## Smart Metering Implementation Programme

# Phase 1A – DCC Project DCC Scope & Services Workstream

Meeting 12: 10 March 2011

## **Agenda**

- 1. Introductions
- 2. Meeting 11: Minutes & actions
- 3. Business process definition
  - Review models for:
    - Product management
    - Payment processing
    - Change of tenancy
  - Discuss:
    - Change of supplier
    - SM fleet management



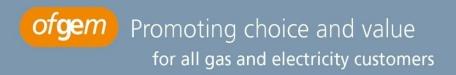
Agenda Item 2

MTG 11: MINUTES & ACTIONS

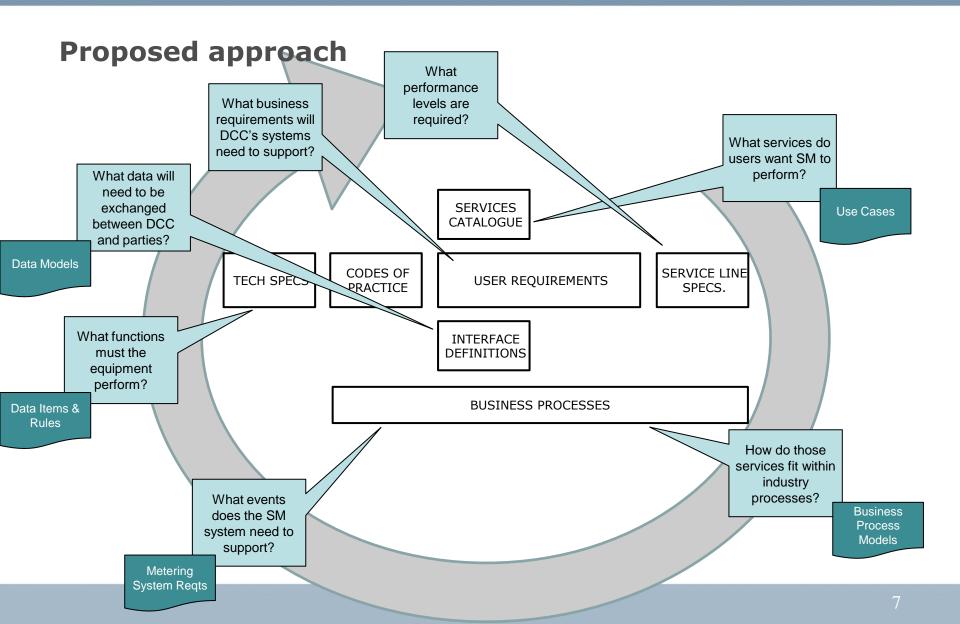


Agenda Item 3
BUSINESS PROCESS MODELLING

<b>Business Processes</b>		10-Feb		24-Feb		10-Mar		24-Mai	•	TBD
01 Meter installation / activation	F	Review								
All										
02 SM fleet management						Discuss	Draft	Review		
Elexon/Gemserv										
03 Product management				Discuss	Draft	Review				
Electralink/xoserve										
04 Meter reading	]	Discuss	Draft	Review						
Elexon/Gemserv										
05 Change of supplier						Discuss	Draft	Review		Review
All										(If needed)
06 Change of tenancy				Discuss	Draft	Review				
Electralink/xoserve										
07 Payment processing				Discuss	Draft	Review				
Elexon/Gemserv										
08 Network operation								Discuss	Draft	Review
Electralink/xoserve										
09 Other (In-home & industry actions)								Discuss	Draft	Review
All										

