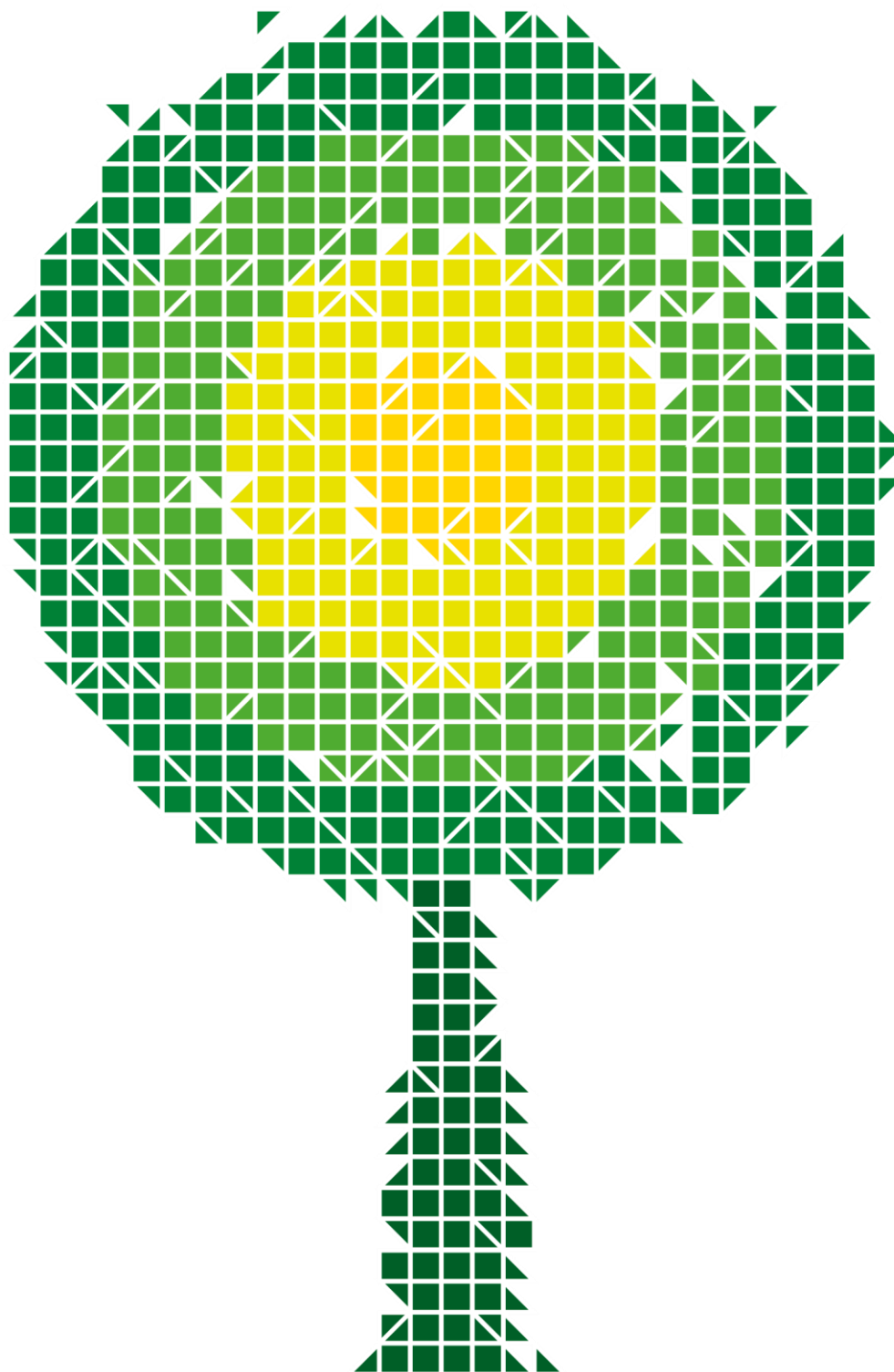


# Assurance Approach

Delivery assurance activities for Retail Market  
Release Schema V13.00.00 – December 2020

30 September 2019

Version 2.0  
Final for Use



**Gemserve**



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## CHANGE HISTORY

VERSION	STATUS	ISSUE DATE	AUTHOR	COMMENTS
0.1	Initial Draft for internal review	4 July 2019	Elizabeth Montgomerie	
0.2	Draft for Review	10 July 2019	Elizabeth Montgomerie	Updates post internal review
0.3	Draft	17 July 2019	Elizabeth Montgomerie	Updates post RMDS review
0.4	Draft for CRU	18 July 2019	Elizabeth Montgomerie	
0.5	Draft for CRU	24 July 2019	Elizabeth Montgomerie	Update post CRU review
1.0	Final	1 August 2019	Elizabeth Montgomerie	Final for IGG Approval
1.1	Final	20 August 2019	Elizabeth Montgomerie	Updates post IGG feedback
1.2	Final – for IGG Approval	13 September 2019	Elizabeth Montgomerie	Further updates post IGG feedback
2.0	Final for Use	30 September 2019		IGG Approved

## DOCUMENT CONTROLS

REVIEWER	ROLE	RESPONSIBILITY	DATE
Sarah Fuller	Assurance Contract Manager	Reviewer	9 July 2019
Oonagh Delaney	RMDS Business Analyst	Reviewer	16 July 2019
Lindsay Sharpe	RMDS Manager	Reviewer & Approver	16 July 2019
IGG	Industry Governance Group	Approver	30 September 2019
CRU	Regulator	Approver	31 July 2019



## 1. INTRODUCTION

### 1.1. RETAIL MARKET CHANGES

This document describes the Assurance Approach (in compliance with the approved Assurance Strategy<sup>1</sup>) that will be employed by Gemserv to deliver assurance for the material changes to be made in the Republic of Ireland (RoI) Retail Market, as implemented under Retail Market Release V13.00.00, scheduled for go live December 2020.

This change will be performed as a deliverable under the National Smart Metering Programme<sup>2</sup> (NSMP) and will involve ESBN (under their Smart Metering Project) and Suppliers (Large and Small).

The Retail Market Design Service (RMDS) has instructed Gemserv to provide assurance that Market Participants implement the changes:

- effectively,
- accurately,
- timely, and
- so that they do not negatively impact the Retail Market Design and functionality or market operation.

This Assurance Approach excludes wider assurance activities of the NSMP to be led by the CRU and only describes assurance activities that impact the Retail Market design and its functionality under Retail Market Release v13.00.00.

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<sup>1</sup> Assurance Strategy for the Delivery of ROI Market Design Changes 2018\_20 this can be found [here](#).

