieve the level of completed installations. This option allows suppliers to book connection capacity in the regions that they require it for the following year. The rollout plans would include smart meters that had already been installed to be migrated to DCC. The charging would be on a cumulative basis reflecting the number of smart meters users had already installed plus the following year's rollout target.<sup>13</sup>
- Market share. Charges would be based on users' market share. Market share would be based on domestic MPANs and/ or MPRNs and any non-domestic smart meters that are using DCC services.
- 4.42. For the above options it is assumed that communication service providers' cost recovery is profiled against the aggregate forecast rollout profile on the basis of which communication services were procured. As part of the procurement process it is expected that communication service providers will include prices/ discounts for varying the timing of available connection capacity against the original aggregate rollout forecast.
- 4.43. We have considered three options for the cost allocation across suppliers against the following objectives:
  - There should be no disincentive for suppliers to rollout smart meters early;
  - The most efficient costs should be incurred by service providers and recovered from users; and
  - To the extent practicable users should be charged on the basis of costs they have caused and services that they have received.

## Option 1 – Actual rollout of smart meters

- 4.44. Under the first option, charges to suppliers would reflect services received. However, as charges are set ex-ante, DCC would require periodic (e.g. monthly) forecasts of suppliers' smart meter installations to set charges and undertake an ex-post reconciliation which has the potential to impact on the predictability of charges. Further, if actual smart meter installations fall behind service providers' contracted cost recovery profiles then the ongoing per unit charge will need to increase to cover service providers' contracted costs.
- 4.45. This option is very similar to Option 2 apart from requiring DCC to continually update its charging to reflect the actual meters being installed. The incentive on suppliers to meet

<sup>&</sup>lt;sup>13</sup> In other words each year's charges would take into account the actual smart meters installed in the preceding years.

their annual rollout plans may be reduced as they will not face a charge for smart meters that they have not installed in line with their forecasts, which may result in inefficient costs being incurred by the service providers.

## Option 2 – Rollout plans plus actual smart meters installed

- 4.46. Under this option, suppliers would face charges based on the services that they forecast they will need i.e. in effect suppliers will buy a capacity option for the following year. They would face these charges irrespective of whether they actually install smart meters in line with their submitted plans for the charging period. This option can also be viewed in the context that it results in users' being charged in relation to their planned market share of DCC services in each charging period during the rollout. This approach should incentivise suppliers to both develop accurate rollout plans and to deliver in line with them, support lower and more predictable service costs, and provide confidence about delivery of the overall smart meter programme.
- 4.47. Communication service providers are likely to be procured on the basis of an aggregate forecast rollout profile. Although dependent on the communications technology solution underlying the services procured, some of the contracted costs recovered in each charging period are likely to be fixed and the number (and location) of smart meters connected to the communication services in a given year may also be predetermined. As noted, it is expected that service providers will price in flexibility in the timing of available connections capacity against the original aggregate rollout forecast.
- 4.48. Where the total number of smart meters planned to be installed by all suppliers in a particular year exceeds the original aggregate rollout profile used in the procurement of the communication services and this leads to higher overall cost, this would be allocated across all suppliers on the basis of their rollout plans for the year. If on the other hand the total of the rollout plans for a particular year is lower than the original rollout profile, suppliers would face higher per unit charges as contracted fixed costs will be spread across a smaller number of smart meters.
- 4.49. This option allows suppliers to "book the communications capacity" they require for the following year and provides for suppliers to pay for the pre-booked capacity on a take-or-pay-basis. That is, if a supplier overestimates the required capacity and rolls out less meters during the year they will still be charged in accordance with their "capacity booking" as the relevant service provider would have incurred costs to ensure the capacity is made available. If a supplier, on the other hand, underestimates the required capacity and seeks to rollout more meters during the year they would either: (i) be able to do so (but could be exposed to higher charges if the capacity sought in excess of their original booking results in higher costs incurred by the service provider; or (ii) may not be able to rollout the additional meters, where the service provider faces practical constraints in providing the additional capacity.
- 4.50. There may be a coordination issue if multiple suppliers exceed their rollout plans and the service providers can meet some but not all of the demand. However, if a supplier was able to use any 'spare' capacity resulting from another supplier not meeting its target, then it would seem reasonable that the latter would not be charged for this capacity during the charging period.

## Option 3 – Market share

- 4.51. Allocating costs based on market share would mean that there would be no direct link between suppliers individual progress in rolling out smart meters and the charges they incurred, i.e. the costs would be socialised. This approach could be straightforward to administer but there are risks. There is no direct incentive on suppliers to prepare and work in line with accurate profiles, which could affect cost predictability and the ability of DCC to meet demand. As service providers will have insufficient information on where and when to invest in their network to meet actual demand inefficient costs may be incurred.
- 4.52. A key concern with socialising the costs across suppliers is that consumers pay for services before they are able to receive the corresponding benefits.
- 4.53. This option needs to be considered in the context of the procurement of communication providers on the basis of an aggregate forecast rollout profile. Depending on the technological solution suppliers may be, to some degree, restricted in making wholesale changes to their rollout plans. In other words, there may be a limit on the number of smart meters that each supplier can connect to DCC services in a given period.
- 4.54. The market share approach may implicitly incentivise faster rollout but in practice service providers may not be able to meet an increase in connection ('capacity') demand. Where service providers are able to provide additional connection capacity it may be at a higher average per unit cost leading to higher per premise charges. In addition, even if the cost allocation is based on market share commitment from suppliers to accurate forecasts, and 'penalties and incentives' around this are likely to be needed which could converge Option 3 into Option 2.

## Other users

- 4.55. The discussion above has focused on suppliers, however a further consideration for the allocation of charges for DCC services is how other users, in particular, network operators, would be charged. The options in relation to network operators are:
  - Actual installed smart meters. Actual installations would be identified by area and network operators charged accordingly.
  - Rollout plans plus actual smart meters installed. Network operators would need to be charged in relation to the rollout in their licensed area.
  - Market share. This would entail charges reflecting the network operators' market share (domestic MPANs and/ or MPRNs and any non-domestic smart meters that are using DCC services).
- 4.56. Rollout decisions by suppliers will not necessarily be the ones that the network operators would make. As network operators are not in direct competition with each other it is unlikely that there would be a distortion of competition from charges based on market share. Whether network operators receive services during rollout needs to be considered, however if their WAN requirements have driven fixed costs which are incurred during the rollout period then these costs need to be covered.

4.57. ESCOs may choose to receive DCC services during rollout. We consider that it may be difficult to forecast the level of DCC services delivered to ESCOs during the rollout. A possible option, therefore, would be to not include forecast DCC revenue received from ESCOs when determining the charges required in a given period, and then for DCC to return this revenue via lower charges to all users in the following period.

### **Proposals**

- 4.58. Under all the options, if DCC's services are not available as agreed, it would seem reasonable that no charges were made for those smart meters yet to receive DCC services. Conversely, our proposal is that if higher costs are caused by inaccurate rollout plans then DCC should recover these costs from the relevant supplier(s). We consider that it may be appropriate during the procurement dialogue phase with service providers to develop options for faster rollout.
- 4.59. We consider that while basing the cost allocation across suppliers on smart meters installed or the rollout plans are similar, there may be greater benefits from basing the charges on the rollout plans. These benefits may include a stronger incentive on suppliers to meet their targets; and result in more predictable charges.
- 4.60. Overall costs should be able to be reduced through greater coordination between suppliers and service providers during the rollout. Suppliers should only install in areas where a connection to DCC services is available at the time of installation to enable testing the connection. The rollout plans provided by suppliers should be as accurate as practicable to minimise the need for repeat visits to consumer premises.
- 4.61. We consider that the analysis against the objectives indicates there is merit with charging suppliers based on their rollout plans. However, we acknowledge that there are some disadvantages with this approach and intends to explore ways in which to improve this option. As such, we welcome views from stakeholders on basing charges for communication services cost recovery on the rollout forecasts plus actual smart meters installed and any variations on this.
- 4.62. If data service provider's fixed costs are recovered evenly, over the length of its contract from "go-live" then we consider that charges for this service should be based on market share as this will better reflect overall services delivered to users. We understand that this is an important issue for stakeholders and welcome further views on the cost allocation options.
- 4.63. Our current view is that the allocation of costs across network operators should be based on market share as network operators may not be able to influence rollout decisions and it is unlikely a distortion to competition would arise from this approach. However, we welcome views on this allocation approach.
- 4.64. We propose that ESCOs should be charged based on the core services they purchase off DCC as they are not required to sign-up to the SEC until they chose to receive DCC services.

Cons	ultation Questions
68.	Is it appropriate that the allocation of costs on suppliers during rollout be based on the suppliers' rollout plan for the year plus actual smart meters installed in preceding years? If so, can this option for allocating costs during rollout be improved? If not, what is your preferred option and why?
69.	Do you have a view on how any additional costs resulting from suppliers exceeding their rollout plans should be allocated? Should DCC be able to pass through to the relevant supplier any higher costs resulting from this (or should such costs be averaged across all users)?
70.	Do you agree that network operators should be charged in line with their market share?

## 5. Charging Methodology

## Introduction

- 5.1. In the Response the Government concluded that the general principles of DCC's charging methodology should be set out in its licence, while the detailed charging methodology, which meets these charging principles, should be set out in the SEC. DCC's service charges are likely to compromise a mix of standard and variable charges and should be designed to reflect different types of service. There should be a licence obligation on DCC to publish charging statements that are developed in accordance with the charging methodology in the SEC.
- 5.2. The Government further concluded that DCC should charge for elective services requested by individual users or groups of users on a 'users pays' basis. DCC will be allowed to charge higher rates to address the higher costs of providing these elective services. The detail of DCC's charging arrangements will be developed and consulted upon during the development of DCC's regulatory framework in the next phase of the programme.
- 5.3. DCC will need to charge the users of its services in order to recover the revenues it is allowed under the conditions of its licence. DCC will initially provide a set of core services, which will reflect the requirements that the Government determines in consultation with the industry.
- 5.4. This chapter provides further discussion around key issues related to DCC's charging methodology, and requests views on the following issues:
  - core service charging structure;
  - other service charges (e.g. elective and value-added services);
  - · cost reflectivity per smart meter; and
  - charging objectives and principles.

## Services

- 5.5. As noted in chapter 3 under its licence DCC would be required, and potentially be able, to provide services under a number of different categories, each of which would have different obligations, in the DCC licence and the SEC, around their provision. These services categories are designed to ensure the objectives of the smart metering programme are met while providing DCC flexibly to allow for innovation in future services offered. The key service categories are:
  - core;
  - · elective; and
  - value-added.
- 5.6. A summary of the key categories is provided below:

## **Core services**

- 5.7. There is a need to define minimum guaranteed services based on what is needed to deliver the smart metering programme's objectives. These will be based on users' requirements and procured by the programme on behalf of DCC. DCC will be obligated to offer these services to all users subject to their entitlement to receive the service under the SEC. In defining core services to a user(s) account will need to be taken of the rules governing privacy and data access and where consumer consent will be required. DCC will be obliged to offer core services in relation to all compliant smart metering systems. The Government has concluded that, core services delivered to suppliers in relation to non-domestic customers will be charged on the same basis as in relation to suppliers of domestic customers.
- 5.8. Core services will be procured based on, amongst other things, the WAN requirements to which they give rise. These requirements, e.g. bandwidth to enable message flows, will drive the performance requirements of DCC's service providers that in turn drive the costs of providing core services. Depending on the WAN solution(s) that is/are procured, the majority of these costs may be fixed and these costs would need to be recovered from users irrespective of actual overall use of core services.
- 5.9. There are likely to be two different types of core services offered; scheduled type services, e.g. a daily message containing half-hourly meter reads; and on demand services, e.g. credit balance update.
- 5.10. The current analysis of core services' WAN requirements is set out in Chapter 6.

## **Elective services**

- 5.11. These are services that make use of the smart metering system and are related to energy use and consumption, but are not initially defined as core services in the SEC and are requested by individual users or groups of users are defined as elective services. For example, an elective service could be for an increased frequency of meter reads over that which is available as a core service.
- 5.12. DCC will be obliged to offer terms for the provision of elective services to interested parties, signed up to the SEC. As these services will be undefined when the service providers are initially procured there would be a different cost in providing them. The Response concluded that elective services would be charged on a 'user pays' basis.
- 5.13. It is expected that as part of the procurement service providers will be required to supply prices for optional capacity to provide for additional core (agreed after the implementation of the initial SEC) and/ or elective services. Providing DCC with the option to increase capacity allows it and its users greater scope for flexibility and innovation. Scope for flexibility and innovation is important given uncertainty over a number of aspects of the future electricity system, particularly on the demand side, over the next two decades.
- 5.14. DCC data and communication services provided to AMRs are an elective service. It is expected that any investigation and design costs that DCC incurs as part of a request for providing advanced metering services will be charged to the requester.

## Value added services

- 5.15. DCC may also offer value added services that are unrelated to energy use and consumption, for example communication with smart meters outside the energy sector, however any services offered must be approved by the Authority and must not interfere with core services. In addition, in the Response the Government concluded that given DCC's monopoly position it will be restricted from offering energy value added services.
- 5.16. We note that the procurement of DCC's data and communication services may result in a service provider(s) obtaining a privileged position in the provision of value-added services, particularly where a DCC service is provided on the basis of a new build technology. We expect that in these circumstances DCC's contracts will act to prevent service providers from exploiting any monopoly position created via DCC's contracts that could otherwise enable them to extract unreasonable rents from value-added services.

## Core services structure of charges

- 5.17. The Prospectus document set out a number of options for DCC core service charges. This charging structure was based on reflecting the common cost drivers in line with common practice in the telecommunications industry. The charges were proposed to comprise:<sup>14</sup>
  - Activation charge: An on/off activation charge in respect of each activated WAN communications module. This would recover costs associated with bringing each WAN connection into service as well as an appropriate share of central communications costs and the administrative costs of connection set up.
  - *Standing charge*: A standing, or rental charge, in respect of each WAN connection that is served, or a share of a WAN connection when two or more smart meters share a WAN connection. This would recover the cost of maintaining the WAN connection.
  - Volume charges: A charge related to the volume of data transferred, which may be differentiated by time of day and, depending on the technology, a charge for the number of data transfers (i.e. the frequency of meter data access).
  - *General charges*: A contribution to other administration and general costs incurred by DCC that are not related to any of the above direct cost drivers.
- 5.18. The extent to which DCC will be able charge based on volume will likely depend on its contracts with its service providers. Where volume charges exist, there is a risk to DCC of under or over recovering service providers' contracted costs if users do not provide firm commitments to offtake core services, or new users request core services. As DCC will be contracted to cover service provider costs in each charging period it may need to set charges to over recover costs (and refund any over recovery in the following year). The extent to which the charges will be volume based will be dependent on the technology solution, e.g. for a new build it is likely a higher proportion of costs will be fixed.

<sup>&</sup>lt;sup>14</sup> Ofgem, Smart metering implementation programme: Communications business model, July 2010, p 36.

5.19. Ideally, the service provider contracts will include an element of volume charging to allow for varying levels of service and incentivise the service providers to encourage greater use of its services. If the majority of costs are fixed an option could be to convert a proportion of ongoing fixed operating expenditure into a variable charge. This charging structure would need to be finalised during the dialogue stage of the procurement process and set out in the service providers contracts.

## Proposals

- 5.20. After further considering the structure of charges, we propose that DCC's core service charges should be comprised of:
  - *Standing charge*: This would recover a proportion of the service providers' fixed costs for providing core services to each smart meter, DCC's internal costs and the SEC management funding requirements.
  - Volume charge: A charge related to the volume of services received, which could be differentiated by time of day and, depending on the technology, by the number of data transfers.
- 5.21. Based on the above, users would face a service charge made up of a standing charge and, where applicable, a volume charge. The structure of DCC's charges should reflect the service providers' contracted charges. Where service providers' charges contain a volume element DCC may need to over-recover costs, to ensure that it can reimburse service providers for contracted costs. (An incentive during the course of a charging period, i.e. year, to minimise the over-recovery may be required). Any overrecovery will be refunded to users in the following charging period. We expect that service providers will only charge for services delivered e.g. some core services may not be expected to be delivered until 2019.
- 5.22. We expect that DCC's charges on users will always precede service provider payments in order for DCC to meet service providers' contracted costs while protecting its cash flow position.

