

SEC Guidance I

Smart Change of Supplier Process



Overview

The following diagrams set out a number of processes that occur as part of a Change of Supplier (CoS) event where a site has a DCC enrolled Smart Metering Systems.

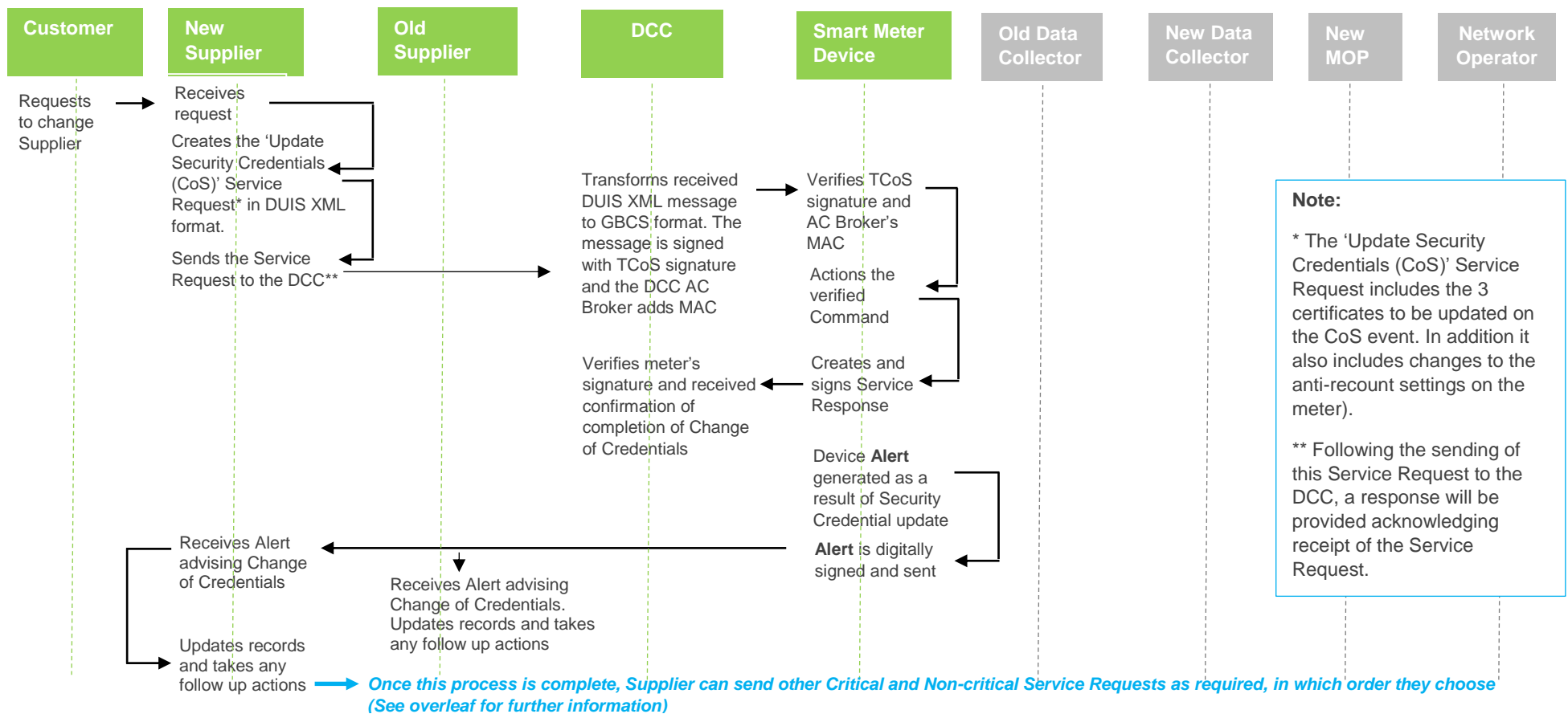
The diagrams provided, show specific examples of Service Requests (and associated responses). You can find information on the general process for each type of Service Requests in the 'Processing of Service Requests, Responses and Alerts' guidance document.

A Glossary of terms used in the diagrams is provided on page 8 of this document.

