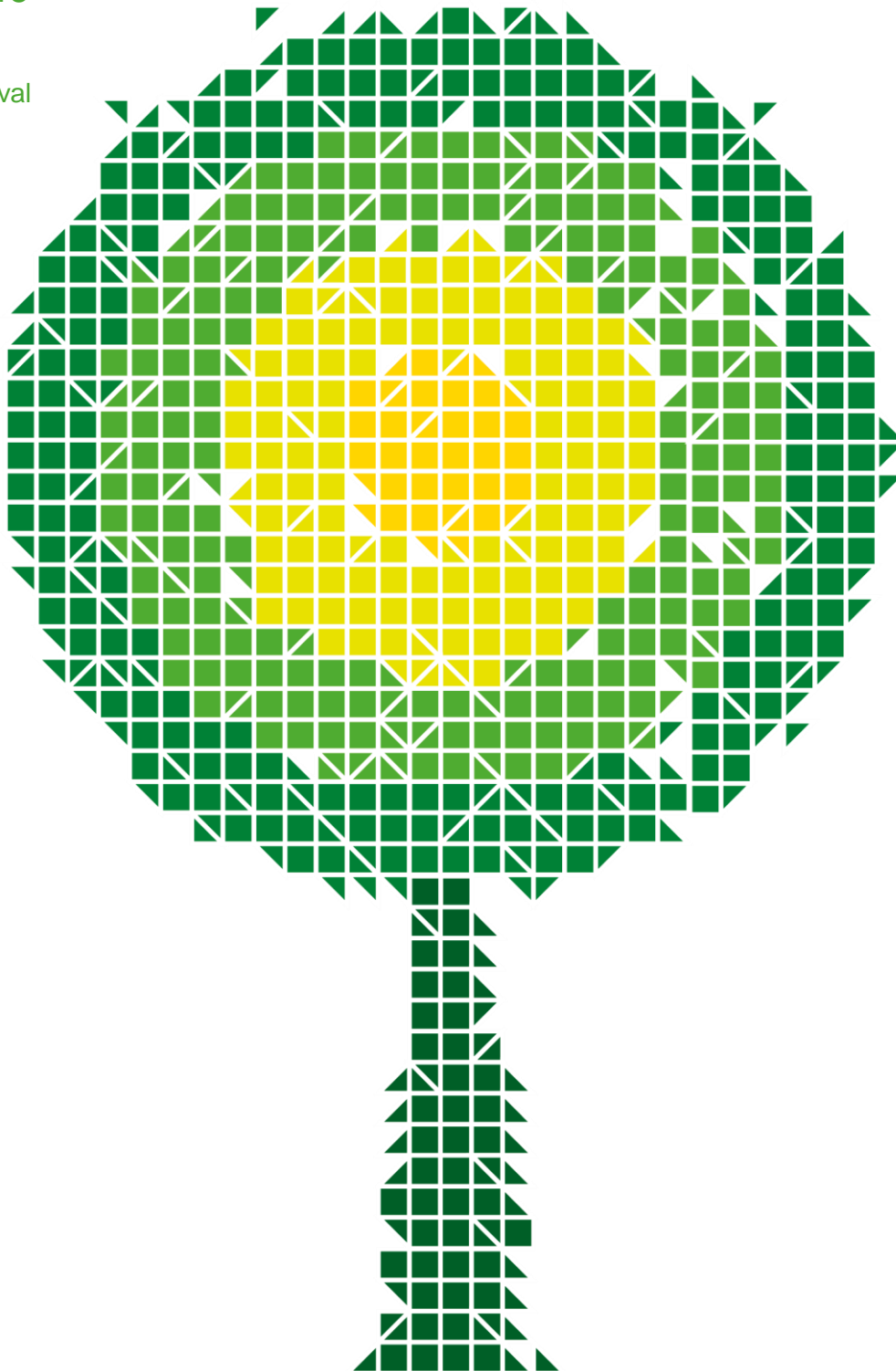


Assurance Strategy

Delivering assurance activities for Retail Market changes in the RoI during 2018 to 2020.