<sup>2</sup> A summary of the NSMP changes, schedule and impacts to the RoI can be found at Appendix A



## 2. ROLES & RESPONSIBILITIES

Table 1 below lists the organisations that will be involved in this assurance project and the role(s) that each organisation will fulfil.

AREA OF OWNERSHIP	ROLE	ROLE DESCRIPTION
<b>Gemserv (as the Assurance Body)</b>	Assurance Lead	To lead the independent assurance activities as outlined in this document to provide confidence that the risks from Retail Changes made by the Retail Market Release V13.00.00 and as part of the NSMP are appropriately mitigated.
<b>RMDS</b>	Retail Market Design Service	To lead the assurance function for the Retail Market on behalf of CRU. To lead and act as subject matter expert on the Retail Market. To manage communications and to coordinate with the Retail Market and ESNB.
<b>ReMCoDS</b>	Retail Market Coordination Design Service	To facilitate coordination of assurance activities between NI and RoI, if required.
<b>IGG</b>	Industry Governance Group	To facilitate the assurance activities in RoI and to ensure that this particular assurance strategy does not and will not be negatively impacted by external impacts.
<b>Market Participants &amp; ESNB</b>	Project Manager and Subject Matter Experts	To manage the Retail Market changes through to implementation into the live environments and to assist in the delivery of the assurance activities as required.
<b>CRU</b>	Regulatory Authority	To receive the output of the assurance strategy and approach for review. To provide direction as required to ensure operational integrity of the Retail Market is maintained.

TABLE 1: ROLES AND RESPONSIBILITIES



## 2.1. COMMUNICATION PLAN

This section summarises the frequency, methods and rationale for communications between the relevant parties during the assurance process.

WHO	WHEN	WHAT	WHY	HOW
<b>Regulatory Authorities</b>	On completion of Self-Assessments  Briefing post Formal Assessments  On completion of all IPT (final report)  Fortnightly Progress Updates	Progress on the assurance strategy and execution and outcomes	To provide confidence and to ensure the assurance timelines can be adhered to	By email and call
<b>ReMCoWG and IGG (Market Participants)</b>	Every 8 weeks	Progress on the assurance strategy and execution	To provide updates on progress and ensure that stakeholders are prepared appropriately	By presentation and call
<b>Market Participants</b>	As required	Details about the assurance process specific to individual parties	To enable readiness and collaboration	By call, face to face and email
<b>ESBN</b>	Weekly	Progress on the assurance strategy and execution and to receive information on the progress of the project	To ensure that the assurance services are aligned to the project performance	By call
<b>Other Parties (e.g. Data Protection Assurance Body)</b>	As required	Details about the assurance process, timings and scope	To ensure efficiencies are made and protect ways of working	By call

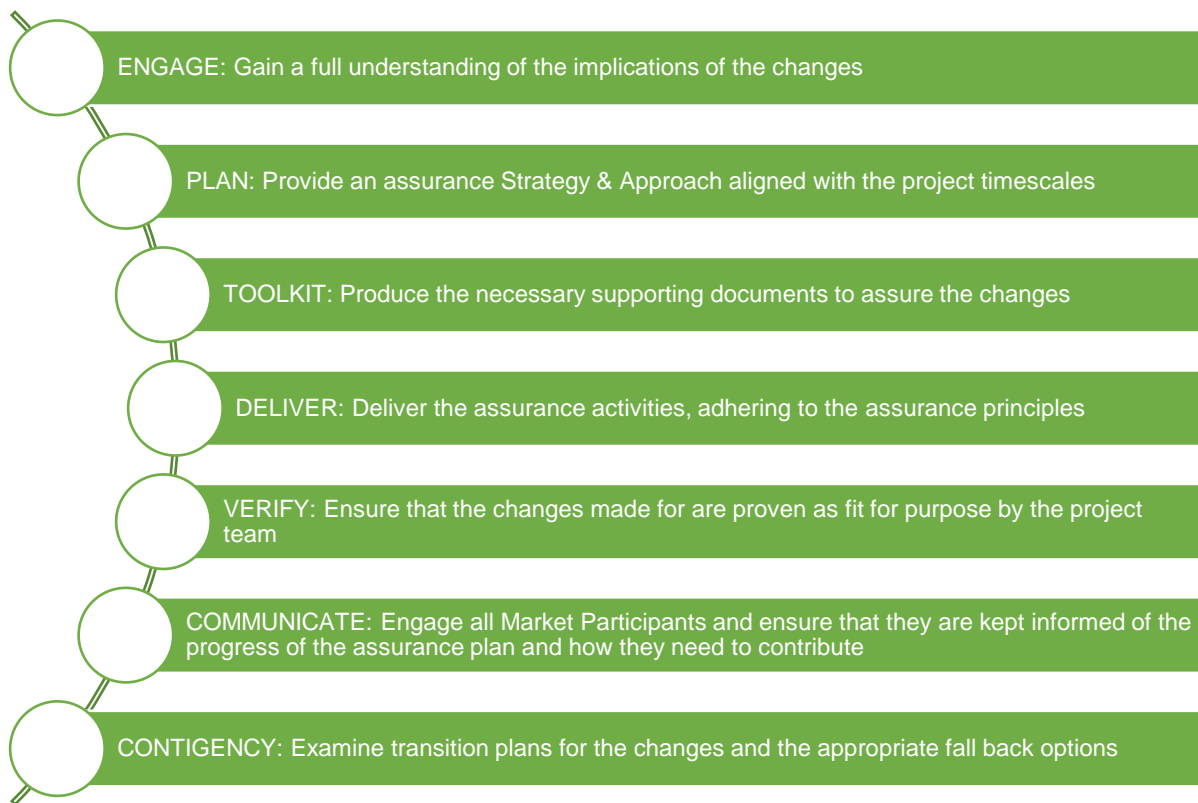


### 3. ASSURANCE PRINCIPLES & OBJECTIVES

This approach will be guided by a set of **principles** that Gemserv will follow when undertaking all 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 approach will also adhere to a set of **objectives** that the work Gemserv undertakes will meet:







## 4. ASSURANCE SCOPE & CHANGES

### 4.1. ASSURANCE SCOPE - IN

The following areas are **in scope** of this assurance approach:

- RoI Electricity Retail Market
- ESNB
- Large Suppliers
- Small Suppliers

Specifically, for the Central Market Systems (CMS)

- SAP PO Implementation
- SAP IS-U Support Packs
- SAP Hana Database Packs

Specifically, for the Retail Market Model:

- Market Change Requests (MCRs) detailed in Table 2

### 4.2. ASSURANCE SCOPE - OUT

The following areas are **out of scope** of this assurance approach:

- Gas Market
- NI Electricity Market
- Wholesale Market
- NSMP - not relating to the Retail Market for example; data protection and security, which is being led by the CRU.