SEC Guidance | Smart Change of Supplier Process



Diagram 1: On a Change of Supplier an Update Security Credentials (CoS) Service Request is issued by the New Supplier



SEC Guidance | Smart Change of Supplier Process



Other Service Requests related to a Change of Supplier

The following table lists the various Service Request areas that a Supplier may consider sending following a “CoS Update Security Credentials” Service Request on a Change of Supplier.

Note: There is no defined order for sending these Service Requests. They can be sent in any order, if and when the Supplier chooses too.

Service Request areas
Prepayment Configuration parameters
Balances
Auxiliary Load Control Parameters
Gas specific Parameters
Tariffs
Billing Calendar
Contact Details
Device Logs
Supply Status and Load Timings
Time
Instantaneous Power Thresholds

SEC Guidance | Smart Change of Supplier Process

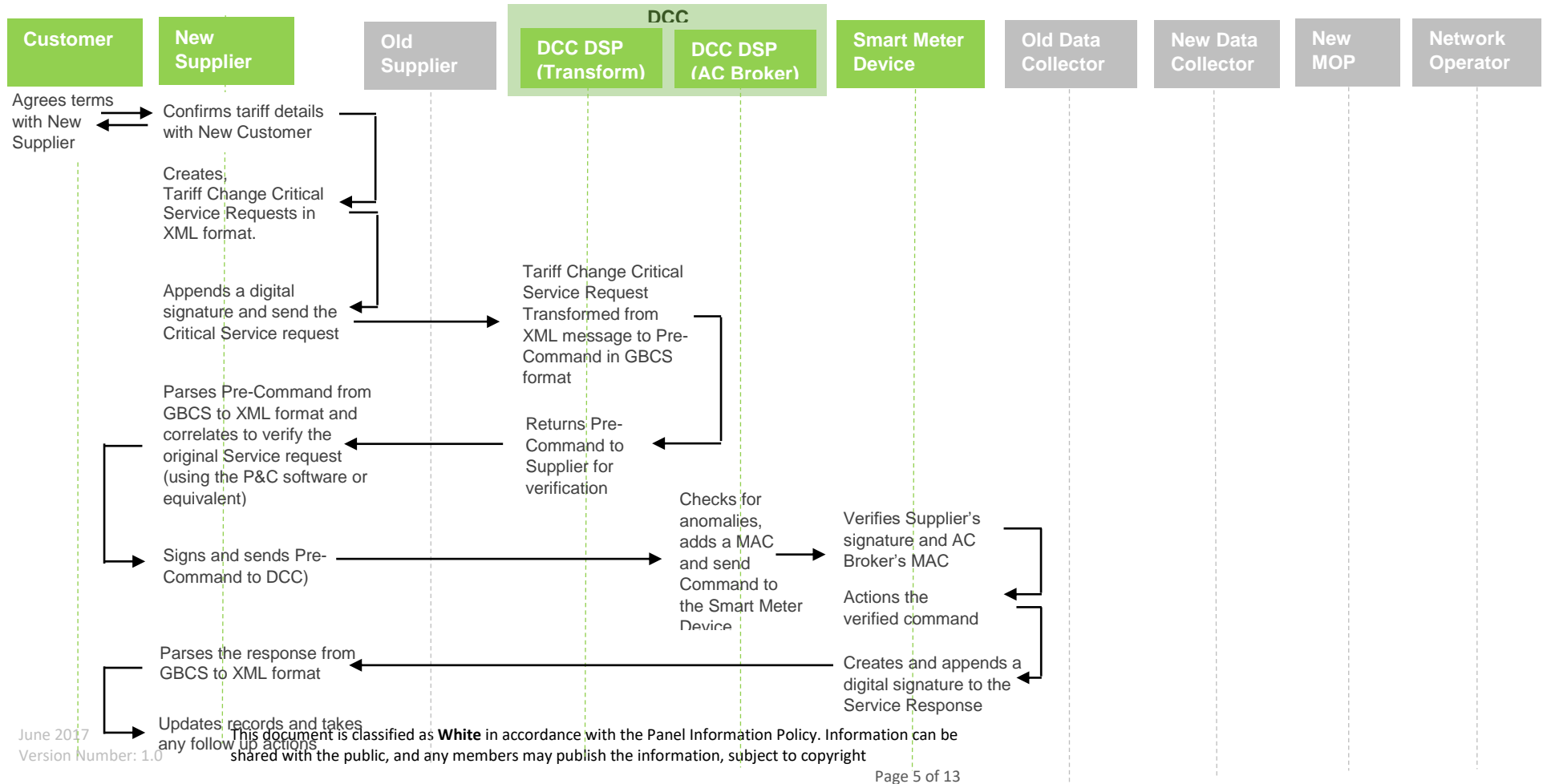


MPAN/MPRN
Supply tamper state

SEC Guidance | Smart Change of Supplier Process



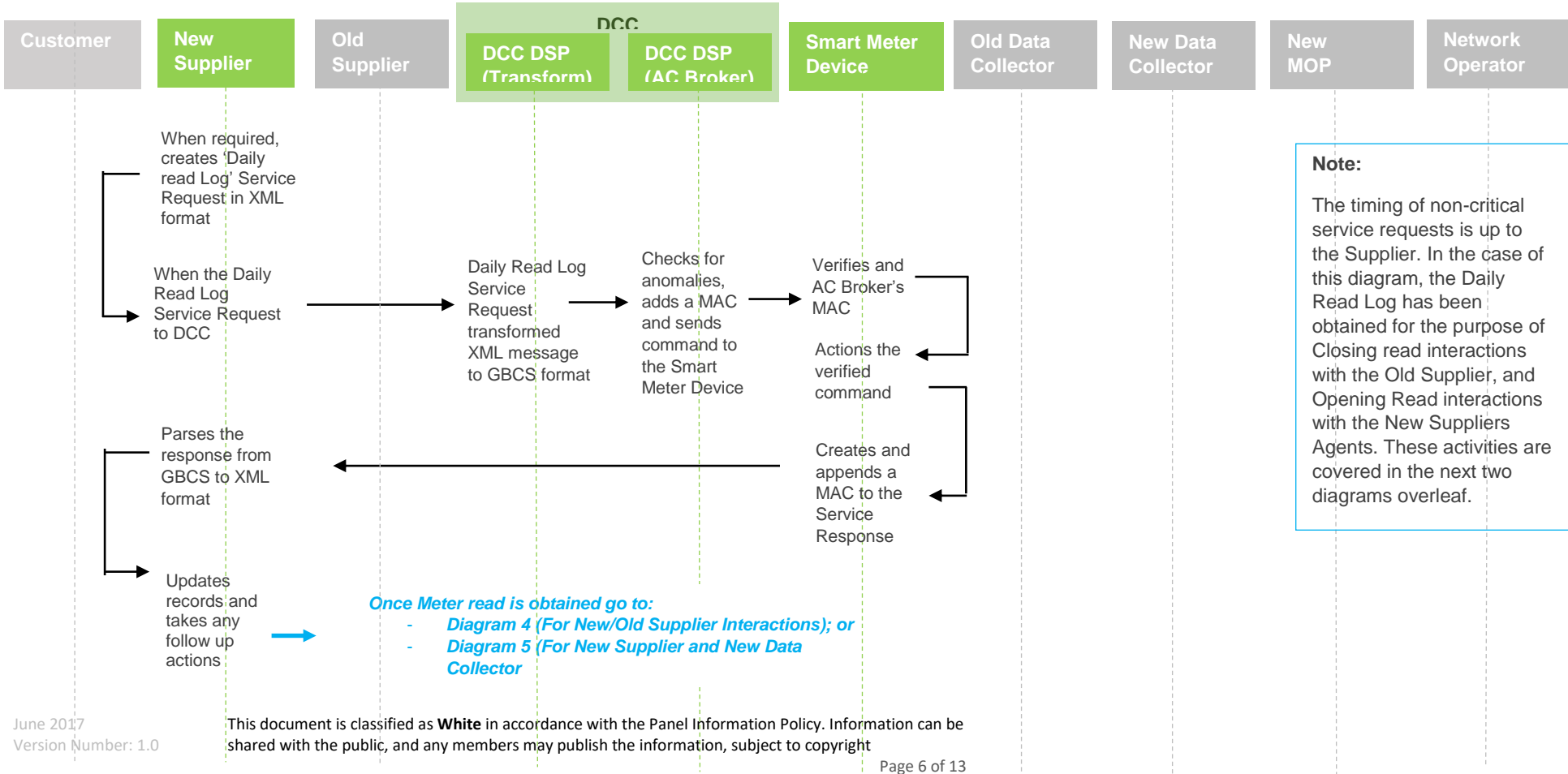
Diagram 2: Critical Service Request example – Tariff Change