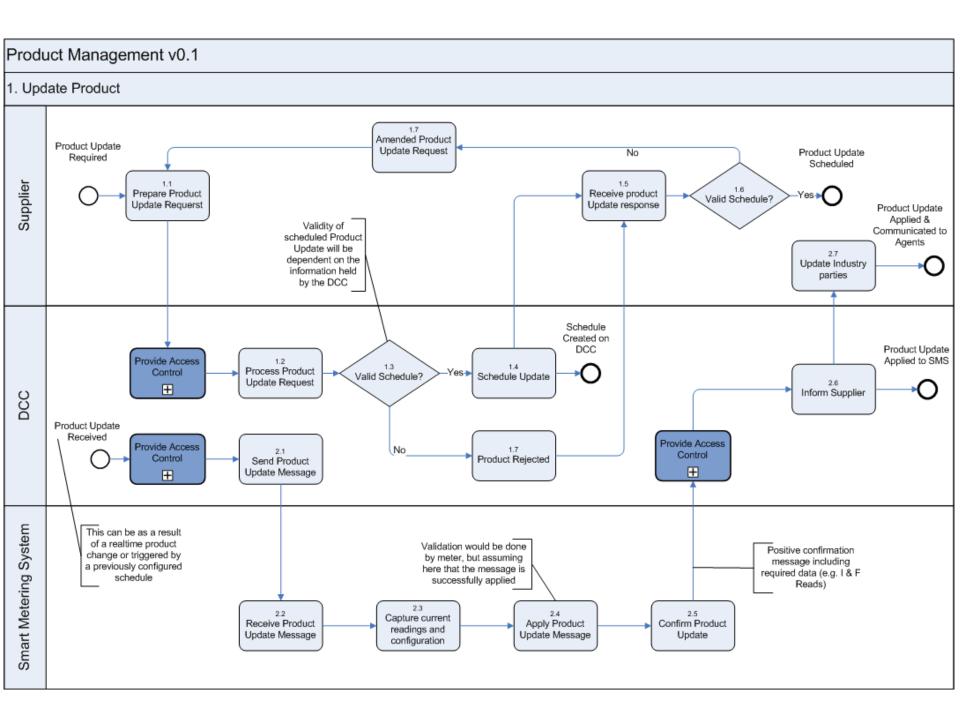


Agenda Item 3
BUSINESS PROCESS MODELS





Agenda Item 3
PRODUCT MANAGEMENT





Agenda Item 3
PAYMENT PROCESSING

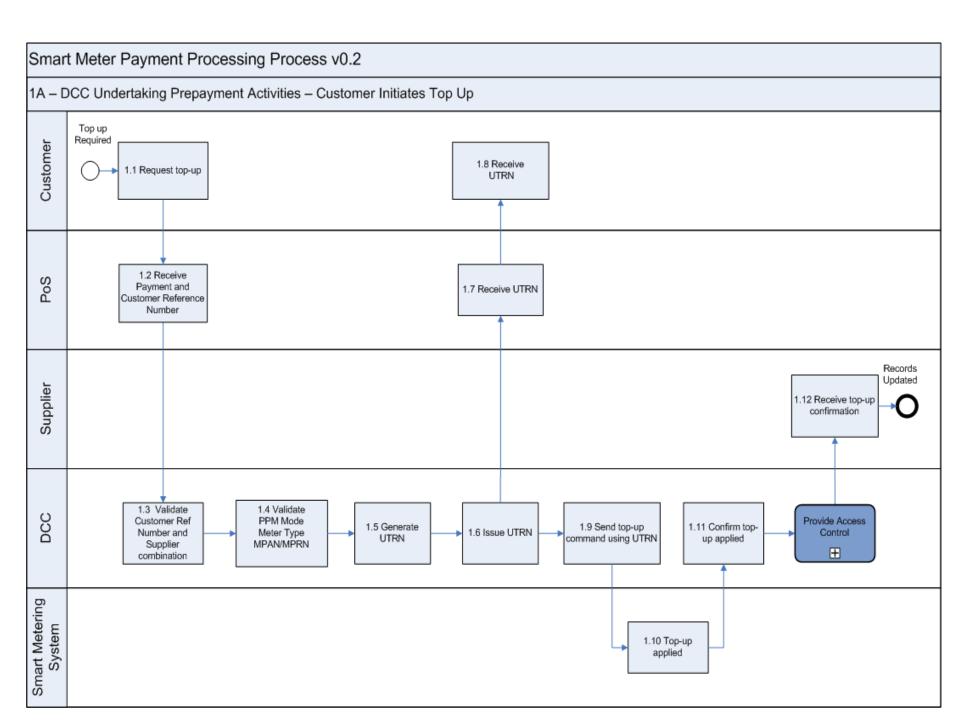
## **Prepayment Assumptions**

- DCC will require additional prepayment account record information from Suppliers to generate a UTRN. This information will need to be updated regularly and either held by DCC or as a look up.
- Each payment request made by a customer at Point of Sale needs to be validated against the prepayment account records.
- The UTRN is a one-time code that can be applied directly onto the relevant meter in order to set prepayment credit, with no further translation/manipulation by the sender necessary.
- Generating a UTRN requires knowledge of the payment required and the meter make/model used at that site.
- At a minimum, the DCC needs to know the MPAN/MPRN in order to send any instructions to the associated meters.

### **Processes covered**

- Updating DCC with Prepayment Account Information
- Prepayment processing
  - DCC undertaking prepayment activities
  - DCC generating and applying UTRNs
  - DCC applying UTRNs only
- Account Balance updates

#### Smart Meter Payment Processing Process v0.2 Updating DCC with Prepayment Account Information Receives confirmation of 1.1 Submits updated Prepayment Account Prepayment Supplier Information Account Information Updates and Receives Supplier Stores Supplier Provide Access Changes to Stores Supplier Generates No Prepayment Prepayment Control confirmation of account Prepayment Account Account information Account update $\pm$ Information Information Information DCC Yes NB New Prepayment Account processes will be Information contains: required for open/ Supplier ID close/maintain Customer Reference information Number MPAN/MPRN Meter Mode (Prepayment) Meter make and model

