



The Authority (Ofgem), the SEC Panel, SEC Parties,  
and other interested parties

8 December 2022

Dear Colleague,

**SMART METERING IMPLEMENTATION PROGRAMME: CONSULTATION ON CHANGES TO ENERGY SUPPLY LICENCES, THE DCC LICENCE AND THE SMART ENERGY CODE**

The attached consultation document annexed to this letter seeks stakeholder views on a number of proposed amendments to conditions of Energy Supply Licences, the Smart Meter Communication Licence (the “DCC licence”) and to the Smart Energy Code (SEC).

The proposed changes cover the following broad areas relevant to smart metering of electricity and gas:

- Security and Smart Metering Key Infrastructure (SMKI)
- Enduring Change of Supplier (ECoS) arrangements
- Optionality for assuring proposed DCC procurements in the future
- Completion of Implementation (Col)
- Network Evolution Transition and Migration Approach (NETMAD)

The proposed licence condition and SEC changes can be found in the Attachments to the consultation document that forms the Annex to this letter. Subject to consideration of consultation responses and the Parliamentary process, the revised licence and SEC drafting will be introduced using the Secretary of State’s Section 88 Energy Act 2008 powers.

**Territorial extent**

This consultation applies to the gas and electricity markets in Great Britain. Responsibility for energy markets in Northern Ireland lies with the Northern Ireland Executive’s Department for the Economy.

**Timing**

Responses to this consultation should be submitted by **17:00 on 26 January 2023**.

**Responding to this consultation**

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

Responses should be submitted to **[smartmetering@beis.gov.uk](mailto:smartmetering@beis.gov.uk)**.

When responding, please state whether you are responding as an individual or representing the views of an organisation.

## Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018, and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential, please tell us but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our [privacy policy](#).

We will summarise all responses and publish this summary on the SEC website. The summary will include a list of organisations that responded, but not people's personal names, addresses or other contact details.

If you have any complaints about the way this consultation has been conducted, please email: [beis.bru@beis.gov.uk](mailto:beis.bru@beis.gov.uk).

Yours sincerely,



**Duncan Stone**

Deputy Director & Head of Delivery  
Smart Metering Implementation Programme

### List of Annexes and Attachments to this letter (the Attachments are separate documents)

<b>Annex A</b>	Consultation document
<b>Attachment 1</b>	Proposed legal drafting – SEC Section A
<b>Attachment 2</b>	Proposed legal drafting – SEC Section D
<b>Attachment 3</b>	Proposed legal drafting – SEC Section F
<b>Attachment 4</b>	Proposed legal drafting – SEC Section G
<b>Attachment 5</b>	Proposed legal drafting – SEC Section L
<b>Attachment 6</b>	Proposed legal drafting – SEC Section X
<b>Attachment 7</b>	Proposed legal drafting – DCC Licence
<b>Attachment 8</b>	Proposed legal drafting – Electricity Supply Licence
<b>Attachment 9</b>	Proposed legal drafting – Gas Supply Licence

## **Annex A: Consultation document**

This consultation document sets out a number of proposed changes to Energy Supply Licences, the DCC Licence and the Smart Energy Code. Each of the proposed changes is explained in turn, and the proposed legal drafting associated with the changes is included in the Attachments to this Annex.