### 4.3. DETAILS OF CHANGES

#### Central Market Systems (CMS)

- **SAP PO Implementation**

SAP PI (Process Integration) is the existing middleware by which SAP provides end-to-end integration between SAP IS-U and TIBCO Hub.

As part of NSMP Capability Drop 6, SAP PI will be upgraded to SAP PO (Process Orchestration) and all existing Retail Market Messages migrated.

Any new Retail Market Messages as part of the Smart Market Change Requests will also be developed in SAP PO.

- **SAP IS-U Support Packs**

Update our IS-U to Release 18, Support Pack- Level 12 to ensure systems are at latest version as recommended by SAP.



- **SAP Hana Database Packs**

Apply Hana Database Support Pack 04 to ensure our database is at latest version, In line with SAP Hana Database support roadmap.

The approved **Market Change Requests (MCR)** to be implemented under the Retail Market Release V13.00.00 are detailed in table 2 below.

CHANGE	DESCRIPTION	SCHEMA / NON-SCHEMA
MCR1157	<b>Smart Metering Data Processing &amp; Data Aggregation</b> This MCR describes changes to the Retail Market Design within the Process Group of Data Processing and Data Aggregation to facilitate Smart Metering.	Schema
MCR1158	<b>Smart Metering Customer Data Changes</b> This MCR describes changes to the Retail Market Design within the Process Group of Customer Data Changes to facilitate Smart Metering	Schema
MCR1159	<b>Smart Metering Change of Supplier</b> This MCR describes changes to the Retail Market Design within the Process Group of Change of Supplier to facilitate Smart Metering.	Schema
MCR1160	<b>Smart Metering Meter Works</b> This MCR describes changes to the Retail Market Design within the Process Group of Meter Works to facilitate Smart Metering.	Schema
MCR1161	<b>Smart Metering New Connections</b> This MCR describes changes to the Retail Market Design within the Process Group of New Connections to facilitate Smart Metering.	Schema
MCR0176	<b>Email Address Validation</b> This MCR describes the inclusion of a new functionality which validates the format of email addresses. Currently there is no validation on email addresses. Market Participants will need to adhere to the new email address format.	Schema
MCR1135	<b>MPRN Enquiry web service</b> This MCR describes the inclusion of a new web service that allows suppliers access to customer data on demand. ESBN will provide a Web Service and Market Participants will be responsible for developing their own systems to integrate with this web service.	Non-Schema

TABLE 2: MARKET CHANGE REQUESTS APPROVED FOR INCLUSION INTO RETAIL MARKET RELEASE V13.00.00



N.B. Any subsequent changes approved (through the RoI Change Process) to be included under the v13 release will be assessed for impact to the current Assurance Approach and may lead to a revised Assurance Approach.



## 5. ASSURANCE APPROACH

To deliver assurance for the Retail Market Release, Gemserv will apply the Self-Assessment, Formal Assessment and Inter Participant Testing assurance techniques.

For Market Participants to exit successfully from the assurance activities, Gemserv must be satisfied that the changes will result in zero negative impacts to any or all Market Participants or on market performance.

### 5.1. ASSURANCE TECHNIQUES BY PARTICIPANT TYPE

Table 3 shows how each technique will be applied to the different categories of Market Participant and table 4 shows how each Assurance Technique will be deployed, for each MCR.

Assurance Technique	ESBN	Large Supplier	Small Supplier
<b>Self-Assessment x 2</b>	✓	✓	✓
<b>Formal Assessment<sup>3</sup></b>	✓	✗	✗
<b>Inter Participant Testing</b>	✓	✓	✓

TABLE 3: ASSURANCE TECHNIQUES DEPLOYED BY PARTICIPANT TYPE

Participant Type	ESBN	Large Supplier	Small Supplier
<b>Self-Assessment</b>	IT changes All MCRs	All MCRs	All MCRs
<b>Formal Assessment</b>	IT changes All MCRs	Potentially - dependant on SA outcome	Potentially - dependant on SA outcome
<b>IPT</b>	IT changes All Schema MCRs	All MCRs	All MCRs

TABLE 4: ASSURANCE TECHNIQUES DEPLOYED BY MCR

### 5.2. ASSURANCE TECHNIQUES TO BE EMPLOYED

#### 5.2.1. Self-Assessment

The Self-Assessment technique will gather information on the ESBN project management methodology and the progress to date. Market Participants will be required to undertake the Self-Assessment technique twice during

<sup>3</sup> Suppliers may be subject to Formal Assessment if it is deemed relevant at the Self-Assessment stage. Approval to do so will be sought from the CRU.



this period of assurance, once to gauge awareness and readiness (early in the assurance process) and secondly (later in the assurance process) to assess capability for implementation.

ESBN will be provided with a Participant Questionnaire (PQ) that elicits details to demonstrate its approach to delivering the changes and will require ESBN 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 ESBN.

Market Participants will be issued a Participant Questionnaire that is designed to elicit details of their awareness and readiness to implement these changes and any business and operational changes that they need to make as a result.

The minimum standard of response and the required supporting documentation will be identified by Gemserv in the PQ itself for Market Participants. Table 5 provides an overview of the coverage of the Participant Questionnaire for Phases 1 and 2.

The completed Participant Questionnaires and all evidence will be provided to Gemserv via RMDS. The Participant Questionnaires will then be assessed against the identified exit criteria detailed below.

Any necessary clarifications required by Gemserv will be sought by email or phone with Market Participants. When Gemserv is satisfied of the adequacy of the responses, a Self-Assessment Outcome Report will be provided to the CRU on the outcome of the Self-Assessment assurance stage for each of the phases completed.