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,		Do you agree that a standing charge should cover the service providers' fixed costs for providing core services, DCC's internal costs and the SEC management funding requirements?
,	72.	Do you agree that a proportion of service providers' fixed operating expenditure should be converted to volumetric charges?

## Core service charges per premises

onsultation Questions

Discussion

5.23. The Government's objective is for all domestic energy consumers to have access to smart metering services.<sup>15</sup> DCC will manage service providers, namely communication provider contracts that may differ in costs due to the deployment of different

<sup>&</sup>lt;sup>15</sup> Overview doc p 5, para 1.1.

technologies and the manner in which these technologies are deployed. These costs will need to be recovered from DCC's users and ultimately the consumer. A question arises as to whether charges for the same core services should be equal for all consumers or should they reflect the geographical and/ or technical differences in supplying the smart metering services to a premise.

- 5.24. It is considered that there are three possible options in relation to charging for the same core services for consumers, these are as follows:
  - **Postage stamp**. Charges for the same core services should be equal for all consumers. In other words, a GB wide average tariff for core services.
  - **Regional pricing**. Charges for the same core services are determined based on the regional costs of providing the service. These may be based on different service provider regions, or because the service provider(s) is required to supply regional based pricing where variations are sufficiently different from the average.
  - **Technology level**. Charges fully reflect the cost of supplying the same core services to each premises i.e. main technology versus "infill" charges.
- 5.25. Where different communication service providers are procured for the different regions their structure of charges may differ, for example one region's communication service provider may have relatively higher levels of variable charges for core services.

## Postage stamp

- 5.26. Postage stamp charging results in the costs of the smart metering services being socialised across all users. This approach should prevent smart metering related services being offered to, or taken up by, consumers in some regions and not others on the basis of costs. If regional or technology level based charging was adopted consumers in one location may be offered fewer services (e.g. ESCO services) than in other locations as costs may be prohibitively high.
- 5.27. We note that most regulated utilities are required, as far as is reasonably practicable, to ensure that charges reflect the costs incurred in supplying the service. This is generally included to ensure that the customer faces the full economic cost of choosing to locate in a particular area. The obligation on the suppliers and DCC will require smart metering services to be provided to all domestic premises (except where this is not reasonably practicable) therefore the fixed costs of smart metering will exist for each premise regardless of whether a net benefit has been identified for each individual premise; i.e. smart metering services will be provided to each premise on the basis of UK economy-wide net benefits.<sup>16</sup> Penalising consumers based on the technological requirements to provide the same core services therefore may not be appropriate.
- 5.28. Because the installation of (and communication to) smart meters is a universal obligation, subject to exceptional circumstances, in principle this could therefore be considered to be similar to Royal Mail's Universal Service Obligation (USO). The USO requires Royal Mail to deliver to every home or premises of every individual (subject to exceptional circumstances) or other person in the UK at an affordable uniform rate.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> This is particularly relevant in relation to smart grids where there may be increasing returns to scale i.e. the effectiveness

of smart grids increases as more premises are connected

<sup>&</sup>lt;sup>17</sup> Postal Services Act 2000, Section 4.

## Cost reflective (Regional pricing or technology level)

- 5.29. With respect to regional based charging, the available evidence suggests that in a less densely populated area, such as Scotland, communication costs are likely to be higher than costs in more densely populated regions. With respect to technology based charging, it is noted that costs of servicing "difficult to reach premises" (these could be very remote locations but also basements or apartment blocks, for example) could be three to four times higher than the typical costs of providing communication services.
- 5.30. On the other hand, regional or technology based charging is likely to lead to better and more efficient use of the communication services, as users would be charged based on the actual cost of their use of the services. This should provide more efficient price signals to ration use of the services in areas that are hard to serve, avoid uneconomic congestion on the system and provide incentives to invest appropriately.

## Proposals

- 5.31. We propose that a postage stamp based universal per premises charge is adopted. We consider that this option best represents the policy objectives of the programme. However, we acknowledge that this is an important issue and seek further views from stakeholders.
- 5.32. It is expected that DCC will procure the most appropriate service provider for each region and the costs associated with each service provider will be reported transparently. In other words in relation to the former, we do not propose DCC procure service providers in such a way as to have similar costs/ payments across the communication service providers. If a postage stamp approach is adopted, where the charging structure differs between service providers, variable charges will need, for instance, to be averaged across GB in order to ensure postage stamp charging for core services.
- 5.33. If postage stamp approach was adopted, consideration needs to be given as to whether DNOs should face a regional volume charge instead of a GB wide average volume charge. Charging distribution network operators on a cost reflective basis for volumes would provide them with better price signals and allow them to make more efficient decision on the use of DCC services.
- 5.34. As DCC will recover charges from users it will have the responsibility of converting service provider costs to postage stamp charging. This may mean that it will need to over recover costs in a charging period to ensure all service provider contracted costs can be met. We expect that service providers contracted costs and DCC method for converting them will be transparent.

## Consultation Questions73.Do you agree that the proposal for postage stamp charging is consistent with<br/>the objectives of the smart metering programme?74.Should postage stamp charging apply to all users including network<br/>operators?

## Charging objectives and principles

## Discussion

- 5.35. The charging methodology for DCC will be set out in the SEC, however the DCC licence will contain the specific objectives and principles that its charging should achieve. These objectives will set out how user charges will be determined on an ongoing basis. Energy regulation in the UK has typically identified three key broad objectives to guide regulated companies' charging methodology:<sup>18</sup>
  - charges should reflect, to the extent practicable, the costs incurred in providing the services;
  - charges should facilitate competition, and not distort, restrict or prevent competition; and
  - charges should take account of developments in the licensee's business.
- 5.36. There is likely to be a proportion of fixed costs associated with the provision of the data and communication services, which will to an extent, be common across all core services, for e.g. building rents. In addition, different core services may have costs associated with their particular requirements, e.g. low latency. Fixed costs will need to be allocated across core services, and as a result users. As multiple core services may be common to only one particular group of users, e.g. network operators, then they may face a direct charge for these services.
- 5.37. There are numerous approaches that can be utilised in allocating common costs for example, based on the relative output (capacity) of each core service, or based on different user types (i.e. charging users who require the service a greater share of the common costs) whatever method is used for the allocation it is expected that it would conform to the charging objective and principles.

## Proposals

- 5.38. In relation to the charging methodology we propose the following charging objectives and principles:
  - a) the charging methodology facilitates competition; and does not restrict, distort, or prevent competition in the supply of energy, provision of energy related services or energy distribution;
  - b) the charging methodology should take account of developments in DCC's business;
  - c) DCC's charges for a core service will be the same for each meter point;
  - d) subject to objective (c) above, charges overall should be, as far as reasonably practicable, cost reflective;
  - e) charges should be predictable;
  - f) charges should not disincentive early rollout of smart meters; and
  - g) charges should be non-discriminatory.

<sup>&</sup>lt;sup>18</sup> For example: Electricity transmission, Use of System (C5); Gas transportation NTS Connection (4B); Electricity distribution (Connection and use of system) (C13); and Electricity distribution (Common distribution charging methodology) (C13A).

- 5.39. Note, if volume charges only to network operators are allowed to vary by region then the third principle above would need to reflect this.
- 5.40. There is a consideration whether the charging methodology should also promote innovation in the supply of energy, provision of energy related services and energy distribution.
- 5.41. Based on the objectives and principles, it is envisaged that there will be a schedule of charges (with fixed and/or variable elements) for the core services from which each user would be charged. The charges will reflect the requirements of delivering the service, e.g. bandwidth, message frequency, latency, message size, etc. Where there is an increase in the number of users for a particular core service, the average charge to all users of that core service will fall in the following charging period.
- 5.42. It is also currently envisaged that DCC's internal costs should be charged to user groups on the same basis as service provider fixed costs. However, we welcome views from stakeholders on the allocation of DCC internal costs across users.

Consultation Question							
75.	Do you agree with the proposed charging principles?						
76.	Do you consider that an objective for the charging methodology should be to promote innovation in the supply of energy, provision of energy related services and energy distribution?						
77.	Do stakeholders have views on whether DCC's internal costs should be allocated across the different types to users on the same basis as service provider fixed costs?						

## Other service charges

- 5.43. For elective and value-added (non-core) services DCC will adopt a 'user pays' approach to charging. It is expected that elective or value added service charges will likely include an element contributing to costs common with core services. In order for there to be transparency of its charges DCC may need to clearly identify revenue streams from non-core services split into contributions to common costs and any incremental costs. DCC will also need to demonstrate that core service charges are reduced accordingly. While transparency around the provision of elective services is desirable, consideration also needs to be given to the level of transparency required as some aspects of an elective service may be commercially sensitive to the user.
- 5.44. For services to AMR, it is envisaged that when requested, DCC will be obligated to offer terms for the provision of the service. However, core service users should be protected from financing extensive investigation and design work. An option to protect core service users is for DCC to be obliged to provide an initial quote and the costs of any further work required to provide a quote to a certain level of confidence would be

charged to the requester. Consideration needs to be given as to whether this approach is appropriate for all elective service quotes.

5.45. As noted previously, as part of the procurement service providers will be required to provide an option and pricing for additional capacity. This will allow DCC greater flexibility to offer elective services (including to AMR), which in turn should provide scope for innovative services to be developed.

Proposals

- 5.46. Charges for non-core services will be governed by the same objectives and principles as core services, however as these services are likely to be treated differently to the provision of core services in DCC's revenue restriction there is a risk that charges for non-core services, and their contribution to common costs, may not be transparent. We would expect DCC to ensure that charges for non-core services reflect the actual costs incurred in providing the services taking into account the existing data and communications infrastructure. This may include the DCC licensee benchmarking the costs against similar core services where such similarities exist.
- 5.47. DCC will be required to report its revenue received from elective and value-added services to the Authority. In complying with its revenue restrictions DCC must show the amount of revenue contributed from non-core services to cover any share of common fixed costs.
- 5.48. Where DCC is required to offer terms for AMR services, we consider that DCC should be obligated to provide an initial quote, which would include the costs of any further work required to provide a further quote to a certain level of confidence. We expect that DCC will charge for investigation and design work required irrespective of whether the service is offered and/ or accepted. We also consider that DCC should be obligated to refund a proportion of, for instance, design work to the 'first comer' if similar work is required by additional users ('second comers').
- 5.49. DCC may also provide other services to SEC parties as defined in the SEC. For example, in the future DCC may provide data aggregation, storage and processing services. If these are provided by DCC in future, these would be set out in the SEC. Charges for these services will be governed by the same objectives and principles as core services.

# Consultation Questions 78. Do you agree with the proposals to charge users for extensive assessment and design work in relation to AMRs? Should a similar approach be adopted for other elective services offered by DCC, regardless of the user accepting the service? 79. Do you agree that "a second comer principle" can be applied?

## 6. Core services – WAN requirements

## Introduction

- 6.1. As discussed in chapter 5, DCC will provide a set of minimum guaranteed services to users, the *core services*, based on what is needed to deliver the Programme's objectives. A core service is defined as a specific type of message flow (e.g. meter reading), of a particular size (e.g. 544 bytes), occurring at a particular frequency (e.g. 1 per day), with a guaranteed response (e.g. 1 hour) and covering a given meter population (e.g. 100%). These core services will be based on users' requirements.
- 6.2. In order to deliver core services, the scope of DCC's communication services includes the provision of a Wide Area Network (WAN) communication between DCC's systems and the smart metering system in each consumer premise. The communication service providers will be procured on the basis of the core services' requirements. These requirements, will drive the performance requirements of DCC's service providers, which in turn will drive the costs of providing core services.
- 6.3. This chapter provides further discussion around the current indicative core services' and how they drive the WAN requirements.

## WAN requirements

- 6.4. The evaluation and selection of potential solutions for DCC's communication services will consider a wide range of the solutions' attributes. However, all potential communication solutions would be subject to performance constraints, which relate to:
  - Message size, which, together with response time, can place considerable demands on a WAN.
  - Frequency of communication: the number of expected average daily connections per smart meter or household.
  - Response time (or latency): the minimum time from supplier request/schedule to receipt of the response.
  - Traffic volume (coverage, % meters), which represents the total amount of information to be transferred between DCC and the smart meter population, per year.
- 6.5. Increasing frequency, traffic volume, coverage and /or latency requirements tend to increase the costs of the communication infrastructure. It is desirable that DCC's communication services should provide high levels of coverage at low cost and therefore it is reasonable to expect that commercially attractive communication solutions will have either limited bandwidth or higher levels of latency or a combination of both. This assumption is supported by the responses from potential service providers to previous consultations including the PIM in which, respondents have proposed a range of wireless and wired options which could not be classified as high-bandwidth low latency technologies.
- 6.6. Given the potential capacity constraints of potential communication solutions, it is important that an understanding of the minimum size, frequency and expected response time required for all information exchanges is developed to allow meaningful dialogue with potential communication service providers.

- 6.7. A definitive definition of all required message types, size and frequency (which are the key drivers for communication services performance requirements) will not be available until the business processes design is complete later this year, and an indicative *'message list'* has been developed to allow interim evaluation of key message..
- 6.8. The indicative message list was considered against communication service providers' responses to the PIM. This comparison identified a significant risk that users' requirements relating to frequency and response time for some message flows would exceed the performance constraints of a number of otherwise viable communication solutions.
- 6.9. We have discussed with stakeholders these constraints and derived a 'minimum frequency' alongside the original user target. Hence, for each message flow, two sets of performance matrix have been defined (see Table 6.1 below):
  - the target frequency, message size and volume, as established through discussions with the relevant DCCG Working Group ("User Target"); and
  - a minimum frequency, message size and volume required to and ensure potential communication service costs are efficient ("Minimum Core Service Requirement").
- 6.10. The intention of specifying a minimum core service requirement for each of the key message flows, is to encourage more effective competition for DCC's communication services and enable the programme to better determine the optimum cost/benefit of core service levels.

## Message flows driving WAN requirements

- 6.11. The list of message flows required to deliver anticipated user requirements, which have currently been identified as having a high performance (i.e. high cost) requirements relating to DCC's communication services, are highlighted in Table 6.1. User Target and Minimum Core Service requirement are specified for each message flow.
- 6.12. Note that in the following tables, 'Message Size' excludes the impact of any additional application, transport or security layer overhead. The "coverage" (% of smart meters) will be examined further in the light of the impact of data privacy arrangements.
- 6.13. The programme is undertaking modelling of traffic on the WAN. This is testing both the data requirements and the impact of overheads such as the application layer and security functionality. This will assist the programme to better assess the potential constraints on the WAN and potential cost impact of specific elements. Additional evidence may also be gained from interaction with communication service providers through the procurement dialogue process. This evidence and analysis will be used in association with consultation feedback to re-assess the core requirements outlined and determine the requirements for the dialogue stage of the procurement process.