### **1. Changes relating to Management of Security of Smart Metering**

- 1.1. The Secretary of State is accountable for ensuring appropriate arrangements are in place for managing critical national infrastructure (CNI) risks within GB Smart Metering. In the case of smart metering, the Secretary of State has delegated responsibility for security risk management to DCC, Supplier Parties and other SEC Parties through licence obligations, the security arrangements set out in Section G of the SEC and other more general SEC provisions. This includes the arrangements for oversight of the end-to-end security architecture by the Security Sub-Committee of the SEC Panel and the management of the smart-metering related public key infrastructures under the SMKI PMA, as well as the overall oversight of SEC Panel itself.
- 1.2. In general, BEIS considers that the security framework for smart metering works well and that both industry participants and the code Sub-Committees overseeing various aspects of the security framework continue to perform a valuable and effective role. Having considered the operation of the arrangements for smart metering and developments in other sectors, such as the telecommunications sector resulting in the Telecommunications (Security) Act 2021<sup>1</sup>, BEIS considers that there are four areas in which changes should be made in order to continue to allow government to fulfil its accountability role over security relating to smart metering into the future, whilst continuing to rely on smart metering industry parties and bodies under the SEC to be responsible for managing security.
- 1.3. The first area in which a change is proposed is to give the Secretary of State powers to be able to raise (or to be able to direct the Data Communications Company (DCC)) to raise a SEC Modification in circumstances where the Secretary of State considers that this is necessary to protect the security of the End-to-End Smart Metering System. This proposed power is only intended as a backstop provision and would not generally be expected to be used other than in the unlikely event that the existing framework for managing security within smart metering was not delivering an outcome that the Secretary of State considered as effectively and proportionally managing security risks or incidents. It is not intended to distract from the current situation in which security for smart metering is the responsibility of the organisations who participate in smart metering and the SEC Sub-Committees (SSC and SMKI PMA).
- 1.4. It is proposed that the process for progressing any such modification would be the same as that applying to modifications that the Authority can raise (or can direct DCC to raise) to implement the outcome of a Significant Code Review. In this case it would be the Secretary of State rather than the Authority who would be able to issue a timetable for the progression of such a modification.
- 1.5. The second area in which a change is proposed is to require that new appointments to fulfil the role of chairperson of the SMKI PMA or the SSC would be subject to the Secretary of State confirming that they do not object to their appointment. This is the equivalent of the role that the Authority already performs in respect of SEC Panel Chair appointments. Subject to consultation responses, and the Parliamentary process for making them, the changes

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<sup>1</sup> <https://www.legislation.gov.uk/ukpga/2021/31/enacted>

proposed would take effect in around Q2 2023 which we understand is before the term of the current chairperson of the SSC and SMKI PMA expires, and so they would apply to future appointee(s).

- 1.6. The third area of proposed change is to require that the terms of appointment of future chairpersons of the SMKI PMA or SSC include provision for their role to be terminated if the Secretary of State directs the SEC Panel to do so, and for the SEC Panel to comply with any such direction. This power would only be exercised if the Secretary of State considered that this was necessary to do so in order to protect the security of the End-to-End Smart Metering System (for example in circumstances where the chairperson has or intends to undertake activities or make security decisions that are contrary to the obligations set out in Sections G7.19 to G7.23). Again, the Secretary of State would not expect to have to ever exercise this power of termination other than in highly exceptional circumstances.
- 1.7. The final area in which a change is proposed is to require that, going forward, if a person appointed to become either the SMKI PMA or SSC Chairperson does not have an active clearance level of at least Security Check<sup>2</sup> ("SC") under the government's national security vetting arrangements<sup>3</sup>, then their appointment will be conditional upon them starting the vetting process within a month of their appointment and achieving at least that level of clearance within a period of twelve months (or such longer period as may be approved by the Secretary of State).
- 1.8. For the Secretary of State to be able to raise (or to direct DCC to raise) modifications to the SEC, we are proposing changes to condition 23 of the DCC licence and Section D of the SEC (Attachments 7 and 2 respectively). To make the changes regarding future appointees to the role of chairperson of the SSC and SMKI PMA, and for the Secretary of State to have the power to direct the Panel to terminate their appointment, we propose to amend SEC Sections A, G and L (Attachments 1, 4 and 5 respectively).

