Work Practice ID	Title	Type	Status
WP 0018	*Draft Document the procedure to be used where a customer has a ESBN Landis & Gyr Budget Controller (Token Meter) installed*	*WA*	*Draft*

Date Raised	10.11.2009	Implementation Date	November 2009

Change History

Version	Date	Comment	Checked by
0.1	10.11.2009	First draft	
0.2	11.11.2009	2nd draft following review by MRSO, MeterOPs and RMDS	
0.3	27.09.2010	3rd draft following 1st Budget Controller Workshop	
0.4	27.09.2010	Small update following internal review.	
0.5	29.09.2010	Update following 2nd Budget Controller Workshop	
0.6	01.10.2010	Small update following internal review.	
1.0	01.10.2010	Version to be attached to DR 0175	
2.0	21.10.2010	Version to be attached to DR 0175 v4.0	

Identification of Retail Market Design Baseline Products Impacted

Any changes to existing market documentation and processes will be covered under DR 0175.

Reason for Working Practice

The current Token Meter technology in use for pre-payment customers (also known as Budget Controllers) has only been available to ESBCS customers until now. Due to the fact that a Smart Metering solution is being developed but will not be ready in the short to medium term CER has asked ESB Networks Ltd to implement an interim solution using the current Landis and Gyr token Meter technology.

This interim solution will require ESB Networks Ltd to:

1. Provide an additional 17,500 Token Meters to cover the interim period until Smart Metering is rolled out.
2. Make these Token Meters available to all Suppliers
3. Take over management of the Token Card Contract from ESBCS so that Token Cards can be made available to all suppliers for vending through their payment providers
4. Put in place working practices to allow customers with Budget Controllers to change Supplier.

This document covers key processes for customers with Budget Controllers and includes a change to the CoS process for customers with ESBN token meters i.e.

A. Change of Supplier
B. Cancellation of Change of Supplier.
C. Erroneous Transfers
D. Reset Token Meter (following CoS or Price Change)
E. Installation/Removal of Token Meter

CER will issue a draft Interim Code of Practice for Pre-Payment Meters which will propose guidelines to Suppliers around the operation of Token Meters in the electricity market.

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Working Practice

A: The procedure for Change of Supplier is:

Primary Procedure (Supplier Initiated)		Fall Back Procedure	
Step	Description	Step	Description
1	Supplier shall ascertain whether the new customer has a Budget Controller. If so, Supplier shall send an email informing MRSO that the customer wishes to retain their Budget Controller, at the same time as they send in their 010 message.	1	On receipt of 102P Market Message with Reason Code SIR (Site Visit), Supplier will email MRSO advising that Site Visit is not required and requesting cancellation of the Service Order. If neither of these steps are carried out by the Supplier, the Budget Controller will be removed.
2	MRSO will follow up with MeterOp to cancel the Service Order for removal of theToken Meter.	2	MRSO will follow up with MeterOp to cancel the Service Order for removal of the Token Meter.
3	MRSO will ensure that the Switch is moved on and the 102 Market Message issues to Supplier	3	MRSO will ensure that the Switch is moved on and the 102 Market Message issues to Supplier
4	On receipt of 320 Market Message Supplier will need to request a reset of the Token Meter (see procedure below)	4	On receipt of 320 Market Message Supplier will need to request a reset of the Token Meter (see procedure below)
5	MRSO will email Suppliers on a weekly basis with a list of new customers who are still scheduled to have their Budget Controllers removed.			

B: Cancellation of Change of Supplier:

Step	Description
1	COS is cancelled as per MPD 03.
2	Old Supplier will email MeterOP.ESBNetworks@esb.ie to check if the Budget Controller corresponding to the customer's MPRN has been removed or reset since the CoS was initiated. Subject of email should be "MPRN------------"
3	If the Budget Controller has not been removed or reset, any outstanding Service Order to do so will be cancelled.
4	If the Budget Controller has been removed or reset, Old Supplier will request re-instate/reset by sending in a M030.