	Description				
Electricity Meter read (scheduled)	Scheduled meter reads (a meter read includes the last 48 half-hourly reads (import and export)).				
Required by:		User Target	Minimum Core Service requiremen		
	Message Size	544bytes	544bytes		
Day 1 (2014)	Frequency	48 per day	6 per day (√)		
Service Users:	Response Time	10 minutes	1 hour		
Energy Suppliers	Coverage (% meters)	100%	100%		
Gas / Water Meter read (scheduled)	Scheduled meter read includes the last 48 ha		y water meters) (a meter re		
Required by:		User Target	Minimum Core Service requiremen		
Day 1 (2014)	Message Size	544bytes	544bytes		
Day 1 (2014)	Frequency	48 per day	1 per day (√)		
Service Users:	Response Time	10 minutes	1 hour		
Energy Suppliers	Coverage (% meters)	100%	100%		
Electricity Motor road (on	<b>A B C</b>				
Electricity Meter read (on demand) Required by:	an up-to-date meter re amount of this busines read. However, the as	eading. That is the purpo as critical data is the same sociated response time	se of this message flow. The as that of a periodic meter		
demand)	an up-to-date meter re amount of this busines	eading. That is the purpo as critical data is the same sociated response time	supplier may need to obtain use of this message flow. Th ne as that of a periodic mete is short, due to the near rea Minimum Core Service requiremen		
demand) Required by:	an up-to-date meter re amount of this busines read. However, the as	eading. That is the purpo as critical data is the sam sociated response time uest.	se of this message flow. The as that of a periodic meters is short, due to the near rea		
demand) Required by: Day 1 (2014)	an up-to-date meter re amount of this busines read. However, the as time nature of the requ	eading. That is the purpo as critical data is the sam sociated response time uest. <b>User Target</b>	ise of this message flow. The ne as that of a periodic meter is short, due to the near rea Minimum Core Service requiremen		
demand) Required by: Day 1 (2014) Service Users:	an up-to-date meter re amount of this busines read. However, the as time nature of the requ Message Size	eading. That is the purpo as critical data is the sam sociated response time uest. <b>User Target</b> 544bytes	se of this message flow. The ne as that of a periodic meter is short, due to the near rea <b>Minimum Core</b> <b>Service requiremen</b> 544bytes		
demand) Required by: Day 1 (2014) Service Users:	an up-to-date meter re amount of this busines read. However, the as time nature of the requ Message Size Frequency	eading. That is the purpo as critical data is the sam sociated response time uest. <b>User Target</b> 544bytes 1 per year	this message flow. The me as that of a periodic meter is short, due to the near rea Minimum Core Service requirement 544bytes 1 per year		
demand) Required by: Day 1 (2014) Service Users:	an up-to-date meter re amount of this busines read. However, the as time nature of the requ Message Size Frequency Response Time Coverage (% meters)	ading. That is the purpo as critical data is the sam sociated response time uest. <b>User Target</b> 544bytes 1 per year 10 sec 100% nature, this simple, busi	ise of this message flow. The ne as that of a periodic meter is short, due to the near rea Minimum Core Service requiremen 544bytes 1 per year 30 sec (↓) 100%		
demand) Required by: Day 1 (2014) Service Users: Energy Suppliers Remote dis/enablement of supply (On demand)	an up-to-date meter rea amount of this busines read. However, the as time nature of the requ Message Size Frequency Response Time Coverage (% meters)	ading. That is the purpo as critical data is the sam sociated response time uest. <b>User Target</b> 544bytes 1 per year 10 sec 100% nature, this simple, busi	se of this message flow. The ne as that of a periodic meter is short, due to the near rea <b>Minimum Core</b> <b>Service requiremen</b> 544bytes 1 per year 30 sec (↓)		
demand) Required by: Day 1 (2014) Service Users: Energy Suppliers Remote dis/enablement of supply (On demand) Required by:	an up-to-date meter rea amount of this busines read. However, the as time nature of the requ Message Size Frequency Response Time Coverage (% meters)	ading. That is the purpo sociated response time uest. <b>User Target</b> 544bytes 1 per year 10 sec 100% nature, this simple, businse time.	ness critical control message <b>Minimum Core</b> <b>Service requiremen</b> 544bytes 1 per year 30 sec (√) 100%		
demand) Required by: Day 1 (2014) Service Users: Energy Suppliers Remote dis/enablement of supply (On demand)	an up-to-date meter reamount of this busines read. However, the as time nature of the requinant Message Size Frequency Response Time Coverage (% meters) Due to its on-demand flow has a short respo	ading. That is the purpo as critical data is the sam sociated response time uest. User Target 544bytes 1 per year 10 sec 100% nature, this simple, busi nse time. User Target	se of this message flow. The ne as that of a periodic meter is short, due to the near rea Minimum Core Service requiremen 544bytes 1 per year 30 sec (↓) 100% ness critical control messag Minimum Core Service requiremen		
demand) Required by: Day 1 (2014) Service Users: Energy Suppliers Remote dis/enablement of supply (On demand) Required by:	an up-to-date meter reamount of this busines read. However, the as time nature of the requ Message Size Frequency Response Time Coverage (% meters) Due to its on-demand flow has a short respo Message Size	ading. That is the purpo as critical data is the sam sociated response time uest. User Target 544bytes 1 per year 10 sec 100% nature, this simple, businse time. User Target 160bytes	is of this message flow. The ne as that of a periodic meter is short, due to the near rea Minimum Core Service requiremen 544bytes 1 per year 30 sec (↓) 100% ness critical control messag Minimum Core Service requiremen 160bytes		

## Table 6.1 – Smart meter message flows with potentially a high impact on WANrequirements/costs

Message flow	Description				
Diagnostics (high priority)	A message flow to support Service Management of Smart Meter System components by providing, on request, diagnostic data relating to device state and configuration.				
Required by:		User Target			
Day 1 (2014)		J	Minimum Core Service requirement		
	Message Size	160bytes	160bytes		
Service Users:	Frequency	1 per year	1 per year		
Energy Suppliers	Response Time	10 sec	30 sec (↓)		
	Coverage (% meters)	100%	100%		
Reduce all non-essential loads	Energy Supplier-initiaten non-essential loads.	ed message to instruct s	smart appliances to reduce all		
Required by:		User Target	Minimum Core Service requirement		
After 2019	Message Size	n/a	160bytes		
	Frequency	n/a	2 per day		
Service Users:	Response Time	n/a	30 seconds		
Energy Suppliers	Coverage (% meters)	n/a	5%		
Switch on / off EV chargers		ed message to instruct s mmence or cease charg	smart-enabled Electrical ging.		
Required by: After 2019		User Target	Minimum Core Service requirement		
	Message Size	n/a	160bytes		
Service Users:	Frequency	n/a	2 per day		
Energy Suppliers	Response Time	n/a	30 seconds		
	Coverage (% meters)	n/a	5%		
Switch on / off heat pumps	Energy Supplier-initiate commence or cease o	-	smart-enabled heat pumps to		
Required by:		User Target	Minimum Core		
After 2019		_	Service requirement		
	Message Size	n/a	160bytes		
Service Users:	Frequency	n/a	2 per day		
Energy Suppliers	Response Time	n/a	30 seconds		
	Coverage (% meters)	n/a	5%		

Message flow	Description					
Switch on / off immersion heaters	Energy Supplier-initiated message to instruct smart-enabled immersion heaters to commence or cease operation.					
Required by:		User Target	Minimum Core Service requirement			
After 2019	Message Size	n/a	160bytes			
	Frequency	n/a	2 per day			
Service Users:	Response Time	n/a	30 seconds			
Energy Suppliers	Coverage (% meters)	n/a	5%			
Dynamic tariff - real-time pricing	Message flow to support near-real-time pricing states to the support of the suppo		s that would be required for			
Required by:		User Target	Minimum Core			
After 2019		User ranger	Service requirement			
	Message Size	160bytes	160bytes			
Service Users:	Frequency	48 per day	6 per day			
Energy Suppliers	Response Time	120	120			
	Coverage (% meters)	5%	5%			

- 6.14. In addition to the messages required to support energy suppliers current requirements, a number of message flows that could potentially be used to support distribution network quality, safety and control management ('smart grid' requirements) have been identified. Through discussions with the Energy Networks Association (ENA), it has been established that the majority of the expected smart grid message flows are likely to be small in size with response time requirements of 30 seconds or more.
- 6.15. The list of message flows required to deliver anticipated smart grid functionality, are highlighted in Table 6.2. Only potential Minimum Core Service requirements are specified for each message flow.

Message flow	Description		
Electricity Quality Read (Programmed)	Periodically requested of a sample of the electricity meters by the DNOs, this flow comprises a single electricity quality reading performed received at 30 minute intervals.		
Required by:		Minimum Core Service requirement	
Day 1 (2014)	Message Size	300bytes	
	Frequency	48 per day	
Service Users:	Response Time	300 seconds	
Distribution Network Operators	Coverage (% meters)	10%	
		ent it is assumed that voltage quality can be mum of three measurement points per substation.	
Electricity Quality Read (Programmed)		of all electricity meters by the DNOs for planning mprises a half-hourly reads over a three month	
Required by:		Minimum Core	
Day 1 (2014)	Massau Cine	Service requirement	
	Message Size	141,472bytes	
Service Users:	Frequency	4 per year	
Distribution Network	Response Time	12 hours	
Operators	Coverage (% meters)	10%	
SMTS ES12.3&4 Load Limiting - Energy Consumption / MD	To allow, for example, determined voltage loa	for operation of the supply switch in the event that prad is exceeded.	
Threshold Required by:		Minimum Core Service requirement	
After 2019	Message Size	160bytes	
	Frequency	4 per day	
Service Users:	Response Time	600 seconds	
Distribution Network Operators	Coverage (% meters)	100%	
SMTS ES13 Aux switch #1 operation e.g. electric heating	Message flow to suppo Network Operators (ce	ort auxiliary switching and load control messages fror entral heating).	
Required by:		Minimum Core	
Day 1 (2014)		Service requirement	
Day 1 (2014)	Message Size	160bytes	
Service Users:	Frequency	4 per day	
	Response Time	600 seconds	
Distribution Network Operators	Coverage (% meters)	20%	

## Table 6.2 – Smart grid message flows having a high impact on WAN requirements

Message flow	Description		
SMTS ES13 Aux switch #2 operation e.g. water heating	Message flow to support auxiliary switching and load control messages from Network Operators (water heating).		
Required by: Day 1 (2014)		Minimum Core Service requirement	
	Message Size	160bytes	
Service Users:	Frequency	4 per day	
Distribution Network	Response Time	600 seconds	
Operators	Coverage (% meters)	20%	
SMTS ES13 Aux switch #3 operation e.g. EV charging		ort auxiliary switching and load control messages from ectric vehicle charging).	
Required by: After 2019		Minimum Core Service requirement	
	Message Size	160bytes	
Service Users:	Frequency	4 per day	
Distribution Network	Response Time	600 seconds	
Operators	Coverage (% meters)	5%	
SMTS ES13 Aux switch #4 operation e.g. Heat Pump	Message flow to support auxiliary switching and load control messages from Network Operators (heat pump operation).		
Required by:		Minimum Core	
Day 1 (2014)		Service requirement	
	Message Size	160bytes	
Service Users:	Frequency	4 per day	
Distribution Network	Response Time	600 seconds	
Operators	Coverage (% meters)	5%	
SMTS ES13 Aux switch #5 Microgeneration curtail / dispatch		ort auxiliary switching and load control messages from icrogeneration control).	
Required by:		Minimum Core	
After 2019	M	Service requirement	
	Message Size	160bytes	
Service Users:	Frequency	4 per day	
Distribution Network	Response Time	600 seconds	
Operators	Coverage (% meters)	20%	

Message flow	Description				
Real-time rewards/penalties information	To support provision of real-time rewards and/or penalties information from Network Operators which might be used to support Microgeneration.				
Required by:	Minimum Core Service requirement				
After 2019	Message Size	500bytes			
	Frequency	2 per day			
Service Users:	Response Time	600 seconds			
Distribution Network Operators	Coverage (% meters)	20%			
	This messages is expe functionality.	ected to be available for systems with advanced IHD			

- 6.16. Some of the message flow requirements set out in the tables above may involve high costs. . It is essential that suppliers and other DCC users carefully consider the extent to which these core services represent their minimum core service requirements, for which they will all expect to pay regardless of whether in reality such services are used with respect to all consumers. In order to allow for cost-benefit analysis to be conducted during the procurement process the benefits of any message flows which are likely to drive higher costs should be quantified in the consultation responses as well as through the ongoing work, for example of the Smart Grids Forum<sup>19</sup>.
- 6.17. DCC users should also consider carefully where it makes sense to differentiate service levels (i.e. through the provision of elective services) to provide DCC users with proper cost signals around additional usage.
- 6.18. It is also important that we understand the time dimension of each requirement. Where higher levels of demand are anticipated longer term, it will be important to test whether the chosen communication solutions have the capability to meet these requirements but it may not be necessary to provide the capacity from "go-live" if to do so would add extra cost.

## **Consultation Question**

- 80. Please indicate whether the Minimum Core Service Requirements (i.e. message size, frequency, response time and coverage) for each of the message flows in the above tables can be modified to reduce the potential impact on the WAN cost without compromising the corresponding benefits. Please quantify the additional Programme benefit that could be realised by including each of this message flows in the aggregate Minimum Core Service Requirements.
- 81. Please quantify the additional benefit, if any, that could be realised by using the 'User Target' rather than the 'Minimum Core Service Requirement' in table

<sup>&</sup>lt;sup>19</sup> <u>http://www.ofgem.gov.uk/Networks/SGF/Pages/SGF.aspx.</u>

## 6.1. as basis for the procurement of DCC communication services.

## Other message flows

6.19. The majority of other message flows currently identified have low impact on WAN requirements. The full (indicative) list of these message flows are listed in Table 6.3.

## Table 6.3 – Core Service Requirements (with low/moderate potential impact on WAN cost/performance)

Message flow	Coverage (% meters)	Message Size (bytes)	Response Time (seconds)	Frequency (per day)	Users	Required by
Electricity quality read (on-demand)	10%	300	30	12	DNO	Day 1 (2014)
Electricity quality read (DG)	1%	300	300	17520	DNO	Day 1 (2014)
smart grid: Localized weather forecast reports	20%	1,024	600	1460	DNO	after 2019
smart grid: Over/under voltage alarm	100%	160	30	50	DNO	Day 1 (2014)
smart grid: Re- synchronization of "islands"	10%	160	30	12	DNO	after 2019
smart grid: Small-scale generation management	10%	160	30	1825	DNO	Day 1 (2014)
smart grid: V2G support (bids)	50%	160	30	2190	DNO	after 2019
13-month meter read upload	34%	152,224	3600	1	N/A	Day 1 (2014)
Supply fault alarm triggered	100%	160	600	50	N/A	Day 1 (2014)
Credit balance update	30%	160	120	12	Other	Day 1 (2014)
Read distributed generation data	100%	282	120	12	Other	Day 1 (2014)
IHD, meter or comms unit s/w upgrade	100%	650,000	86,400	2	Supplier	Day 1 (2014)

Message flow	Coverage (% meters)	Message Size (bytes)	Response Time (seconds)	Frequency (per day)	Users	Required by
Battery status	100%	160	600	365	Supplier	
Consumer meter interaction	100%	160	120	12	Supplier	Day 1 (2014)
Diagnostics (low priority)	100%	160	10,800	4	Supplier	Day 1 (2014)
Diagnostics (routine)	100%	160	120	6	Supplier	Day 1 (2014)
Download/clear data from meter (on demand)	100%	600	120	1	Supplier	Day 1 (2014)
Download/clear data from meter (scheduled)	100%	600	600	1	Supplier	Day 1 (2014)
Energisation status check	100%	160	120	1	Supplier	Day 1 (2014)
Feed in tariff update (on demand)	5%	160	120	52	Supplier	Day 1 (2014)
Feed in tariff update (scheduled)	5%	160	120	52	Supplier	Day 1 (2014)
Gas calorific value update (on demand)	5%	160	600	12	Supplier	Day 1 (2014)
Gas calorific value update (scheduled)	5%	160	600	365	Supplier	Day 1 (2014)
Leak alarm	5%	160	600	365	Supplier	
Leakage performance reports	5%	150	600	4	Supplier	
Maximum demand read	100%	160	10,800	12	Supplier	Day 1 (2014)
Message to consumer via IHD (on demand)	100%	256	120	12	Supplier	Day 1 (2014)
Message to consumer via IHD (scheduled)	100%	256	600	52	Supplier	Day 1 (2014)
Meter fault alarm triggered	100%	160	600	1	Supplier	Day 1 (2014)

