SUMMARY POLICY ISSUE PAPER – FOR EDAG DISCUSSION

Title of Paper	**Interactions Between Switching and Smart Metering**		
Issue Ref	BPD i36	Date: 4 October 2016	
Issue Owner / Author	Jenny Boothe / Colin Sawyer		
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Issued to DA		Discussion at DA	

Summary and recommendation

1. By the time the new switching arrangements are implemented a significant proportion of customers will have smart meters, operated by DCC. This paper considers ways in which the new switching arrangements should interact with them[1].

2. Smart meters provide customers with visibility into the volume of energy being consumed and the value of that energy. If the customer has a prepayment contract the smart meter will also display the outstanding balance and other terms such as emergency credit. To ensure that the information presented to customers is current it is important that switching transactions are promptly reflected by the customer's smart meter.

3. The two main policy positions on which we invite comment from EDAG are as follows:

    a. Although it will always be desirable for a customer's smart meter to reflect the contract offered by their current supplier, we do not consider that a switch should be aborted if – for any reason – an update to the smart meter fails (e.g. if the comms link is unavailable). Our principal arguments in support of this position are:
        i. The customer will have switched for good reason (e.g. lower tariff) and would be frustrated if they are unable to access a lower tariff purely because of a (potentially temporary) interruption to their smart meter communications
        ii. Switches being blocked by failures to smart meter communications may deter people from switching and may tarnish the image of smart meters

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[1] This paper focuses on SMETS2 meters. SMETS1 meters operated by DCC may be treated as SMETS2 but those operated by other SMSOs will require a different set of operating procedures.

b. Reconfiguration of smart meters should be undertaken between gate closure (17:00[2]) and midnight such that the new tariff for both electricity and gas is activated at midnight. This approach aligns the tariff update to the start of the customer's contract; provides a common deadline for both suppliers (especially if Supplier B is using a multi-rate tariff); ensures that a single set of meter reads are used for closing and opening bills and settlement; and is compatible with profiled and HH settlement.

4. Proposed positions in relation to less substantial issues are discussed in the policy paper and are summarised later in this paper.

Analysis

5. Standard supply contracts between energy suppliers and (domestic and smaller non-dom) customers state that supply starts from the 'effective date' – the date when registration of a meter point transfers to that supplier. As no specific time is mentioned, contract start is at midnight. Our objective is therefore to design arrangements which allow the gaining supplier to activate their tariff and other terms at midnight on the switch date.

6. Current switching arrangements in both electricity and gas operate on MPRS and UKLink using overnight batch procedures. DCC uses outputs from these runs to update its access control information which it uses to ensure that only valid service requests are sent to smart meters: for example to verify that a supplier requesting an update to security credentials is the registered supplier. The current switching timetables mean that some gaining suppliers will not be able to access the meter of their new customer until several hours after midnight.

7. Operating within the constraints of the existing arrangements, industry has devised a set of interim arrangements for implementing a switch on a smart meter. Inter alia these involve bilateral exchanges of meter reads between gaining and losing suppliers.

8. In the policy paper we have outlined a series of steps that would be taken by suppliers and DCC to allow tariff and other terms to be configured on the smart meter at midnight. The procedures also provide for retrieval of a consistent set of meter readings for use in billing and settlement.

9. In developing the new procedures we noted that under certain conditions (e.g. failure of comms to the smart meter) it may not be possible to update the smart meter at midnight. This prompted discussion on whether – in these exception conditions – the switch should be aborted.

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[2] This is an illustrative timing. The actual timing of gate closure will need to be set once DCC has more experience of traffic volumes and scheduling constraints.

Summary of key points from stakeholders

Business Process Design User Group

10. The User Group expressed strong support for the proposal that a switch should not be 'tightly coupled' to reconfiguration of the smart meter, such that the switch would be aborted if reconfiguration failed.

11. The User Group also concurred with Ofgem that the objective should be to reconfigure smart meters in the period between gate closure (e.g. 17:00) and midnight. This would allow a customer who has signed up to Supplier B before 17:00 to have switched supplier by the start of the next day and have the new tariff on their smart meter. However this would not mean that all switches have to proceed at this pace as suppliers (or customers) may have reason to set a later switch date (e.g. to allow time to issue prepay top-up instructions or to undertake additional triangulation).

12. Completing the switch at midnight and reconfiguring tariff registers to match the new tariff would allow suppliers to use the SMETS2 Daily Read Log as the 'single source of truth' in relation to meter readings at the point of switch.

13. Although the User Group supported the principles of reconfiguring smart meters by midnight and using the Daily Read Log for meter readings, members identified a number of specific points which will need to be addressed during the design stages, as follows:

    a. Exceptions and error handling: communications failures, error conditions on meters (e.g. battery failure) will need to be identified and worked through in detail to develop error handling routines. These will need to include consideration of how the new ECoS process might constrain the activities of the gaining supplier
    b. Verification of CoS read: until suppliers are confident in their use of the Daily Read Log consideration should be given to retaining – as a temporary measure – the procedures for exchanging and validating switch reads (i.e. to continue the interim arrangements)
    c. Prepayment customers: various situations relating to prepayment customers will need to be established when DCC implements prepayment services (i.e. prior to implementation of the new switching arrangements). Consideration will be needed as to how these should be carried forward into the new switching arrangements
    d. Alignment with gas settlement day: User Group members supported the position that the switch of a smart meter customer should occur at midnight despite the 'gas day' not starting until 05:00
    e. UTC and local time: it was recognised that this issue may be covered by work relating to elective and mandatory HH settlement but, pending this further work, it is proposed that all timings discussed in relation to switching and smart metering are expressed as UTC time (not local time)

External Design Assurance Group

14. To be added following EDAG.

DA Decision Log

Date of DA Meeting	
Decisions (from Ofgem website)	
Notes	