Department for
Business, Energy
& Industrial Strategy

SMART METERING IMPLEMENTATION PROGRAMME

Consultation on enrolment of SMETS1 meter cohorts with the Data Communications Company

April 2018

Consultation on enrolment of SMETS1 meter cohorts with the Data Communications Company

The consultation can be found on GOV.UK:
https://www.gov.uk/government/consultations/

Any enquiries regarding this publication should be sent to us at smartmetering@beis.gov.uk.

Contents

General information

Purpose of this consultation

This consultation seeks stakeholders' views on a proposal to require the Data Communications Company (DCC) to provide an interoperable smart meter service for SMETS1 meter cohorts consisting of Aclara, Honeywell Elster, Itron and Landis+Gyr (L&G) meters. There will be a further consultation on the remaining SMETS1 meter cohorts of Secure Meters and EDMI meters once there is sufficiently mature information from existing and prospective service providers and the DCC.

Issued: 17 April 2018

Respond by: 5pm, 24 May 2018

Enquiries to: smartmetering@beis.gov.uk

Smart Metering Implementation Programme - Delivery Team
Department for Business, Energy & Industrial Strategy,
5th Floor Victoria 3,
1 Victoria Street,
London, SW1H 0ET

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.

How to respond

Your response will be most useful if it is framed in direct response to the questions posed, by reference to our numbering, though further comments and evidence are also welcome. Responses should be submitted by email to smartmetering@beis.gov.uk and hardcopy responses sent to the BEIS postal address above will also be accepted.

Additional copies:

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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 the GOV.UK website. 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 Consultation Principles.

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:

BEIS Consultation Co-ordinator
1 Victoria Street,
London, SW1H 0ET
Email: enquiries@beis.gov.uk

1. Introduction

Smart Metering Implementation Programme

1. The development of a world-leading smart energy system delivering secure, cheap and clean energy is an important part of the Government's Industrial Strategy[1]. As our Clean Growth Strategy highlights, smart technologies and services will play a vital role in decarbonising the energy sector[2]. Smart meters are a vital upgrade to our energy infrastructure enabling these smarter energy systems and energy consumers to be better informed and engaged.

2. The Government is committed to ensuring that smart meters will be offered to every home and small business by the end of 2020. The smart meters rollout will deliver a much needed digital transformation of our energy system. The rollout is not only an investment in our future; it will also support, for example, the delivery of tangible and immediate energy-saving benefits for households and small businesses across Great Britain. And it is an important foundation for the Government and Ofgem's Smart Systems and Flexibility Plan which was published last year[3]. This Plan sets out a number of actions to deliver a smarter, more flexible energy system that supports innovation in new smart products and services.

3. Energy suppliers are responsible, under standard conditions of electricity and gas supply licences ('supply licence conditions')[4], for taking all reasonable steps to roll out smart meters to all domestic and smaller business premises in Great Britain. The Government's role includes providing the right framework against which energy suppliers can plan, and ensuring benefits are delivered to consumers.

4. An updated Cost Benefit Analysis of the Smart Meter roll-out was published in November 2016. This estimated the costs and benefits associated with the national roll-out of smart meters and identified a substantial net benefit from the Programme of £5.7 billion for the period to 2030[5].

5. The key benefits of the smart metering programme are that it will:

   - Contribute to the UK having a secure and resilient energy system.
   - Provide near real-time information on cost and usage encouraging consumers to reduce demand and enable faster switching between suppliers. This in turn will lead to a more dynamic and competitive retail energy market.

[1] See: https://www.gov.uk/government/topical-events/the-uks-industrial-strategy
[2] See: https://www.gov.uk/government/publications/clean-growth-strategy
[3] See: https://www.gov.uk/government/publications/upgrading-our-energy-system-smart-systems-and-flexibility-plan
[4] See: https://www.ofgem.gov.uk/licences-codes-and-standards/licences/licence-conditions
[5] See: https://www.gov.uk/government/publications/smart-meter-roll-out-gb-cost-benefit-analysis

- Provide the foundation for a range of innovative energy services, which will enhance consumer choice and control.

Background to SMETS1 policy

6. The roll-out of smart meters in Great Britain is happening in two stages – the Foundation Stage, which began in 2011, followed by the Main Installation Stage, which commenced in November 2016 and will run until the completion of the rollout at the end of 2020.