ASSURANCE TECHNIQUE & TIMELINE	MARKET PARTICIPANT	COVERAGE	EXIT CRITERIA
<p><b>Self-Assessment – phase 1</b> (Participant Questionnaires)</p> <p><b>Timeline:</b> 17 October – 17 December 2019</p>	ESBN	<p>Project Management:</p> <ul style="list-style-type: none"> <li>• Project governance</li> <li>• Implementation plans</li> <li>• Testing strategies</li> <li>• Risk management</li> <li>• Issue management</li> <li>• Authorisation procedures and sign off</li> <li>• Resourcing</li> </ul>	<p>Delivery of:</p> <ol style="list-style-type: none"> <li>1. Best practice project management methodology in delivering the changes</li> <li>2. Implementation plan, delivery timetable &amp; associated resourcing plan</li> <li>3. Testing strategy and plan               <ol style="list-style-type: none"> <li>a. Any testing outcomes already performed</li> <li>b. Any risk or issues arising</li> </ol> </li> <li>4. Risk &amp; Issue management process (including escalation route)</li> <li>5. Project authorisation process &amp; sign off procedures</li> </ol>
	Suppliers	<p>Awareness of the changes:</p> <ul style="list-style-type: none"> <li>• Planning &amp; Impact assessment</li> <li>• Planning &amp; Action</li> <li>• Change Management</li> <li>• Project Management Methodology</li> </ul>	<p>Delivery of:</p> <ol style="list-style-type: none"> <li>1. Confirmation of understanding of the changes in the Retail Market Release V13.00.00</li> <li>2. Confirmation of readiness (or planned readiness) to implement the changes</li> <li>3. Change management methodology (impact assessment)</li> <li>4. Actions taken (or to be taken) to cater for the changes</li> </ol>



ASSURANCE TECHNIQUE & TIMELINE	MARKET PARTICIPANT	COVERAGE	EXIT CRITERIA
<b>Self-Assessment – phase 2</b> (Participant Questionnaires)  <b>Timeline:</b> 10 April – 26 June 2020	ESBN	Project Management: <ul style="list-style-type: none"> <li>• Project governance</li> <li>• Implementation plans</li> <li>• Testing strategies</li> <li>• Risk management</li> <li>• Issue management</li> <li>• Authorisation procedures and sign off</li> <li>• Resourcing</li> </ul>	Delivery of: <ol style="list-style-type: none"> <li>1. Best practice project management methodology in delivering the changes</li> <li>2. Implementation plan, delivery timetable &amp; associated resourcing plan</li> <li>3. Testing strategy and plan               <ol style="list-style-type: none"> <li>a. Any testing outcomes already performed</li> <li>b. Any risk or issues arising</li> </ol> </li> <li>4. Risk &amp; Issue management process (including escalation route)</li> <li>5. Project authorisation process &amp; sign off procedures</li> </ol>
	Suppliers	Readiness and preparation for the changes: <ul style="list-style-type: none"> <li>• Planning &amp; Project Management</li> <li>• Issue management</li> <li>• Technical changes</li> <li>• Progress and actions</li> </ul>	Delivery of: <ol style="list-style-type: none"> <li>1. Declaration of progress in preparing for the changes in Retail Market Release V13.00.00 including any technical changes being undertaking.</li> <li>2. Confirmation of due readiness (or planned readiness) to implement the changes and any actions being taken to ensure readiness to cut over.</li> <li>3. Change/Project management methodology</li> <li>4. Project authorisation process &amp; sign off procedures</li> <li>5. Testing strategy</li> <li>6. Actions taken (or to be taken) to cater for the changes</li> </ol>

TABLE 5: SELF-ASSESSMENT PHASES 1 & 2 COVERAGE



### 5.2.2. Formal Assessment

The Formal Assessment assurance technique includes a site visit made to the Market Participants' offices to undertake records reviews, witnessing and/or sampling processes.

A site visit will ONLY be required for **ESBN** at this time (although, if any significant issues are identified during the Self-Assessment stages, the assurance body may invoke the Formal Assessment for Suppliers to investigate further into the responses received via Self-Assessment, with approval sought from the CRU).

The areas to be covered within this stage are detailed in Table 6. 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 ESBN, to enable it to take the necessary remedial actions and provide evidence of such to Gemserv.

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

Any significant issues identified will be raised immediately with RMDS and the CRU; otherwise a full overview of the Formal Assessment will be provided in the final Assurance Report.





ASSURANCE TECHNIQUE	MARKET PARTICIPANT	COVERAGE	EXIT CRITERIA
<b>Formal Assessment</b> (records review, evidence review, witnessing)  <b>Timeline:</b> 29 June – 25 August 2020	ESBN	<ul style="list-style-type: none"> <li>ESBN Project Delivery</li> <li>Project PID (current version)</li> <li>Project Plan</li> <li>Test Strategy &amp; Execution and Outcomes</li> <li>Quality Reviews</li> <li>Entry &amp; Exit criteria for test stages</li> <li>Minutes or records of the latest Project Board Meeting</li> <li>Requirements Matrix</li> <li>Cut-over plan, strategy, approach</li> <li>High Level contingency plan</li> </ul>	<ol style="list-style-type: none"> <li>Testing has been carried out to ensure changes conform to Market Design and Business Requirements.</li> <li>Any defects identified by testing are either resolved or prioritised according to the impact to delivery.</li> <li>Testing has been carried out and recorded to ensure there aren't unspecified changes in functionality.</li> <li>Testing has been carried out and recorded to ensure that there will be no negative impacts to Market Participants.</li> <li>Processes are in place to ensure very high probability of successful implementation of the changes.</li> </ol>
	Suppliers	Readiness and preparation for the changes: <ul style="list-style-type: none"> <li>Planning &amp; Project Management</li> <li>Issue management</li> <li>Technical changes</li> <li>Progress and actions</li> </ul>	TBD – this will be highly dependent upon the outcome of Self-Assessment.  Gemserv will provide Exit Criteria for each Supplier subject to the Formal Assessment in preparation.

TABLE 6: FORMAL ASSESSMENT TECHNIQUE COVERAGE



### 5.2.3. Inter-Participant Testing

The purpose of Inter-Participant Testing (IPT) is to gain assurance that all Market Participants can correctly operate the key scenarios that it will meet in the Market using its declared systems, business processes and operational staff within normal, operational conditions and using the central market technical infrastructure.

All Market Participants must provide a go live ready system/solution for use during IPT.

A selection of IPT scenarios will be performed by ESBN, Large Suppliers and Small Suppliers. This will provide confidence that the implemented changes resulting from Retail Market Release v13.00.00 have been done so completely and accurately and have **not** negatively impacted the delivery or functionality of the Retail Market. IPT will be applied for Schema changes only.

**Timeline:** 28 September to 26 November 2020; IPT testing window 26 October to 20 November 2020.

#### ENTRY CRITERIA

IPT will take place when the following criteria have been fulfilled:

- All Market Participants have completed all preceding stages of assurance as directed by the Assurance Approach.
- All Market Participants have been engaged, a SPOC (single point of contact) identified and all supporting documentation has been provided to the Market Participant by the RMDS and Gemserv and the Market Participant has confirmed understanding (with a signed declaration).
- There are no outstanding issues or defects that would materially affect the outcome of a test scenario.
- An IPT plan has been agreed for scenario execution with RMDS.
- Test data has been agreed, as the data to be used during the scenario execution.
- The test environment is available.
- The responsible technical bodies (ESBN, Atos) have satisfied themselves that the technical requirements are met and have declared as such and are ready for IPT.

