Assurance Approach: Interim Retail Market Microgeneration Solution

28 March 2022

Version 1.0 Final

This document encompasses information that can be released outside of Gemserv. This document does not include any confidential, personal or sensitive information.

Gemserv

Contents

CHANGE HISTORY

Version	Status	Issue Date	Author	Comments
0.1	Initial Draft for internal review	9 March 2021	Sarah Fuller	
0.2	Draft for RMDS comments	11 March 2022	Sarah Fuller	
1.0	Final	22 March 2023	Sarah Fuller	For CRU approval

DOCUMENT CONTROLS

Reviewer	Role	Responsibility	Date
Harry Rix	Assurance Consultant	Technical Review	10 March 2022
Simon Fox-Mella	Assurance Specialist	Quality Review	11 March 2022
Lindsay Sharpe	RMDS	Reviewer	14 March 2022
CRU	Regulator	Approver	28 March 2022
IGG	Industry Governance Group	For Information	30 March 2022

Introduction

BACKGROUND

The 'Climate Action Plan (CAP) to Tackle Climate Breakdown' was published in 2019 and contained several actions to promote microgeneration take-up. The CAP states that a new support scheme to support microgeneration was planned to be introduced by the Government in June 2021. The introduction of a new support scheme complements new European policy contained in the 'Clean Energy for All Europeans' package of legislation.

In January 2021, the Department of Environment, Climate and Communications (DECC) published its consultation paper on a new Microgeneration Support Scheme (MSS) with a 'Summary Report of Submissions Received' paper, which it published in June 2021. The MSS proposed the introduction of a 'Clean Export Guarantee' and a 'Clean Export Premium' to support the take-up of microgeneration in Ireland.

In August 2021, the CRU informed the IGG that DECC had tasked it with developing a regulatory framework for the implementation of an Interim Clean Export Guarantee for the period up to the commencement of an enduring solution, which will align with the end of Phase 3 of the National Smart Metering Programme.

Following consultation, on 1 December 2021 the CRU published an 'Interim Clean Export Guarantee' decision paper (CRU/21/131). ESB Networks subsequently updated draft MDR1213 to reflect the CRU's decision. The IGG approved the resulting MCR1213 on 2 February 2022.

This document describes the Assurance Approach that will be employed by Gemserv, as the Retail Electricity Market Assurance Body. Gemserv will deliver market assurance for the microgeneration support material changes in the Retail Market. The Interim Retail Market Microgeneration Solution is scheduled to be in place by the end of Q2 2022.

This change will involve ESBN 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.

Roles and 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
Gemserv (as the Assurance Body)	Assurance Lead	To lead the independent assurance activities as outlined in this document to provide confidence that the Interim Retail Market Microgeneration Solution works as intended and risk to the operation of the retail market is mitigated.
RMDS	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 Design. To manage communications and to co-ordinate with the Retail Market and ESBN.
IGG	Industry Governance Group	To facilitate the assurance activities and to ensure that this assurance strategy does not and will not be negatively impacted by external impacts.
Market Participants & ESBN	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.
CRU	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.

COMMUNICATION PLAN

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

Who	When	What	Why	How
Regulatory Authority	On completion of Self-Assessments Briefing post Formal Assessment On completion of all IPT (final report) Fortnightly Progress Updates	Progress on the assurance strategy, execution and outcomes	To provide confidence and to ensure the assurance timelines can be adhered to	By email and call
IGG (Market Participants)	Every 4 weeks	Progress on the assurance strategy and execution	To provide updates on progress and ensure that stakeholders are prepared appropriately	By presentation and call
Market Participants	As required	Details about the assurance process specific to individual parties	To enable readiness and collaboration	By call, face to face and email
RMDS & ESBN	As required	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

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
- Inspire confidence in the assurance regime