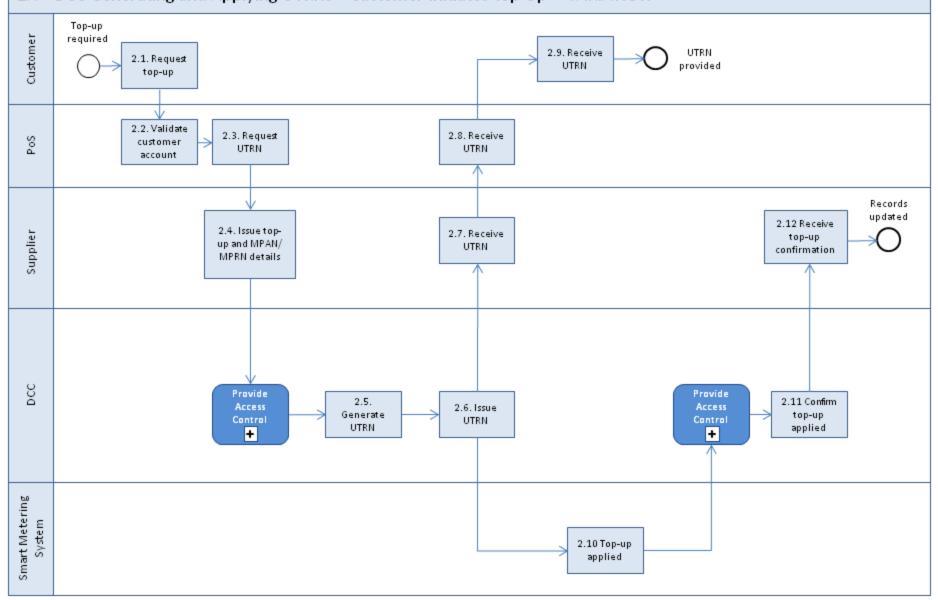


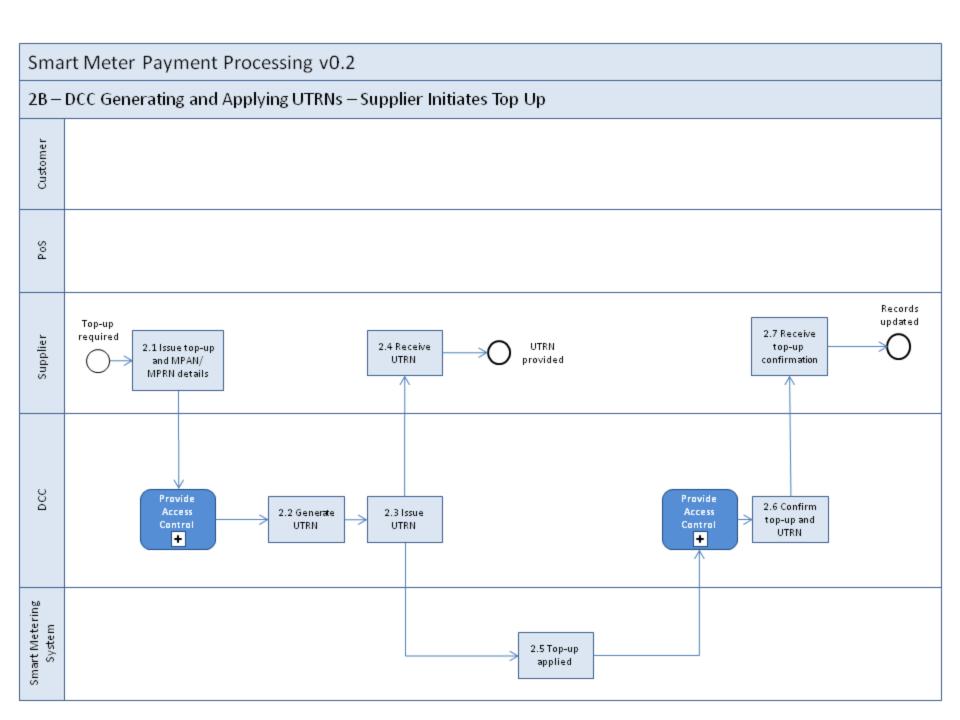
#### Smart Meter Payment Processing Process v0.2 1B – DCC Undertaking Prepayment Activities – Supplier Initiates Top Up Top Up Required Records Updated Supplier 1.9 Receive top-1.1 Request top-1.6 Receive UTRN up for customer up confirmation 1.2 Validate 1.3 Validate Provide Access Provide Access Customer 1.4 Generate PPM Mode Reference Number Control Control 1.5 Issue UTRN Meter Type UTRN and Supplier $\pm$ MPAN/MPRN $\pm$ Combination DCC 1.8 Confirm top-up applied Smart Metering System 1.7 Top-up applied

#### Smart Meter Payment Processing v0.2 2A – DCC Generating and Applying UTRNs – Customer Initiates Top Up Top-up Customer required UTRN 2.10 Receive 2.1 Request UTRN provided top-up 2.2 Validate 2.3 Request 2.9 Receive customer UTRN UTRN account Records updated 2.13 Receive 2.6 Issue Supplier top-up MPAN/ confirmation MPRN 2.12 Confirm top-up applied How would DCC identify the Supplier based on 2.4 Identify 2.5 Request 2.7 2.8 Issue Provide UTRN/Customer Ref associated MPAN/ Generate UTRN alone? May need access Access MPRN UTRN Supplier to customerrecords—see Control Prepayment Configuration + Setup Phase Smart Metering 2.11 Top-up applied