7. A standard for the minimum common functionality of smart meters deployed during the Foundation Stage, known as SMETS1, was defined in 2012 to address the variability in the smart-type meters which some suppliers were already installing and to help ensure consumers received a consistent, minimum service offer. In allowing for SMETS1 meters to count towards suppliers' 2020 roll out targets, Government sought to foster early consumer benefits of smart metering and provide industry valuable experience to support the subsequent deployment of smart meters at scale.

8. A number of energy suppliers have been installing first-generation (SMETS1) smart meters for their customers, using their own data and communications systems to provide smart services. Just under 10.1 million SMETS1 meters have now been installed[6]. Like SMETS2 meters, SMETS1 meters provide benefits of accurate bills and near real-time energy consumption information. However these SMETS1 meters currently operate via data and communications systems put in place by individual energy suppliers, as opposed to a single national data and communications infrastructure which is easily accessible to all suppliers. Consequently consumers may lose smart services on switching to another energy supplier, depending on which supplier they are switching to and from.

9. Our overall aim is to ensure interoperability for SMETS1 meters so that smart functionality is retained when a customer switches energy supplier. Our long-standing policy has been for all significant populations of SMETS1 meters to eventually be operated via the DCC to deliver this objective[7].

10. Enrolment of SMETS1 meters with the DCC would provide a number of benefits to consumers and the energy market, in particular:

    - Retention of smart services for consumers when they switch supplier;

[6] https://www.gov.uk/government/collections/smart-meters-statistics
[7] For example, a Programme update published in April 2012 confirmed that 'the Government has stated that all domestic Smart Metering Systems should be managed through the DCC and is keen to apply this principle, as far as possible, to meters installed in the Foundation Stage: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/68976/Smart_metering_programme_update_-_April_2012.pdf

- Reduction of stranding risk for existing SMETS1 assets[8];
- A number of security benefits arising from enrolling these metering cohorts into the national data and communications service.
- Efficiencies from rationalisation of smart metering interfaces and processes within supplier businesses.

Background to the DCC Enrolment & Adoption Programme

11. In March 2015 the Government directed the DCC to assess the feasibility of options for enrolling SMETS1 meters in its system. This process concluded in May 2017 when the DCC submitted the final version of its Initial Enrolment Project Feasibility Report (IEPFR) to BEIS, setting out a series of design options for the enrolment of SMETS1 meters into the DCC infrastructure. The options included integration path approaches (IP), for how the DCC would technically communicate with SMETS1 meters, together with proposed security measures.

12. In June 2017, the Government wrote to the DCC to provide guidance on narrowing and advancing its enrolment design options. The letter also stated that BEIS would ultimately decide on whether to proceed to enrolment and, if so, in respect of which meter marques (henceforth referred to as a 'SMETS1 meter cohort'[9]), informed by the DCC's design work and a cost benefit analysis of enrolment.

13. The DCC set out its plan for the delivery of a SMETS1 service in October 2017, following stakeholder consultation[10]. The plan sets out a three-phase approach to the provision of SMETS1 Services. An initial SMETS1 Service would be provided in relation to at least one meter cohort from 30th November 2018[11] with an interim release for additional meter cohorts on 31st March 2019, and on final release by 30th June 2019. The DCC informed industry of which SMETS1 meter cohorts are currently associated with each release at a Smart Metering Delivery Group (SMDG) meeting held on the 11th April 2018.

14. The DCC has provided BEIS with a cost model that sets out both firm and projected costs for providing a SMETS1 service in respect of the meter cohorts under all possible technical implementation scenarios (integration paths). This cost model has been informed by the DCC's engagement with its current and potential service providers (including current Smart Meter Service Operators, SMSO's) and other parts of industry. In addition, a number of

[8] Namely the risk of suppliers replacing their SMETS1 meters with SMETS2 meters before the SMETS1 meter's end of life.
[9] Meter marques or meter cohorts are devices that comprise of a number of smart metering systems that are connected to a particular head end system.
[10] https://www.smartdcc.co.uk/media/440317/20171016_SMETS_1_planning_conclusions.pdf
[11] There is currently no contingency built into this plan, however the DCC has proposed to monitor progress and the potential need for contingency on an ongoing basis, and will report to the Smart Metering Design Group (SMDG) and Implementation Managers Forum (IMF) accordingly.

energy suppliers provided their views to BEIS on supplier costs and benefits involved in enrolling SMETS1 meters with the DCC.