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

- **Engage:** Gain a full understanding of the implications of the changes
- **Plan:** Provide an assurance Strategy & Approach aligned with the project timescales
- **Toolkit:** Produce the necessary supporting documents to assure the changes
- **Deliver:** Deliver the assurance activities, adhering to the assurance principles
- **Verify:** Ensure that the changes made for are proven as fit for purpose by the project team
- **Communicate:** Engage all Market Participants and ensure that they are kept informed of the progress of the assurance plan and how they need to contribute
- **Contingency:** Examine transition plans for the changes and the appropriate fall back options

Assurance Scope & Changes

HIGH LEVEL PROJECT SCOPE

The Interim Retail Market Microgeneration Solution will give effect to the policy decisions outlined in the CRU's decision paper. This is a non-Schema impacting change. However, Suppliers are obliged to offer microgeneration payments to their customers and as such must be capable of implementing the changes contained within MCR1213.

There will be a change to ESBN backend systems to correct a rounding feature currently present in the 301MM. This change is to align the 301MM with to the standard rounding that is used in the other Market Messages that contain the Maximum Export Capacity (MEC).

The RMP Extranet and the Webservice will be updated to display the MEC value when interrogated.

New 344 and 345 XML files loosely modelled on the 343 & 345 Market Message will be made available to Suppliers via the Secure File Transfer System (SFTS) to facilitate export data provision.

ASSURANCE SCOPE – IN

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

- Retail Electricity Market
- ESBN
- Large Suppliers
- Small Suppliers.

ASSURANCE SCOPE - OUT

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

- Gas Market
- Wholesale Electricity Market.

DETAILS OF CHANGES

ESBN Only Scope

Access Systems

- Extranet
  - Change to Extranet field definition (to display MEC)
- Webservice
  - Introduction of the MEC field into the webservice
- Secure File Transfer Service (SFTS)
  - New 344 and 345 XML files
  - Addition of the MEC to the DOM_CUST File structure
  - Change to the MEC field in the COM_CUST File to match the amended DOM_CUST File

ESBN Backend System
- Update and test 301MM to introduce rounding up and down in line with other existing market messages that display the MEC value.

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.

ASSURANCE TECHNIQUES BY PARTICIPANT TYPE

The table below shows how each technique will be applied to the different categories of Market Participant and deployed.

Participant Type	ESBN	Large Supplier	Small Supplier
Self-Assessment	Readiness & Preparation for: Change to Access Systems (Extranet & Webservice) Change to 301MM Provision of new 344 & 345 XML files Amendments to DOM_Cust and COM_Cust files	Awareness & Readiness for: Access System Updates Acceptance of new 344 & 345 XML files Amendments to DOM_Cust and COM_Cust files	Awareness & Readiness for: Access System Updates Acceptance of new 344 & 345 XML files Amendments to DOM_Cust and COM_Cust files
Formal Assessment	Details of project delivery for: Access Systems 301MM ESBN backend system change	n/a	n/a

Participant Type	ESBN	Large Supplier	Small Supplier
	Provision of export data via SFTS on 344 & 345 XML files Amendments to DOM_Cust and COM_Cust files		
IPT*	Demonstration of access to Extranet/Webservice and successful SFTS only	Demonstration of access to Extranet/Webservice & successful SFTS only	Demonstration of access to Webservice & successful SFTS only

*Two large and two small Suppliers only, through request for volunteers.

ASSURANCE TECHNIQUES TO BE EMPLOYED

Self-Assessment

The Self-Assessment technique will gather information on the ESBN project management methodology, plan and the progress to date. Market Participants will be required to undertake the Self-Assessment to gauge awareness of the changes, what the changes may mean for them and readiness 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 it 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 PQ that is designed to extract details of their awareness and readiness to implement these changes and any business and operational changes that they need to make as a result.
In the PQ, Gemserv will identify the minimum standard of response and the required supporting documentation. The table below provides an overview of the coverage of the PQ.