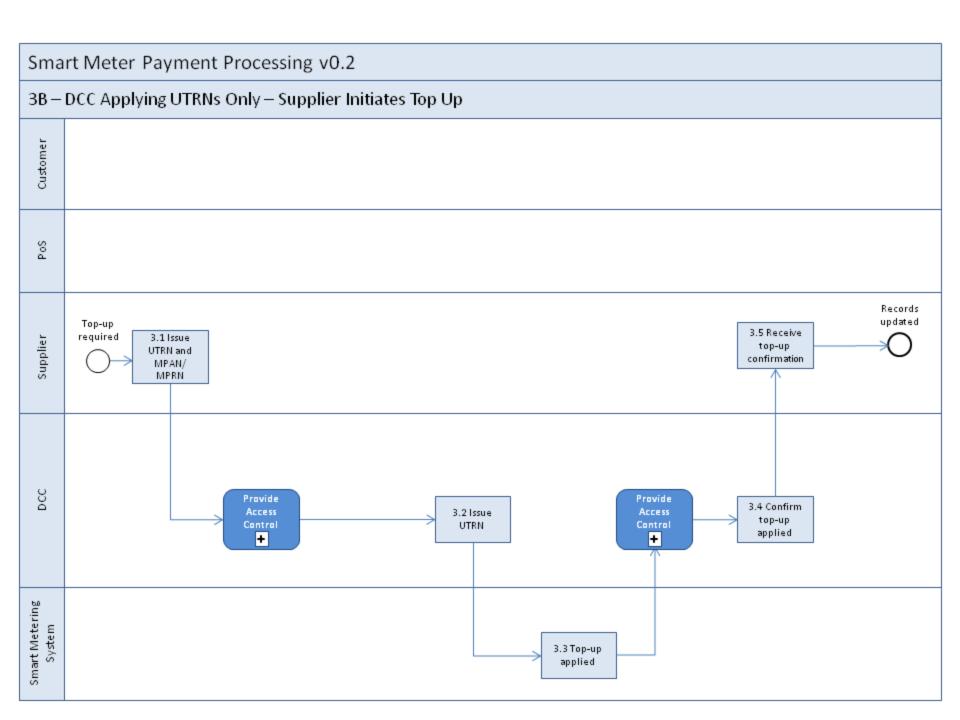
### Smart Meter Payment Processing v0.2

#### 2A – DCC Generating and Applying UTRNs – Customer Initiates Top Up -- VARIATION



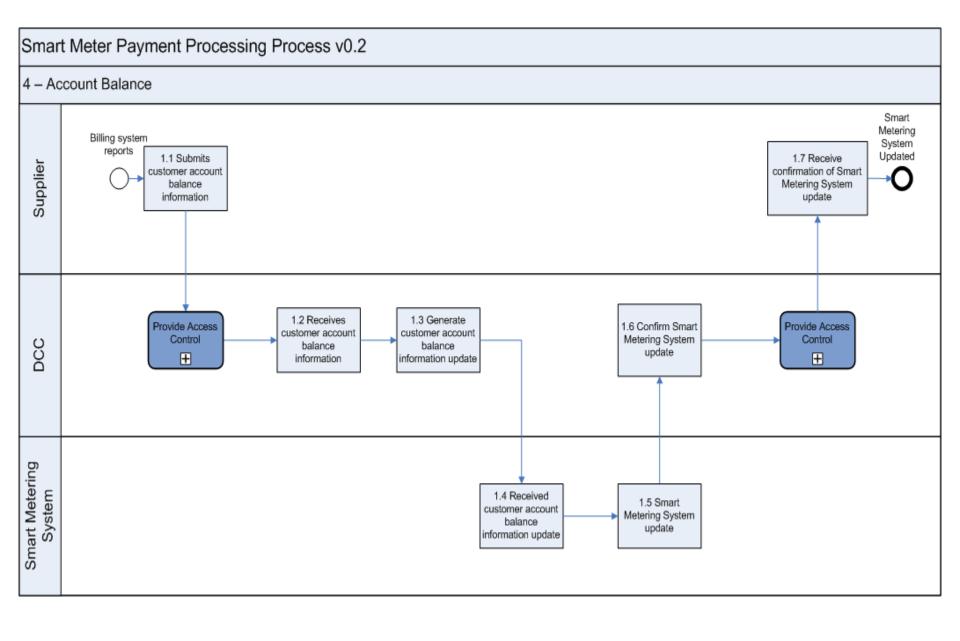


#### Smart Meter Payment Processing v0.2 3A – DCC Applying UTRNs Only – Customer Initiates Top Up Top-up Customer required 3.1 Request 3.4 Receive UTRN provided UTRN top-up 3.3 3.2 Validate Generate account UTRN Records updated 3.8 Receive Supplier 3.4 Issue top-up UTRN and confirmation MPAN/ MPRN Provide Provide 3.7 Confirm 3.5 Issue Access top-up Control UTRN Control applied + + Smart Metering 3.6 Top-up applied