15. Other sources of information provided to BEIS include a DCC report on its delivery confidence for specific groups of meters on the basis of information available at the time and different combinations of implementation paths to inform considerations around the robustness of data and technical feasibility. This report has been informed by engagement between DCC and its current and prospective service providers.

16. The DCC also provided BEIS with security analysis relating to DCC's proposed SMETS1 security architecture (including by a risk assessment and an enrolment and adoption security options report) to inform our assessment of security risk and costs.

17. The previous Smart Metering Implementation Programme Impact Assessments and the latest programme-wide cost-benefit analysis published in November 2016 made an allowance for enrolment, such that enrolment costs and benefits modelled separately for the analysis summarised below are not new; provision is made within the programme-wide cost-benefit analysis. In particular, a significant amount of the costs associated with enrolment are equivalent to SMETS1 data and communications costs currently borne by energy suppliers. We have undertaken a specific analysis on the costs and benefits of enrolment to inform this consultation, based on the latest available information, and are committed to publishing an update of the programme cost-benefit analysis in 2019.

18. We have set out factors considered in the cost-benefit analysis and the high level cost-benefit analysis range in this consultation. The details of DCC's cost model and Government's related cost-benefit analysis have not been disclosed as this would prejudice ongoing commercial negotiations surrounding the design and delivery of the DCC's SMETS1 service.

Content of this consultation

19. Enrolment of SMETS1 meters with the DCC is currently voluntary. This consultation considers whether there is a business case for certain cohorts of SMETS1 meters to be enrolled in the DCC. This is based on a cost-benefit analysis and consideration of security and the technical feasibility of enrolment.

20. Alongside this consultation we are also consulting[12] on policy proposals to maximise interoperability for SMETS1 meters. The proposals include requiring energy suppliers to enrol their eligible SMETS1 meters into the DCC or, failing that, to replace with SMETS2 meters within 6 months of the point at which they can be enrolled.

21. Additionally, we are consulting[13] on a number of proposed changes to the Smart Energy Code (SEC), Energy Supply Licence Conditions and DCC Licence. The changes are designed to enable the delivery of data and communications services in respect of SMETS1 meters ("a SMETS1 service") by DCC. They also update the regulatory framework in relation to the transition from transitional to enduring, industry-led smart metering governance.

[12] https://www.gov.uk/government/consultations/
[13] https://smartenergycodecompany.co.uk/latest-news/beis-consultation-sec-changes-enable-provision-smets1-service-dcc/

2. Consideration of options

Description of the issue

22. Since the conclusion of the DCC's IEPFR in May 2017, the DCC has made progress in the design and development of its service in accordance with its SMETS1 delivery plan[14]. This has involved significant engagement with a number of prospective and existing SMETS1 service providers, the production of design documentation and initial testing of functionality.

23. In order to determine whether the DCC should offer SMETS1 services, and if so, in respect of which meter cohorts, it is right that Government verifies that enrolment of meter cohorts will result in a net societal benefit and that it is a technically deliverable service which provides robust security. This is the focus of the present consultation, which will result in a government 'go/no go decision' for certain meter cohorts. The substance of the 'go/no go decision' will be to decide whether DCC should provide a service for a particular SMETS1 meter cohort.

Scope

24. There are six SMETS1 meter cohorts that were within the scope of DCC's IEPFR:

- Aclara,
- EDMI,
- Honeywell Elster,
- Itron,
- Landis+Gyr, and
- Secure Meters.

25. We are consulting on a 'go/no go' decision in respect of Aclara, Honeywell Elster, Itron and Landis+Gyr meters[15]. This will ensure that the benefits of full interoperability for consumers in respect of such meters can be realised as soon as possible.

26. We do not consider that we currently have access to sufficient information on the delivery of a DCC SMETS1 service in respect of the Secure Meter and EDMI cohorts to enable a consultation on a go/no-go decision at this stage. In order for us to reach a decision on

[14] https://www.smartdcc.co.uk/about-dcc/future-service-development/enrolment-and-adoption/ .
[15] Installing suppliers include EDF Energy, Scottish Power, SSE, EON, British Gas and N Power (known at the time of consultation)

these cohorts, there will need to be further commercial and technical discussions between the DCC and the relevant existing and prospective service providers.