12 June 2018

Version 1.0
Final for Approval



Gemserve



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CHANGE HISTORY

VERSION	STATUS	ISSUE DATE	AUTHOR	COMMENTS
0.1	Initial Draft		Elizabeth Montgomerie	
0.2	Initial Draft		Elizabeth Montgomerie & Hanna Laatio McDonnell	
0.3	Draft with RMDS feedback		Elizabeth Montgomerie	
0.4	Draft for Issue		Elizabeth Montgomerie	Updates made post internal review
0.5	Draft for Issue	24 April 2018	Elizabeth Montgomerie	Updates made post review
0.6	Draft for Issue	1 May 2018	Elizabeth Montgomerie	Updates made post RMDS full review
0.7	Draft for issue	2 May 2018	Elizabeth Montgomerie	Updates
1.0	Final for approval	12 June 2018	Elizabeth Montgomerie	

DOCUMENT CONTROLS

REVIEWER	ROLE	RESPONSIBILITY	DATE
Hanna Laatio-McDonnell	Assurance Consultant	Author & Contributor	17 May 2018
Sarah Fuller	Assurance Contract Manager	Reviewer	23 April 2018
David Walshe	RMDS Business Analyst	Reviewer	10 May 2018
Carl Murphy	RMDS Manager	Reviewer & Approver	10 May 2018
IGG	Industry Governance Group	Approver	TBC
CRU	Regulator	Reviewer & Approver	TBC



1. INTRODUCTION

1.1. RETAIL MARKET CHANGES

This document describes the strategy that will be employed by Gemserv to deliver assurance activities for the significant changes proposed to be made in the Republic of Ireland (RoI) Retail Market between 2018 and 2020.

There are three material changes proposed to be made to the Retail Market throughout this period;

1. Unicode Upgrade – Go live date August 2018
2. Market Change Requests implementation (including updated Schema to V12.00.00) – Retail Market Release date April 2019
3. Market Change Requests implementation (including updated Schema to V13.00.00) – Retail Market Release date December 2020 (TBD)

The above three Retail Market impacting material changes are aligned with the National Smart Metering Programme (NSMP) and will be implemented by ESNB and market participants.

The Retail Market Design Service (RMDS) on behalf of the Commission for Regulation of Utilities (CRU) has instructed Gemserv to provide assurance that the three changes delivered are delivered:

- effectively,
- accurately,
- timely, and
- without unexpectedly impacting the Retail Market negatively.

The aim is to ensure that the risks and any impacts to the Retail Market arising from these changes are mitigated successfully. This strategy must provide confidence to the CRU that the delivery of the changes will not introduce risk into the Retail Market and that all Market Participants, as appropriate, are properly prepared for the new arrangements.

This Assurance Strategy excludes assurance activities of the National Smart Metering Programme. Its purpose is to describe assurance activities for the changes implemented by the programme that impact the Retail Market Design and/or Systems and its functionality.

1.1.1. The National Smart Metering Programme

The NSMP is a national program of work. The CRU, has overall responsibility for the NSMP and are operating as the Programme Manager. ESNB is one of many contributors to the programme alongside Electricity Suppliers, Eirgrid, GNI and Gas Suppliers.

The NSMP will deliver its programme over three phases between 2018 and 2024, using a number of Capability Drops, some of these Capability Drops include a number of Retail Market Changes. The CRU approval of ESNB's phased approach was publicly announced in September 2017.



There will be six Capability Drops, although only three of them will have impacts on the Retail Market and its functionality. These three drops are summarised below, **including how they will impact the Retail Market:**