## **Account Balance Assumptions**

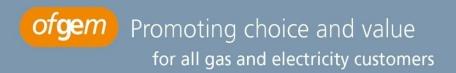
- No balance calculations are performed within the meter; all information is provided by the Supplier and downloaded as required
- DCC ensures balance updates are applied successfully to the meter but would not confirm the same information has flowed through to the IHD (if present)





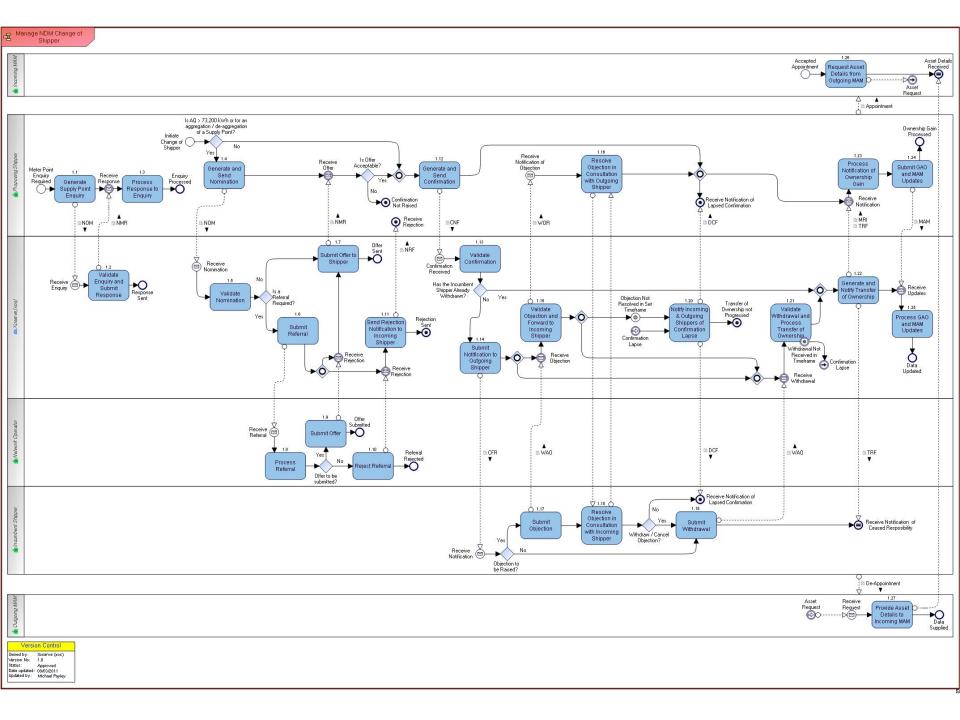
Agenda Item 3
CHANGE OF TENANCY

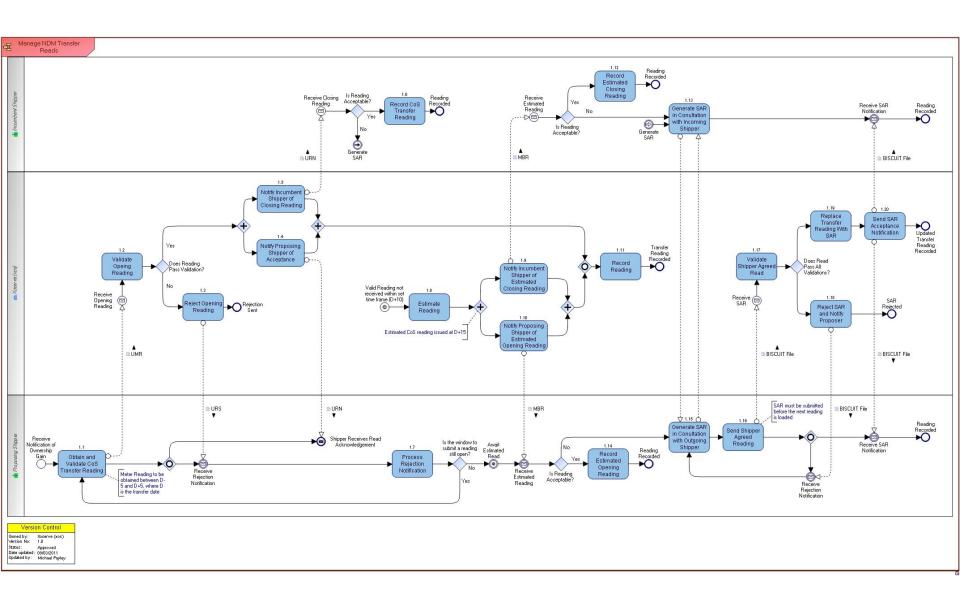
#### Change of Tenancy v0.2 1. Notification of CoT by Outgoing / Incoming Tenant Incoming Customer Contact Supplier to Notify of CoT Customer Moving In Received Outgoing Customer Contact Supplier to Notify of CoT Final Bill Customer Received Moving Out This will need to include the Only required if old tenant has If Prepayment date and time of the CoT meter configured to prepayment 1.13 Customer Establish Data and Configuration Prepayment **Details Issued** 1.3 1.5 Obtain Final Obtain CoT details Record Change and required tariff / Balance & Reset of Tenancy Date Debit if PP payment type 1.12 1.14 Send Requests Systems Issue Final Bill & Updates to Updated **Outgoing Tenant** Meter 1.4 1.6 Set Meter Obtain CoT Request Final / Configuration for Opening Reading details **New Tenant** 1.15 Provide Updates to Relevant **Industry