27. The Government intends to consult on a go/no go decision for these meter cohorts in the future, once further commercial and technical engagement between relevant parties' result in sufficient information that would enable the Government to take a decision.

Options

28. The Government's overall aim in relation to SMETS1 meters is to ensure that smart functionality is retained when a customer switches energy supplier, with the following underlying objectives:

    a. To make interoperability and smart benefits available quickly and reliably for all stakeholders;
    b. To do so in a cost-effective manner, taking account of the impact on businesses and consumers; and with
    c. An acceptable level of security for the end to end smart metering system.

29. In order to judge whether or not DCC should provide SMETS1 services in respect of Aclara, Honeywell Elster, Itron and Landis+Gyr meter cohorts, they have been assessed against the following criteria on the basis of the information that is currently available:

    I. **Whether a net societal benefit exists**.

    There needs to be a net benefit taking into account quantitative and qualitative costs and benefits, compared to the 'do nothing' option where no DCC enrolment takes place and most consumers who switch energy suppliers can lose their smart services or have their SMETS1 meter replaced with another smart meter.

    II. **Whether there is an acceptable level of security for the end to end smart metering system**.

    III. **Whether the delivery of the potential solutions in respect of the meter types is technically feasible**.

    There needs to be a sufficient degree of confidence in the ability of the DCC to provide an enrolment and adoption solution that enables DCC to access the functionality on devices that it needs in order to enrol and provide SMETS1 services to users; and provides a level of technical functionality that enables suppliers to continue to provide a "smart" service to consumers who have SMETS1 meters.

Assessment

Societal cost benefit analysis

30. Based on current information, we estimate that enrolling Aclara, Honeywell Elster, Itron and Landis+Gyr meters, would provide a positive Net Present Value to Great Britain in the range of £210m to £320m under central assumptions. This range is dependent on final design decisions by the DCC[16].

31. This assessment is compared to the 'do nothing' scenario, where no DCC enrolment takes place and most consumers who switch energy suppliers either lose their smart services or have their SMETS1 meter replaced with another smart meter. The benefit-to-cost ratios range from 1.4 to 1.7, on central assumptions, which is similar to the benefit-to-cost ratio in the Smart Meter Roll-Out Cost Benefit Analysis published in November 2016.

32. However, these results show only the impact of enrolment on quantified costs and benefits and need to be considered in the context of the security and technical feasibility assessments below. Additionally, there are some costs and benefits that remain unquantified, including the benefits from third party access to enrolled meters and efficiency savings accruing to energy suppliers from rationalising SMETS1 and SMETS2 systems.

33. For reasons of commercial confidentiality, we cannot disclose cost information relating to the design and development of the DCC's service which is the subject of ongoing commercial discussions or information relating to energy supplier and other stakeholder businesses such as costs that they would incur. However, the types of costs and benefits considered in the Government's analysis are set out below.

34. The benefits of enrolment of SMETS1 meters in the DCC that have been considered are:

- Avoiding the cost of premature replacement of SMETS1 meters compared to the counterfactual where interoperability is less prevalent[17];
- Avoiding the associated inconvenience to consumers of the additional installation visit
- associated with premature meter replacement;

[16] The figures used are based on 2011 prices and discounted to 2016.
[17] The counterfactual incorporates existing interoperability between users of one existing SMSO that we were aware of at the time of analysis. A sensitivity analysis of high interoperability in the counterfactual was also run, covering any meters churning between users of existing Secure, IE and Trilliant SMSO systems. In this sensitivity analysis, the lower end of the Net Present Value range for enrolment in the DCC was reduced but remained positive.

- Ensuring availability of smart services and benefits from meters that would otherwise temporarily run in dumb mode in the absence of enrolment; and
- Providing other non-quantified benefits, such as providing third party access to data from SMETS1 meters and rationalising energy suppliers' SMETS1 and SMETS2 systems.