CAPABILITY DROP	TIMELINE	ROI RETAIL MARKET IMPACT?
<p>Capability Drop 1 - Unicode Conversion Conversion of the ESB Networks systems to the Unicode industry standard. The upgrade is a pre-requisite for the later implementations.</p>	<p>Unicode Upgrade - August 2018</p>	<p>Yes</p> <p>There are no expected changes to the Retail Market Design. Assurance is required as it is a significant change to the ESBN SAP IS-U system and may impact the functionality of the Retail Market if not implemented appropriately.</p>
<p>Capability Drop 3 - Technical Upgrades, Smart Installation Enablers & Non-Smart MCR's This Capability Drop implements upgrades to the technical infrastructure already in place to provide Retail Market Services. It enhances the capabilities of these IT systems to prepare them for the delivery of Smart Metering functionality in later Capability Drops. It also delivers the Market System application changes required to allow Smart Meters to be installed by ESB Networks Technicians and provides a systemised interface to Deployment Contractors for meter rollout services. Finally, it also includes non-Smart MCRs which will be delivered as a Retail Market Schema Release.</p>	<p>Retail Market Release V12.00.00 - April 2019</p>	<p>Yes</p> <p>This release will introduce changes to the Retail Market through MCRs affecting Market Participants and the operation of the market design.</p>
<p>Capability Drop 6 - Smart Interval Data Services Capability Drop 6 delivers all changes to the Market Systems to support the interval data services. The key changes will be the delivery of Interval Data Services High Level Design and the full integration of SAP IS-U and the AMI components. This drop may include other non-smart MCR changes requested by Market Participants and is aligned with industry approved Market Schema Release 2, subject to agreement with the relevant external stakeholders</p>	<p>Retail Market Release V13.00.00- December 2020 (TBD)</p>	<p>Yes</p> <p>The changes are yet to be defined, though will include changes to support the Smart Metering Services and any approved schema / non-schema and non-smart Retail Market related changes.</p>



and Project Board. This drop will include non-SMART MCRs yet to be agreed for 2020.

TABLE 1: SUMMARY OF NSMP CAPABILITY DROPS AFFECTING THE ROI RETAIL MARKET



2. ROLES & RESPONSIBILITIES

Table 2 below lists the organisations that will be involved in this Assurance Strategy and the role(s) that each organisation will fulfil.

AREA OF OWNERSHIP	ROLE	ROLE DESCRIPTION
Gemserv (as the Assurance Body)	Assurance Lead	To lead the independent assurance activities as outlined in this document to provide confidence that the risks from the Retail Market Releases are appropriately mitigated.
RMDS	Retail Market Design Service	To lead the assurance function for the Retail Market on behalf of the CRU. To lead and act as subject matter expert on the Retail Market. To manage communications and to co-ordinate with the Retail Market and the NSMP.
ReMCoDS	Retail Markets Coordination Design Service	To facilitate coordination of assurance activities between NI and ROI.
Market Participants & ESNB	Project Managers Subject Matter Experts	To manage the changes through to implementation of such into the live environments, to assist in the delivery of assurance activities and participate where necessary and required.
CRU	Regulatory Authority	To receive the output of the Assurance Strategy and the detailed approaches to assurance for each of the changes. To provide direction, as required, to ensure operational integrity of the Retail Market is maintained based on the outputs and recommendations in the assurance reports.