SEC Guidance | Smart Change of Supplier Process



Diagram 3: Non-Critical Service Request Example – Daily Read Log

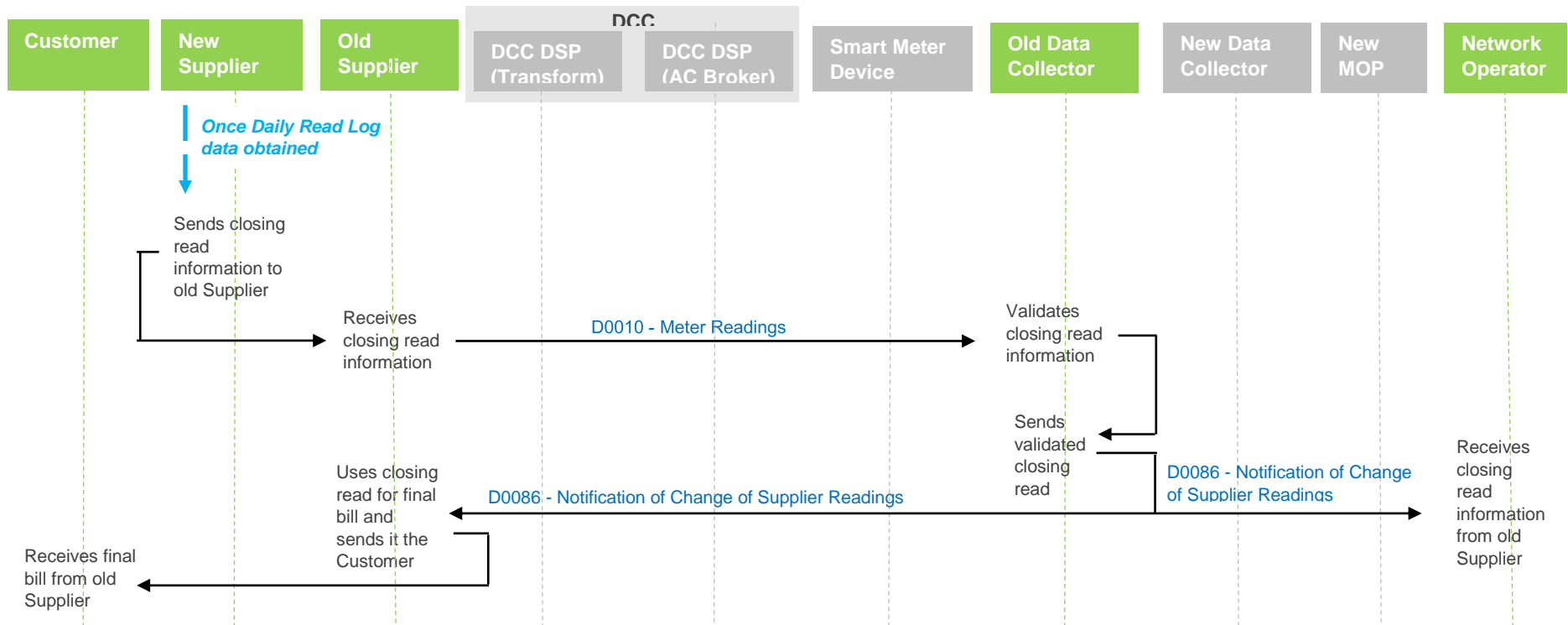


Note:
 The timing of non-critical service requests is up to the Supplier. In the case of this diagram, the Daily Read Log has been obtained for the purpose of Closing read interactions with the Old Supplier, and Opening Read interactions with the New Suppliers Agents. These activities are covered in the next two diagrams overleaf.