35. These benefits have been considered against the following costs of enrolment:

- The cost to the DCC (including its service providers) to design, build, test and operate the DCC SMETS1 solution (additional to any equivalent costs incurred in the counterfactual);
- The costs to energy suppliers of migrating SMETS1 meters in their portfolio to the DCC and upgrading their systems and business processes to support DCC-enrolled SMETS1 meters on an enduring basis. This includes systems integration and associated testing costs expected to be incurred by energy suppliers; and
- The potential reduction in network benefits, when compared to the counterfactual where SMETS1 are replaced with SMETS2 meters more quickly, as networks are able to access a broader suite of functionality on SMETS2 meters.

36. A further breakdown of the cost categories that can be disclosed can be found in the **Annex.**

Security

37. We have reviewed security documentation provided by the DCC and are minded to support its findings that if the proposed DCC security architecture is implemented, SMETS1 meters can be enrolled into the DCC without a material increase in risk to the DCC total system, enrolled smart metering systems and/or user systems.

38. In addition, DCC has sought feedback from the Smart Energy Code (SEC) Panel Security Sub Committee (SSC) as the SSC is responsible for the management of the end-to-end security architecture which would incorporate the SMETS1 service post enrolment. It is our understanding that the DCC will incorporate SSC feedback into updates of the security architecture and risk assessment. Further, as per obligations in the SEC (and prior to enrolment), energy suppliers are responsible for ensuring that testing has been undertaken which confirms that the relevant meter complies with the SMETS technical specification requirements (including those relating to security) and for making evidence of such testing available to OFGEM or the SEC Panel on request.

39. Our assessment recognises there are a number of security benefits arising from enrolling these meter cohorts with the DCC. These include:

- Enhancements driven by alignment with the security and assurance requirements of the SEC. The DCC (and users) would continue to be subject to annual security assessments though these will be conducted via the centrally procured Competent Independent Organisation (CIO). This would provide consistency of approach and would also be overseen by the SSC under its existing remit.

- Enrolled cohorts would be included within the end-to-end risk assessment and security architecture which the SSC is responsible for maintaining, thereby ensuring a holistic view of risks and controls across all aspects of the architecture.

- In addition to the security controls that SMETS1 meters already have in place, SMETS1 meters would be able to capitalise on the centralised alerting and monitoring systems provided by the DCC which would provide timely insight into identifying and mitigating potential issues or threats.

Technical feasibility

40. We have considered the DCC's progress in developing viable solution designs and the ability of service providers to implement these designs. The DCC has been developing, in conjunction with users, changes to the SEC Subsidiary Documents (SSD) in order to facilitate SMETS1 enrolment and adoption.

41. DCC consulted on the revised drafts of these documents[18] and following updates resulting from that consultation they were baselined by the transitional governance body, the Technical and Business Design Group (TBDG), in February. This means that the documents are under formal programme change control, cannot be amended without consultation, and provide a stable design baseline which largely completes the SMETS1 solution design that suppliers require visibility of in order to develop their systems.

42. Residual design issues do remain but are primarily related to migration, service management and device-specific behaviours. DCC has held a series of workshops with stakeholders to develop the migration approach, and plans to consult on a draft of the relevant SSD (the Transition and Migration Approach Document) in the near future. DCC will also consult on the service management SEC subsidiary documents shortly. Any device-specific requirements will need to be identified through the development and test phases for each cohort, and arrangements for consulting on changes will be managed through formal change control.

[18] Baselined documents include: SEC Appendix B - Organisation Certificate Policy v1.2 draft, SEC Appendix M - SMKI Interface Design Specification v1.2 draft, SEC Appendix Z - CPL Requirements Document v1.1 draft, SEC Appendix AB - Service Request Processing Document v1.2 draft, SEC Appendix AC - Inventory, Enrolment and Withdrawal Procedures v1.3 draft, SEC Appendix AD - DCC User Interface Specification v3.0 draft, SEC Appendix AF - Message Mapping Catalogue v3.0 draft, SMETS1 Supporting Requirements version 0008 draft

43. We recognise that some elements of the solution may not be fully resolved until detailed commercial negotiations have concluded. However, the detailed specifications that feed into those commercial negotiations are based on the solution design that has been consulted upon (and as described in the SSDs) and we believe them to be sufficiently mature and robust.