The IPT scenarios may cover the following Retail Market Processes:

- Change of Supplier
- New Connections
- Meter Works
- Data Processing & Data Aggregations
- Customer Data Changes
- Unmetered
- DUoS



A selection of IPT scenarios have been identified as being necessary to exercise the key market processes in a simulated environment for Gemserv to deliver a satisfactory level of assurance. RMDS will issue an IPT plan of when participants can expect IPT actions to take place, this will be followed up with the specific details that each participant requires to undertake the testing required.

The IPT Assurance Stage will be co-ordinated and overseen by RMDS and all Market Participants will be supported and prepared in advance. All resulting IPT evidence is provided to Gemserv for review and assessment, via RMDS.

Each IPT scenario is defined as follows:

- Objectives;
- Initial Conditions;
- Market Transactions - steps to complete;
- Exit Conditions; and
- Required Evidence.

We have selected the scenario coverage by:

- Analysing the Schema changes and identifying all 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; and
- Further refining the scenarios by, for example, including more than one condition in a scenario.

An overview of the proposed set of Market Scenario tests can be found below in Table 7. We require all Large and Small Suppliers to undertake IPT (with some requirements determined by the outcome of the Self-Assessment). However, it may be that not *all* Suppliers will be required to undertake *all* the tests. Scheduling of the tests and details of which Suppliers will be required to undertake which tests will be confirmed during the preparation stage for IPT. Please note that full details of the scenario test steps and evidence requirements will also be provided during the preparation stage for IPT.

While executing the tests, Market Participants will gather evidence showing how the tests have progressed and will submit this to RMDS. This shall include all Market Messages sent and received and other evidence where specified. When each Market Participant has completed the tests applicable to them, they should review the test record. If any test has not met the success criteria and/or did not comply with the Market Design a re-test should be requested as soon as possible.

As is the normal IPT approach, used in previous change programmes, further and full detail on the tests, including test scenario workbooks, will be issued nearer the testing window.

Important to note:



- All IPT scenarios must be carried out in a timely manner in accordance with the agreed schedule to avoid unnecessary delay to all Participants.
- It is the Participant's responsibility to follow the IPT scenarios and complete all steps as required.
- The Participant must collect evidence at each step to demonstrate compliance with the Market Design and their business processes and systems.

## EXIT CRITERIA

IPT will be considered complete when the following criteria have been fulfilled and evidenced:

- All tests have been run (if not run, sufficient justification and supporting evidence must be given and accepted by Gemserv).
- Evidence has been provided, reviewed and signed off for all tests that were run.
- There are no open defects of severity High.

## IPT Defect Severities Definitions

- **Low:** defect affects minor functionality with little or no impact to other participants, and there is a known workaround which is practical to implement.
- **Medium:** defect affects major functionality with an impact to other participants, and there is a known workaround which is practical to implement.
- **High:** defect affects major functionality with a serious impact to other participants, and there is no known workaround, or the workaround is impractical.



## 5.2.4. IPT Testing Coverage

The table below summarises the proposed test scenarios / Market Processes for the Schema changing MCRs, non-Schema MCRs will be assured via the Formal Assessment technique – there will be no specific testing for non-Schema changes through the IPT technique. The full scenario details, final conditions, evidence requirements, data requirements will be issued nearer the testing window to support timely preparation for all Market Participants, in line with publication of the IPT plan by RMDS.

MCR	MARKET SECTOR COVERAGE	SCENARIOS COVERAGE	MARKET MESSAGE COVERAGE
1157 – Smart Metering Data Processing and Data Aggregation	Interval Metered Non-Interval Metered	IPT1157RP – Reading Process – Non-Interval Metered IPT1157DP - Data processing – Interval Metered IPT1157DA - Data Aggregation IPT1157SRR - Special Read Requests	Existing: 303R, 352R, 305, 341, 342 New: 343, 345, 592,322
1158 – Smart Metering Customer Data Changes	Interval Metered Non-Interval Metered	IPT1158CoCD - Change of Customer Details IPT1158CoLE - Change of Legal Entity	Existing: 013. 016, 014R, 114, 116A, 116R
1159 – Smart Metering Change of Supplier	Interval Metered Non-Interval Metered	IPT1159CoSNIM - Change of Supplier – Non-Interval Metered IPT1159CoSIM - Change of Supplier – Interval Metered IPT1159CoSOC - Change of Supplier Objection & Cancellations IPT1159CoSDF - Change of Supplier with Debt Flagging IPT1159SoLR - Supplier of Last Resort	Existing: 010, 102, 102P, 102R, 105, 112R
1160 – Smart Metering Meter Works	Interval Metered Non-Interval Metered	IPT1160CCC - Changes to Connection Characteristics IPT1160DE - De-Energisation IPT1160RE - Re-Energisation IPT1160CMC - Change to Meter Configuration IPT1160MPD - Meter Problems and Damage IPT1160CoM - Change of Metering	Existing: 017, 117R, 303R, 331, 332, 332W, 131, 130D, 130R



1161 – Smart Metering New Connections	Interval Metered Non-Interval Metered	IIPT1161NCNIM - New Connections – Non-Interval Metered IPT1161NCIM - New Connections – Interval Metered	Existing: 010, 101, 101P, 101R
0176 – Email Address Validation	Interval Metered Non-Interval Metered	IPT0176CoS - Change of Supplier IPT0176CDC - Customer Details Change IPT0176CoLE - Change of Legal Entity IPT0176MPSC - Meter Point Status Change Request with COLE	Central Systems Validation Existing: 010, 013, 016, 017, 014R, 101R, 102R, 116R, 117R
1135 – MPRN Enquiry Web Service	n/a	IPT1135 – Proof of connectivity	None

TABLE 7: PROPOSED IPT MARKET SCENARIO COVERAGE



### 5.3. ASSURANCE ASSUMPTIONS

This assurance approach has been written based on the following assumptions:

Resources	Timescales	Market Design	Testing	Changes
<ul style="list-style-type: none"> <li>• Market Participants are available to support delivery of the plan.</li> <li>• Market Participants provide accurate information and provide supporting evidence.</li> <li>• Any Third Parties required will be available to support the assurance activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Individual project tasks and milestones are complete on schedule.</li> <li>• Any project stage delays may result in a delay in delivery of assurance activities.</li> </ul>	<ul style="list-style-type: none"> <li>• There will be no changes to the Retail Market Design other than those approved and included in this Market Release.</li> <li>• Any subsequent changes will be assessed and may lead to a revised Assurance Approach</li> <li>• Any subsequent changes to be included under the v13 release will have gone through the RoI change process.</li> </ul>	<ul style="list-style-type: none"> <li>• All testing will be auditable and an appropriate quality control method employed.</li> <li>• Defects and issues are captured at the earliest stage possible and communicated accordingly.</li> <li>• There will be a low rate of defects and issues found <i>via assurance techniques</i>.</li> <li>• Test cases will be provided to suppliers</li> <li>• Test data will be provided by ESN</li> <li>• Test environment will be provided by ESN</li> <li>• Test support will be provided</li> <li>• Test plan will be provided</li> <li>• Methodology of a secure transfer of test evidence will be provided</li> <li>• Test Account for the test environment will be provided</li> </ul>	<ul style="list-style-type: none"> <li>• Market Participants are suitably informed about the changes.</li> <li>• No migration of data will be undertaken as part of these changes.</li> </ul>



#### 5.4. ASSURANCE TIMELINE

Table 8 summarises the key milestones and our proposed timetable. Please note that some of these dates are provisional and based on the progress of the assurance activities and the agreement of a Formal Assessment site visit date with ESNB and an Inter-Participant Testing window.

ASSURANCE MILESTONE	DATE
Assurance Approach Approved by CRU	31 July 2019
Assurance Approach Approved by IGG	4 September 2019
Self-Assessment Participant Questionnaire Phase 1 issued	18 October 2019
Market Participants Self-Assessment Participant Questionnaire Phase 1 Return Deadline	19 November 2019
Gemserv issues Self-Assessment Report 1 to the CRU	17 December 2019
Self-Assessment Participant Questionnaire Phase 2 issued	30 April 2020
Market Participants Self-Assessment Participant Questionnaire Phase 2 Return Deadline	1 June 2020
Gemserv issues Self-Assessment Report 2 to the CRU	29 June 2020
ESNB Formal Assessment performed <sup>4</sup>	3 – 12 August 2020
Gemserv issues Formal Assessment Report/Brief	25 August 2020
RMDS Issue IPT plan <sup>5</sup>	7 September 2020
Inter-Participant Testing Window <sup>6</sup>	26 October – 20 November 2020
Gemserv Issues IPT Exit Report <sup>7</sup>	26 November 2020
Gemserv issues Final Assurance Outcome Report to the CRU	10 December 2020
CRU Go / No Go Decision	TBC
Cut Over	TBC
Go Live	TBC

TABLE 8: ASSURANCE ACTIVITIES TIMELINES

<sup>4</sup> A one-day site visit, dates to be arranged with ESNB and Suppliers, if required.

<sup>5</sup> Date of issue to be confirmed.

<sup>6</sup> IPT dates are to be confirmed and as such are subject to minor change.

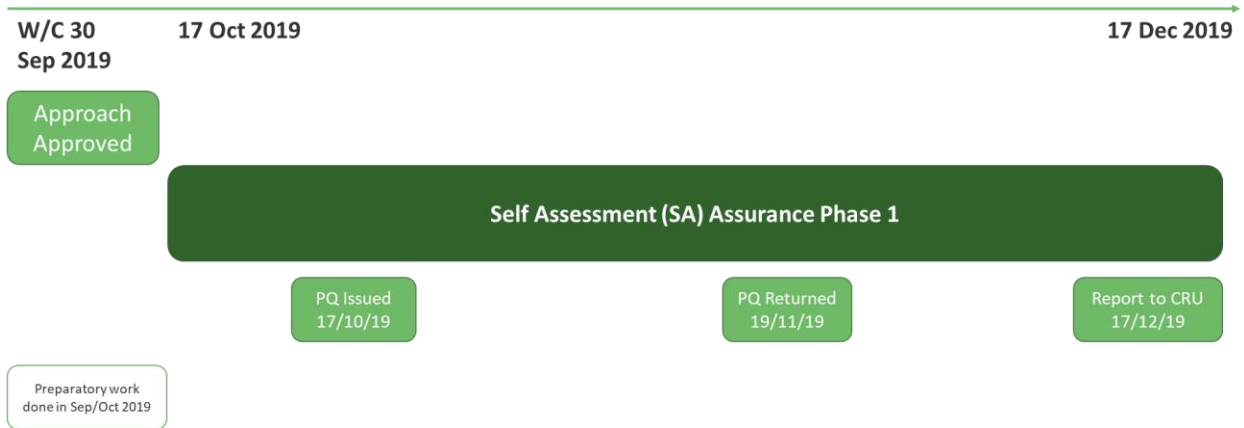
<sup>7</sup> The IPT Exit Report issue will depend on the IPT execution dates, yet to be confirmed.