Message flow	Coverage (% meters)	Message Size (bytes)	Response Time (seconds)	Frequency (per day)	Users	Required by
New device added to SMHAN	100%	160	120	4	Supplier	Day 1 (2014)
PAYG: Remote Top up Payment	30%	160	120	365	Supplier	Day 1 (2014)
PAYG: Remote balance Adjustment (ex gratia payment)	30%	160	120	12	Supplier	Day 1 (2014)
PAYG: Remote config of non disc periods	30%	160	120	6	Supplier	Day 1 (2014)
PAYG: Remote config of non disc periods	30%	160	120	6	Supplier	Day 1 (2014)
PAYG: Remote config of debt settings	30%	160	120	12	Supplier	Day 1 (2014)
PAYG: Remote config of debt settings	30%	160	120	12	Supplier	Day 1 (2014)
PAYG: Locally credit top up applied at meter	30%	160	120	12	Supplier	Day 1 (2014)
Query devices on HAN	100%	544	120	12	Supplier	Day 1 (2014)
Remote configuration of settings (on demand)	100%	1,100	120	4	Supplier	Day 1 (2014)
Remote configuration of settings (scheduled)	100%	1,100	600	36	Supplier	Day 1 (2014)
Remote dis/enablement of supply (scheduled)	100%	160	600	1	Supplier	Day 1 (2014)
Security or software patch	100%	400,000	3,600	24	Supplier	Day 1 (2014)
Self registration on installation	100%	160	120	1	Supplier	Day 1 (2014)
Switch between credit and PAYG (on demand)	100%	160	120	1	Supplier	Day 1 (2014)
Switch between credit and PAYG (scheduled)	100%	160	600	1	Supplier	Day 1 (2014)
Tamper alarm triggered (and reset)	10%	160	600	365	Supplier	Day 1 (2014)

Message flow	Coverage (% meters)	Message Size (bytes)	Response Time (seconds)	Frequency (per day)	Users	Required by
Tariff update (on demand)	100%	160	120	12	Supplier	Day 1 (2014)
Tariff update (scheduled)	100%	160	600	100	Supplier	Day 1 (2014)

## **Consultation Question**

82. Please provide views on whether the Service Requirements described in the above table represent the Minimum Core Service Requirements. Please also indicate whether in your view there are any additional Minimum Core Service Requirements not identified in the above table, and for any such requirement please quantify the additional benefits, if any, that could be realised.

## 7. Performance incentives

## Introduction

- 7.1. DCC will be the monopoly provider of smart metering data and communication services to the domestic sector and therefore it is important to keep its costs as efficient as possible while still ensuring its meets it licence obligations and key performance indicators ("KPIs") set out in the SEC.
- 7.2. In the Response the Government concluded that appropriate performance incentive mechanisms to drive economic and efficient outcomes will be developed. DCC's right to recover from users its own internal costs and the allowed profit margin on these internal costs, as well as the contracted costs of its service providers, should exist within the context of this incentive mechanism. DCC's cost recovery and incentive mechanism should be designed to provide for both its financial viability and the efficient provision of its services.
- 7.3. As a "for-profit" organisation, incentivisation of DCC provides a mechanism to:
  - align DCC's commercial interest with its licence objectives;
  - align DCC's commercial interests with those of its users; and
  - transfer risks of data and communication service provision to DCC and its contracted service providers.
- 7.4. DCC's licensing and incentive regime, and how service level and performance obligations and penalties are reflected in its underlying service provider contracts, will impact on who ultimately bears the commercial risks of service provision. The risk and performance obligations should be transferred to those parties best placed to manage them. This concept is illustrated in Figure 7.1 below.

## Figure 7.1 – Risks and obligations matrix



- 7.1. Before consideration is given to the specifics of different possible incentives mechanisms to be employed there are some general issues that should be considered. These include:
  - objective for establishing each incentive mechanism;
  - incentive strength;
  - degree of symmetry; and
  - sharing factors.
- 7.2. These are discussed below.

## Objective for establishing each incentive mechanism

- 7.3. For each incentive measure consideration needs to be given to:
  - the objective of the particular incentive measure and its overall fit in the incentive regime;
  - the degree of control DCC has over the underlying cost/ activity; and
  - the emphasis that users place on the activity.

## Incentive strength

7.4. This is a particularly important issue given that DCC is asset-light and if it is unable to recover all of its internal operating costs this could present a risk to its financial viability. In other words, an aggregate penalty may need to be restricted to DCC's profit margin. This is important as potential DCC licence applicants will be less willing to apply for the

licence if revenue covering DCC efficiently incurred internal costs is not guaranteed. Service providers may also be less willing to bid if they are concerned about DCC's financial viability.

7.5. The emphasis that users place on a particular activity needs to be considered as the incentive strength should reflect the relative importance of each cost/ activity incentivised. A further issue is the interaction between incentives and the degree to which over-performance in one incentive mechanism can offset under-performance in another incentive mechanism; this issue also relates to whether limits (cap and floor) are required (although an absolute floor could be the profit margin).

## Degree of symmetry

7.6. Consideration should be given to whether an incentive is asymmetric or symmetric, i.e. a symmetric incentive would allow for both penalties and rewards, while an asymmetric incentive may only penalise DCC for poor performance. Factors to consider should be the desired outcome and the ease of achieving/ beating the target. In relation to the former factor, a question to be considered is whether the target is simply something that should not be breached or whether users benefit from DCC exceeding the target. Flowing from the desired outcome of the mechanism is a consideration of the ease of achieving/ beating the target. If actions required to beat the target are different from those required to maintain the target then the incentive strength should reflect this.

## **Sharing factors**

7.7. The degree to which any cost savings/ overruns should be shared with users is an important consideration. While the competitive process of selecting the DCC licensee will help ensure that DCC's costs are efficient, during the licence period DCC may be able to identify areas where internal cost savings against its fixed revenue allowance can be made and consideration should be made on the degree to which these should be shared with users. DCC may also have scope to renegotiate service provider contracts that could lead to costs savings. It is reasonable for these savings to be passed to consumers but to incentive DCC to renegotiate the contracts it may be allowed to keep a proportion of the savings.

## DCC incentive framework

- 7.8. DCC will be incentivised on both its own and its service provider costs to ensure performance. The incentives on DCC's service providers will be included as service level agreement (SLA) provisions in the contracts between the service providers and DCC.
- 7.9. DCC will be a relatively "thin" procurement and contracting entity and with limited recourse to recover losses arising from failure to perform, therefore the risk associated with poor performance in the delivery of data and communication services will need to sit with DCC's contracted service providers. However under a *commercial* business model, DCC should bear at least some of the risks linked to activities that it controls.
- 7.10. DCC incentives should promote good management of service provision (be that service provision itself, or the procurement, contract management and development of those services). For example, preventing smart metering communications from becoming dominated by incumbent service providers and technologies, running an effective and

transparent procurement processes, change management, contract retendering, managing integration risk and effective management of service provider performance. Therefore, these activities should be reflected in DCC's incentive regime and linked to its profit margin.

- 7.11. DCC will be incentivised to meet its licence obligations including the proposed obligation to provide *efficient, economic, and co-ordinated provision of DCC data and communication services*. Given this obligation it is expected that the incentive framework at a minimum would need to:
  - prevent DCC procuring 'gold plated' service providers i.e. a high cost service level procured that exceeds users' requirements;
  - ensure DCC is incentivised over service aspects it has control over, including supporting the rollout of smart meters;
  - ensure DCC actively monitors contracted service level agreements; and
  - ensure costs to users, and in turn consumers, are efficiently incurred in line with DCC's licence obligations and an appropriate service level.
- 7.12. Furthermore, DCC will need to be incentivised to seek to build an appropriate level of flexibility in the services it procures. This will allow for innovation in the delivery of future services and allow DCC to take account of technology improvements to realise efficient costs in the delivery of appropriate services.
- 7.13. The incentive mechanisms during the first generation of the licence are likely to be different to those in subsequent licence terms, because the Government will be procuring the service providers on behalf of DCC. In addition, there is no performance history from which to set performance targets, and there will likely to be uncertainty as to users desired performance standards. Therefore, it is expected that from the award of its licence DCC should be incentivised in relation to its:
  - Outputs. Procurement and contract management; and DCC's internal services to users activities, e.g. dealing with service requests, help desk waiting times, etc.
  - Costs. DCC should ensure costs are efficiently incurred, both its internal costs and those of its service providers, and share any savings with users.
- 7.14. For future generations of the DCC licence Ofgem will have a greater information on users' service priorities and DCC's performance history. It is expected that the incentive regime will reflect the experience gained during the first generation of the licence and the activities DCC will be required to carry out in each subsequent DCC licence period.

## Incentives linked to outputs

7.15. DCC's primary role is contract management and procurement therefore it should be possible to define and measure key performance indicators (KPIs) in relation to these activities. It is expected that DCC's KPIs will cover its internal performance in delivering services (e.g. change management) and procurement and contract management (e.g. number of bidders DCC get for each tender).

- 7.16. Identifying and setting targets for specific KPIs in the first generation of the licence may be difficult, particularly as desired services (and standards) may change as parties become more familiar with the regime. However, incentives mechanisms should be in place to ensure DCC actively manages its contracts and procurement activities in order to attain the service levels users value at efficient costs. It is also expected that there will be an output measure(s) in relation to DCC being responsive and collaborative with the energy industry in supporting improvements to efficiency in the wider industry processes.
- 7.17. DCC should be incentivised on its service delivery where its role can be isolated from the service providers, e.g. DCC's role as the agent of a user in dealing with service requests could be isolated from the service provider's work in dealing with the request. Service providers will be incentivised via the SLAs in the contracts. The Programme will work with stakeholders to identify DCC's potential KPIs.
- 7.18. One option being considered is to allow DCC licence applicants to bid in KPI target levels. In line with this, the applicants would be invited to bid in the revenue they would be willing to place at risk in relation to the performance incentive. This would encourage efficient targets through the competitive procurement process.
- 7.19. Once DCC has begun delivering services an option could be to allow the DCC licensee and the SEC Panel to renegotiate KPI targets on a regular basis, e.g. every two years. This approach would help to ensure that DCC is targeting its own internal service performance that its users value. the Authority would act as the arbitrator if agreement between DCC and the SEC Panel could not be reached. In addition, Ofgem could also set alternative targets if it considered the proposed ones did not meet DCC licence objectives. The scope for negotiation may be limited as changes to KPI targets may involve a higher (or lower) cost to DCC and may require a modification to the DCC licence.
- 7.20. It may be difficult, particularly for the first generation of the licence, to set appropriate output measures encompassing all of the DCC licence obligations.
- 7.21. The use of an Independent Auditor to assess DCC service performance is an option that may mitigate the possible inability to set specific outputs encompassing all of its licence obligations. The auditor would assess whether DCC's service provision, procurement and contract management was in line with its licence obligations and furnish a report to Ofgem. The Authority would have discretion as to the action it would take if DCC was found to be underperforming.
- 7.22. The audit could be done on a regular (annual) basis and/ or if Ofgem has concerns about areas of the licensee's performance. It is expected that Ofgem would be able to launch its own assessment if it considered DCC had breached its licence conditions.
- 7.23. In addition DCC will be required to issue regular reports on its (and its service providers') performance and these reports would be monitored by the SEC Panel and Ofgem. Any concerns raised by the Panel may prompt Ofgem to review DCC performance on a more regular basis.
- 7.24. Consideration needs to be given to ensuring that service performance incentives do not encourage inefficient expenditure, e.g. the incentive mechanism should not result in 'gold plating' of services, but are strong enough in order to encourage DCC to

undertake the activity (e.g. renegotiate a service provider contract to reduce total user costs).

7.25. An incentive mechanism reopener at the five year point would allow Ofgem to revisit the KPI targets and incentive mechanisms. To provide further flexibility an option could be for Ofgem to reopen the incentive regime if, for example, it received two successive auditors' reports indicating poor performance by DCC or it had ongoing concerns about DCC performance.

## Targeted costs and gain sharing

- 7.26. An incentive mechanism based on target forecast costs is common in GB energy regulation, for example the information quality incentive (IQI) for network operators. The incentive mechanism is generally based on sharing any under/ overspends against a target between the regulated monopoly and users. The incentive mechanism therefore encourages the regulated monopoly to make efficiency saving on its own internals costs while ensuring that users (and ultimately consumers) benefit from these savings. The mechanism also protects the regulated monopoly's revenue where an overspend occurs against its target internal costs, while providing a disincentive to overspend.
- 7.27. In addition, it is expected that there will be a gain-sharing mechanism under the service providers' contract to share with users, through DCC, costs efficiency gains achieved by service providers. An option for incentivising DCC to ensure service provider contracted costs are incurred efficiently would be to allow it to share in achievable savings against a cost target.

## Proposals

- 7.28. We consider that a package of incentives is required to make sure that DCC manages and procures its service providers efficiently and effectively and manages its internal costs efficiently and effectively. The incentives will need to be coordinated to prevent the risk of DCC procuring "gold plated" services to meet KPIs. We expect that the incentive package would ensure efficiency gains made by DCC on its internal costs or via management of the service provider contracts would be shared with users.
- 7.29. We propose to include incentives relating to KPIs on DCC's:
  - internal services to users activities, e.g. dealing with service requests, help desk waiting times, etc;
  - contract management and procurement, e.g. number of bidders for each tender; responsive and collaborative approach with users, etc; and
  - management of the performance of its service providers.
- 7.30. We propose that DCC licence applicants should be invited to bid in the revenue at risk and KPI targets. It is expected that the aggregate incentive penalty amount will be restricted to DCC's profit margin in order for DCC to always cover its operating costs. The incentives will need to maintain a level strength over DCC's licence period in order to prevent perverse incentive on it to delay or bring forward work.
- 7.31. We also propose to provide for the ability for the Authority to commission an independent audit of DCC performance against its licence obligations. The auditor would provide the Authority with an assessment of whether DCC has underperformed

and provide recommendations. Under DCC's licence reporting requirements DCC would be required to furnish regular reports on its (and its service providers) service performance.

7.32. We consider that including a reopener for the incentive mechanisms at the five year mark would be appropriate to enable Ofgem to review the effectiveness of the incentive arrangements. It may be appropriate for Ofgem to reopen the incentive arrangements prior to or after the five year mark if, for instance, the independent review identifies poor performance in successive years. It is also expected that Ofgem would review the KPIs and update these as required to ensure they are in line with DCC's objectives.

Consultation Questions		
83.	Please provide comments on the incentive regime proposed for DCC.	
84.	Do you consider it appropriate and feasible for the SEC panel and DCC to negotiate KPI targets?	
85.	Do you have views on the use of an independent audit of DCC performance? Should this be on a regular and/or ad hoc basis?	
86.	Do you consider that a sharing mechanism should be in place for DCC internal costs? Should a sharing mechanism be included in the contracts with the service providers?	
87.	Do you consider that it is appropriate to invite DCC licence applicants to propose KPIs?	

## 8. Adoption of Foundation Stage Communication Contracts

Previous Government Conclusions

- 8.1. In the Response the Government concluded that DCC should be required to adopt communication contracts associated with compliant smart meters installed before DCC's services are available, subject to those contracts meeting pre-defined criteria. It further stated that there should be a limit on the number of contracts that DCC would guarantee to accept, subject to the adoption criteria being met, but that it would have the discretion to adopt contracts in excess of this number where it was satisfied this was consistent with the procurement strategy objectives set out in its licence.
- 8.2. The Response recognised that reliable information is not likely to be available until DCC's communication service providers have been selected but that suppliers would benefit from an early indication of the adoption criteria and volume. Accordingly the Government concluded that, in parallel with the early stages of the procurement process for DCC communication services, an adoption criteria and initial guaranteed volume would be identified and implemented through DCC licence conditions and then that a final guaranteed volume would be available before any significant rollout of compliant metering systems.