Parties** If the new tenant is not known then the Supplier CoT could use a default configuration for the meter Processed This will include the sending The DCC may wait for the CoT date to be of details to the relevant **Provide Access Provide Access** reached before sending the message to the electricity agents, gas Control Control meter. If date is in the past then the CoT parties, etc. required to fulfil will be retrospectively applied to the meter $\Box$ $\Box$ supplier obligations This is only required Smart Metering Await CoT if the new tenant is Date not known This will include updating the CoT date on the meter which will prevent the new tenant from being able to view the previous tenants data. 1.10 1.11 1.16 Obtain Data & Send Data & Historical data will remain on the meter for supplier use Display Message on Meter to **Update Meter** Confirm Configuration Updates Contact Supplier Meter Updated



Agenda Item 3

CHANGE OF SUPPLIER - GAS







Agenda Item 3

CHANGE OF SUPPLIER - ELECTRICITY

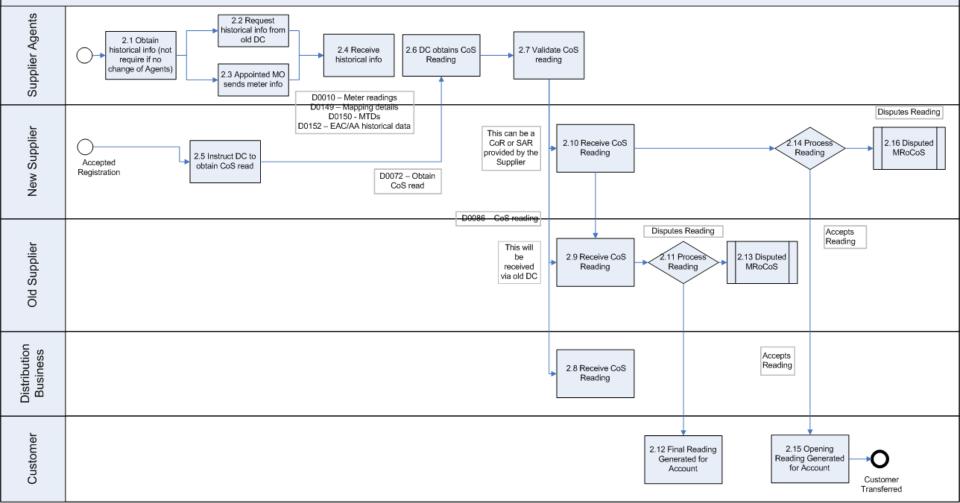
## Assumptions

- Sunny Day
- Triangulation in ECOES by New Supplier has happened and did not reveal any issues (and therefore no change to MPAD)
- No Objection
- New Supplier might change agents
- Not PPM
- Actual Read obtained for CoS
- No disputed CoS Read