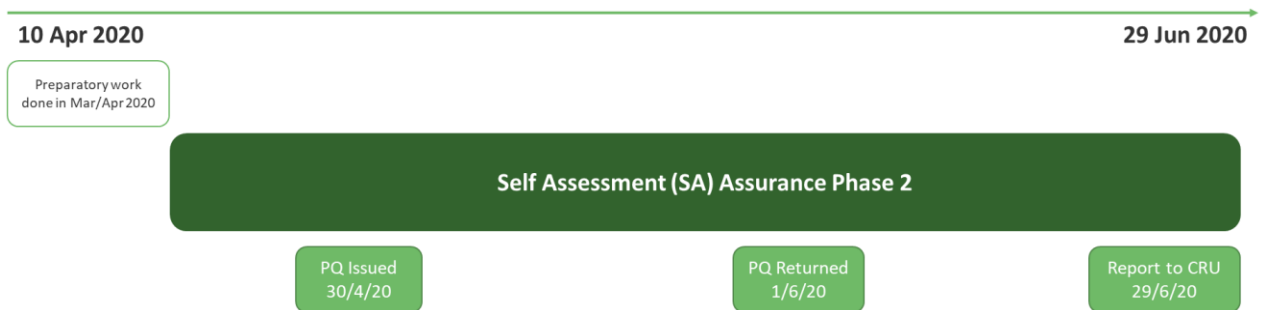


## 5.5. HIGH LEVEL PLANS ON A PAGE

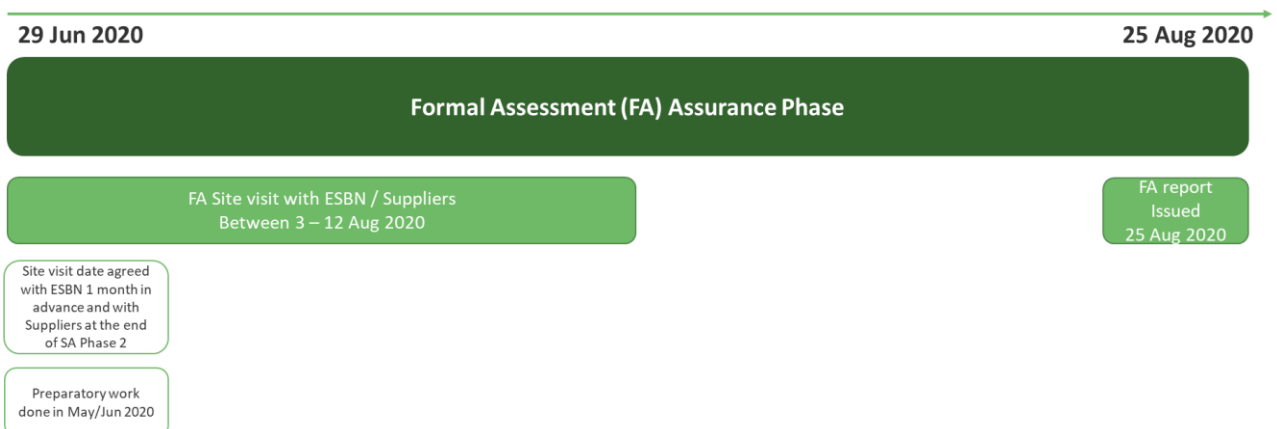
### 5.5.1. Self-Assessment Phase 1 Summary Plan



### 5.5.2. Self-Assessment Phase 2 Summary Plan

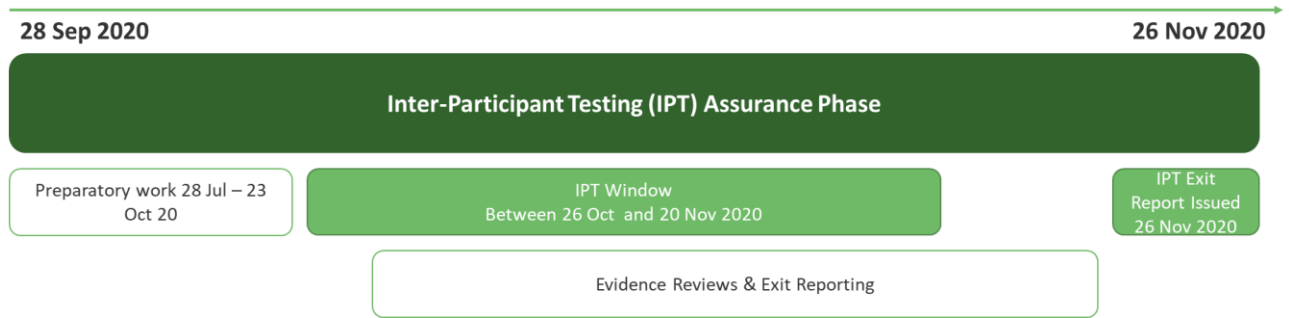


### 5.5.3. Formal Assessment Summary Plan





### 5.5.4. Inter Participant Testing Summary Plan



### 5.5.5. Final Reporting Summary Plan



### 5.5.6. Communications to Market Participants

Updates will be provided to Market Participants at each of the IGG and ReMCoWG meetings / conference calls.

Individual Market Participants will be communicated with separately to enable the assurance activities specific to each to be performed.

## 6. REPORTING

Gemserv will report to the CRU at the end of the Self-Assessment and the Final Assurance Outcome Report stage of the assurance activities. An overview of each report is provided below.

If, during the Formal Assessment stage, significant issues are raised, Gemserv will also prepare a Formal Assessment Report. Should this be the case, Gemserv will issue the detailed report to the CRU in advance of the Final Assurance Outcome Report.

REPORT TITLE	REPORT SUMMARY	WHEN
Self-Assessment Outcome Report Phase 1	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Assessment methodology</li> <li>• Assessment outcome</li> <li>• Common themes</li> <li>• Recommendations &amp; next steps</li> </ul>	17 December 2019
Self-Assessment Outcome Report Phase 2	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Assessment methodology</li> <li>• Assessment outcome</li> <li>• Common themes</li> <li>• Recommendations &amp; next steps</li> </ul>	29 June 2020
Formal Assessment Outcome Report/Brief  - To be issued to the CRU if any issues are identified and escalation is required.	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Assessment methodology</li> <li>• Assessment outcome</li> <li>• Common themes</li> <li>• Recommendations &amp; next steps</li> </ul>	25 August 2020
Inter-Participant Testing Exit Report  - To be issued to RMDS and will form part of the Final Assurance Outcome Report to the CRU.	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Testing overview</li> <li>• Outcome Summary</li> </ul>	5 days post IPT completion
Final Assurance Outcome Report	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Executive summary</li> <li>• Assurance approach &amp; timeline</li> <li>• Assurance techniques                             <ul style="list-style-type: none"> <li>○ Application</li> <li>○ Outcomes</li> <li>○ Exit Criteria</li> </ul> </li> <li>• Cut over readiness</li> <li>• Any outstanding risks or issues</li> </ul>	10 December 2020



	<ul style="list-style-type: none"><li>• Recommendations &amp; next steps</li></ul>	
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TABLE 9: CRU REPORTING SUMMARY TABLE

Gemserv will also maintain a weekly feedback session with RMDS to provide updates, raise issues, seek any additional support required and progress with assurance activities.



## 7. RISK ASSESSMENT

This section summarises the risk evaluation methodology used by Genserv and provides a risk assessment for delivery of Retail Market Release V13.00.00 in relation to the Retail Market Design. The significance of a risk is assessed by considering the impact and probability that a risk would have if no controls were applied. Each risk represents the 'worst case' scenario.

The impact and probability assessments offer a method to measure the relative importance of the risks and facilitates a comparison of other risks relative to each other. It should **not** be interpreted as the absolute magnitude of each risk. Essentially this methodology evaluates the probability and impact **relative to the other wider risks associated to delivery of this project by Market Participants** and the delivery of the assurance activities.

Some of the factors that are considered when assessing the probability of a risk are (but not limited to):

- The opportunity for a failure to occur;
  - The larger the number or frequency of processes that contribute to the risk, the greater the risk;
- The complexity of the activities that might contribute to the risk;
  - The more complex an activity is, the more subject to errors it might be;
- The level of manual intervention required;
  - A large amount of manual intervention within the activity, the increased chance of errors occurring; and
- The performance history of the activity (or similar activity) being performed in the past;
  - Any prior experience of activities is considered.