SEC Guidance | Smart Change of Supplier Process



Diagram 4: Old Supplier Obtaining Closing Read Information (Based on the Approved BSC Modification Proposal P302)

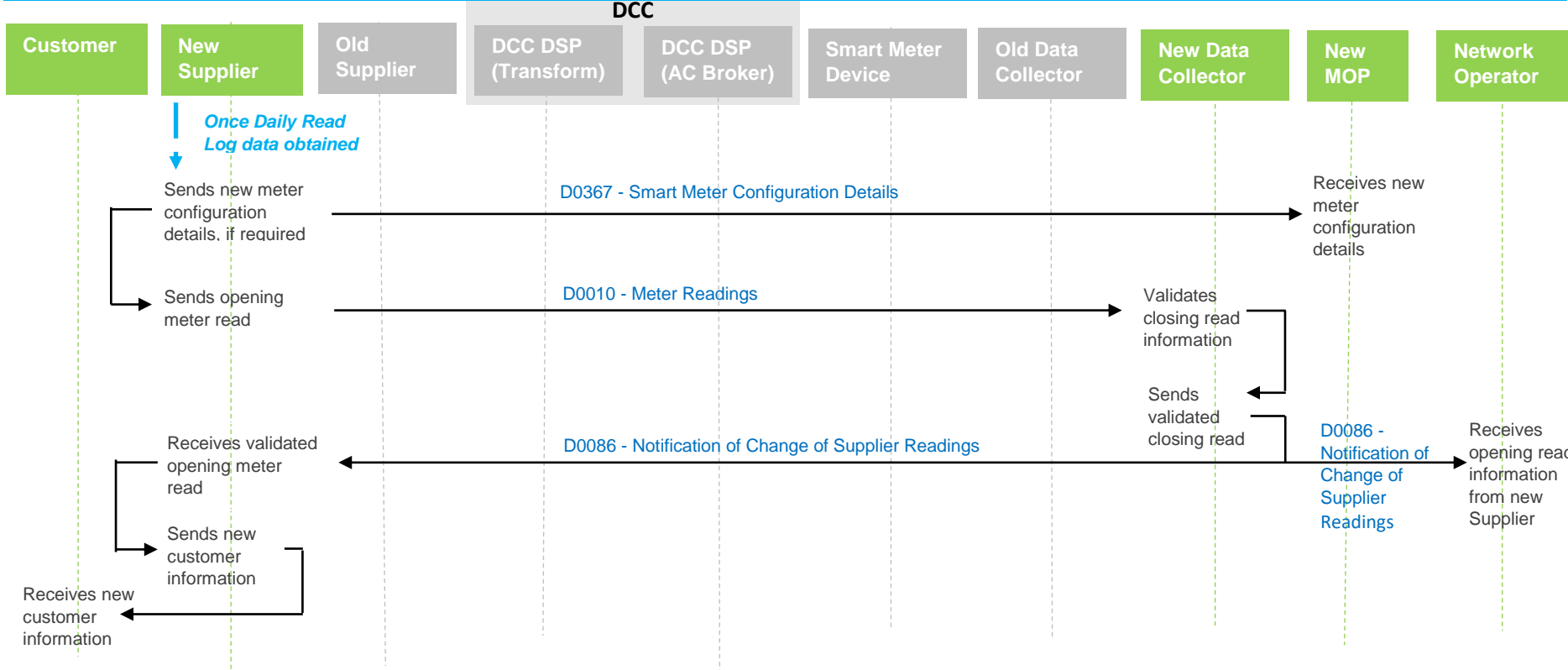


Note: This process diagram is based on the approved [BSC Modification Proposal \(P\) 302](#) 'Improve the Change of Supplier Meter read and Settlement process for smart Meters' Solution. Under this process, the new Supplier sends the meter read to the old Supplier on a Change of Supplier event. The old Supplier can still send its own meter read Service Requests to the DCC as per the process under Step 2, if it wants its own meter read for validation purposes.

SEC Guidance | Smart Change of Supplier Process



Diagram 5: New Supplier's Interactions with New DC, MOP and Network (Based on the Approved BSC Modification Proposal P302)