- 8.3. Due to the cost, as well as the inconvenience to customers, of making second visits to replace communication modules, Suppliers will have a disincentive to rollout smart meters during the Foundation Stage unless they have a good prospect that the associated communication contracts will be adopted by DCC. Some respondents to the Prospectus argued that Suppliers' Foundation Stage communication contracts should be of very limited duration so as to avoid sharing risks with other DCC Users by letting the contracts expire and hence avoiding the issue of adoption. However, this too could discourage Foundation Stage rollout.
- 8.4. We remain keen to facilitate early rollout of smart metering systems prior to DCC's services starting operation, in order that benefits can be realised early and experience gained. The Impact Assessment, which formed part of the Response, assumes low, central and high estimates of 2.7m, 4m and 6.5m smart meters, respectively, being installed before DCC's services are operational.
- 8.5. Hence, DCC will be required to guarantee, subject to certain criteria, to adopt communication contracts entered into between Suppliers and communication providers in respect of a minimum volume of compliant meters installed by Suppliers before DCC services are available.
- 8.6. Four issues that arise are:
  - Adoption Criteria: Some communication contracts entered into by Suppliers could have potentially onerous terms and conditions, which it would not be in the best interests of consumers and DCC Users for DCC to adopt. Thus, criteria should be defined which Foundation Stage communication contracts must satisfy in order to be considered for adoption; defining such criteria will give greater certainty to Suppliers during the Foundation Stage.
  - Guaranteed Adoption Volume: Notwithstanding the benefits, it could be counterproductive if rollout during the Foundation Stage were to significantly increase
the cost of the communication services to be provided on an enduring basis by DCC. Therefore, specifying the guaranteed volume of compliant smart metering systems the DCC would guarantee to adopt, subject to the criteria being met, may be appropriate to prevent the business case for the Programme being eroded. As with the adoption criteria, defining the guaranteed adoption volume will help give certainty to Suppliers during the Foundation Stage.

- Allocation of Guaranteed Adoption Volume: Any guaranteed adoption volume will need to be allocated between the three communication regions and between the Suppliers.
- Timing of Adoption: It needs to be considered when, during the mass rollout stage, contracts that have been identified for adoption are migrated into DCC's services.

# Adoption Criteria

- 8.7. Since the Response was published, the Programme has discussed with stakeholders through the relevant DCCG Working Groups potential criteria for the adoption of communication contracts.
- 8.8. In order to avoid the DCC being burdened with contracts that are costly to manage, it is considered that, at the principle level, to be adopted the foundation contracts should meet the following adoption criteria:
  - the communication contract should be of sufficient scale to warrant adoption;
  - the communication contract should be proven to work operationally with compliant meters and DCC service requirements and standards; and
  - the communication contract should be commercially acceptable in terms of price, incentives, duration and a positive service provider relationship.
- 8.9. In addition to standard terms and conditions to provide technical interoperability and value for money, characteristics of foundation stage communication contracts to support adoption should include the following principles:
  - the contract should be let with a clear option to novate to DCC;
  - the communication elements of the contract should be distinct or separable as only these will novate;
  - the contract's duration should be sufficient to permit a reasonable usage period by DCC after adoption;
  - the contract's duration or termination provisions should permit exit on fair terms if the contract is not adopted; and
  - the contract should have sufficient exit provisions to enable smooth transition post adoption for both consumers and DCC to a future DCC service provider.
- 8.10. As to whether the contract charges are such that they impact negatively on the costbenefit case for the programme, factors the DCC will need to take into consideration at the time of the actual contract adoption may include the cost of the adopted contract as compared to the cost of DCC's service providers and the cost of changing a communications hub that not adopting the contract would entail. It is also possible that

further cost savings could be realised by one of the service providers taking on the adopted contract and rationalising the adopted technologies with its own and hence this option will need to be considered by the DCC also.

# **Guaranteed Adoption Volume**

- 8.11. While the installation of smart metering systems during the Foundation Stage will provide early benefits of smart metering, if DCC adopts communication contracts for too many smart metering systems, this could erode the economies of scale of the communication contracts procured by DCC itself. Potentially this loss of economies of scale could outweigh the benefits of early installation, and hence impact negatively on the business case of the Programme.
- 8.12. The costs of rolling out each smart meter during the Foundation Stage include:
  - the cost of loss of economies of scale for DCC's service providers' services depending on the number of Foundation Stage metering systems served by Foundation Stage communication contacts; plus
  - the opex and capex cost for Foundation Stage communication contracts, which is assumed to be greater than DCC communication costs; and
  - the integration cost per smart metering system installed during the Foundation Stage, to cover the cost of incorporating the Foundation communication contract into DCC's services.
- 8.13. The benefits of rolling out Foundation Stage smart meters include early smart metering benefits, benefits of reducing peak installation rate during mass rollout or allowing for earlier completion, as well as increasing supplier readiness for the mass rollout by allowing sufficient large scale testing and trialling.
- 8.14. Table 8.1 shows the costs and benefits of all the parameters that have been identified as being relevant and the way these parameters impact on the adoption volume. Views are invited on the values of these parameters that it would be appropriate to use in determining the appropriate guaranteed adoption volume.

# Table 8.1 – Costs and Benefits of Foundation Stage Rollout and Effect on the Guaranteed Adoption Volume

Cost / Benefit	Duration of Cost/Benefit	Impact on Minimum Adoption Volume
Smart metering benefits during the Foundation Stage (and during the early part of mass rollout)	Foundation Stage	Higher benefits will increase the minimum adoption volume.
Potential cost of loss of economy of scale for DCC communication contracts (for some technologies)	Duration of adopted communication contract (if economies of scale can be realised thereafter) or length DCC contracts otherwise	Greater loss of economies of scale for some technologies reduces adoption volume

Cost / Benefit	Duration of Cost/Benefit	Impact on Minimum Adoption Volume
Cost of integrating the Foundation Stage communication contract into DCC services	One-off	Higher integration cost reduces the net cost-benefit of Foundation Stage adoption and hence reduces the adoption volume
Opex cost for the adopted contract	Duration of adopted contract	Higher opex for the adopted contract reduces the net cost-benefit of Foundation Stage adoption and hence reduces adoption volume
Cost of Foundation Stage communications equipment / WAN module	One off	High communication equipment/WAN module costs reduces the net cost-benefit of Foundation Stage adoption and hence reduces adoption volume
Benefit of reducing peak installation rate during mass rollout or allowing for earlier completion	One off	Notwithstanding the benefit is difficult to quantify, a higher benefit will imply that more adoptions can and should be made before the benefit is outweighed by any potential loss in economies of scale for DCC communications.
Benefit of learning during Foundation Stage	One off	Notwithstanding the benefit is difficult to quantify, a higher benefit will imply that more adoptions can and should be made before the benefit is outweighed by any potential loss in economies of scale for DCC communications.

- 8.15. The Response recognised that the information needed to calculate the minimum adoption volume, specifically the impact on the service providers' economies of scales and costs, will not be known until after the DCC service providers have been selected. Thus it concluded that there would be an initial figure determined to give an early level of certainty to Suppliers and so facilitate early roll-out.
- 8.16. Given the continued uncertainty around the parameters needed to determine the appropriate level of the minimum adoption volume, it may be appropriate to set an initial figure in order to assist suppliers in developing their Foundation Stage rollout plans, which may be revised later when information on DCC service provider costs becomes known.
- 8.17. We have considered initial minimum adoption volumes of 2.7 million, 4 million and 6.5 million meters, which correspond with the Impact Assessment low, central and high scenarios. Currently meters must be certified, and certifications last for typically 20 years (or 10 or 15 years in some cases). Thus, in the run up to DCC "go-live", the certifications for significant numbers of existing meters will expire, and the Suppliers will be obliged to replace them. Additionally, during this period, meters will need to be installed at new premises. Estimates are that approximately 4 million such new and replacement meters will need installing or replacing during the Foundation Stage.
- 8.18. In view of the current uncertainty around the costs and benefits we propose to set an initial guaranteed adoption volume following our analysis of the responses to this consultation.
- 8.19. We then propose to determine the final guaranteed adoption volume to take into account information on the impact on the enduring DCC communication service providers, which will become available in the late stages of the DCC services procurement process. The final guaranteed adoption volume will be based on a trade-off between the benefits of rollout during the Foundation Stage and any impact on the

cost of the enduring communication contracts resulting from the loss of economies of scale. The initial guaranteed limit will not be decreased, it will either be retained or increased, otherwise it would not provide the certainty needed to facilitate early rollout.

8.20. As DCC's communication contracts are being let on a regional basis, it may be that the economies of scale are also realised separately within each of the communication regions. Accordingly, adoption volumes should be calculated separately for each communication region. Should a communication contract be let which covers more than one of the regions then it may be possible to calculate an adoption volume for the relevant regions combined.

#### Adoption of Contracts In Excess of the Minimum Adoption Volume

- 8.21. If a Foundation Stage communication contract is not adopted by DCC, the Supplier will be liable for the additional cost of a second visit to replace the communications hub at the relevant premises.. The cost in addition to the inconvenience to the consumer of a second visit could be significant.
- 8.22. DCC will have the discretion to adopt communication contracts associated with compliant smart metering systems in excess of the guaranteed minimum adoption volume providing this is consistent with DCC's licence objectives. In exercising this discretion DCC would need to consider any changes to the various parameters and circumstances that are likely to occur between setting the guaranteed adoption volume and the time of the adoption process as well as how additional adoptions might impact on its contracts with service providers.
- 8.23. It is for consideration what additional obligations and incentives need to be provided to DCC under its licence to guide its assessment as to whether it should adopt additional contracts. For instance, it may be appropriate to ensure that DCC assesses all costs incurred in not adopting the contract, including the cost incurred by the supplier of the further site visit to install a new WAN module, rather than just DCC's costs alone. It is also for consideration whether to specifically provide for suppliers to compensate directly DCC for any costs incurred by DCC or its service providers in the adoption of additional contracts.
- 8.24. Were, however, a change in circumstances to occur as a result of the actions of the service provider, e.g. a delay in the provision of the service provider's services requiring more meters to be installed in the Foundation Stage and subsequently adopted, then it appears appropriate that the service provider be expected to absorb the impact on it of the higher number of adoptions.

#### Allocation

- 8.25. Having established the guaranteed adoption volume within each region, it must then be established how the volume within each region is allocated between each of the Suppliers.
- 8.26. Options include:
  - Option 1: adopt the contracts that are the most economically advantageous;
  - Option 2: adopt the contracts up to the guaranteed adoption volume on the basis of first come first served;

- Option 3: adopt contracts on the basis of market share within each region;
- Option 4: adopt contracts on the basis of numbers of compliant smart metering systems installed; and
- Option 5: a combination of Option 3 and Option 4.
- 8.27. Option 1 might appear attractive in terms of overall economic efficiency, however, this option would create considerable uncertainty for Suppliers, who would probably not install a Foundation Stage meter rather than risk not having it adopted and incurring the cost of a second site visit to change the communications module.
- 8.28. Option 2 might give less uncertainty than Option 1 but could lead to the Foundation Stage being dominated by only one or two large Suppliers.
- 8.29. Option 3, allocation based on market share, could provide Suppliers with a higher degree of certainty. Certainty would be further enhanced by referencing market share to some fixed date, say 1 April 2011, such that the market shares are known and Suppliers can manage their rollout plans accordingly.
- 8.30. Some Suppliers might, for reasons unconnected with the adoption of communication contracts, not be able to use their allocations during the Foundation Stage, in which case beneficial opportunities to rollout smart metering systems early could be lost. These Suppliers could be required to declare the fact that they did not intend to use their full allocation, such that it could be redistributed amongst the other Suppliers. The timing and frequency of such reallocation such that the other Suppliers can take advantage of the opportunity for additional adoptions would need consideration.
- 8.31. Option 4 has the advantage of being reflective of need, i.e. it would provide a greater allocation for Suppliers installing more smart meters, although the allocation for each individual Supplier does become dependent on the actions of other Suppliers, creating a degree of uncertainty. This is so because the allocations would need to be made expost.
- 8.32. Should the guaranteed adoption volume be greater than the number of new and replacement meters then, to provide a level of certainty, an allocation for new and replacement meters could be made based on Option 3, i.e. market share, with the excess being pro-rated on the basis of Option 4, i.e. meters actually installed (in excess of the new and replacement allocation). This is the basis of Option 5.
- 8.33. Also it is recognised that small Suppliers' Foundation Stage communication contracts could be adopted with negligible impact on the rest of the market, and the desirability of putting in place special provisions for such suppliers needs to be examined.

# Timing

8.34. Finally, there remains an issue of when, during the mass rollout phase, communication contracts should be migrated to DCC's services. It is possible that the adoption of communication contracts could happen either towards the beginning of the rollout or towards the end or in accordance with some predetermined event, i.e. change of supplier. Adopting contracts earlier would allow the earlier realisation of the additional benefits of integration into DCC services. Alternatively, to the extent that the limiting factor during mass rollout is the rate at which meters can be integrated into DCC's services then adoption might be possible during any part of mass rollout.

8.35. It is recognised that the timing of adoption is likely to have consequences for both DCC and the Supplier. It is for consideration as to whether adoptions are required to take effect within some period of "go-live", say 12 months, so as to maximise benefits, or whether the Supplier can novate the contracts at any time of its choosing, perhaps subject to a plan pre-agreed with DCC.

#### **Proposals**

- 8.36. To avoid adopted Foundation Stage communication contracts being too costly for the DCC to manage, we propose that the adoption of Foundation Stage communication contracts should be subject to the criteria described in paragraphs 8.8 and 8.9.
- 8.37. We seek stakeholders' views on the value of parameters listed in Table 8.1 that we should use to decide whether there should be a minimum adoption volume and the level of that volume.
- 8.38. In view of the current uncertainty around the costs and benefits outlined in Table 8.1 we propose to set an initial guaranteed adoption volume following our analysis of the responses to this consultation.
- 8.39. We then propose to determine the final guaranteed adoption volume to take into account information on the impact on the enduring DCC communication service providers, which will become available in the late stages of the DCC services procurement process. The final guaranteed adoption volume will be based on a trade-off between the benefits of rollout during the Foundation Stage and any impact on the cost of the enduring communication contracts resulting from the potential loss of economies of scale. Any revision will only be made if it is an increase to the initial figure, otherwise the minimum adoption volume set initially would not provide the certainty needed to facilitate early rollout.
- 8.40. We propose that the adoption volume be determined separately for each region.
- 8.41. We seek views on which of the following options should be used to allocate the adoption volume amongst Suppliers:
  - on the basis of market share; or
  - on the basis of number of smart metering systems installed; or
  - on the basis of a combination of market share and number of smart metering systems installed.
- 8.42. We seek views on the mechanism that would allow the redistribution of unutilised allocations of guaranteed adoption volumes amongst Suppliers.
- 8.43. We propose that DCC should have the discretion to adopt further contracts and we seek views on whether additional objectives and incentives should be placed on DCC with respect to its assessment of whether to adopt contracts in excess of the minimum adoption volume.

Consultation Question	
88.	Are the criteria for adoption of contracts discussed in paragraphs 8.8 and 8.9 appropriate? Are there any additional criteria that should be included? Can quantitative thresholds for any or all of criterion be defined and, if so, how?
89.	Do you agree with our approach to identifying the guaranteed adoption volume of Foundation Stage smart metering systems? Are the factors we have identified the appropriate ones? What are your views as to the appropriate values of the various parameters identified in Table 8.1?
90.	Do you agree that DCC should be able to decide to adopt communication contracts associated with Foundation Stage smart metering systems in excess of the guaranteed adoption volume providing there is a net benefit to doing so? If so, does DCC need to be provided with additional obligations and incentives to encourage DCC to actively pursue such contracts and what factors should DCC take into account in making its assessments? Should we specifically provide for suppliers to compensate directly DCC for any costs incurred by DCC or its service providers in the adoption of additional contracts?
91.	What in your view is the most appropriate option for allocating the guaranteed adoption volume across energy suppliers and on the mechanism, including timing and frequency, by which any allocation unused by one supplier should be redistributed to other suppliers?
92.	Do you have views as to when Foundation Stage communication contracts should be adopted?

