This document has been redacted to remove any commercially sensitive information and is now classified as DCC Public.

Should you have any queries, please contact Commercial@SmartDCC.co.uk

SCHEDULE 2

PROJECT DESCRIPTION

The contents of this project description does not create a contractual commitment on the DCC.

The Smart Metering Implementation Programme

The Government developed the Smart Metering Implementation Programme to deliver its vision to ensure that every home and small business in Great Britain has smart electricity and gas meters. The programme aims to replace 53 million meters with smart electricity and gas meters in domestic properties and smart or advanced meters in smaller non-domestic sites, benefitting approximately 30 million premises.

The Department of Business, Energy and Industrial Strategy ("**BEIS**") formerly known as DECC granted Smart DCC Ltd a licence in September 2013 to establish and manage the data and communications network to connect smart meters to the business systems of energy suppliers, network operators and other authorised service users of the network.

The DCC infrastructure will help deliver the Government's plans to roll out an estimated 53 million smart electricity and gas meters to domestic and non-domestic properties in the UK by 2020.

The data and communications infrastructure will:-

- operate consistently for all consumers regardless of their energy supplier
- provide smart metering data to network operators in support of smart grids
- allow authorised third parties to provide services to consumers who have granted them permission to use their data. Consumers can benefit by receiving energy services and advice on how to reduce their energy usage.

The DCC initiated the SMETS1 Programme to ensure these smart meters can still be utilised in order to ensure the investment to date by the industry is not lost and that households are not encumbered with a further change in meter to upgrade to SMETS2 technology.

The external link for DCC's SMETS1 Programme, including the links to the IEPFR final report and the delivery plan consultation, can be found here:-

https://www.smartdcc.co.uk/about-dcc/future-service-development/enrolment-and-adoption/

The DCC is in the process of assessing options for the initial enrolment of SMETS1 meters into a DCC service. Once these options have been assessed the DCC will be reporting to the UK Government on the feasibility and estimated cost of each option and the manner in which it would be delivered.

SMETS 1 Options Analysis

The infrastructure for existing SMETS1 meters has developed organically without a unified communications standard and often independently, to meet energy suppliers' own requirements, according to their own business needs. As such, meters installed by one supplier are not always compatible with another suppliers' system and could lose functionality or require replacement when consumers switch supplier.

The Government believes that there are important shared benefits for industry and consumers from the enrolment of SMETS1 meters into the DCC. In particular, the enablement of more efficient and effective switching for customers, as a gaining supplier will be able to access the smart meter functionality should a consumer switch suppliers. Consequently this should reduce the risk of SMETS1 meters being replaced before the end of their operating lives.

In order to achieve the objective of maximising the benefits of smart metering, the Government has requested the DCC to carry out a study of feasible options for the enrolment of SMETS1 meters. Section N of the SEC required the DCC to produce an IEPFR relating to the enrolment of SMETS1 meters and to consult parties on the content of the draft report.

In identifying feasible options for the provision by the DCC of a SMETS1 service, the DCC took as its starting point the existing multiple technical solutions and systems that have developed to support SMETS1 meters, and considered how technical and commercial arrangements could be structured to enable the provision of a DCC SMETS1 service.

The DCC's objective is to identify feasible options that whilst technically effective, commercially efficient and secure, are delivered for a reasonable cost and within reasonable timeframes.

SMETS1 Integration Path

Integration path covers the means by which the DCC can communicate with SMETS1 meters to enable it to first enrol the meters and then send commands to and receive messages from enrolled SMETS1 meters. A range of potential integration path options have been considered as part of consultation with the industry (see Appendix 1 of this Schedule 2).

In order to provide a DCC SMETS1 Service, the DCC needs to establish communication with SMETS1 meters such that (on an on-going basis) the DCC can provide the SMETS1 communication services in respect of the SMETS1 meter. There are a number of options for how the DCC might technically communicate (via integration) with a SMETS1 meter, which are set out and evaluated below. 'Integration path' is the term that is used to describe how such communications might take place.

This initial analysis resulted in five possible integration path options, with a conclusion that two options were feasible. Through the consultation process three options were indeed discounted resulting in two identified options:-

- establish communications between a new SMETS1 service (procured by the DCC) which integrates via existing SMETS1 CSPs to the meter (i.e. 'integrate to meter') – Option 4 ; and
- establish communications with the existing SMETS1 data services capability (known as the Smart Meter Systems Operator ("**SMSO**")), which integrates, via existing SMETS1 CSPs, with the meter (i.e. 'integrate to SMSO') – Option 5.

Option 5 uses existing SMETS1 meters, communications hubs and SMETS1 CSPs but also uses existing SMETS1 SMSOs (together with their existing HESs). This option involves the service request sent to the DCC by a user, 'a user service request', being converted into an 'SMSO service request' (in the format of the current SMSO-user interface/language). As with the current arrangements, the SMSO would then convert the SMSO service request into a command to be sent to the meter.

Option 5 has two related options:-

- non-standardised DCC - SMSO interface: the existing SMSO interfaces are retained and the DCC procures the service that would translate user service requests into SMSO service requests - Option 5a; or
- standardised DCC - SMSO interface: the DCC contracts with SMSOs to modify their interfaces to provide the function to translate the user service requests into the SMSO service requests – Option 5b.

What the DCC requires from the SMSOs

In order to further understand the feasibility of integration path Option 5b the DCC wishes to commission the development required by SMSOs to integrate to the Service Request Interface provided by the DCC Data Service Provider, or equivalent. This will allow the DCC to make an informed and costed recommendation to BEIS in quarter four of 2017.

The DCC wishes to pursue an iterative design and development process. Therefore the requirements are likely to change over the initial stages of the software development. The DCC's requirements are detailed in Schedule 3 (*Requirements*) and the methodology that the DCC wishes SMSOs to employ is detailed in Schedule 4 (*Agile Development Methodology*).

As the methodology is iterative in nature a time and material charging mechanism has been selected. In order to manage the commercial risk of the DCC a cap on effort will be agreed with the DCC for each tranche of work. This cap will not be exceeded without the DCC's authorisation.

SMSO's are asked to recognise that should BEIS decide that Integration Path Option 5b is optimal that the requirements that will be developed as part of this development will likely be used as the basis for an enduring solution.

Therefore the DCC would like the SMSOs to develop the software in a way that allows this development to be scaled into an enduring solution (recognising the non-functional requirements in Schedule 3 (*DCC Requirements*)) in an efficient manner so as to minimise on-going resource requirements and costs.

Appendix 1 – Example Implementation Path Options