### Consultation Questions

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| <b>A.</b> | <b>Do you have any comments on the proposal that would allow the Secretary of State to raise (or to direct DCC to raise) a SEC modification where the Secretary of State considers that this is necessary to protect the security of the End-to-End Smart Metering System?</b>                               |
| <b>B.</b> | <b>Do you have any comments on the proposal that future SSC and SMKI PMA chairperson appointments can only be made if the Secretary of State does not object to the proposed appointment on security grounds?</b>  |
| <b>C.</b> | <b>Do you have any comments on the proposal that the Secretary of State could direct the Panel to terminate the appointment of future chairpersons of the SSC or SMKI PMA where the Secretary of State considers that this is necessary to protect the security of the End-to-End Smart Metering System?</b> |
| <b>D.</b> | <b>Do you have any comments on the proposal that the chairpersons of the SSC and SMKI PMA should be required to achieve SC clearance?</b>  |

<sup>2</sup> Or any equivalent to this procedure which may update or replace it from time to time.

<sup>3</sup> This is the same process for vetting personnel for security reasons, as already defined in the SEC to mean "the vetting of personnel, carried out to a level that is identified by that name, under and in accordance with the HMG National Security Vetting Procedures" at <https://smartenergycodecompany.co.uk/download/26802/>

## **2. Inclusion of Type 1 Devices, Standalone Auxiliary Proportional Controllers and Additional Electricity Smart Metering Equipment with conditions 46A of electricity supply licences and (where relevant) 40A of gas supply licences**

- 2.1. Licence conditions 46A (electricity) and 40A (gas) deal with the security of Supplier Parties' systems that communicate with Enrolled Smart Metering Systems and those Smart Metering Systems themselves (with the exception of the Communications Hub). The scope of devices captured within these conditions is established by reference to the definition of Smart Metering Systems within supply licence conditions. The definition of Smart Metering System in supply licences was initially developed to support the rollout licence conditions and, unlike the definition in the SEC, does not include Type 1 Devices (Prepayment Meter Interface Devices (PPMIDs) and HAN Connected Auxiliary Load Control Switches (HCALCs)), nor does it include Additional Electricity Smart Metering Equipment (Additional ESMEs) or Standalone Auxiliary Proportional Controllers (SAPCs).
- 2.2. These device types are already included in Supplier Parties' obligations under Section G of the SEC, and we believe they should also be covered by condition 46A (electricity) and condition 40A (gas). We are therefore proposing changes to these licence conditions to include reference to the relevant device types (PPMIDs, HCALCs, Additional ESMEs and SAPCs in the case of electricity, and PPMIDs in the case of gas). We believe that this change will provide added clarity and consistency between SEC obligations in Section G and those in the licence, without having any material impact on Supplier Parties.
- 2.3. Changes are proposed to standard licence conditions 46A (electricity) and 40A (gas) to additionally make reference to these device types (Attachments 8 and 9 respectively).

### **Consultation Question**

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| <b>E.</b> | <b>Do you have any comments on the proposal to include the additional devices within the scope of conditions 46A and 40A to be consistent with the SEC?</b> |
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## **3. Permitting DCC to transfer Private Keys from one DCC Service Provider to another**

- 3.1. As part of the introduction of the Enduring-Change-of-Supplier (ECoS) Arrangements, the DCC is considering solutions which would see the transfer of the Transitional Change-of-Supplier (TCoS) Private Key (i.e., the Private Key that is used to Digitally Sign CoS Commands where the Target Devices hold the TCoS Certificate, as well as commands to replace the TCoS Certificate with an ECoS Certificate) to the ECoS Party. If this transfer takes place, it would allow the TCoS Service to be shut down without the risk of being unable to continue to exchange CoS Party and Supplier Party credentials on devices that continue to hold TCoS Certificates, since the requisite commands could continue to be generated by the ECoS Party using the transferred Private Key.
- 3.2. In addition, there may be a case for permitting other Private Keys to be transferred from one DCC Service Provider to another, for example as part of the Network Evolution projects concerned with the replacement of the Data Services Provider (DSP) or the SMKI service provider.
- 3.3. In order to facilitate this, changes are proposed to SEC Section G to explicitly permit the DCC to transfer a Private Key from the systems of one Service Provider to another subject to the DCC gaining the SMKI PMA's approval of the transfer and of the secure mechanism by which the transfer will take place and the security of the systems to which the transfer takes

place. It is also expected that the SMKI PMA will liaise with the Security Sub-Committee to seek any appropriate advice as part of this process.