TABLE 2: ROLES AND RESPONSIBILITIES

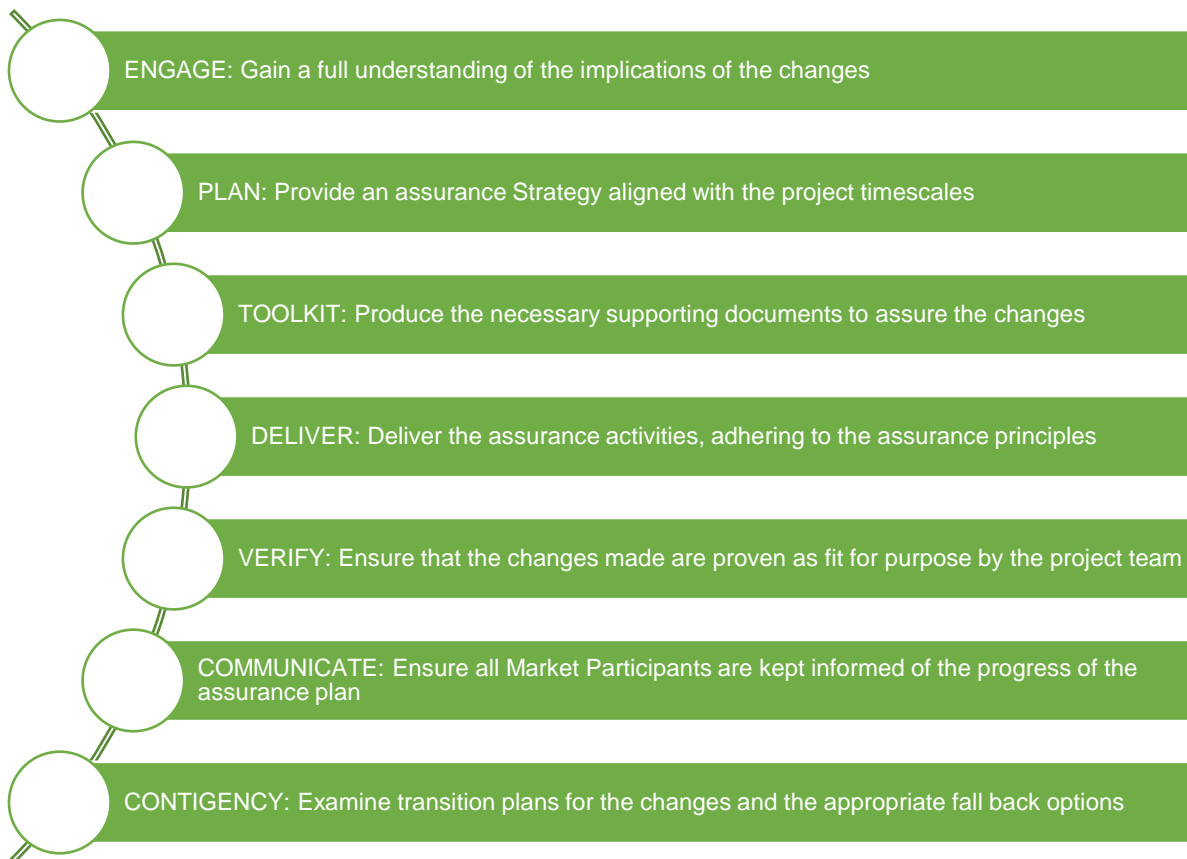


3. ASSURANCE PRINCIPLES & OBJECTIVES

This strategy will be guided by a set of **principles** that Gemserv will follow when undertaking all of its assurance services. These principles are that our service will:

- Provide transparency to all stakeholders;
- Be timely, accurate and complete in the provision of the assurance services and associated toolkits;
- Be independent and impartial;
- Impose the least burden on Market Participants that is possible without compromising confidence in the assurance techniques; and
- Inspire confidence in the assurance regime.

This strategy will also adhere to a set of **objectives** that the work Gemserv undertakes will meet:





4. ASSURANCE SCOPE & MATERIAL CHANGE SUMMARY

4.1. ASSURANCE SCOPE

The scope of the Assurance Strategy in relation to the changes to be implemented to the Retail Market is:

- The approved changes that are to be implemented, to the Retail Market between 2018 and 2020.
 - The impacts on systems and processes arising from the changes to the Retail Market Design and / or systems, as are currently incorporated within the delivery of the NSMP.
- Any changes that may impact the Retail Market / and or systems and functionality (e.g. changes to central systems) that have not yet been defined by the NSMP.

The approved changes (to date) are listed in Table 3 below.

4.1.1. In Scope

The following areas are **in scope** of this Assurance Strategy:

- The RoI Electricity Retail Market
- ESBN
- Suppliers

4.1.2. Out of Scope

The following areas are **out of scope** of this Assurance Strategy:

- The assurance of the NSMP (outside of any potential effects on the Retail Market Design or Market Systems), such as the procurement of third parties, Smart Metering Design, the installation of meters etc¹.
- NI Electricity Market
- The Wholesale Market
- Gas Market changes

4.2. MATERIAL CHANGE SUMMARY

CHANGE	DESCRIPTION	MARKET RELEASE	GO LIVE
Unicode Upgrade	Conversion of the ESB Networks SAP IS-U systems to the Unicode industry standard	Unicode Upgrade	August 2018
MCR 0175	New Reject reasons for Address Change Rejection – 9 new data codes	Retail Market Release V12.00.00 Schema	April 2019