SEC Guidance | Smart Change of Supplier Process



SEC Guidance | Smart Change of Supplier Process



Glossary***	
Alert	Messages sent to Users by a Smart Meter Device or the DCC without a corresponding Service Request having been sent.
AC Broker	Access Control Broker
Anomaly Detection	The DCC DSP Access Control Broker will check whether the total number of communications (in general or of a particular type) sent, received or processed by the DCC in relation a User are within an expected threshold. This threshold is set by the User itself (as per SEC Section G3).
Command	Means a communication to a Device in a format required by the GB Companion Specification (GBCS) document.
Correlate	The Correlate function of the P&C software is a message checking process, only used for Critical Service Responses. The Correlate function will check whether the Pre-Command issued by the DSP for signing corresponds to the original Critical Service Request issued by the User.
Critical Service Request	Means a request identified as critical in the DUIS. These are Service Requests which are potentially supply effecting, may relate to financial fraud or to the security of Smart Metering Equipment. Therefore, all Critical Service Requests will need to be digitally signed by Users
DCC	Means the Data and Communications Company whose role is to provide communications services between Smart Meter Devices and the DCC Service Users.
DCC DSP Access Control (AC) Broker	The DCC DSP Access Control Broker applies Anomaly Detection and appends MACs to verified GBCS format message sent to the Smart Meter Device.
DCC DSP Transform	The DCC DSP Transform converts submitted Service Requests in XML format into GBCS format.

Glossary***	
DCC TCoS	DCC Transitional Change Of Supplier function
DCC User Interface Specification	Means the SEC Subsidiary Document identified as the 'DCC User Gateway Interface Specification' set out in Appendix [TBC].
Digital Signatures	Digital Signatures are short pieces of information appended to messages to ensure the authenticity of the sender and integrity of the message itself. Digital Signatures are only used for authenticating Critical Service Requests, Critical Responses and Critical Alerts.
DSP	Means the Data Service Provider, a Sub-Contractor to the DCC, whose role is to develop and operate the system controlling the movement of messages to and from Smart Meters.
GB Companion Specification.	Devices in a Smart Metering System will communicate with each other and the DCC in a message format specified in the Great Britain Companion Specification (GBCS) document. All outgoing messages from Users (Service Requests and Pre-Commands) will be transformed from XML to GBCS format. The Data Service Provider (DSP) will be responsible for transforming all messages from Users. Messages (Service Responses and Alerts) returned from Smart Meter Devices and the DCC are not transformed into XML by the DSP. This transform function will need to be performed in the User's own IT domain.
GBCS	Means the GB Companion Specification document which will become a SEC Subsidiary Document.
Message Authentication Codes (MACs)	Message Authentication Codes (MAC) are short pieces of information appended to messages to ensure the authenticity of the sender and integrity of the message itself. MACs are applied to Commands, Non-Critical Responses and Non-Critical Alerts.

SEC Guidance | Smart Change of Supplier Process



Glossary***	
MOP	Meter Operator
Non-Critical Service Request	Means a request which is not identified as critical in the DUIS. Non-Critical Service Requests do not require a digital signature.
Parse and Correlate Software (P and C)	<p>The Parse and Correlate Software is software that, on request, must be provided to any person.</p> <p>The Parse and Correlate software, is required by (Section H1.2) to convert all Service Requests and Alerts in the format that is set out in the Message mapping Catalogue and confirm that a Pre-Command is substantively identical to its associated critical Service Requests submitted by the DCC User. Section H11.3 sets out the characteristics of the software (written in Java programming language) and Section H11.4 sets out the format in which the DCC is to provide the file (I.e, an executable file and source software code)</p> <p>Note: Users are not obliged to use the software and instead may choose to procure or develop their own equivalent, or only choose to deploy the Parse component of the software if they have no requirement to submit Critical Service Requests.</p>
Parse	The Parse function of the Parse and Correlate (P&C) software provide a mean of converting all Service Responses and Alerts (both critical and non-critical) from GBCS to XML format, readable by Users' systems.
Pre-Command	Means a Command which has not yet had a Digital Signature or a Message Authentication Code (MAC) appended.
Response	Means responses from Devices and the DCC returned to Users.
Service Request	Means a request sent by a User to the DCC for one of the services listed in the DUIS document. The DUIS requires Service Requests to be submitted in Extensible Markup Language (XML).

SEC Guidance | Smart Change of Supplier Process



Glossary***

Smart Meter Device	Includes Electricity and Gas Smart Metering Equipment, HAN Controlled Auxiliary Load Control Switch, Pre-Payment Interface Device and Gas Proxy Function.
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*** The Glossary in this document uses a mixture of both 'layman' explanation and the SEC defined definition of terms. Please refer to the SEC for all defined terms.

Disclaimer

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