- 3.4. The systems to which the Private Key is transferred must also be compliant with the Section G requirements placed on the systems even if the recipient systems are those of a prospective Service Provider, and not yet part of the DCC Systems. The obligation to comply with the Section G requirements also takes into account that there may be prospective changes to Section G relating to those systems that are in development. The proposed changes to Section G are set out in Attachment 4.

### Consultation Question

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| <b>F.</b> | <b>Do you have any comments on the proposal to permit DCC to transfer Private Keys from one DCC Service Provider to another, subject to the approval of the SMKI PMA?</b> |
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#### **4. Changes to the DCC licence to provide the potential for the future transfer to the Gas and Electricity Markets Authority (GEMA)<sup>4</sup> of the Secretary of State's role in reviewing DCC proposals for procuring new, additional, or amended Relevant Service Capability**

- 4.1. DCC licence condition 16 governs the procurement of Relevant Service Capability (RSC) by the DCC to support the services that it provides. Before entering into an agreement for any new, additional, or amended Relevant Service Capability, the DCC must (unless the RSC is of a type which had been exempted from the requirements via a direction from the Secretary of State) secure written confirmation that the Secretary of State does not object to the proposed RSC<sup>5</sup>.
- 4.2. A change is proposed to licence condition 16 to allow the Secretary of State to transfer his role under licence conditions 16.6A-C to the Authority at a future date specified in a direction by the Secretary of State. Such a transfer may or may not be necessary depending on how far advanced the Authority is with its review of the DCC licensing arrangements<sup>6</sup> and the implementing of resulting reforms that are able to provide an equivalent level of consumer protection<sup>7</sup> with regard to DCC proposed spend by the time that BEIS closes the DCC assurance component of the transitional Smart Metering Implementation Programme (SMIP). Given the size of DCC proposed RSC procurements to date, which have not been constrained by needing a SEC Modification in advance, BEIS considers that it will be important that there remain appropriate controls in place going forwards to provide confidence that any such spend is in line with the interests of SEC Parties who pay for DCC services and the interest of end consumers.
- 4.3. BEIS would work with the Authority to provide it with as much advance notice as possible about the closure of the DCC assurance component of SMIP and would provide the Authority with a handover of knowledge and relevant artefacts with regards to its historic exercise of the role within licence condition 16.16A-C ahead of any transfer of that role to the Authority.

<sup>4</sup> GEMA is the governing body of the Office for Gas and Electricity Markets (Ofgem), which regulates those markets in Great Britain <https://www.ofgem.gov.uk/about-us/our-structure-and-leadership>. GEMA is also referred to as "the Authority".

<sup>5</sup> See DCC Licence Condition 16 at <https://www.ofgem.gov.uk/industry-licensing/licences-and-licence-conditions>

<sup>6</sup> <https://www.ofgem.gov.uk/publications/dcc-review-phase-1-consultation>

<sup>7</sup> We consider that controls equivalent to LC16.6A-C are more likely to need to be retained in a model where DCC remains a for profit, private shareholder owned company than in a scenario where DCC becomes owned and run by its users (along the lines of a variant of Option B in Ofgem's DCC Licence Review consultation).



- 4.4. Where this role is transferred to the Authority, any directions issued by the Secretary of State under licence condition 16.6C(a) to exempt types of RSC from having to comply with the arrangements; or any more general direction under licence condition 16.6C(b) such that the requirements in licence condition 16.6A do not apply, would continue to apply unless and until amended, replaced, or revoked by the Authority. The proposed changes are set out in Attachment 7.