¹ This list is not exhaustive and for example purposes only



MCR 1173	Vulnerable Customers – change existing code; 2 new data codes	Retail Market Release V12.00.00 Schema	April 2019
MCR 1167	Facilitate Energy Efficiencies in Local Authority Public Lighting – 11 new code values	Retail Market Release V12.00.00 Schema	April 2019
MCR 1140	Introduction to Eircodes into the Retail Market	Retail Market Release V12.00.00 Non-Schema	April 2019
MCR 1187	Solution to Eircodes using the A2 address	Retail Market Release V12.00.00 Non-Schema	April 2019
MCR 1169	Addition of Postal Code to two Downloadable Meter Point Details Files	Retail Market Release V12.00.00 Non-Schema	April 2019
MCR 1180	New Registration Default Supplier	Retail Market Release V12.00.00 Non-Schema	April 2019
MCR 1175	Provide MP Business Reference for Reading	Retail Market Release V12.00.00 Non-Schema	April 2019
MCR1183	010 Customer Validation Agreement (NI)	Retail Market Release V12.00.00 Non-Schema	April 2019
MCR1154	New Unmetered Tariff for NI (NI)	Retail Market Release V12.00.00 Non-Schema	April 2019
Smart and Non Smart MCRs	Changes to the Market Systems to support the interval data services and is aligned with industry approved Retail Market Release 2	Retails Market Release V13.00.00	December 2020 (TBD)

TABLE 3: CHANGES AFFECTING THE ROI RETAIL MARKET DESIGN



5. SUMMARY ASSURANCE APPROACH

For each of the Material Changes, Gemserv will produce an individual Assurance Approach and plan, which will be agreed with RMDS, the CRU and the IGG.

Each Assurance Approach will detail (as a minimum):

- Details of changes
- Assurance Plan
- Assurance Techniques to be applied and who to
- Details of the expectations of each of the Assurance Techniques employed

The type of assurance techniques available for use are Self-Assessment, Formal Assessment and Inter Participant Testing and these techniques are explained further in the sections below.

5.1. ASSURANCE TECHNIQUES BY PARTICIPANT TYPE

Table 4 shows how each technique *can* be applied to the different categories of Market Participant:

ASSURANCE TECHNIQUE	ESBN	LARGE SUPPLIER	SMALL SUPPLIER
Self-Assessment (SA)	✓	✓	✓
Formal Assessment (FA)²	✓	x	x
Inter Participant Testing (IPT)	✓	✓	✓

TABLE 4: ASSURANCE TECHNIQUES BY PARTICIPANT TYPE

5.2. ASSURANCE TECHNIQUES DESCRIPTION

5.2.1. Self-Assessment

The Self-Assessment technique will be used to gather information on Supplier awareness and on the ESNB project management methodology and progress.

ESBN will be provided with a Participant Questionnaire that elicits details to demonstrate its approach to delivering the changes, and will require ESNB to give significant consideration and provision of all appropriate supporting documents. This will be used to build the requirements for the later Formal Assessment stage, which will take place once a considerable volume of testing has been completed by ESNB.

Market Participants will be issued a Participant Questionnaire which will require minimal resource to complete. We require Market Participants to confirm they are aware of the changes and to consider the impact to their own businesses and how they intend to manage and participate in the delivery of these changes.

² Formal Assessment may be applied to Suppliers if the Self-Assessment stage identifies areas that require further investigation by Gemserv. If Formal Assessment is required for Suppliers, approval will be sought from the CRU.



The minimum standard of response and the required supporting documentation will be identified by Gemserv in advance for all Market Participants and there will also be guidance on the type of supporting information that is required.

The completed Participant Questionnaires and all evidence will be provided to Gemserv (via RMDS) in a manner to be agreed. The Participant Questionnaires will then be assessed against the identified exit criteria detailed in each of the individual assurance approaches.

Any necessary clarifications required by Gemserv will be sought by email or phone with ESNB or the appropriate Market Participant. When Gemserv is satisfied of the adequacy of the responses by Market Participants, a Self-Assessment Outcome report will be provided to the CRU.

5.2.2. Formal Assessment

The Formal Assessment assurance technique is designed to assess Market Participants' change readiness through audit and sampling and can sometimes include a site visit made to Market Participants' offices to undertake records reviews, witnessing and/or sampling processes.

Whilst Formal Assessment as a technique is available for all Market Participants, generally FA is only applied to Suppliers where significant issues have been raised through the Self-Assessment stage.

A site visit will ONLY be required for **ESBN** (as the operator of all the central Retail Market Systems) for each of the individual assurance approaches. The detail to be covered at the Formal Assessment site visits will also be detailed in those individual approaches.

Generally, at the site visit, the design, implementation and testing of the changes will be verified through inspecting the supporting documents, test strategy, test scripts and results, including defect identification and management. An assessment will also be made of the change processes and/or the project to develop and implement the necessary changes. Any identified deficiencies will be raised with ESNB, to enable it to take the necessary remedial actions and provide evidence of such to Gemserv.