C: Erroneous Transfers:

Step	Description
1	COS is cancelled as per MPD 03.
2	Old Supplier will email MeterOP.ESBNetworks@esb.ie to check if the Budget Controller corresponding to the customer's MPRN has been removed or reset since the CoS was initiated. Subject of email should be "MPRN------------"
3	If the Budget Controller has not been removed or reset, any outstanding Service Order to do so will be cancelled.
4	If the Budget Controller has been removed or reset, Old Supplier request re-instate/reset by sending in a M030.

D: The procedure for Reset of a Token Meter is as follows:

Step	Description
1	Supplier issues M030 requesting re-set. There is usually an appointment made with the customer by Supplier and contact details are provided. Re-set can be required following a Change of Supplier or a Price Change: **CoS** – Supplier needs to advise amount of debt, weekly payment amount. This information has specific fields on the M030 market message. The Supplier also needs to advise its rates including unit rate and Standing Charge as well as contact telephone numbers. This information must be entered into the Free Text field on the M030. The entries to the free text field must comply with the format outlined in the table below. This is to ensure that, firstly, the Network Technician can understand on a consistent basis from Suppliers what data to enter into the meter and secondly, to ensure the Supplier doesn't exceed the maximum number of characters (60) allowed in the free text field. Under the correct format, the Supplier will not enter more than 55 characters into the field, including four end-of-line characters. All rates provided by Suppliers on the M030 shall include VAT.

Unit	Format	Rate	Max Value	Field Type
Total Debt	XXXX.xx	Euro	9999.99	Specific Field
Weekly Debt Repayment	XXX.xx	Euro	999.99	
Emergency Credit	Fixed By CoP	Fixed By CoP	Fixed By CoP	
Rate 1	R1_xx.xx	Cent	99.99	Free Text Field
Rate 2	R2_xx.xx	Cent	99.99	
Standing charge*	Sc/wk_XX.xx	Euro	99.99	
Contact 1	T_XXXXXXXXX	Telephone Number		

	Contact 2	T_XXXXXXXXX	Telephone Number		

* Calculated on a weekly basis. Should include all fixed charges including PSO levy, if applicable.

2	**Price Change** – Supplier needs to advise new rates including Unit and Standing Charge
3	NT calls to premises & re-sets the token meter, completes the call on MDM. M332 issues to Supplier advising re-set has been completed.
4	Where NT doesn't get access to premises, 'no access' card is left asking customer to contact Networks to make appointment. Call is re-scheduled.
5	If customer does not make contact to arrange appointment, Networks will make a 2nd visit to premises. If there is no access after 2nd visit, Networks will cancel the call and advise Supplier via email.

E: The procedure for installation/removal of a Token Meter is as follows:

Step	Description
1	Supplier issues M030 requesting installation/ removal of token meter. There is usually an appointment made with the customer by Supplier and contact details are provided.
2	For installation of token meter, amount of debt, weekly payment amount, rate in cents per unit for Rate1 and Rate2 are supplied by Supplier.
3	NT calls to premises, installs/removes the token meter, completes the call on MDM & M332 issues to Supplier advising installation/removal has been completed.
4	Where NT doesn't get access to premises, 'no access' card is left asking customer to contact Networks to make appt. Call is re-scheduled.
5	If customer does not make contact to arrange appointment, Networks will request cancellation of call from Supplier.

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Supplementary Information

Appendix 1 – Screenshot of M030

Appendix 2 – Budget Controllers Basic Functionality

Background
Token meters (or Budget Controllers) are installed in customers' premises in order to provide a debt recovery facility. The token meter / budget controller will assist the customer with the debt repayment and to manage their electricity usage through the purchase of €5 token cards, which can be inserted into the meter.
The token meter is NOT a replacement for the existing billing meter. The existing billing meter remains in place and bills will issue as normal based on the readings taken by the meter reader from the existing billing meter. While the token meter is a means to assist the customer in debt management, the onus is still on the customer to check their electricity bills issued by their Supplier and make additional payments as necessary in the event that the token meter has not recovered the full cost of electricity consumed.

Installation
The existing billing meter will remain in place and the token meter is installed between this meter and the customer's fuse board. The preferred location is beside the existing meter, to eliminate any alterations to the customer's internal wiring.
The token meter is only available in a single phase model and is best suited to single tariff installations.
The token meter is not suitable for installation in multi-metering apartment situations.