# 9. Competitive licence application process

#### Introduction

9.1. This chapter provides proposals for the process for choosing the DCC licensee. We welcome stakeholder feedback on the details outlined.

#### Previous Government Decision

- 9.2. As outlined in the introduction to this consultation, the Government has concluded that the licence to DCC will be granted following a competitive application process.
- 9.3. It is the intention that an appointed DCC will hold both an electricity and gas licence, consequently it will be a requirement that DCC applicants apply for, and are willing to be granted, both licences. In practice it is intended that both gas and electricity DCC licences will be embodied within a single document with a single set of terms and conditions.
- 9.4. Licence application regulations will set out the framework for running the licence application process. These regulations will be made in accordance with sections 41HC of the Gas Act 1986 and 56FC of the Electricity Act 1989. It is our intention to consult on a draft set of regulations before these are laid before Parliament, which is expected to be in 2012.

#### Design of process

#### Discussion

- 9.5. The process has been developed to apply to the appointment of the initial DCC licensee. The process for subsequent DCC licence applications may differ from the initial process for a number of reasons including, for example:
  - the process may be run by the Gas and Electricity Markets Authority rather than the Secretary of State;
  - there will be an incumbent DCC in place;
  - there will be service providers with contracts in place; and
  - the nature and scope of DCC's obligations may change over time and consequently the type of organisation and/or selection criteria needed to fulfil DCC role may change.
- 9.6. The proposed DCC licence application process has been developed in accordance with Better Regulation principles including transparency and consistency as well as best practice from other similar processes. In particular, while acknowledging that there are differences between the two processes, the proposed DCC licence application process has built on Ofgem's tender process for offshore transmission licences which has developed and been refined over several years and itself built on precedents including the Government's Private Finance Initiative, Ofcom's experience in spectrum auctions and the Department of Transport's rail franchising model.
- 9.7. The process has been developed to suit the specific requirements of the initial appointment of the DCC licensee. We will continue to refine the process in the coming

months and we will encourage stakeholder input and engagement to ensure a robust and effective process.

- 9.8. The offshore transmission tender process had five stages including a "qualification to tender" stage after pre-qualification. We discussed the number of stages to use in the DCC licence application process with the relevant DCCG Working Group and considered the following options:
  - to use a similar five stage process.
  - to eliminate the "qualification to tender" stage, as DCC appointment does not include negotiations with a developer or any substantive capital raising.
  - further reducing the number of stages to minimise the overall timescale by combining pre-qualification with invitation to apply (but for a large number of applicants this would mean that assessment would take an excessive time) and eliminating the "best and final offer" stage (but this would reduce the flexibility of the process).

#### Proposals

- 9.9. The second option above, reducing the number of stages used in offshore transmission to a more streamlined four stage process, is proposed as the DCC application process is less complex than the offshore transmission tenders.
- 9.10. Consequently, the proposed stages for the application process are:
  - pre-qualification (PQ), with hurdles based on responses to a pre-qualification questionnaire (PQQ) to enable the selection of applicants who are able to fulfil the role of DCC licensee.
  - invitation to apply (ITA), during which qualified applicants would put forward detailed proposals of how they would establish and run DCC and their expected costs with selection to the next stage via weighted evaluation criteria.
  - an optional best and final offer (BAFO) stage in the event that there are two or more similar applications and giving the opportunity for further competitive tension.
  - a stage to finalise the details with one or more preferred applicants, including finalising the incentive mechanisms and the terms of the revenue restriction, culminating in DCC licence award to a preferred applicant.
- 9.11. An outline of this process is depicted below.





# Financial security

#### Discussion

9.12. As described in the DCC Licence Conditions chapter (paragraphs 3.126-3.132), we are considering whether the successful DCC applicant can provide some form of financial security as an alternative to demonstrating that it has an investment grade credit rating. For instance, the security could be in the form of a deposit or an unconditional irrevocable letter of credit that would be drawn down upon where necessary.

#### Proposals

9.13. We are considering whether, in the event that applicants could not demonstrate that they can achieve an investment grade credit rating, a commitment to provide an appropriate financial security, were the applicant be awarded the licence, should be required to be made with their response to the invitation to apply. This would ensure that the applicant had sufficient financial standing to commit to the security. The commitment would only be exercised in the event that the applicant was awarded the DCC licence.

**Consultation Question** 

94. Do you consider that applicants should commit to lodge a form of financial security at the invitation to apply stage that would take effect if the licence was granted to the applicant?

# Changes to an applicant's consortium

#### Discussion

9.14. It is often the case that consortia members change during an application process. We need to consider whether changes to consortia should be allowed, and if so, how far into the application process should a consortium be allowed to change its members? In particular, changes after the Invitation to Apply (ITA) stage are likely to require further assessment and to delay the process.

#### Proposals

- 9.15. It is proposed that an applicant group may be allowed to change its membership, but it must notify the Government as soon as reasonably practicable. If change of membership is between pre-qualification and invitation to apply, the Government will reassess whether the revised group meets the pre-qualification criteria, and if not the change of membership will be disallowed or the group will be eliminated from the application process. However, we expect applicant group membership to be finalised when they respond to the ITA. Should unexpected or unforeseen circumstances occur, we expect to determine on a case-by-case basis whether any change would be fair and equitable to all other applicants.
- 9.16. It is also proposed that a change to an applicant group may be refused if it fails to demonstrate it can fulfil the criteria at previous applicant stages.

#### **Consultation Question**

95. Do you agree with the proposals for dealing with changes to consortia including allowing changes up to but not beyond submission of responses to the ITA?

# Confidentiality agreement

Discussion

9.17. We have discussed with the relevant DCCG Working Group whether there should be a confidentiality agreement for each consortium member or whether one confidentiality agreement for a consortium to cover all members would be adequate.

Proposals

9.18. We propose that each applicant enters into one overarching confidentiality agreement that all consortium members sign at the PQ stage. This should result in a lesser administrative burden but afford the same protection as the situation where members enter into individual arrangements.

#### **Consultation Question**

96. Do you agree with the proposal for one overarching confidentiality agreement for each applicant group rather than individual confidentiality agreements for each member of an applicant group?

# Clarifications

#### Discussion

9.19. It is recognised that applicants may seek clarification about the information provided. It will be important for transparency that questions and answers are managed in a structured way.

#### Proposal

- 9.20. We propose that all points of clarification should be requested via the data room (which we expect to provide as a secure electronic means of communication) with responses made available to all applicants subject to any commercially confidential issues. Applicants will be able to seek clarification at both the pre-qualification and the invitation to apply stage.
- 9.21. A clarification of responses from applicants may be sought at both the pre-qualification and the invitation to apply stage.

#### **Consultation Question**

97. Do you have any comments on the approach to clarifications and dialogue with prospective applicants?

# Pre-qualification stage

- 9.22. The main purpose of the pre-qualification stage is for the selection panel to assess applicants in a robust, transparent manner and make recommendations to the Secretary of State on those applicants considered appropriate to invite to apply for the DCC licence. All applicants will complete a PQQ and the selection panel will assess these against pre-determined hurdles to ascertain which applicants will be asked to submit responses to the invitation to apply. We intend to publish a draft of the pre-qualification documentation, including the PQQ and instructions regarding responses before the licence application processes commences to enable potential applicants to consider their applications at an early stage.
- 9.23. We expect to advertise the commencement of the DCC licence application process in relevant national and international publications and on DECC's website.

#### Information requirements

Discussion

9.24. We have discussed the information that applicants should provide during the prequalification stage and with the relevant DCCG Working Group.

Proposal

9.25. In summary, the information that we propose to ask applicants to provide includes:

• information on the applicant and, if applicable, consortium members including shareholdings and organisational structure;

- economic and financial standing of the applicant including ability and willingness to lodge a financial guarantee, if required;
- description of the management and operational capability of the applicant;
- evidence regarding the relevant experience of the applicant including tendering, contract management, communication sector and energy sector including references;
- legal standing including any pending litigation;
- conflicts of interest including evidence of independence from any existing or likely future service providers and with any users; and
- willingness and ability to comply with the proposed DCC licence and other legislative requirements, including intent to apply for both gas and electricity licences, and to comply with the proposed SEC, and a commitment to enter into specified service provider contracts.

# Submissions

# Discussion

9.26. It is important that applicants are selected based on robust and detailed information and the pre-qualification process has been designed to identify the most appropriate applicants to take forward to the next stage.

# Proposals

- 9.27. Information would be made available to each applicant to enable sufficiently detailed responses to the PQQ which we proposed would include:
  - high level information on the proposed service provider contracts;
  - DCC Licence conditions;
  - information on the SEC;
  - relationships of DCC with other industry participants and obligations to these participants; and
  - the selection process to the next stage.
- 9.28. We propose that responses should be submitted within a reasonably short time, about three weeks after the advertisement is issued, in particular as potential applicants will already have been able to have sight of draft PQQ documentation. This should provide a balance between providing enough time for applicants to develop detailed responses to the PQQ and ensuring that the DCC licence is granted in as short a timeframe as possible so that DCC can take on responsibility for service provider contracts. Prospective applicants will already have had an opportunity to see the draft PQQ which we plan to publish prior to the application process commencing.

# Selection criteria and process

# Discussion

9.29. A key principle for the pre-qualification stage is to ascertain whether an applicant meets the minimum application criteria. The objective is to ensure a transparent process

taking decisions based on evidence submitted by applicants. We have agreed the process for the selection of applicants to the next stage following discussions with the Working Group.

Proposals

9.30. We propose that the PQ process is conducted over two parts:

Part 1

- 9.31. In order to pass Part 1, applicants would be required to meet certain minimum standards and to have fulfilled the requirements outlined in the PQQ instructions. We propose that these are that the applicant:
  - has submitted a complete and compliant PQQ response; and
  - meets the minimum compliance and legal eligibility criteria including the ability to meet the licence conditions, which we intend to publish prior to commencement of the application process (for example independence from service providers), and any statutory requirements, and has applied for both gas and electricity licences.
- 9.32. If these minimum standards are not met by an applicant, we propose not to undertake the detailed Part 2 assessment in relation to that applicant. However, to ensure that submissions are not invalidated by a minor omission or deficiency, we propose that the panel checks responses soon after the response deadline and returns a response checklist to each applicant with an opportunity to remedy deficiencies within, say 48 hours. We do not propose to exercise any judgement at this stage as to the quality of the submission in relation to the selection criteria.

#### Part 2

- 9.33. All applicants that pass Part 1 of the selection process would then be assessed against clear, objective criteria by the selection panel. These criteria are proposed to include:
  - the extent of evidence of applicants' economic and financial standing including ability to meet any financial requirements imposed on DCC under its licence;
  - the extent of evidence of a suitable ownership structure for the applicant demonstrating that there is an efficient and legally robust decision-making process for the management of the proposed organisation, specifically identifying any potential conflicts of interest;
  - the extent of evidence of a suitable management capability for operating DCC, demonstrating tender process and contract management experience of substantive projects, and ideally communications and energy sector experience;
  - the extent of evidence that the applicant understands the regulatory environment within which DCC will be operating;
  - the extent of evidence that the applicant will continue to be independent from service providers; and
  - the extent of independence of the applicant from users including any measures in place to ensure no undue influence is exerted by users.

- 9.34. We propose these criteria and a robust process of assessment to give confidence to applicants that the process is fair and transparent.
- 9.35. We propose that the licence application panel selects applicants for the invitation to apply stage based on responses to the questions. If there are a large number of applicants, the number selected for the invitation to apply stage may need to be limited to ensure that the selection process is manageable and that applicants to the invitation to apply have the confidence that it is worth their while to incur application costs. We intend to clarify the selection process in the pre-qualification documents.
- 9.36. We envisage that the time to evaluate applicants, obtain internal approvals and notify applicants will take approximately six weeks.
- 9.37. Applicants selected for the invitation to apply stage would be notified and provided with details of the invitation to apply stage. Unsuccessful applicants would also be notified and offered feedback.

# **Consultation Question**

98. Do you agree with the proposed approach to the pre-qualification stage including the timescale, the information required and the assessment methodology and criteria?

# Invitation to apply stage

9.38. The main purpose of the ITA stage is to identify one or more preferred applicants to become the DCC licence holder (and possibly one or more reserve applicants). Where this is not possible, A small number of applicants may be invited to submit a best and final offer. This section sets out our proposed approach to running the ITA stage of the application process.

#### **ITA Documentation**

Discussion

9.39. The ITA documentation will provide detailed information for applicants, the requirements of the response and the proposed approach to evaluating applications.

Proposals

- 9.40. We propose to publish a draft of the ITA documentation before the licence application process commences. It is envisaged that the ITA documentation will include:
  - rules of the ITA stage;
  - any changes since the pre-qualification stage to the regulatory and contractual framework;
  - details of proposed contracts with service providers, although some contractual issues may still be confidential at this stage;
  - the assumptions that applicants should use in their business plans on the timetable for rollout, the services that DCC will be required to deliver and, if

available, the timetable for taking over meter point/supplier registration service. This will include outline obligations and performance indicators expected to be in service provider contracts.

- detailed instructions on the requirements of response;
- guidance on the data room contents and access arrangements; and
- a description of the assessment process..
- 9.41. We will issue ITA documentation to all applicants that qualified at the PQ stage inviting them to submit detailed applications. As noted above, it is expected that applicants will have an opportunity to see proposed service provider contracts and be provided with information on the service provider procurement process at this stage, which will be going on in parallel with the DCC appointment process. As the service provider contracts continue to develop throughout the application process, we intend to ensure that up-to-date information is made available to all applicants still remaining within the process, subject to any confidentiality issues. If there are any material developments there may be the opportunity for applicants to revise their application accordingly or to adjust the revenue restriction, but otherwise we do not expect material changes to applications.
- 9.42. As part of their application at the ITA stage an applicant will be expected to confirm their acceptance of any changes since the pre-qualification stage to the regulatory and commercial framework applying to DCC.

#### **Consultation Question**

99. Do you have any comment on the documentation to be provided by applicants for the DCC licence? Is there any other information that you think should be made available to applicants?

#### Applicants' Responses

Discussion

9.43. The ITA documentation will contain full details of the information that applicants will be required to submit by way of compliant response (which will be in addition to the information listed earlier to be submitted during the PQ stage) and the timetable for the response.

Proposals

- 9.44. In summary, we expect the submission to include:
  - an executive summary;
  - an opportunity to provide further information and evidence on relevant experience;
  - a letter of credit from a financial institution committing the applicant to provide the financial security discussed in paragraph 9.12 that will be required if the applicant becomes the DCC licence holder;

- an outline business plan including organisational structure and business continuity plans for DCC;
- proposed transition plans, both at commencement of the licence period and at the end of the licence period for ensuring smooth handover of contracts, resources, processes etc to any newly appointed DCC licence holder;
- the expected cost of undertaking DCC's activities including the proposed profit margin for each year of the DCC licence;
- a proposal for the incentivisation scheme that the applicant is willing to conform to including suggestions as to targets for the management of the data communication services and proposals for the risk/reward mechanisms on operating factors and DCC costs. This should include information on how much of its revenue (excluding that for service provider contracts) the applicant is willing to be at risk under the incentivisation schemes.
- any further information or amendments to the information provided during the PQQ stage.
- 9.45. We envisage that applicants will be allowed about four weeks to respond to the ITA.