Any significant issues identified will be raised immediately with RMDS and the CRU verbally. If required we will provide a detailed report; otherwise an overview of the Formal Assessment will be provided in the Final Assurance Report.

When we are satisfied that the responses are adequate and meet the required expectations, ESNB and RMDS will be informed and the parties can then move on from Formal Assessment.

5.2.3. Inter-Participant Testing

Inter-Participant Testing will be carried out as appropriate for each Retail Market Release.



Inter-participant testing is designed to test and assure that the changes to be implemented are effective and that the Market Participants can communicate, send and receive data in alignment with Market Design and Systems.

This is done using a selection of testing scenarios and scripts based upon the functionality of the Market Design and Systems (based upon the changes to be implemented). Suppliers and ESNB are required to take part and operate in their own roles using test data during a specific testing window.

Gemserv will review all evidence and outcomes of the testing scenarios for adherence to the Market Design and Systems.

The Inter-Participant Testing technique is co-ordinated and managed by RMDS.

The details of the tests to be performed for this technique will be provided as part of the detailed planning for each drop, as each drop and change will require a different test strategy.



5.3. ASSURANCE ASSUMPTIONS

This Assurance Strategy has been written based on the following assumptions:

Resources	Timescales	Market Design	Testing	Changes
<ul style="list-style-type: none">• ESNB and contractors are available to support delivery.• All Market Participants provide accurate information and supporting evidence.• Any Third Parties will be available to support the assurance activities.	<ul style="list-style-type: none">• Individual project tasks and milestones are completed on schedule.• Delays introduced by the project may result in a delay to the delivery of the changes by the go-live date.	<ul style="list-style-type: none">• Changes to the design have been fully described and approved.• Changes to the design have been fully tested and proven.	<ul style="list-style-type: none">• All testing will be auditable and an appropriate quality control method employed• Defects and issues are captured at the earliest stage possible and communicated accordingly.• There will be a low rate of defects and issues.	<ul style="list-style-type: none">• Market Participants are suitably informed about the changes and have the knowledge and resources to complete the related work within the plans.• No migration of data will be undertaken as part of these changes.



5.4. ASSURANCE TIMELINE

Table 5 summarises the key milestones and proposed timetable to delivery each of the assurance activities for the Retail Market Releases. Please note that some of these dates are provisional, in particular the dates for Retail Market Release V13.00.00 will be fluid until further information on the changes and required assurance activities required become known.

ASSURANCE MILESTONE	DATE
Unicode Upgrade	
Delivery of Assurance Approach	May 2018
Assurance Activities	May – July 2018
Cut over	5 August 2018
Go Live	7 August 2018
Retail Market Release V12.00.00	
Delivery of Assurance Approach	October 2018
Assurance Activities	October 2018 – April 2019
Cut Over	19 April 2019
Go Live	23 April 2019
Retail Market Release V13.00.00	
Delivery of Assurance Approach	TBA
Assurance Activities	TBA
Cut Over	December 2020 (TBA)
Go Live	December 2020 (TBA)

TABLE 5: OVERVIEW OF ASSURANCE TIMELINES



5.5. EXPECTED ASSURANCE TECHNIQUE DEPLOYMENT

These tables summarise the expected assurance technique deployment for each of the Material Changes affecting the RoI Electricity Retail Market.

5.5.1. Unicode Upgrade - August 2018

Change: Unicode Conversion – This change is the conversion of the ESB Networks systems to the Unicode industry standard. The upgrade is a pre-requisite for the later implementations of Retail Market changes and the NSMP. This will be delivered under the NSMP’s Capability Drop 1.

ASSURANCE TECHNIQUE	ESBN	LARGE SUPPLIER	SMALL SUPPLIER
Self-Assessment (SA)	✓	x	x
Formal Assessment (FA)	✓	x	x
Inter Participant Testing (IPT)	x	x	x

TABLE 6 – SUMMARY OF EXPECTED ASSURANCE TECHNIQUE DEPLOYMENT THE UNICODE UPGRADE

5.5.2. Retail Market Release V12.00.00 - April 2019

Change: The Market Release V12.00.00 will form part of the NSMP’s Capability Drop 3 - this change will deliver Technical Upgrades, Smart Installation Enablers & Non-Smart MCRs. It also includes non-Smart MCRs which will be delivered as a Retail Market Release.