Some of the factors and questions that are considered when assessing the impact of a risk are (but not limited to):

- Does the risk have the potential to threaten the market as a whole?
  - Could it cause severe problems for the industry, Market Participants, ESNB and/or TSO?
- Does the risk have the potential to impact one or more areas in the market?
  - Could it cause severe problems for the Central Market Systems?
  - Could it cause problems to Market Participants operating in the market?

A risk assessment summarising the significant risks associated with the delivery of the changes can be found in Table 10 below.

NB – the assurance controls describe how Genserv (and ESNB working collaboratively) can control the level of risk through the application of the assurance services and is not a description of how the ESNB Smart metering Project will endeavour to fully mitigate the risk of implementing these changes.



RISK	PROBABILITY	IMPACT	RISK RATING	RISK OWNER	ASSURANCE CONTROLS
Failure to adequately design, test and implement the MCRs may result in the Retail Market being unfit for purpose and / or noncompliant with regulations.	Possible	Very High	Medium	ESBN	<ul style="list-style-type: none"> <li>Self-Assessment</li> <li>Formal Assessment</li> <li>Inter-Participant Testing</li> <li>Communication between RMDS, Gemserv and ESBN</li> </ul>
Implementing the changes may impact negatively on the Retail Market design and subsequent operation.	Possible	Very High	Medium	RMDS	<ul style="list-style-type: none"> <li>Self-Assessment</li> <li>Formal Assessment</li> <li>Inter-Participant Testing</li> <li>Communication between RMDS, Gemserv and ESBN</li> </ul>
The technical testing performed by ESBN may identify defects and issues that will delay the implementation and later Market Releases.	Possible	Very High	Medium	ESBN	<ul style="list-style-type: none"> <li>Self-Assessment</li> <li>Formal Assessment</li> <li>Communication between RMDS, Gemserv and ESBN</li> </ul>
ESBN may be unable to implement a robust project management regime resulting in the failure of the Project	Unlikely	Very High	Medium	ESBN	<ul style="list-style-type: none"> <li>Initial Planning</li> <li>Self-Assessment</li> <li>Formal Assessment</li> </ul>
Market Participants may be unable to implement a robust project management regime resulting in the failure of the Project and ability to go live	Possible	Very High	Medium	Market Participants	<ul style="list-style-type: none"> <li>Initial Planning</li> <li>Self-Assessment</li> <li>Formal Assessment (potentially)</li> </ul>
ESBN may not have resources allocated to complete the Market Release.	Possible	Very High	Medium	ESBN	Communication between RMDS, Gemserv and ESBN



RISK	PROBABILITY	IMPACT	RISK RATING	RISK OWNER	ASSURANCE CONTROLS
Market Participants may not have the resources to complete the necessary readiness activities and / or assurance activities	Possible	Very High	Medium	Market Participants	<ul style="list-style-type: none"> <li>Initial Planning</li> <li>Self-Assessment</li> <li>Communication between RMDS, Gemserv and ESBN</li> </ul>

TABLE 10: RISK ASSESSMENT



## 8. APPENDIX A: DETAILS OF CAPABILITY DROPS TO BE DELIVERED BY THE NSMP

CAPABILITY DROP	TIMELINE	ROI RETAIL MARKET DESIGN IMPACT?
<p><b>Capability Drop 1 - Unicode Conversion</b>            Conversion of the ESB Networks SAP IS-U systems to the Unicode industry standard. The upgrade is a pre-requisite for the later implementations.</p>	August 2018	Yes  No changes to the Retail Market Design occurred. Assurance was required as this was a significant change to the ESN SAP IS-U system and may have had an impact on the functionality of the Retail Market if not implemented appropriately.
<p><b>Capability Drop 2 - Deployment &amp; Logistics</b>            This capability drop enables ESB Networks to start detailed deployment planning for meter replacements and 'Early Adopters'. The scope includes the systems and processes to enable Suppliers to engage with their customers for early adoption of SMART services and hence smart meter install as well as meter asset replacement programme.</p>	November 2018	No
<p><b>Capability Drop 3 - Technical Upgrades, Smart Installation Enablers &amp; Non Smart MCR's</b>            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</p>	April 2019	Yes  This release (including Market Release V12.00.00) introduced changes to the Retail Market through MCRs affecting Market Participants and the operation of the Retail Market Design.





<p>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>		
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**Capability Drop 4 - AMI Enablement**

This Capability Drop delivers the Smart Meters themselves, a nationwide communications network to connect the Smart meters to ESBN and the major new backend IT systems required to operate the Smart Meters.

July 2019

No

<p><b>Capability Drop 5 - Deployment Contractor On-boarding</b> At least one Deployment Contractor will be procured to perform smart meter installation. This Capability Drop will enable the integration of ESB Networks and the relevant Deployment Contractor's processes and associated IT systems</p>	<p>July 2019</p>	<p>No</p>
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**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 includes other non-smart MCR changes requested by market participants and is aligned with industry approved Market Schema Release v13.00.00.

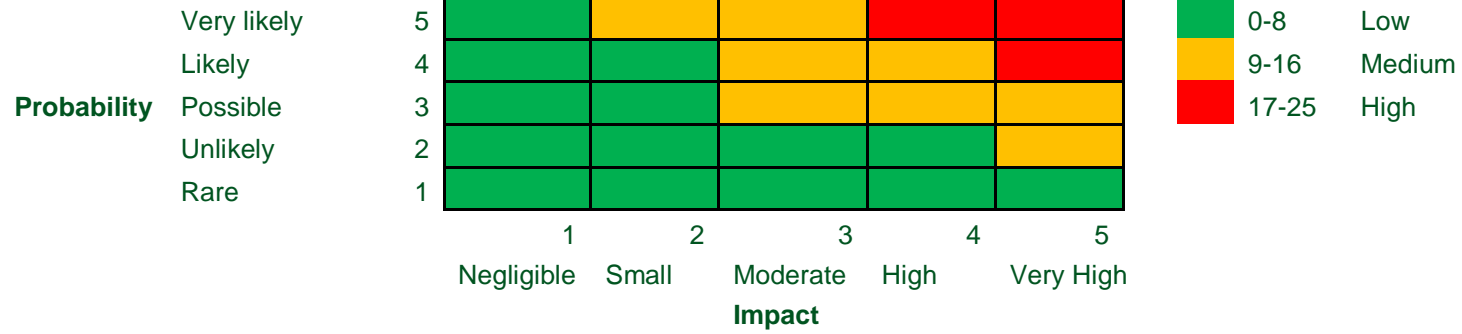
December 2020

Yes

The changes (including Market Release V13.00.00) will introduce changes to the Retail Market through MCRs affecting Market Participants and the operation of the market design to support the smart metering services.



**9. APPENDIX B: RISK ASSESSMENT SCORING MATRIX**



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