On installation, the following fields in the meter are programmed by the Network Technician:

Standing charge per week (€X.xx incl VAT)
Customer debt (€XXXX.xx)
Debt Recovery per week. (€XX.xx)
Price per kWh Rate 1 (xx.xx cent per kWh incl VAT per Supplier 's Tariff)
Price per kWh Rate 2 (xx.xx cent per kWh incl VAT per Supplier's Tariff)
Emergency Credit (Currently €5.00)

NB: Rate 1 and Rate 2 will generally be programmed with the same kWh price.

On installation, the Network Technician can adjust the token meter with an amount of credit to ensure that the token meter will continue to operate pending issue of the customers individual ID card (by their Supplier) to facilitate purchase of tokens at a vending outlet. It is advisable that all Suppliers agree a fixed amount for this, for example €20, and the customer's current debt is increased by this amount and entered onto the token meter. This will increase the debt proportionately and the cost will be recovered from the customer on the next electricity bill issued by their supplier.

Putting Credit on the Meter
Once the meter has been installed and has credit it will allow the passage of electricity to the customer's premises. To top up the credit the customer must purchase quantities of €5 Token Cards at an authorised vending outlet. To purchase the €5 token cards the customer must produce their individual customer ID card issued by their Supplier, and pay an amount in multiples of €5 depending on the number of tokens they require. By presenting their ID card the value of the money they have paid is credited to their electricity account and in exchange for that, they are given €5 Tokens to the value of the amount paid.
NOTE: The tokens have no monetary value but are only intended to allow the customer to transfer the credit they have already paid for onto the Token Meter. Only monies paid at the approved vending points will be credited against the customer's electricity account.
Once a €5 token is inserted into the token meter it will be recognised and will activate a mechanism which marks the card with three little stud marks. It will then transfer the €5 credit onto the meter and the meter will display the value of token inserted. The card is no longer operable and if removed and re-inserted into the meter, it will cause the meter display to change to card error. This error message will disappear when the token is removed from the meter.

Function of the Token Meter
The normal display on the front of the meter will show the value of credit left on the meter, to allow the

customer to know how much credit remains and to indicate if more tokens need to be purchased. By pressing the blue button the display will change to indicate the number of units which have been consumed on the meter (however these dials are not used for billing purposes, as the customer's electricity bill is still based on the original billing meter.)

The credit on the token meter will be reduced over time, depending on the debt recovery rate which was programmed into the meter. The Standing Charge and Debt recovery per week will be recovered gradually over the course of the week in small portions several times a day. This spreads out the recovery over the whole week. The cost of the number of units consumed will be recovered in accordance with the rate of the programmed price per unit. For example, if the debt recovery was set at €10.00 per week and weekly standing charge was €2.00 then on those days where there was no consumption, the credit will reduce by approx €1.71 per day. As the credit approaches zero the meter will give an audible signal to alert the customer that it is almost expired, giving the customer an opportunity to purchase more €5 Tokens.

If the credit runs out during the period from 09.00 to 17.00 Winter months, 10.00 to 18.00 Summer months, the meter will disconnect supply automatically. The meter will not disconnect supply outside of these hours. In the event of an automatic disconnection the customer has an opportunity to press the Emergency credit button which will turn the electricity back on and consume additional credit up to a maximum of €5. The customer must purchase additional tokens as soon as possible. If some emergency credit is used and a €5 token is then inserted, the Emergency credit facility will be replenished first with the value of credit that has been used from it, and the balance will be used for credit in the meter.

NOTE: If the customer comes into possession of €5 token cards that were not purchased in the correct manner from approved vendors, these will NOT be credited against their electricity bill. In this case the tokens may restore supply through the token meter but the debt will still be increasing on the main electricity account. Only monies paid at the approved vending points will be credited against the customer's electricity account.

DISPLAY SCREENS

Normal display

Rx CRED €XXX.xx (indicating which rate the meter is currently on, R1 or R2, and the value of the credit remaining on the token meter, E.g. R1 CRED €12.34)

Repeatedly pressing the Blue button the screen will display to two further screens:
1: KWH 00000.00 TOT (Indicating the total number of units consumed e.g. KWH 11223.45)
2: DISPLAY END.

Displays available if €5 token is inserted in meter and left in place.

