

Market Change Request 1157			Smart Metering Data Processing and Data Aggregation		
<b>Status</b>	Implemented	<b>Priority</b>	High	<b>Status Date</b>	16/02/2021

Date	Version	Reason for Change	Version Status
24/06/2015	2.0	Converted to MCR	Final
25/01/2019	3.0	2018 Smart MCR/DR Re-Versioning Activity	Final
10/10/2019	4.0	Smart MCR Re-versioning Exercise November 2019 Final	Final
19/03/2020	5.0	Smart MCR Re-versioning Exercise April 2020	Final
23/07/2020	6.0	Smart MCR Re-Versioning Exercise September 2020	Final

Part 1 DETAIL OF DISCUSSION REQUEST / MARKET CHANGE REQUEST			
<b>Requesting Organisation(s)</b>	ESB Networks	<b>Originating Jurisdiction</b>	RoI
<b>Request Originator Name</b>	Michael Moloney		
<b>Date Raised</b>	04/02/2015		

Classification of Request			
<b>Jurisdictional Applicability</b>	RoI	<b>Jurisdictional Implementation</b>	RoI Specific
<b>If jurisdictional implementation is for one jurisdiction only – is the other jurisdiction required to effect any changes?</b>	Yes	<b>Co-Ordinated Baseline Version No.</b>	tbc
<b>Change Type</b>	Schema Impacting		

Detail of Request
<b>Reason for Request</b>

### Background

The CRU, working closely with the Department of Communications, Energy and Natural Resources (DCENR), established the National Smart Metering Programme (NSMP) in late 2007. In Phase 1, a trial was carried out in order to assess the costs and benefits of smart meters and to inform decisions relating to the full rollout. In July 2012 a decision was announced to rollout electricity and gas smart meters for all residential and small and medium sized businesses. Phase 2 commenced in January 2013 and is broadly composed of a high level design and procurement phase. [CER14046]

The Smart Metering High Level Design Decision Paper published in October 2014 outlines the decisions with regard to the high level design stage within Phase 2 with regards to 1) Core Design, 2) Time of Use Tariffs, 3) Presentation of Energy Usage information to consumers and 4) Pay As You Go (PAYG) solution. This next stage is to work through 5 process groups sequentially at MPD and Schema detail level to inform the Detail Design of the ROI Retail Market Design.

This 1st DR provides details of the Retail Market Design within the Process Group of Data Processing and Data Aggregation.

### 2018 SMART MCR/DR Re-Versioning Driver

The original NSMP Programme plan envisaged a “big bang” delivery of all NSMP functionality for electricity, gas and in-home data Smart services, with an estimated delivery date in 2023.

In early 2017 ESNB submitted a revised proposal to the NSMP to CRU, outlining a phased approach to the delivery of Smart Metering and the NSMP High Level Design (HLD). The proposal foresees delivery over three distinct phases.

Phase 1 delivers the installation of 250,000 Smart Electricity Meters by the end of 2020 (Meter installation is expected to begin prior to August 2019). With the Market Schema Release delivered at the end of 2020, all system, business and market changes will have been completed to allow 30-minute interval data to flow to Suppliers via the Market Systems

and for Interval Data to be used in all market processes including DUoS Billing and Market Settlement Aggregation. Smart Pre-Payment services without remote de-energisation/energisation can also begin after this phase and Suppliers will have the ability to offer new Time-of-Use based tariffs to their customers.

Phase 2 delivers the installation of an additional 1 million Smart Electricity Meters by the end of 2022. With the Market Schema Release at the end of 2022, all retail market use cases requiring remote and local operation of the service switch in Smart Electricity Meters will be enabled. Smart Pre-Payment services with remote de-energisation/energisation can begin after this phase.

Phase 3 delivers the installation of an additional 1 million+ Smart Electricity Meters by the end of 2024. Along with the Market Schema Release at the end of 2024, Gas Smart Metering Services and In-Home Data Services will be enabled. The installation of Smart Gas Meters and In-Home Display devices can begin after this phase.

This Phased Approach proposal has been positively received by CRU and Energy Suppliers and now forms the basis of ESN's plans and assumptions in respect of the NSMP. The CRU approval of the phased approach was publicly announced in September 2017.

NSMP Programme is currently progressing through Phase 1, and it is within this phase that the SMART MR/DR re-versioning activity is being carried out.

**Proposed Solution**

The scope and content of the proposed changes, involving changes to Market Messages, Data Items, Data Definitions and Data Codes, would not conveniently be described directly in this DR document. Rather, the details are contained in the linked amended Design Documents (with track changes).