The completed PQs and all evidence will be provided to Gemserv via RMDS. The PQs 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

Self-Assessment
 	
Timeline: 30 Mar– 13 Apr 2022
	ESBN	Project Management:
		
		▪ Project governance
		
		▪ Implementation plans
		
		▪ Testing strategies
		
		▪ Risk management
		
		▪ Issue management
		
		▪ Authorisation procedures and sign off
		
		▪ Resourcing
			Delivery of:
			
			1. Best practice project management methodology in delivering the changes
			
			2. Implementation plan, delivery timetable & associated resourcing plan
			
			3. Testing strategy and plan
			
			   a. Any testing outcomes already performed
			
			   b. Any risk or issues arising
			
			4. Risk & Issue management process (including escalation route)
			
			5. Project authorisation process & sign off procedures

	Suppliers	Awareness of the changes: ▪ Planning & Impact assessment ▪ Planning & Action ▪ Project Management Methodology	Delivery of: 1. Confirmation of understanding of the changes for the interim Retail Market Microgen Solution 2. Confirmation of readiness (or planned readiness) to implement the changes 3. Actions taken (or to be taken) to cater for the changes

SELF-ASSESSMENT COVERAGE

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. Due to Covid restrictions, this may have to be carried out remotely. A Formal Assessment will ONLY be required for **ESBN** at this time.

The areas to be covered within this stage are detailed in the table below. 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 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
Formal Assessment (records review, evidence review, witnessing) **Timeline:** 25 Apr – 6 May 2022	ESBN	- ESBN Project Delivery - Project PID (current version) - Project Plan - Test Strategy & Execution and Outcomes - Quality Reviews - Entry & Exit criteria for test stages - Minutes or records of the latest Project Board Meeting - Requirements Matrix	1. Testing has been carried out to ensure changes conform to Market Design and Business Requirements. 2. Any defects identified by testing are either resolved or prioritised according to the impact to delivery. 3. Testing has been carried out and recorded to ensure there aren't unspecified changes in functionality.

Assurance Technique	Market Participant	Coverage	Exit criteria
		- Cut-over plan, strategy, approach - High Level contingency plan	4. Testing has been carried out and recorded to ensure that there will be no negative impacts to Market Participants. 5. Processes are in place to ensure very high probability of successful implementation of the changes

FORMAL ASSESSMENT TECHNIQUE COVERAGE

Inter-Participant Testing

The purpose of Inter-Participant Testing (IPT) is to gain assurance that 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. However, as the implementation of the Interim Retail Market Microgeneration Solution does not necessitate a change to the SAP IS-U central market technical infrastructure Gemserv does not believe it proportionate or necessary to undertake traditional IPT.

Instead, Gemserv will define scenarios intended to test the functionality of the changes made to the Extranet, Webservice, and to test the ability of ESBN and Suppliers to exchange the new XML files via SFTS. These scenarios will be performed by ESBN, and a small number of Large Suppliers and Small Suppliers. As there is no change being made to the Market Design, IPT will not be required for all Suppliers. Gemserv will (via RMDS) seek volunteers amounting to a minimum of two large Supplier and two small Suppliers to undertake IPT on a pre-selected set of processes. This will be designed to seek evidential proof that the operational elements of the Interim Retail Market Microgeneration Solution function as set out in MCR1213, and that the changes have not negatively affected the ability for the market to interact as per the Retail Market Design.

Timeline: 30 May – 10 Jun 2022

Entry Criteria

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

- All required Market Participants have completed all preceding stages of assurance as directed by the Assurance Approach.
- All required Market Participants have been engaged, a single point of contact identified, and all supporting documentation has been provided to the Market Participant by RMDS and Gemserv and the Market Participant has confirmed understanding (with a signed declaration).
- There are no outstanding issues or defects prior to IPT 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 body (ESBN) has satisfied itself that the technical requirements are met and have declared as such and are ready for IPT.

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 through an individual workbook for each Market Participant.

The IPT Assurance Stage will be co-ordinated and overseen by RMDS and Market Participants will be supported and prepared in advance. The 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
- Required Evidence.

We will select the scenario coverage by:

- Identifying test scenarios that will exercise the core processes of the Interim Retail Market Microgeneration Solution; and
- Eliminating scenarios that cannot occur in practice or that are highly unlikely.

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 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.

