

RoI Electricity
Oct 2013 Market Design Release
Assurance Approach

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RoI

Gemserve Assurance

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1. Introduction

The CER has approved the introduction of a Market Design Release (MDR) in the Republic of Ireland (RoI) Retail Electricity Market, to be implemented on the weekend of 19th/20th October 2013. This will be the first schema release since the implementation of the harmonised market design. Implementation of the release will necessarily take place concurrently in the Republic of Ireland and in Northern Ireland. The plans leading up to the implementation will be co-ordinated through the joint industry governance bodies (ReMCoDS, ReMCoWG). This document applies only to assurance in the Republic of Ireland.

There are just two Market Change Requests included in the Release:

MCR 1111 – Automated Debt Flagging.

MCR 1111 introduces changes that replace the present manual methods for debt flagging in a Change of Supplier context. Changes will be made to market processes, the situation in which some market messages may be used, and the addition of a number of new values to existing data codes.

The changes required to ESB Networks' Central Systems are of significant complexity. Suppliers will make use of existing Market Messages but with additional data codes. For both ESB Networks and Suppliers two wait periods will be introduced during which debt may be flagged (where applicable) and the associated Change of Supplier cancelled, respectively.

MCR 1122 – Sites with Essential Plant.

MCR 1122 introduces a new flag to be applied to MPRN data to indicate the presence of essential plant such as fire-fighting equipment, alarms, lifts in public areas etc. The flag will be set and unset by ESB Networks and will be included as a new field on 17 Market Messages and on the RMP Extranet and Downloadable Meter Points Details file.

The changes required to ESB Networks' Central Systems are of significant complexity. Suppliers will make use of existing Market Messages but with additional data codes.

All Suppliers operating in the RoI and ESB Networks will be impacted by the MDR and will need to introduce changes to their market-facing systems concurrently and begin operating to the new Market Design simultaneously.

In order to give confidence that all market participants are properly prepared for cut-over, the industry requires, via its Assurance Strategy, an assurance plan. This document describes the approach that is proposed for this assurance.

For IGGG

2. Glossary

The following terms and acronyms are used within this document:

Term/Acronym	Expanded Form	Meaning
EMMA	Electricity Market Message Application	The hardware and software components that transfer market messages to/from market participants from/to the central Hub.
IM	Interval Metered	Denotes that consumption is measured at regular intervals throughout the day – also known as Quarter Hourly in the Republic of Ireland.
IPT	Inter-Participant Test	
Market, the Market		The Republic of Ireland electricity market
MDR	Market Design Release, Release	The MCRs and associated changes are to be applied to the Market Design and operational procedures.
Market Infrastructure		The technical arrangements for the harmonised retail market, comprising central market hub, communications channels and EMMA installations.
Market participant, Participant		Any organization that actively trades within the Market. This includes ESB Networks, TSO, Suppliers, Self-Suppliers and Generators
NIM	Non-Interval Metered	Denotes that consumption is based on cumulative meter readings taken periodically, typically two-monthly – also known as Non Quarter Hourly in the Republic of Ireland.

RMP Extranet	Retail Market Participants' Extranet	A Web-based facility that allows Market Participants to look up Meter Point Details
Webforms		Software installed on EMMA that allows market messages to be created and displayed in an easily readable form

For IGG

3. The Assurance Plan

The approach to assurance will be tailored to the specific requirements of the MDR and, in line with the Assurance Strategy, it is planned to carry out Assurance in the most efficient and effective way using existing techniques.

Several techniques are to be used:

- Self-Assessment, in which market participants provide answers to a targeted questionnaire and, where required, supply evidence to support those answers. Market participants will be asked about changes/additions to their business processes and internal test plans including details of the specific tests included. This will be used to verify that market participants have plans to assess the impact of the changes, incorporate these into their systems and carry out appropriate internal testing;
- Formal Assessment, where the Assurance Body verifies the preparedness of market participants by walking through key aspects with the participant's expert staff. This technique will be used in conjunction with ESB Networks since the changes being applied here will have a market-wide impact and are significantly complex;
- Inter-Participant Testing in which participants carry out a number of prescribed market scenarios, which have been specifically defined for this MDR, in conjunction with each other using the whole target market infrastructure. All Large Suppliers will be expected to participate in these tests and carry out a specified subset. See Appendix B for the full set.