### Consultation Question

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| <b>G.</b> | <b>Do you have any comments on the proposal to change condition 16 of the DCC licence to allow the Secretary of State to transfer to the Authority at a future date the responsibility for approving new, amended, or additional RSC?</b> |
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## 5. Changes following Completion of Implementation (Col)

- 5.1. The concept of “Completion of Implementation” (Col) was introduced into the initial DCC licence when it was originally granted, before the DCC systems had been established and before the DCC was providing any services under the SEC. Completion of Implementation would be achieved when those systems envisaged as being needed at the time of licence grant had been established and the relevant services were being provided. The last remaining element to be completed in order to achieve Col is the finalisation of the migration of SMETS1 Smart Metering Systems into DCC Systems, which is covered by a plan under condition 13 of the DCC licence. When this migration is suitably completed, the Secretary of State intends to declare that Col has been achieved under the SEC (and hence the DCC licence). When Col is declared, a range of provisions in the SEC and DCC licence conditions will lapse. Among these provisions are powers for the Secretary of State to designate and re-designate documents under condition 22 of the DCC licence and Section X5 of the SEC, as well as powers for the Secretary of State to require SEC Variation Testing Approach Documents (SVTADs) under Section X11 of the SEC.
- 5.2. Since the original concept of Col was introduced into the DCC licence and SEC, the Secretary of State has additionally introduced licence conditions 13A (dealing with ECoS) and 13B (dealing with Network Evolution). It is anticipated that it might be necessary to modify documents for the purposes of progressing these two programmes past Col. For example, there may be a further version of the ECoS Transition and Migration Approach document dealing with termination of the ECoS Arrangements, and we expect to need migration and SVTAD documents for Network Evolution. We therefore propose that the Secretary of State should retain the ability to designate and re-designate documents under condition 22/Section X5 and to be able to require SEC Variation Testing Approach Documents (SVTADs). The proposed extension of these powers would run until 1 November 2028, consistent with, but not directly linked to, the timescales for the proposed extension of the powers under Section 88 of the 2008 Energy Act that were included within the recent Energy Bill<sup>8</sup>, after which they would terminate.
- 5.3. Changes to give effect to these proposals in SEC Section X are set out in Attachment 6.

<sup>8</sup> <https://bills.parliament.uk/bills/3311> - see Clause 164.

## Consultation Question

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| H. | Do you have any comments on the proposal that the Secretary of State should retain the power to designate documents under the SEC and to require the development of SVTADs after Completion of Implementation (and up to 1 November 2028)? |
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### 6. Introducing SEC Section F13 to introduce a new SEC Subsidiary Document, the Network Evolution Transition and Migration Approach Document (NETMAD)