# Evaluation

Discussion

- 9.46. The main aim of the ITA stage is to identify the most appropriate applicants for the DCC licence in terms of their ability to provide value economically for end users given the obligations DCC will face under the regulatory framework.
- 9.47. We have discussed with the relevant DCCG Working Group the criteria that we propose be used to evaluate applicants and the appropriate weighting factors. The Working Group considered that key criteria included:
  - the experience of the applicant and its management team;
  - ensuring that licence obligations are fulfilled;
  - the quality of the submitted business plan including the proposed costs; and
  - the incentivisation scheme that the applicant is willing to accept.
- 9.48. It was considered that the experience of the applicant and its management team was the most important criterion as this will ultimately determine the success of DCC and hence that this should be given the highest weighting.
- 9.49. Options suggested by the Working Group but not proposed to be included as part of the detailed evaluation criteria (with reasons for rejection as key criteria in brackets):
  - independence from users (this is a pre-qualification criterion)
  - experience of administering registration services (the critical issues are procurement and contract management not evidence of running a meter point/supplier registration service)
  - revenue management (should be covered by the financial assessment in prequalification)

- security (will be included in communications market experience)
- performance management (should be included in contract management)
- 9.50. We have discussed with the relevant DCCG Working Group the importance of different criteria and it was considered that experience of senior management was most critical, followed by the experience of the consortium in managing and procuring substantial contracts, particularly in similar sectors. There was considerable debate about the weightings, and the weightings shown below reflect the Working Group discussions. We particularly welcome stakeholder views on the evaluation criteria and their weightings.

#### Proposals

9.51. Similar to the PQ stage, we propose that the assessment of applications be undertaken in two parts.

#### Part 1

- 9.52. In order to proceed to the detailed evaluation, applicants would need to demonstrate that they have met certain minimum standards and to have fulfilled the requirements outlined in the ITA instructions. We propose that this is that the applicant has submitted a complete and compliant ITA response.
- 9.53. If these minimum standards are not met by an applicant, we propose that it would not be appropriate to undertake the detailed Part 2 assessment in relation to that applicant. However, to ensure that submissions are not invalidated by a minor omission or deficiency, we propose to check responses soon after the response deadline and to return a response checklist to each applicant with an opportunity to remedy deficiencies within, say 48 hours. It is not proposed that any judgement would be exercised at this stage as to the quality of the submission in relation to the selection criteria.

#### Part 2

- 9.54. All applicants that pass Part 1 of the assessment process would then be assessed against clear, objective criteria by the DCC licence application panel.
- 9.55. It is proposed that applicants are assessed against specific, pre-defined criteria, each one assigned a weighting. Our proposal for these criteria together with the proposed weightings for each factor are shown in Table 9.1 below.

#### Table 9.1 – Evaluation criteria and weightings

Evaluation criterion	Weighting
Relevant experience of proposed applicant and its senior management team (including both procuring and management of substantial contracts, finance, regulation, communications sector, data services, energy sector) and recruitment plans for filling other key roles	30%
How licensee will fulfil its licence obligations	15%
Quality of business plan demonstrating understanding of the requirements, including business continuity planning and transition plans (both on appointment and for handover after 10 years)	15%
Operating cost (consistent with the business plan), including proposed profit margin: the cost of running DCC (excluding the cost of the service providers) based on the assumptions provided in the ITA documentation	15%
Proposed incentivisation scheme that applicant is willing to accept including	15%

the amount of its revenu	e it is willing to risk	
	t experience and energy sector experience (note higher weighting for communications experience rrience)	10%

- 9.56. These criteria and weightings may be adjusted in the light of consultation responses and we expect to publish a final list of assessment criteria and weightings in the ITA documentation.
- 9.57. Where it is considered appropriate and necessary, we propose to invite a limited number of applicants to a best and final offer stage. Alternatively, we may have sufficient information having completed the ITA stage to nominate one or more preferred applicants in which case the process will proceed directly to the preferred applicant stage. It is proposed to also reserve the right to nominate one or more reserve applicants as back-up in case the preferred applicant(s) withdraw or are, for any reason, disqualified.
- 9.58. We envisage that it will take approximately six to eight weeks to evaluate applicants at the ITA stage.
- 9.59. Applicants selected to continue in the application process would be notified and provided with details of the next stage. Unsuccessful applicants would also be notified and offered feedback.

Consultation Question	
100.	Do you agree with the proposed approach to the Invitation to Apply stage including the timescales, the assessment criteria and their weightings?
101.	Do you agree with the proposals for appointing one or more preferred applicants as well as one or more reserve applicants to ensure that there are alternatives in the event that a preferred applicant withdraws or is disqualified?

# Best and final offer (BAFO) stage

Discussion

9.60. In the event that a BAFO stage is required, the detail of this stage will depend on the reasons for requiring a further stage, the applicants remaining and any specific issues.

Proposals

- 9.61. We propose to ask each BAFO applicant to provide an updated application against a limited number of revised issues. We would expect to provide pre-defined criteria for evaluating responses. The evaluation process would be set out in the BAFO documentation issued at the BAFO stage. The timing of the BAFO stage will be dependent on the nature and extent of any issues to be resolved.
- 9.62. As with the ITA stage, following any BAFO stage one or more reserve applicants may be selected as well as one or more preferred applicants.

9.63. We envisage that a BAFO stage will take approximately four weeks.

#### **Consultation Question**

102. Do you agree with the proposal for an optional best and final offer stage in the event that two or more applicants have similar positions?

# Preferred applicants and licence grant

Discussion

9.64. This stage is expected to finalise the details for any outstanding issues culminating in DCC licence award to a preferred applicant.

#### Proposals

- 9.65. Our proposal is to confirm that the preferred applicant(s) continue to meet the minimum legal requirements for a DCC licensee. In the event that a preferred applicant fails to meet any of the requirements or that a preferred applicant withdraws, then discussions will continue with any remaining preferred applicants. In the event that all preferred applicants are eliminated from the application process then one or more of the reserve applicants will be nominated as preferred applicants.
- 9.66. Once all outstanding issues have been resolved, including finalising the incentive mechanisms and the terms of the revenue restriction, the panel will recommend to the Secretary of State that one of the preferred applicants should become the DCC licence holder and it is expected that the Secretary of State will then grant the DCC licence.
- 9.67. We envisage that it will take two to three weeks to complete this stage and award the licence.

#### **Consultation Question**

103. Are there any other specific issues that you think should be considered before grant of the licence?

#### Fast track process

#### Discussion

- 9.68. This chapter has set out the process that we expect to follow to appoint the first DCC licence holder. However, in the event that an incumbent DCC has its licence revoked (for example for serious breach of licence conditions), the Government/the Authority may then wish to "fast track" the appointment of a successor DCC.
- 9.69. We consider that it would be important to have the ability to appoint a company to step in as DCC as soon as possible given the consequences of withdrawal of DCC services. Completion of a full competitive application process, which would take a minimum of six months, will expose end users to too great a risk of having an inadequate service.

#### Proposals

9.70. We propose that the DCC Application Regulations should include the provision for the Authority to competitively appoint a "temporary" DCC licence holder through a fast track process in the event that the incumbent has its licence revoked. The appointment would be for a period of, say, up to eighteen months, which would provide sufficient time to appoint a successor DCC through a full competitive process in a timely and effective manner.

# **Consultation Question**

104. Do you agree that in the event of DCC losing its licence the Authority should have the power to fast track the appointment of a temporary DCC? If so, is eighteen months an appropriate maximum time period for the temporary DCC to hold a licence before a new DCC can be appointed via a full competitive process? Which elements of the licence application process could be accelerated or eliminated to ensure rapid appointment of a temporary DCC?

# **10.** Related Matters for Future Consultation

#### The Smart Energy Code

- 10.1. Only those elements of the SEC which are related to the DCC licence are dealt with in this consultation, but the SEC itself cuts across many areas of smart metering, and will be one of the key regulatory documents that sets out the rules, rights and obligations underpinning the new end to end smart metering system.
- 10.2. The SEC will be developed in conjunction with stakeholders. The relevant DCCG Working Group is currently meeting on a fortnightly basis to advise the Programme on relevant DCC provisions of the SEC. We propose to consult on DCC related elements of the SEC in Autumn this year. A separate consultation will look at the detailed governance arrangements that will be contained within the SEC. This consultation is currently planned for Spring 2012.
- 10.3. Further work is required to develop other elements of the SEC. A plan setting out how the SEC as a whole will be taken forward and implemented will be shared with stakeholders in due course. This will set out at a high level the key milestones and deliverables, and the anticipated stages of implementation.

# Transitional Arrangements

- 10.4. Gas and electricity DCC licences will be awarded to a single company to undertake the DCC activity in the gas and electricity sectors in GB. Upon award of the DCC licences, the licensee will be required to sign contracts with a set of service providers and take the necessary steps to facilitate operational provision of services by DCC under the SEC. In this transitional period covering grant of the licence up until operational "go-live", a number of obligations in DCC's licence may need to be "switched off" and, as discussed in chapter 3, a number of transitional provisions are likely to apply.
- 10.5. It is anticipated that, in addition, the necessary elements of the SEC will be introduced into the legal framework upon grant of DCC's licence, with DCC and other licensees (gas and electricity suppliers, electricity distribution companies and gas transportation companies) required to accede to and comply with the SEC as a condition of their licences. As with the DCC licence, a number of the "operational" provisions in the SEC may need to be "switched off" until such time as DCC is ready to provide those services under the SEC (which will follow a period of system integration, testing and trialling), referred to as "go-live". Some provisions of the SEC may not be fully incorporated in the document upon the granting of DCC's licence. This might be because they are in separate documentation which has not yet been incorporated in the SEC, or because they deal with issues that require further consideration. Where necessary issues that need further consideration would be developed through the transitional period and introduced into the SEC in time for DCC "go-live".
- 10.6. The detail of the transitional arrangements to apply between DCC licence award and DCC "go-live" will be developed further and will be consulted upon, including any draft licence conditions, in 2012.

# Annex 1 - Summary of consultation questions

Chapter 2: Proposed regulatory approach to DCC	
1.	Please provide views on the approach to basing the prohibition upon contracting with all licensed suppliers in respect of all domestic smart meters, and on the way in which the specific wording of the prohibition should be developed.
2.	Do you think there will be any persons other than DCC who might inadvertently be captured by a definition structured in this way?
3.	Do you have any other comments on the form of the licensable activity?
4.	Please provide comments on the proposed changes to legislation identified in Table 2.1 and Table 2.2 and any other possible changes that you consider might be appropriate.
5.	Do you agree with the proposal to have a single document with a single set of licence conditions that apply to both licences?
6.	Do you agree with, and have any comments on, the proposed approach to establish all of the DCC licence conditions as "special" conditions?
7.	Do you have any comments on the scope and nature of the consequential licence changes that we propose to make?
8.	Are there any other consequential licence changes that you consider might be necessary as a result of the creation of the new licensable activity?
9.	Please provide any comments on the proposed approach in relation to geographic scope of the DCC licence and provisions relating to its duration.

# Chapter 3: DCC licence conditions

10.	Do you agree with the proposed general objectives of DCC set out above?
	Do you think it is necessary to include any statutory duties on DCC in the Gas and Electricity Acts or is it appropriate address these issues in the DCC licence alone? Please provide the rational for your views.
12.	Do you agree that any obligation to facilitate competition in the area of distribution should be considered as part of the implementation of any future smart grids related arrangements?
13.	Do you agree with the approach proposed in relation to the protection of

	consumers interests?
14.	Do you think DCC should have a separate objective to promote (or facilitate) energy efficiency?
15.	Do you agree that SEC licence condition should be drafted so as to provide flexibility over the future scope of the SEC, i.e. that the scope of the SEC in the DCC licence condition should be drafted in a permissive manner?
16.	What are your views on the SEC Applicable Objectives set out above?
17.	Do you agree that the SEC should be designed to take into account consumers' interests by meeting its applicable objectives, rather than having a explicit objective related to the protection of the interests of consumers?
18.	Should there be a SEC objective related to promoting (or facilitating) efficiency of energy networks?
19.	Do you think the SEC should have a separate objective of promoting (or facilitating) energy efficiency?
20.	Do you agree with the definitions of the services that DCC should be required or permitted to provide?
21.	In relation to which non-compliant metering systems should DCC be required to offer services?
22.	In relation to which non-compliant metering systems associated with energy supply at consumer premises should DCC be permitted to offer services?
23.	<ul> <li>What information should be made available to all users about: <ul> <li>elective services;</li> <li>value-added services?</li> </ul> </li> <li>Should information be restricted to that required to assess the impact on other users of DCC services or should there be full transparency? Should DCC be required to make available the detailed commercial terms and conditions of such services?</li> </ul>
24.	Do you think the detailed terms and conditions for elective and value-added services should be set out in the SEC or included in bilateral agreements between DCC and persons to whom it is providing services?
25.	Are there any other matters that we have not addressed related to the nature of services provided by DCC? (Note that provisions addressing independence and non-discrimination in the provision of DCC services are covered in paragraphs 3.119 to 3.120).

26.	Do you agree that DCC should be required to externally procure specific services and have principles that determine what other services it should externally procure?
27.	Do you agree with the procurement objectives for DCC identified above?
28.	Do you agree that DCC should be required to produce a procurement and contract management approach document?
29.	We seek your views as to whether the procurement and contract management approach document should be required to be submitted for approval by the Authority and/or the Secretary of State.
30.	Is the scope of the proposed prohibition on discrimination, which is limited to undue discrimination between uses or classes of users, adequate?
31.	Are any specific provisions needed which require DCC not to discriminate between service providers? Or is it sufficient to rely on obligations on DCC to maintain and develop an economic system and, in the procurement of DCC services, to promote competition in the provision of such services?
32.	Do you agree that DCC should be independent of service providers? Do you agree that a de minimis level of affiliation between DCC and service providers should be permissible?
33.	What level of affiliation do you consider should be set for the maximum level of shareholding or control of any individual service provider may have in DCC?
34.	Do you agree with the business separation between DCC and users that is proposed? More specifically, do you agree that no DCC user that operates in a competitive environment should be permitted to have more than a 20% shareholding or control in DCC, and that DCC and its subsidiaries should not be permitted to have any shareholdings in users or service providers?
35.	Do you agree that it is not necessary to explicitly require business separation between DCC users and DCC service providers?
36.	Should DCC be prohibited from using confidential information for any purpose other than the licensed DCC activity? Should DCC be obliged to impose this restriction on service providers contractually?
37.	To what extent do you believe that the existing financial ring fencing provisions (and those proposed by Ofgem in its recent consultation on this issue) should be included in DCC's licence?
38.	Do you agree that a flexible approach to financial security should be adopted and, if a financial security is required, what level of financial security should be

	provided?
39.	What are your views on whether it would be appropriate to require DCC to pay for a proportion of the costs of appointing a new DCC in the event of an early licence revocation? Do you think that this potential liability should be reflected in the level of financial security required from DCC?
40.	Are there any other conditions that you consider should be imposed in DCC's licence to ensure its continued financial viability?
41.	Would it be appropriate for a special administration scheme to apply to DCC?
42.	Do you agree with that DCC should be required to ensure business continuity of service providers and should monitor the provisions that they have in place to deliver business continuity?
43.	Do you believe that DCC needs to include in its service provider contracts any further protections which help to secure against, or mitigate the consequences of, a financial failure of a major service provider? Please provide examples of any additional protections you consider suitable.
44.	Do you agree that it is appropriate to grant the initial DCC licence for a ten year period?
45.	Do you agree that flexibility for the Authority to decide to extend the initial DCC's licence by up to 5 years would be desirable?
46.	Do you agree with the approach described for the treatment of DCC internal costs for any extension period?
47.	Do you agree that DCC should be required to ensure that any critical services can be transferred to a successor?
48.	What scope of matters governing the handover to a successor do you think need to be included in DCC's licence?
49.	Do you agree that DCC's licence should be capable of being revoked in the event of a repeated or material failure to meet service levels?
50.	Do you agree that the DCC licence should contain a condition which gives it a high-level obligation in relation to foundation and subsequent rollout, activities and that the detailed obligations can be dealt with as part of the development of the SEC?
51.	Do you agree that DCC should have a high-level obligation, albeit initially "switched off", relating to the provision of meter point/supplier registration services?