3.1 Applicability

The types of assurance applicable to different types of Market participant for this MDR are as follows:

Participant Type	ESB Networks	Supplier (QH, NQH, UM)	Small Supplier (QH, NQH, UM)	Self-Supplier	TSO (EirGrid)
Self-Assessment	Yes	Yes	Yes	No	Yes

Participant Type	ESB Networks	Supplier (QH, NQH, UM)	Small Supplier (QH, NQH, UM)	Self-Supplier	TSO (EirGrid)
Formal Assessment	Changes to Schema, Webforms, Processes, Extranet, Downloadable MP Details; Cut-over plan	No	No	No	No
IPT	All	Yes	Optional	No	Essential Plant Flag Tests

3.2 Self-Assessment

In the self-assessment stage market participants will be provided with a questionnaire that elicits details of their approach to readiness for the MDR. To support their answers the market participant will also be expected to provide evidence that demonstrates their approach (for example copies of documented processes, screen shots from a system and/or database, XML prints of Market Messages).

The questionnaire and evidence can be provided by e-mail to RMDS, who will forward them to Gemserv to be assessed at Gemserv's offices. It is not intended to make a site visit. Any necessary clarifications will be sought by e-mail or 'phone. When Gemserv is satisfied that the responses are adequate, the market participant and RMDS will be informed and the market participant will be eligible to carry out the next stage of assessment. For ESB Networks this is Formal Assessment and for Suppliers Inter-Participant Testing.

3.3 Formal Assessment

Participants that are subject to formal assessment will be provided with the same questionnaire as for Self-Assessment. Following evaluation of this and any necessary clarifications, all carried out at Gemserv's offices, a visit will be made to the market participant's offices.

At this visit evidence of the design, implementation and testing of the MDR will be verified by inspection of the corresponding documents, test records etc. and an assessment will be made of the effectiveness of the market participant's change project. Any perceived deficiencies will be raised with the market participant, who will be expected to take any necessary corrective action and, possibly subsequently, provide evidence of this to Gemserv. When Gemserv is satisfied that the market participant project has completed the

necessary and sufficient activities to minimise the risk of introducing the changes RMDS will be informed and the market participant will be eligible to carry out Inter-Participant Testing (if applicable).

3.4 Inter-Participant Testing

A series of Inter-Participant Tests (IPTs) will be compiled to exercise the MDR changes in a live-like environment. Each test is defined in terms of a scenario that sets out:

- The objectives.
- The initial conditions, which must prevail before the test starts. ESB Networks will usually identify or create the data required for IPT but each market participant will be responsible for ensuring that any initial conditions required in their own systems are created. In all cases market participants should co-ordinate through RMDS for the creation of initial conditions.
- The steps that must occur within the test (in business terms). Each market participant must interpret the business steps into the activities that they will carry out using their own business processes and execute these just as they would if they were operating in the live Market.
- The conditions that must prevail at the end of the test if the test has been successful. Each market participant is responsible for ensuring that they complete the test from their own perspective and should notify RMDS when this is the case;
- The requirements for evidence to be gathered by both the Supplier and ESB Networks for assessment by Gemserv

The scenarios are identified by:

- Analysing the changes and identifying all of the separate test conditions that may occur;
- Identifying test scenarios that will exercise each test condition;
- Eliminating scenarios that cannot occur in practice or that are highly unlikely;
- Further refining the scenarios by, for example, including more than one condition in a scenario.

The proposed set of Market Scenario Tests can be found in Appendix B. These will be allocated to specific Suppliers for testing based on their market position, such that all material scenarios are tested but that no one Supplier faces an undue burden for IPT. Suppliers will not be allocated scenarios for market sectors for which they are not approved to operate, and nominal scenario duplication will be avoided within any given supplier. Small Suppliers may opt to be included in Inter-Participant Testing and will be included in the scenario allocation if they do so. Any Supplier may request to run scenarios from Appendix B in addition to those allocated and such a request will be supported provided that the additional central resources required are available.

Whilst executing the tests market participants will gather evidence showing how the test progressed and will submit this to RMDS. This will include all Market Messages sent and received by ESB Networks. When each

market participant has completed the tests applicable to them, they should review the test record. If any test did not meet the market participant's own success criteria as well as complying with the Market Design a re-run should be requested as soon as possible through RMDS.

The evidence collected by the market participant during their testing is to be sent to RMDS at: RMDS@esb.ie. RMDS will forward the evidence to Gemserv who will assess the evidence to verify whether the test ran according to the IPT scenario.