**Scope of Change**

Jurisdiction	Design Documentation	Business Process	DSO Backend System Change	MP Backend System Change	Tibco	Supplier EMMA	Schema	Webforms	Extranet/NI Market Website
<b>ROI</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>NI</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

**Co-Ordinated Baseline Market Design Documents Impacted by Request**

Market Messages				
Message No.	Message Name	CoBL	ROI	NI
303R	Customer Read Rejection	Impacted	Impacted	No Impact
305	Non Settlement Estimates	Impacted	Impacted	No Impact
322	DUoS Billing Cycle Notification	Impacted - new	Impacted - new	No Impact
341	Import Interval Meter Daily Readings	Impacted	Impacted	No Impact
342	Export Interval Meter Daily Readings	Impacted	Impacted	No Impact
343	SMART Import Interval Meter Daily Readings	Impacted - new	Impacted - new	No Impact
345	SMART HH Cumulative Register Readings	Impacted - new	Impacted - new	No Impact
352R	Special Reading Request Rejection	Impacted	Impacted	No Impact
592	SMART Interval Import Aggregation	Impacted - new	Impacted - new	No Impact

Data Definitions
<b>DUoS Billing Frequency</b> - Duos Billing Frequency is a code that indicates the frequency of Duos billing at the meter point
<b>Duos Billing Cycle</b> - Duos Billing Cycle Day refers to the day in a 41 working day cycle (ROI) that a Half Hourly meter is due to be Duos Billed

Data Codes
MM305 – No read code – 98      Comms not available
MM343 – Register Type code - 70 Import HH kW
MM345 – Register Type code - 74 Import 24hr kWh
MM303R – Reject Reason - IRI Invalid Request Half Hourly site
MM303R – Reject Reason - RIR Remote Site Invalid Read
MM352R – Reject Reason - IRI Invalid Request Half Hourly site
<b>Register Type Code on MM208, MM210, MM300, MM300S, MM300W, MM303R, MM305,</b>
<b>70      Import HH kW</b>
<b>74      Import 24hr kWh</b>
<b>78      Day Off Peak</b>

79 Night Off Peak  
80 Peak

Timeslot Code on MM208, MM210, MM300, MM300S, MM300W, MM305, MM303R,  
01D 08:00-17:00 & 19:00-23:00 Day Consumption  
01N 23-08 Night Consumption  
01P 17:00-19:00 Peak Consumption

Time of Use Data Item Code MM591  
01D 08:00-17:00 & 19:00-23:00 Day Consumption  
01N 23-08 Night Consumption  
01P 17:00-19:00 Peak Consumption

### Market Message Implementation Guides

ROI	Yes/No	NI	Yes/No
Data Aggregation	Yes	Data Aggregation	No
Data Processing	Yes	Data Processing	No

### Comments

### ROI - Market Process Diagrams – MPDs

Market Process Diagram Number	Market Process Diagram Description	End to End Diagram	Affected
MPD 14	MPD 14 – Reading Processing Non Interval – SMART ver. 13.0	<a href="#">Click Here</a>	Yes
MPD 15.1	MPD 15.1 – Data Processing for Half Hourly Interval Metering – SMART ver. 13.0	<a href="#">Click Here</a>	Yes
MPD 16 2.1	MPD 16 2.1 – Data Aggregation – SMART ver. 13.0	<a href="#">Click Here</a>	Yes
MPD 18	MPD 18 – Special Read Request – SMART ver. 13.0	<a href="#">Click Here</a>	Yes
MPD 20	MPD 20 – Change of SSAC and or Supplier Unit – SMART ver. 13.0	<a href="#">Click Here</a>	Yes

### NI - Market Procedures

Market Process Number	Market Procedure	Affected
No Impact	No Impact	No Impact

ROI Guidance Documentation		
Document	Version	Affected
No impact		No Impact

ROI Briefing Documents		
Document/Paper	Version	Affected
Data Aggregation Briefing Document	4	Yes
Draft Supplier Communications Resulting from DUoS Billing and Invoicing	2	Yes
DUoS, Transaction and PSO Payment Process	2	Yes
Periodic Consumption and Initial EUF Values for Smart Non Interval Sites	1	Yes
HH Validation Estimation and Substitution Summary	1	Yes

User and Technical Documents			
Reference	Name	Version	Affected
No impact			No Impact

Part 2 - Performance and Data Changes	
Market Messages volume, processing etc.	
Data	
Details of Data changes e.g. cleansing	

Part 3 - ReMCoSG / CER Approval		
Approved by	ReMCoSG	CER
Comments		