52.	Do you agree that conditions should be introduced in other licences providing the ability to release other licensees from the requirement to provide meter point/supplier registration services at some point in the future?
53.	Do you agree that DCC and other relevant licensees should be subject to an obligation requiring the licensee to take steps to facilitate the transfer of meter point/supplier registration activities to DCC?
54.	What dispute mechanism would be appropriate to apply to disputes involving DCC and who should be enabled to determine such disputes ?
55.	Do you believe that DCC should be required to operate its business in a way that ensures it does not restrict, prevent or distort competition in gas shipping, the generation of electricity and participation in the operation of an interconnector?
56.	Do you have views on the additional conditions discussed above?
57.	Are there any additional conditions that you would wish to see included?
Chap	ter 4: Revenue requirements
58.	Is it appropriate to consider extending the Secretary of State's powers to provide equivalent powers to modify DCC's licence conditions as it does for other energy licences for the purposes of implementing smart metering?
59.	Do you consider that it is practicable for DCC licence applicants to provide costs for undertaking meter point/supplier registration? Or is it more appropriate to include a specific reopener for DCC's costs of undertaking meter point/supplier registration?
60.	Do you have views on the relative benefits of the two options (cost pass through and volume drivers) for recovery of DCC internal costs associated with SEC modifications?
61.	Do you have a view on the appropriate materiality threshold (trigger) for the revenue reopener?
62.	Do you consider that any other cost areas may require mechanisms to deal with uncertainty?
63.	Do you agree that market share should be based on MPANs and MPRNs that are mandated to receive smart metering systems, rather than all MPANs and MPRNs?
64.	Do you have a view on whether suppliers of only larger non-domestic customers should be charged a proportion of DCC internal costs?

65.	We welcome views from stakeholders in regards to charges on network operators for DCC internal costs pre-"go-live" and whether they should charge DCC for services provided to DCC.
66.	Do you agree that DCC should only begin to charge users for communication service providers' costs from "go-live"? Please provide reasons as to why this is or is not appropriate.
67.	Do you have a view on whether the data service provider(s) should be treated differently from communication service providers and be allowed to recover its fixed costs evenly over the length of its contract from "go-live"? Please provide reasons why this is or is not appropriate.
68.	Is it appropriate that the allocation of costs on suppliers during rollout be based on the suppliers' rollout plan for the year plus actual smart meters installed in preceding years? If so, how can this option for allocating costs during rollout be improved? If not, what is your preferred option and why?
69.	Do you have a view on how any additional costs resulting from suppliers exceeding their rollout plans should be allocated? Should DCC be able to pass through to the relevant supplier any higher costs resulting from this (or should such costs be averaged across all users)?
70.	Do you agree that network operators should be charged in line with their market share?
Chap	ter 5: Charging methodology
71.	Do you agree that a standing charge should cover the service providers' fixed costs for providing core services, DCC's internal costs and the SEC management funding requirements?
72.	Do you agree that a proportion of service providers' fixed operating expenditure should be converted to volumetric charges?
72. 73.	
	expenditure should be converted to volumetric charges? Do you agree that the proposal for postage stamp charging is consistent with
73.	expenditure should be converted to volumetric charges? Do you agree that the proposal for postage stamp charging is consistent with the objectives of the smart metering programme? Should postage stamp charging apply to all users including network

77.	Do stakeholders have views on whether DCC's internal costs should be allocated across the different types to users on the same basis as service provider fixed costs?	
78.	Do you agree with the proposals to charge users for extensive assessment and design work in relation to AMRs? Should a similar approach be adopted for other elective services offered by DCC, regardless of the user accepting the service?	
79.	Do you agree that "a second comer principle" can be applied?	
Chapter 6: Core services – WAN requirements		
80.	Please indicate whether the Minimum Core Service Requirements (i.e. message size, frequency, response time and coverage) for each of the message flows in the above tables can be modified to reduce the potential impact on the WAN cost without compromising the corresponding benefits. Please quantify the additional Programme benefit that could be realised by including each of this message flows in the aggregate Minimum Core Service Requirements.	
81.	Please quantify the additional benefit, if any, that could be realised by using the 'User Target' rather than the 'Minimum Core Service Requirement' in table 6.1. as basis for the procurement of DCC communication services.	
82.	Please provide views on whether the Service Requirements described in the above table represent the Minimum Core Service Requirements. Please also indicate whether in your view there are any additional Minimum Core Service Requirements not identified in the above table, and for any such requirement please quantify the additional benefits, if any, that could be realised.	
Chapter 7: Performance incentives		
83.	Please provide comments on the incentive regime proposed for DCC.	
84.	Do you consider it appropriate and feasible for the SEC panel and DCC to negotiate KPI targets?	
85.	Do you have views on the use of an independent audit of DCC performance? Should this be on a regular and/or ad hoc basis?	
86.	Do you consider that a sharing mechanism should be in place for DCC internal costs? Should a sharing mechanism be included in the contracts with the service providers?	
87.	Do you consider that it is appropriate to invite DCC licence applicants to propose KPIs?	

Chapt	er 8: Adoption of Foundation Stage communication contracts
88.	Are the criteria for adoption of contracts discussed in paragraphs 8.8 and 8.9 appropriate? Are there any additional criteria that should be included? Can quantitative thresholds for any or all of criterion be defined and, if so, how?
89.	Do you agree with our approach to identifying the guaranteed adoption volume of Foundation Stage smart metering systems? Are the factors we have identified the appropriate ones? What are your views as to the appropriate values of the various parameters identified in Table 8.1?
90.	Do you agree that DCC should be able to decide to adopt communication contracts associated with Foundation Stage smart metering systems in excess of the guaranteed adoption volume providing there is a net benefit to doing so? If so, does DCC need to be provided with additional obligations and incentives to encourage DCC to actively pursue such contracts and what factors should DCC take into account in making its assessments? Should we specifically provide for suppliers to compensate directly DCC for any costs incurred by DCC or its service providers in the adoption of additional contracts?
91.	What in your view is the most appropriate option for allocating the guaranteed adoption volume across energy suppliers and on the mechanism, including timing and frequency, by which any allocation unused by one supplier should be redistributed to other suppliers?
92.	Do you have views as to when Foundation Stage communication contracts should be adopted?
Chapt	er 9: Competitive licence application process
93.	Do you agree that a four stage process as outlined in paragraph 9.10 is appropriate for appointment of DCC?
94.	Do you consider that applicants should commit to lodge a form of financial security at the invitation to apply stage that would take effect if the licence was granted to the applicant?
95.	Do you agree with the proposals for dealing with changes to consortia including allowing changes up to but not beyond submission of responses to the ITA?
96.	Do you agree with the proposal for one overarching confidentiality agreement for each applicant group rather than individual confidentiality agreements for each member of an applicant group?
97.	Do you have any comments on the approach to clarifications and dialogue with

	prospective applicants?
98.	Do you agree with the proposed approach to the pre-qualification stage including the timescale, the information required and the assessment methodology and criteria?
99.	Do you have any comment on the documentation to be provided by applicants for the DCC licence? Is there any other information that you think should be made available to applicants?
100.	Do you agree with the proposed approach to the Invitation to Apply stage including the timescales, the assessment criteria and their weightings?
101.	Do you agree with the proposals for appointing one or more preferred applicants as well as one or more reserve applicants to ensure that there are alternatives in the event that a preferred applicant withdraws or is disqualified?
102.	Do you agree with the proposal for an optional best and final offer stage in the event that two or more applicants have similar positions?
103.	Are there any other specific issues that you think should be considered before grant of the licence?
104.	Do you agree that in the event of DCC losing its licence the Authority should have the power to fast track the appointment of a temporary DCC? If so, is eighteen months an appropriate maximum time period for the temporary DCC to hold a licence before a new DCC can be appointed via a full competitive process? Which elements of the licence application process could be accelerated or eliminated to ensure rapid appointment of a temporary DCC?

# Annex 2 - Glossary

#### **Access control**

The arrangements to ensure that access to systems and data is available only to appropriately authorised parties.

#### Advanced Meter Reader (AMR)

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.

#### **Adoption volume**

The number of communications contracts that DCC may adopt

#### **Balancing and Settlement Code (BSC)**

The document which contains the rules and governance for electricity balancing and settlement in Great Britain.

#### **Better regulation principles**

http://www.bis.gov.uk/policies/bre/better-regulation-framework/url

#### **Capital Expenditure (Capex)**

Investment expenditure.

#### **Communications Hub**

A device or set of devices located at a consumer's premises which will have the capability to communicate and transfer data between Smart Metering Equipment and the WAN.

#### **Code Governance Review**

The review of the governance of industry codes carried out by Ofgem. Final proposals and consultation on the proposed licence drafting to implement those proposals were published on 31 March 2010.

#### Codes

Industry codes establish detailed rules that govern gas and electricity market operation. Gas and electricity licences require the establishment of a number of industry codes that underpin various elements of market operation. The electricity codes include the: Balancing and Settlement Code (BSC); Connection and Use of System Code (CUSC); Distribution Code; Grid Code; Master Registration Agreement (MRA); System Operator-Transmission Owner Code (STC); and the Distribution Connection and Use of System Agreement (DCUSA). The gas codes include the: Uniform Network Code (UNC); Independent Gas Transporter (IGT) Network Codes; and the Supply Point Administration Agreement (SPAA).

# **Commercial interoperability**

The terms on which a new supplier can use the meter and related equipment when a customer changes supplier. Achieving commercial interoperability (e.g. the contractual arrangements for use of metering assets on change of supplier) is important in terms of ensuring there are no adverse impacts on supply competition.

# **Communications service providers**

Providers of services to DCC which will be used by DCC to provide services to persons wishing to send data to and from smart meters.

#### Consumer

A person who consumes electricity or gas.

#### **Consumer Advisory Group (CAG)**

The Consumer Advisory Group consists of members from groups representing a broad range of domestic consumers. It was set up to help inform the programme and to promote understanding of key consumer issues, particularly more complex issues that cannot be fully explored through primary consumer research.

#### Customer

Any person supplied or entitled to be supplied with electricity or gas by a supplier.

#### **Customer premises equipment**

All smart metering equipment in a customer's home or business.

#### **Data aggregation**

The process of aggregating of data from individual meters for use in energy settlement.

#### **Data processing**

The process of validation of meter reading data and the transfer of the relevant information to interested parties.

#### **Data Protection Act 1998**

The principal legislation that governs protection of personal data in the UK.

#### **Data retrieval**

The process of obtaining a reading (either manually or remotely) from a meter.

#### Data service providers

Providers of any data service to DCC, including data retrieval, aggregation, processing and storage.

#### **Department of Energy and Climate Change (DECC)**

The Department of Energy and Climate Change (DECC) which was created in October 2008, to bring together: energy policy and climate change mitigation policy.

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

The new entity that will be licensed to deliver smart metering communications services. The DCC will be responsible for the procurement and contract management of data and communications services from service providers and for the provision of services to its users.

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

Companies that are licensed to distribute electricity over lower-voltage electricity networks.

#### **Energy Service Companies (ESCOs)**

Companies providing energy efficiency / energy management services.

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

The End-to-end Smart Metering System covers all relevant equipment, communication links and connections from every consumer premises through the DCC and its service providers' systems through to the systems of suppliers, network operators and authorised third-party DCC users.

#### **Functional requirements**

The functions that must be supported by the different elements of the smart metering system to ensure the delivery of the benefits of smart metering.

#### Home Area Network (HAN)

The Home Area Network is the means by which communication between Smart Meters, IHDs and other Authorised Devices in premises is effected.

#### In-home Display (IHD)

An In-home Display is an electronic device, linked to the HAN, which provides information on a customer's energy consumption.

#### Interoperability

The ability of diverse systems, devices or organisations to work together (interoperate). See also commercial interoperability and technical interoperability.

#### Logging –Up

The company 'logs up' costs specified (usually small capital expenditure items) when the price control is set. These costs will then be considered at a set point(s) in time.

# Meter Point Administration Number (MPAN)

A Meter point administration number is a unique number required to identify the electricity meter in the house.

# Meter Point Registration Number (MPRN)

A meter point registration number is a unique number on all gas meters for identification

#### **Microgeneration**

Microgeneration is the on-site generation of lower carbon heat and power by individuals, small businesses and communities at a small scale.

# **Network Operators**

The companies that are licensed by Ofgem to maintain and operate the electricity and gas networks in Great Britain.

# **Non-domestic sector**

For the purposes of this document, we define smaller non-domestic electricity and gas sites as those sites in electricity profile classes 3 and 4 and those non-domestic gas sites with consumption of less than 732 MWh per annum.

# Ofcom

The independent regulator and competition authority for the UK communications industries.

#### Ofgem

The Office of the Gas and Electricity Markets (Ofgem) is responsible for protecting gas and electricity consumers in Great Britain. It does this by promoting competition, wherever appropriate, and regulating the monopoly companies that run the gas and electricity networks.

# **Operational expenditure (Opex)**

Costs incurred for delivering a service and/or operating a system

#### **Pass-Through**

A mechanism by which costs incurred by a regulated company, or its contractors, for a particular service/ activity are passed directly on to users independently of the allowed revenue.

# **Postage Stamp Charges**

For the purposes of this document arrangements so that the DCC's core service charges should be the same irrespective of differences in the costs of serving the smart meter to which they relate.

# **Pre-Qualifying Questions (PQQ)**

PQQs are questions to ascertain whether an applicant meets the minimum application criteria.

#### **Programme**

The Smart Metering Implementation Programme.

#### Reopeners

**General** - A point(s) at which, during or after the price control, a regulated company can request that costs included in the price control be reassessed. A materiality threshold or trigger will generally be set which the company must meet in order to apply for the reopener.

**Specific** - A point(s) at which a regulated company can request that specific costs be reassessed. A trigger mechanism will be set by the regulator that the company needs to meet before a re-opener will be considered.

#### Senior Responsible Owner (SRO)

The individual responsible for ensuring that a project or programme of change meets its objectives and delivers the projected benefits.

#### **Smart grids**

Smart grids, as part of an electricity power system, can intelligently integrate the actions of all users connected to it - generators, consumers and those that do both - in order to efficiently deliver sustainable, economic and secure electricity supplies.

#### **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**

The Smart Meters, IHD, Communications Hub and any other devices needed to deliver the smart metering requirements described in the SMETS.

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

The document, designated by the Secretary of State that describes the requirements of the Smart Metering Equipment.

#### Tamper alarm

A tamper alarm senses and reports any tampering with the metering system such as removal of the metering case or reversal of current.

#### **Technical interoperability**

The capability of systems or devices to provide and receive services and information between each other, and to use these services and information exchange to operate effectively together in predictable ways without significant user intervention. Within the context of the smart metering system, this means the seamless, end-to-end connectivity of hardware and software

from customer premises equipment through to DCC, suppliers, network operators and other authorised parties.

# **Technical specifications**

The technical specifications for the smart metering system will be an explicit set of solutions and guidelines as to how the smart metering system will fulfil the functional requirements

#### Value-added services

Communications services that rely to some extent on DCC's systems but that are not energyrelated communications with metering systems.

#### **WAN Module**

The equipment that enables the exchange of information between the Smart Metering Equipment and the WAN.

#### Wide Area Network (WAN)

The network that is used for two-way communication between the Smart Metering Equipment and the Data and Communications Company. © Crown copyright 2011 Department of Energy & Climate Change 3 Whitehall Place London SW1A 2HD www.decc.gov.uk