#### Change of Supplier 1 Accepted CoS registration Supplier Agents Co 1.7 Notify DA of 1.10 Terminates D0209 - Instructions to 1.11 Agent new supply agent NHHDA appointments appointments registration D0151 - Termination of appointment of contract D0155 - MOP/DC appointment Old Supplier D0153 - DA Appointment and terms 1.6 Receive D0058 - Termination of 1.9 Old Supplier notification of CoS registration end info compiled registration date D0311 - Old Supplier information New Supplier 1.5 Notification of 1.1 Submits D0217 - Confirmation of registration 1.12 Receives acceptance of D0260 - Old Supplier registration registration details Information from registration to MPAS details from MPAS Old Supplier request D0055 - Registration of Supplier to MPAN MPAS 1.2 Receives and 1.3 Notification of accepts registration new registration request ECOES updated Internal flow Distribution Business 1.4 Receive 1.8 Records updated details updated

#### Change of Supplier

#### 2 – Obtain and Notify CoS Read





Agenda Item 3
SM FLEET MANAGEMENT



# Gas Change of Shipper Process

To- Be Strawman

#### Manage Gas NDM Change of Shipper Γο-Be Strawman v0.2 Incoming MAM Supplier sales activities have 1.19 Request Data not been included in the Appointment From Outgoing MAM process and it is assumed Received that the is a valid contract in Data place with the Consumer The Shipper can enquire about The Registration Effective Date can be no Proposing Shipper / Supplier the site prior to submitting a Manage NDM more than 30 business days and no less than Nomination / Confirmation 15 business days in the future, or no less than 8 business days in the future if the Incumbent Reading Shipper has already withdrawn from the site or the Shipper remains unchanged Recorded 1.5 Product Resolve Process Generate Generate Management Objection with Notification of Nomination Confirmation Outgoing Shipper Ownership Gain Initiate Configuration Is AQ > 73,200 Change of kWh or for an Updated Shipper aggregation / deaggregation of a Submit MAM Supply Point? Updates Is a Referral If the objection is not resolved Required? or withdrawal not received 1.9 within set timeframe then the 1.21 Validate Submit Offer to Validate Validate Process MAM confirmation will lapse Shipper Nomination Confirmation Objection Updates Data Notification Updated sent at D-7 Yes A referral is required when Has the there are changes to the The change of Shipper is Incumbent effective from 06:00 on the nominated capacity or for an Notify Shippers Shipper Already rocess Transfer aggregation / de-aggregation transfer day of Transfer of Submitted of Ownership of a Supply Point Yes Ownership Withdrawal Notification? No Network Operator The incumbent Supplier may be required to Process Referral updated some and Submit Offer configuration on the meter Incumbent Shipper / Supplier Objection to be Raised? Product 1.12 Receive Resolve Process Ceased Submit Raise Objection Objection with Responsibility Notification of Withdrawal Confirmation Incoming Shipper Notification Ceased Responsibility Processed Outgoing MAM If there is a Change of Tenancy in conjunction with a Change of Shipper then 1.17 the Incumbent Shipper De-Appointment Provide Data to should not raise an objection Incoming MAM Received

#### Manage Gas NDM Transfer Reads To-Be Strawman v0.2 Incoming MAM The meter read window for obtaining a reading is D +/- 5 business days Proposing Shipper / Supplier Is Estimated Reading Acceptable? 2.1 Request Opening Generate Receive Reading Reading Shipper Agreed Receive Notification Receive Reading of Ownership Gain Notification of Read Yes Acceptance Record Manage "Pull" Meter Readings Estimated Reading Issued at D+15 2.3 Receive Opening 2.6 Notify Shippers Reading Generate 0 Estimated of Estimated Reading Transfer Reading 2.10 Record Reading Receive Shipper Valid Reading Agreed Reading Not Received in Transfer Read Set Timeframe (D+10) Recorded Network Operator Outgoing Incumbent Shipper / Supplier Is Reading Acceptable? Generate Receive Closing Shipper Agreed Reading Reading