44. We have drawn further assurance on the technical feasibility of enrolling relevant cohorts based on DCC reports on the progress of the potential service provider's development and testing of solutions. These have been in progress since autumn 2017 and DCC has assessed progress of each of the developments on a regular basis and reflected this into its delivery confidence reports to BEIS. These reports provide us with further assurance around the technical feasibility of the solution.

45. In summary, we consider that technical solution designs for the provision of a SMETS1 service for the Landis+Gyr, Aclara, Itron and Honeywell Elster meters are sufficiently mature to be considered technically feasible.

Government's proposed approach

46. Further to our assessment of the Aclara, Honeywell Elster, Itron and Landis+Gyr meter cohorts against the criteria set out above, we are minded to require the DCC to provide SMETS1 services in respect of these meters, as enrolment of these meters provides a net benefit to Great Britain, enhances security and is technically feasible. This 'minded to' position is subject to ongoing commercial negotiations between the DCC and its prospective and existing service providers and will be subject to any relevant information updates from the DCC.

47. We will take into account all relevant considerations before making a final decision, including responses to this consultation, further commercial developments during this time and resulting updates to the DCC's cost model.

48. We intend to consult regarding enrolment of Secure meters and EDMI meters once sufficient information is available from further engagement between existing and prospective service providers on the one hand, and the DCC on the other. We would encourage all relevant parties to facilitate this further engagement promptly.

Consultation Questions

Q1	Do you agree that the DCC should offer SMETS1 services for Aclara, Itron, Honeywell Elster and Landis+Gyr meter cohorts?
Q2	Are there any other types of cost arising from enrolment of these SMETS1 meter cohorts that you believe should be considered?
Q3	Are there any other types of benefits arising from enrolment of these SMETS1 meter cohorts that you believe should be considered?
Q4	Are there any other factors that we should consider in arriving at our conclusion?

Please provide quantitative and qualitative evidence to support your views.

3. Implementation

49. DCC is currently developing the capability to provide a SMETS1 service in respect of the SMETS1 meter cohorts which are the subject of this consultation in accordance with its SMETS1 plan[19].

50. As part of this development work, the DCC is drafting and will further consult upon a SMETS1 SEC Variation Testing Approach Document (SVTAD) which describes how the DCC would test its SMETS1 services capability before it could go live. Once designated by the Secretary of State, the SVTAD would require DCC to test against Device Models combinations to demonstrate that if enrolled, the DCC would be able to provide the SMETS1 services in respect of them. The process for determining the Device Model combinations that the DCC would test against is intended to be set out in the SVTAD, but would take as its starting point the meter cohorts that are the subject of this consultation.

51. The DCC is also currently developing proposals for a transitional process by which already installed SMETS1 smart metering systems could be migrated to and enrolled with the DCC and shall be consulting on those proposals in the Transition and Migration Approach Document (TMAD).

52. We consider that the development work set out above should continue consistent with our 'minded-to' position pending the final decision on whether the DCC should ultimately be required to offer a SMETS1 service.

53. Should the Secretary of State decide to require the DCC to offer a SMETS1 service, then this would be implemented through changes to the SEC and proposed changes to SEC Subsidiary Documents, including new SEC Subsidiary Documents such as the TMAD.

54. We are consulting upon the amendments to the SEC that would require the DCC to offer SMETS1 services. The detail of these proposed amendments and the draft legal text can be found in our consultation on changes to the main body of the SEC and in the proposed changes to SEC Subsidiary Documents[20].

55. Of particular note are our proposed changes to the SEC (Sections F2 and H5), as set out in more detail in the consultation referred to in the paragraph above. These changes broadly reflect the need to include SMETS1 devices on what is currently known as the Certified

[19] Pursuant of condition 13 of the Smart Meter Communication Licence. The smart meter communication licences were granted pursuant to sections 6(1A) and (1C) of the Electricity Act 1989 and sections 7AB(2) and (4) of the Gas Act 1986.
Conclusions on DCC's Delivery Plan for SMETS1 Services:
https://www.smartdcc.co.uk/media/440317/20171016_smets1_planning_conclusions.pdf

[20] SEC consultation: https://smartenergycodecompany.co.uk/latest-news/beis-consultation-sec-changes-enable-provision-smets1-service-dcc/
SEC Subsidiary Documents: https://smartenergycodecompany.co.uk/the-developing-sec/

Products List to allow relevant devices to be added to the Smart Metering Inventory (as defined in the SEC) and thus be eligible for enrolment.