ASSURANCE TECHNIQUE	ESBN	LARGE SUPPLIER	SMALL SUPPLIER
Self-Assessment (SA)	✓	✓	✓
Formal Assessment (FA) ³	✓	✓	✓
Inter Participant Testing (IPT)	✓	✓	✓

TABLE 7 – SUMMARY OF EXPECTED ASSURANCE TECHNIQUE DEPLOYMENT FOR RETAIL MARKET RELEASE V12.00.00

5.5.3. Retail Market Release V13.00.00 - December 2020

Change: The Market Release V13.00.00 will form part of the NSMP’s Capability Drop 6 – these changes will deliver all changes to the Market Systems to support the interval data services.

³ Formal Assessment for Suppliers will only be required if we identify significant issues through Self-Assessment. If this is the case, approval will be sought from the CRU to initial FA with the individual Participants,



This may include other non-smart MCR changes and will be delivered through the industry approved Market Schema Release V13.00.00. All MCRs will be progressed through the normal change processes.

As the changes to be included are yet to be defined, as such the table below is an expectation of the techniques to be deployed if the changes are Schema affecting.

ASSURANCE TECHNIQUE	ESBN	LARGE SUPPLIER	SMALL SUPPLIER
Self-Assessment (SA)	✓	✓	✓
Formal Assessment (FA)⁴	✓	✓	✓
Inter Participant Testing (IPT)	✓	✓	✓

TABLE 8 – SUMMARY OF EXPECTED ASSURANCE TECHNIQUE DEPLOYMENT FOR RETAIL MARKET RELEASE V13.00.00

⁴ Formal Assessment for Suppliers will only be required if we identify significant issues through Self-Assessment. If this is the case, approval will be sought from the CRU to initial FA with the individual Participants,



6. REPORTING & COMMUNICATION

Gemserv will report to RMDS and the CRU within the required timescales that will be detailed in each of the individual Assurance Approaches and Plans.

Each Outcome report will cover (this list is not exhaustive and may also be changed to best reflect the requirements of the CRU):

- An overview of the assurance project plan versus progress and delivery;
- An overview of each of the assurance techniques and its outcomes;
- Any issues or risks identified during the assurance period (and any resolution or remedial activities associated to them);
- Outstanding risks and concerns; and
- Gemserv's (as the Assurance Body) opinion.

Table 9 summarises the frequency, methods and rationale for the regular communications between the relevant parties during the assurance process. The below description is the minimum level of activity and it is likely that further communication points will be established, dependent on need.

WHO	WHEN	WHAT	WHY	HOW
CRU	On completion of Self-Assessment stages If issues arise doing Formal Assessment, a report will also be provided at that point. Final Assurance Outcome Report	Progress on the Assurance Strategy, execution and outcomes.	To inform the CRU of the outcomes of the assurance techniques undertaken for each of the Retail Market Releases to support the CRU in its decision-making processes.	By email, presentation and call (as appropriate)
RMDS	Weekly	Progress reporting on delivering the Assurance Strategy and approaches.	To provide information on the progress of the Assurance Strategy, the individual assurance approaches, raise issues and as an initial point of escalation.	By call
IGG	Monthly at scheduled the	Progress on the Assurance Strategy,	To provide updates on progress and ensure	By presentation at the IGG meetings



WHO	WHEN	WHAT	WHY	HOW
	IGG meetings and conference calls	approaches and execution.	that stakeholders are prepared appropriately	and conference calls.
Market Participants	As required	Details about the assurance process	To enable readiness and collaboration	By call, face to face and email

TABLE 9: REPORTING AND COMMUNICATION APPROACH

Elizabeth Montgomerie

Senior Assurance Consultant

Elizabeth.montgomerie@gemserv.com

Hanna Laatio-McDonnell

Assurance Consultant

Hanna.laatio-mcdonnell@gemserv.com

Sarah Fuller

Assurance Contract Manager

Sarah.fuller@gemserv.com

Gemserv Limited - London

8 Fenchurch Place

London

EC3M 4AJ

Company Reg. No: 4419 878

Gemserv Limited - Dublin

Fitzwilliam Hall Business Centre

Fitzwilliam Place, Dublin 2

T: +353 (1) 6694630

www.gemserv.com