- 6.1. Network Evolution is the collective name given to a number of projects governed under condition 13B of the DCC licence. The four projects are designing, procuring, and where required, replacing: (i) communications hubs and networks (CH&N), (ii) the data services provider (DSP), (iii) the smart metering key infrastructure (SMKI) security trust service provider (TSP), and (iv) automated testing.
- 6.2. As indicated by the DCC in its Consultation on the revised delivery plan for the 4G Communications Hubs and Networks Programme of 23 November 2022<sup>8</sup>, the Secretary of State anticipates that, as part of the implementation of the CH&N Programme, it will be necessary to introduce a transition document into the SEC supporting the transition to the enduring supply of 4G Communications Hubs and the provision of a 4G WAN. For example, in order to enable the orderly and coordinated transition to 4G Communications Hubs in consumer premises, Supplier Parties will wish to have certain information from DCC to help them plan the discharge of their existing duties to take all reasonable steps not to compromise the connection between the meter and the DCC so that they and the consumer can continue to benefit from unbroken smart services. Such steps will include the timely replacement of existing communications hubs such that the connection between the meter and the DCC is not lost. The DCC information required by Supplier Parties is likely to include early clarity on the final, contracted position on how long the DCC SMETS1 and SMETS2 2/3G communications contracts will endure (and so how long Supplier Parties will have to replace all the SMETS1 and SMETS2 2/3G Communications Hubs in advance with non-2/3G Communications Hubs, when factoring in dates from DCC's latest 4G delivery plan). If this information is not otherwise forthcoming from DCC in a timely manner, then the Secretary of State may need to place an obligation on DCC via the transition document to provide that clarity to Supplier Parties. The NETMAD would also act as a vehicle through which other rights and obligations could be clarified to the extent that this was considered necessary to support the effective and timely transition to the use of the 4G Communications Hubs and WAN.
- 6.3. The Secretary of State also anticipates that transition arrangements may be required to support the implementation of other aspects of the Network Evolution Arrangements, for example the re-procurement of the DSP. Such transition documents have previously been introduced to cover SMETS1 Enrolment and Adoption and the implementation of the ECoS Arrangements.
- 6.4. To facilitate this, we propose to amend the SEC by introducing a new Section F13 to enable the Secretary of State to introduce the NETMAD. As proposed above, the Secretary of State could designate the NETMAD and redesignate it, as required. The content of the proposed new F13 has been modelled on the equivalent drafting for the SMETS1 TMAD and the ECoS TMAD. The only principal difference is that for NETMAD, it is considered that as the various programmes within Network Evolution may require transition arrangements at different times, any particular version of the NETMAD may only cover some, but not all of the Network



Evolution Arrangements. Only one version of the NETMAD will exist at any particular point in time, however the proposed power to redesignate the NETMAD enables the introduction of additional provisions over time as required to support the implementation of other Network Evolution programmes. Importantly, the NETMAD would have a transitional purpose and the proposed powers to enable its introduction and ongoing modification would also include a requirement that the NETMAD provides for its expiry. The proposed changes to SEC Sections A and F to give effect to this are set out in Attachments 1 and 3.

### Consultation Question

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| <b>I.</b> | <b>Do you have any comments on the proposal to enable the establishment, and ongoing modification of, a NETMAD within the SEC?</b> |
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## **7. Discontinuing the obligation on the DCC to publish the Enduring Change of Supplier (ECoS) Interface Specification on an enduring basis**

- 7.1. When the original enduring SEC changes to support the ECoS Arrangements were developed, it was envisaged that the DCC would be required to publish a version of the ECoS Interface Specification (the document setting out the specification of the interface between the ECoS Party and any other DCC Systems). Section G of the SEC was drafted accordingly to provide for this. Before the changes took effect discussions with the SSC Chair and DCC led to a suggestion that it would be more prudent not to publish this specification since it specified a secure interface within DCC, and it was not an interface between DCC and any other external party. Hence there is no business need for the interface to be published on the DCC website.
- 7.2. A change was therefore made to remove the obligation on DCC to publish this interface specification by making a modification to Section G via Clause 3.1(b) of the ECoS Transition and Migration Approach Document (ETMAD – SEC Appendix AS). This requires the DCC to ensure that the latest version of the ECoS Interface Specification, any previous changes to it, and the supporting Security Impact Assessments are made available to the DCC Independent Security Assessment Service Provider on request for the purposes of carrying out a DCC Security Assessment.
- 7.3. As ETMAD is not an enduring document and will fall away following completion of ECoS Migration, we are proposing a change to give permanent effect to the change currently made by ETMAD. The affected SEC provisions are G2.52, G2.54 and G2.55 (please see Attachment 4).

### Consultation Questions

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| <b>J.</b> | <b>Do you have any comments on the proposed changes to permanently discontinue the obligation on DCC to publish the ECoS Interface Specification?</b>             |
| <b>K.</b> | <b>Do you have any comments on the proposed legal drafting relating to any of the changes proposed in this document set out in the Attachments to this Annex?</b> |