56. The changes also include describing a list of 'SMETS1 Eligible Product Combinations' which sets out those SMETS1 Device Model combinations in relation to which the DCC would be required to provide services should those Device Model combinations be enrolled. The DCC would be required to add to that list those Device Model combinations in respect of which it has successfully completed relevant testing to prove its general ability to provide services. This would include testing undertaken as set out in the SVTAD referred to above. The intention is that once on the list of proposed SMETS1 Eligible Product Combinations, the process set out in the TMAD that results in the migration of devices to the DCC and thus the enrolment of smart metering systems with the DCC can commence.

57. Should we conclude that the DCC should not be required to provide services in respect of a particular SMETS1 meter cohort, we would make any necessary amendments to the regulatory framework at that time to remove the obligation on the DCC to develop its SMETS1 service capability in respect of those particular meters, such as testing obligations.

4. Timing and next steps

58. Stakeholders and other interested parties are invited to provide their views on the Government's proposed approach and, more specifically, the questions set out in this consultation by 5pm 24 May 2018.

59. The Government response to this consultation will be published following an analysis of responses and on the basis of any updated cost and design information provided to us by the DCC together with any further relevant considerations.

60. The DCC will, in accordance with its SMETS1 plan, continue its work in respect of Secure and EDMI. We intend to consult regarding enrolment of Secure Meters and EDMI meters once sufficient information is available from further engagement between existing and prospective service providers on the one hand, and the DCC on the other. We would encourage all relevant parties to facilitate this further engagement in a prompt fashion.

Annex: breakdown of the cost categories considered in the analysis

1. The costs to the DCC (including SMETS1 service providers) to design, build, test and operate the DCC SMETS1 solution (additional to any equivalent costs incurred in the counterfactual) include but are not limited to:

    - DCC internal costs to deliver the SMETS1 E&A programme (including DCC overheads and margin).
    - External service provider costs that are the same irrespective of the integration path chosen, which include Systems Integration, and Dual Control Organisation (DCO) and Data Service Provider (DSP) build, test and operational costs.
    - Ongoing SMETS1 Foundation Communication Service Provider (FCSP) costs (relative to the costs for FCSP communication services in the counterfactual).
    - The additional costs of building and operating a new system to support an integrate to meter option if pursued.
    - At an individual meter cohort level:
        i. The cost to design, build, test and operate the solution for that cohort, taking into consideration where this is upgrading an existing SMSO regime or new build (and relative to the costs for ongoing SMSO services in the counterfactual).
        ii. The cost of security enhancements, including system hardening, DCO and SEC section G compliance, where additional to the costs incurred in the counterfactual.

    In order to account for uncertainties and cost contingencies, optimism bias has been applied in line with HM Treasury Green Book guidance.

2. The costs to energy suppliers of migrating SMETS1 meters in their portfolio to the DCC and upgrading their systems and business processes to support DCC enrolled SMETS1 meters on an enduring basis include (but are not limited to):

    - Systems integration and associated testing costs expected to be incurred by energy suppliers.
    - IT changes for a supplier to support SMETS1 meters which it wishes to enrol from operation via an SMSO to operation via the DCC.
    - IT changes for all suppliers to deliver enduring operation and interoperability of all types of SMETS1 meters enrolled in the DCC.

- Testing costs as part of programme of work to enrol SMETS1 meters into the DCC.
- Business change to support SMETS1 meters enrolled in the DCC.

At present there are some unquantified costs that would be expected to be incurred, such as the costs arising from migration.

3. We have also taken into account the potential reduction in network benefits, when compared to the counterfactual where SMETS1 are replaced with SMETS2 meters more quickly. This includes consideration towards SMETS2 meters providing Distribution Network Operators (DNO) with outage alerts, enabling them to resolve outages faster and more efficiently. This functionality is not required within the SMETS1 specification, which means enrolment and adoption cannot be relied upon to deliver these benefits – therefore they have been excluded. Other network benefits, however, such as access to profile data remain.

4. For reasons of commercial confidentiality, we cannot disclose information relating to the design and development of the DCC's service, which is the subject of ongoing commercial discussions, or information relating to energy suppliers and other stakeholder businesses such as costs that they would incur.

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