Once the token is inserted it will immediately display
TOKEN VALUE €5

After a short while the screen will revert to
Rx CRED €XXX.xx (indicating which rate the meter is currently on R1 or R2, and the value of the credit remaining on the token meter, E.g. R1 CRED €17.34. Note that the value of this credit will now be advanced by €5 from the original screen above.

Repeatedly pressing of the Blue Button will reveal 14 additional screens which will display the following:
1: DISPLAY TEST
2: TIME 00.00 (this will display the actual time in Winter time (GMT), and during the Summer months it will appear to be an hour behind time)
3: THR 16/09/2010 (this will display the date in the format of an abbreviation of the actual day and the date in numerical form)
4: T. CREDIT €XXXX. (this will display the total credit inserted into the meter since the credits were last reset e.g. T. CREDIT €5675)
5: T.CARDS 0000. (this will indicate the total number of token cards which have been inserted since the meter was last reset e.g. T.CARDS 1135, should equate mathematically to the T.CREDIT above)
6: FXDCH/WK €000.00 (this will indicate the amount of money to be deducted on a weekly basis on top of the units used and is made up of a combination of the Debt recovery Per week and the Standing charge. E.g.

Debt recovery per week €10.00 and standing charge of €2 would mean that this screen will display FXDCH/WK €12.00

7: KWH 00000.00 R1 (this indicates the total number of units recorded on Rate 1)

8: KWH 00000.00 R2 (this indicates the total number of units recorded on Rate 2)

9: RATE 1 000.00 cpu (this indicates the price per unit being recovered while the meter is on Rate 1)

10: RATE 2 000.00 cpu (this indicates the price per unit being recovered while the meter is on Rate 2)

11: E.CREDIT €005.00 (this indicates the value of emergency credit installed)

12: T.DEBT €0000.00 (indicates the total debt now remaining on the meter which has yet to be recovered)

13: DEBT/WK €000.00 (indicates the rate of recovery per week of the debt which has been programmed e.g. as above DEBT/WK €010.00)

14: DISPLAY END

Note some older meters may display the currency in £ rather than € and in ppu rather than cpu, but the value is still the same.

Appendix 3 – Overview of ESBN's and Supplier Role in Token Budget Controller Solution

ESBN's role is as a central monitoring body for the production and distribution of Token Cards to payment vendors appointed by Suppliers. The current contract for the production of Token Cards is with a UK based company called Magnadata. Once printed the Token Cards are forwarded to and then stored in a secure location nominated by the vendor, to prevent theft or mis-appropriation.

When stock levels fall, due to sales at the vending companies outlets, it triggers a replenishment request. The Token Cards are then transferred from the secure storage to the vendor's outlets by courier. Vendors must ensure that Token Cards are secured safely in the outlets i.e. in the outlet safe.

Customers wishing to buy Token Cards in the vendor's outlets must present their Supplier Card - this is a Supplier unique (branded) card with the customer's account details stored on it. The agent for the vendor swipes the card and payments are credited to the customer's account. The vending companies send periodic (weekly/monthly) reports to ESBN on the level of Token Card sales and returns of faulty cards,

ESBN's responsibility for managing the supply and distribution of Token Card's are:

1. ESBN is responsible for managing the contract with the Token Card manufacturer

2. ESBN must be satisfied that the storage facilities for the vending companies' are properly secured

3. ESBN will review weekly/monthly reports from the vending companies to ensure proper monitoring of stock levels

4. While the commercial terms between the Supplier and the vending company are confidential to those companies, ESBN will have to be satisfied that audit/control procedures between the Supplier and vending company are to a satisfactory standard

5. ESBN will monitor the installation/removal of Budget Controllers to advise Magnadata to increase/decrease production levels of Token Cards to meet customer demand

6. Suppliers must complete an agreement with relevant vendors for the provision of payment services.

7. Suppliers must provide their customers with a unique Supplier card.

See presentation below for more details:

Interim Token Card
Meter Solution.ppt

ESB Networks Ltd presentation to CER/Suppliers 06/11/09

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Appendix 4 – RM Codes for Landis and Gyr Budget Controllers

For the AMPY / Landis & Gyr type Token Meters there are two RM Codes used, RM055 and RM056.