Appendix A. Key Assurance Dates

Participant Questionnaire issued	2 nd August 2013
Participant Questionnaire returned	23 rd August 2013
Site visit to ESB Networks	During period 23 rd August – 6 th September 2013
Inter-Participant Testing Window	9 th – 27 th September 2013
Gemserv report to CER	4 th October
CER Go/No-Go decision	11 th October
Cut-over	Weekend of 19 th & 20 th October

Appendix B. Inter-Participant Tests

Below are the headline IPT scenarios proposed as an indicative guide to the testing for market participants at IPT. This is subject to refinement. Suppliers will be expected to run a specified selection of the scenarios. ESB Networks will be involved in all scenarios.

MCR	Ref.	Trigger	Target Messages	Scenario	Number of IPTs
1111	1	010	012, 112, 011, 111, 111L	NIM CoS where Old Supplier objects on grounds of debt within 1 st Wait Period and New Supplier cancels within 2 nd Wait Period. No Change of Legal Entity	2 (Old Supplier, New Supplier)
	2	010	012, 112, 105, 105L	NIM CoS where Old Supplier objects on grounds of debt within 1 st Wait Period but New Supplier does not cancel.	2 (Old Supplier, New Supplier)
	3	010	110, 12, 112R	NIM CoS where Old Supplier objects outside of First Wait Period.	2 (Old Supplier, New Supplier)
	4	010	110, 12, 112R	NIM CoS where Old Supplier objects on grounds of debt within 1 st Wait Period where Change of Legal Entity present.	2 (Old Supplier, New Supplier)
	5	010	012, 112, 011, 111, 111L, (no service order)	NIM CoS where meter point is de-energised for NPA, Old Supplier objects on grounds of debt within 1 st Wait Period and New Supplier cancels within 2 nd Wait Period.	2 (Old Supplier, New Supplier)
	6	010	012, 112, 011, 111, 111L	IM CoS where Old Supplier objects on grounds of debt within 1 st Wait Period and New Supplier cancels within 2 nd Wait Period. No Change of Legal Entity	2 (Old Supplier, New Supplier)
	7	010	012, 112, 105, 105L	IM CoS where Old Supplier objects on grounds of debt within 1 st Wait Period but New Supplier does not cancel.	2 (Old Supplier, New Supplier)
	8	010	110, 12, 112R	IM CoS where Old Supplier objects outside of First Wait Period.	2 (Old Supplier, New Supplier)

MCR	Ref.	Trigger	Target Messages	Scenario	Number of IPTs
	9	010	110, 12, 112R	IM CoS where Old Supplier objects on grounds of debt within 1 st Wait Period where Change of Legal Entity present.	2 (Old Supplier, New Supplier)
		010	012, 112, 011, 111, 111L	Single Point UnM CoS where Old Supplier objects on grounds of debt within 1 st Wait Period and New Supplier cancels within 2 nd Wait Period.	2 (Old Supplier, New Supplier)
	10	010	012, 112, 105, 105L, 331	Single Point UnM CoS where Old Supplier objects on grounds of debt within 1 st Wait Period but New Supplier does not cancel.	2 (Old Supplier, New Supplier)
1122	12	010	102, 105,	NIM successful CoS where MPRN has Essential Plant Flag set to 1.	1
	13	010	102, 105, 331		1
	14	010	105, 700	Single Point UnM successful CoS where MPRN has Essential Plant Flag set to 1.	1
	15	010	101, 332	NIM New Connection Registration where Site has Essential Plant	1
	16	010	101, 331	IM New Connection Registration where Site has Essential Plant	1
	17	017	106D, 306	Successful De-Energisation where Essential Plant is Present.	1
	18	017	301, 307	NIM Re-energisation with meter already present and where ESB Networks determines that essential plant is now present.	1
	19	017	301, 332	NIM Re-energisation with meter absent and where ESB Networks determines that essential plant is now present.	1
	20	017	106E, 301	IM Re-energisation where ESB Networks determines that essential plant is now present.	1
	21	017	700	Re-Energisation of TMPRN in Grouped UnM where ESB Networks determines that essential plant is now present.	1
	22	301	301	Ad-hoc update to set Essential Plant Flag	1

Appendix C. Assumptions

1. For IPT there will be a test Hub available for use, separately from the live Hub.
2. For each large supplier operating in RoI there will be a test EMMA available for use in IPT.
3. There will be a test extranet available during IPT, with the Essential Plant Flag available to be populated. The test extranet data base may be a small scale extract from the live extranet.

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