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 IPT tests that were run.
- There are no open defects of severity High[1].

ASSURANCE ASSUMPTIONS

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

- Resources
  - Market Participants are available to support delivery of the plan
  - Market Participants provide accurate information and provide supporting evidence
  - Any Third Parties required will be available to support the assurance activities

---

[1] 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.

- Timescales
    - Individual project tasks and milestones are complete on schedule
    - Any project stage delays may result in a delay in delivery of assurance activities
- Market Design
    - There will be no changes to the Retail Market Design
- Testing
    - 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 found *via assurance techniques*
    - Test cases will be provided to suppliers
    - Test data will be provided by ESBN
    - Test environment will be provided by ESBN
    - Test support will be provided
    - Test plan will be provided
    - Methodology of a secure transfer of test evidence will be provided
    - Test Account for the test environment will be provided
- Changes
    - Market Participants are suitably informed about the changes
    - No migration of data will be undertaken as part of these changes.

ASSURANCE TIMELINE

This table summarises the key milestones and our proposed timetable. Please note that some dates are provisional and based on the progress of the assurance activities and the agreement of a Formal Assessment site visit date with ESBN and an IPT window.

Assurance milestone	Date
Assurance Approach Approved by CRU	25 March 2022
Self-Assessment Participant Questionnaire issued	30 March 2022
Market Participants Self-Assessment Participant Questionnaire Return Deadline	13 April 2022
Gemserv issues Self-Assessment Report to the CRU	27 April 2022
RMDS Issue IPT plan	6 May 2022
ESBN Formal Assessment performed[2]	25 Apr – 6 May 2022

[2] A one-day site visit, dates to be arranged with ESBN.

Assurance milestone	Date
Gemserv issues Formal Assessment Brief	13 May 2022
Inter-Participant Testing Window	30 May – 10 Jun 2022
Gemserv Issues IPT Exit Report	13 Jun 2022
Gemserv issues Final Assurance Outcome Report to the CRU	14 Jun 2022
Cut Over	28 June 2022

ASSURANCE ACTIVITES TIMELINES

Communications to Market Participants

Updates will be provided to Market Participants at each of the IGG meetings / conference calls. Individual Market Participants will be communicated with separately to enable the assurance activities specific to each to be performed.

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.

CRU REPORTING SUMMARY TABLE

Report Title	Report Summary	When
Self-Assessment Outcome Report	▪ Introduction ▪ Assessment methodology ▪ Assessment outcome ▪ Common themes ▪ Recommendations & next steps	27 April 2022
Formal Assessment Outcome Brief Only to be issued to the CRU if any issues are identified and escalation is required	▪ Introduction ▪ Assessment methodology ▪ Assessment outcome ▪ Common themes	13 May 2022

Report Title	Report Summary	When
	▪ Recommendations & next steps	
Inter-Participant Testing Exit Report To be issued to RMDS and will form part of the Final Assurance Outcome Report to the CRU	▪ Introduction ▪ Testing overview ▪ Outcome Summary	1 Working Day post IPT completion
Final Assurance Outcome Report	▪ Introduction ▪ Executive summary ▪ Assurance approach & timeline ▪ Assurance techniques ◆ Application ◆ Outcomes ◆ Exit Criteria ▪ Cut over readiness ▪ Any outstanding risks or issues ▪ Recommendations & next steps	14 June 2022

Risk Assessment

This section summarises the risk evaluation methodology used by Gemserv and provides a risk assessment for delivery of the System Separation project in relation to the RoI 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
- 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, ESBN 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 the Table below.

NB – the assurance controls describe how Gemserv (and ESBN working collaboratively) can control the level of risk through the application of the assurance services and is not a description of how ESBN will endeavour to fully mitigate the risk of implementing these changes.
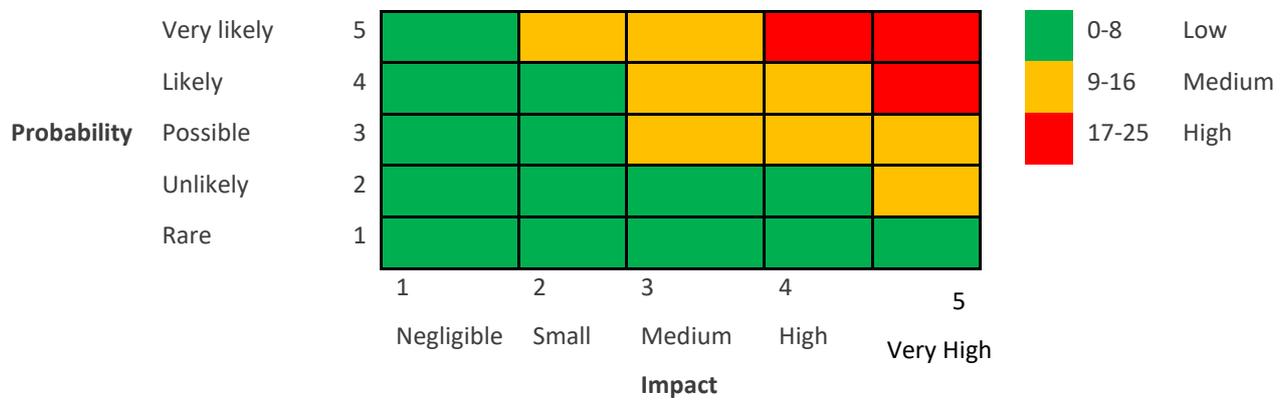
RISK ASSESSMENT

Risk	Probability	Impact	Risk rating	Risk owner	Assurance controls
Failure to adequately design, test and implement the described changes may result in the Retail Market being unfit for purpose and / or noncompliant with regulations	Unlikely	Very High	Medium	ESBN	▪ Self-Assessment ▪ Formal Assessment ▪ Inter-Participant Testing ▪ Communication between RMDS, Gemserv and ESBN
Implementing the changes may impact negatively on the Retail Market design and subsequent operation	Unlikely	Very High	Medium	RMDS	▪ Self-Assessment ▪ Formal Assessment ▪ Inter-Participant Testing ▪ Communication between RMDS, Gemserv and ESBN
The technical testing performed by ESBN may identify defects and issues that will delay the implementation	Possible	Very High	Medium	ESBN	▪ Self-Assessment ▪ Formal Assessment ▪ Communication between RMDS, Gemserv and ESBN
ESBN may be unable to implement a robust project management	Unlikely	Very High	Medium	ESBN	▪ Initial Planning ▪ Self-Assessment ▪ Formal Assessment

Risk	Probability	Impact	Risk rating	Risk owner	Assurance controls
regime resulting in the failure of the Project					
Market Participants may be unable to implement a robust project management regime resulting in the failure of the Project and ability to go live	Unlikely	Medium	Low	Market Participants	▪ Initial Planning ▪ Self-Assessment ▪ Formal Assessment (potentially)
ESBN may not have resources allocated to complete the Market Release	Unlikely	Very High	Medium	ESBN	Communication between RMDS, Gemserv and ESBN
Market Participants may not have the resources to complete the necessary readiness activities and / or assurance activities	Unlikely	Medium	Low	Market Participants	▪ Initial Planning ▪ Self-Assessment ▪ Communication between RMDS, Gemserv and ESBN

Appendix A: Risk Assessment Scoring Matrix

Probability				Impact				

Very likely 5
Likely 4
Possible 3
Unlikely 2
Rare 1

1 Negligible
2 Small
3 Medium
4 High
5 Very High

Impact

0-8 Low
9-16 Medium
17-25 High

To find out more please contact:

Sarah Fuller

Contract Manager

E: sarah.fuller@gemserv.com

W: www.gemserv.ie

Harry Rix

Consultant

E: harry.rix@gemserv.com

W: www.gemserv.ie

Dublin Office

Fitzwilliam Hall Business Centre

Fitzwilliam Place, Dublin 2

Company Reg. No: 627668

T: +353 (1) 6694630

Gemserv