

Assurance Approach: Delivery Assurance Activities for Hub Relocation

20 June 2022

Version 1.0 Approved

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Contents

Contents	2
Change History	3
Document Controls.....	3
Introduction.....	4
Retail Market Changes.....	4
Background	4
Assurance Approach	4
Roles and Responsibilities	6
Communication Plan	7
Assurance Principles & Objectives.....	8
Assurance Scope & Changes	9
High Level Project Scope	9
Assurance Scope – In	9
Assurance Scope - Out.....	9
Details of Changes	9
Assurance Approach	13
Assurance Techniques by Participant Type	13
Self-Assessment.....	14
Formal Assessment	15
Inter-Participant Testing.....	17
IPT Testing Coverage	19
Assurance Assumptions.....	20
Assurance Timeline.....	21
Communications to Market Participants.....	22
Risk Assessment.....	24



CHANGE HISTORY

Version	Status	Issue Date	Author	Comments
0.1	Initial Draft for internal review	11 May 2022	Simon Fox-Mella	
0.2	Draft for CRU	30 May 2022	Simon Fox-Mella	Updates post RMDS review
1.0	Approved by CRU	20 June 2022	Simon Fox-Mella	

DOCUMENT CONTROLS

Reviewer	Role	Responsibility	Date
Sarah Fuller	Assurance Contract Manager	Reviewer	12 May 2022
Elizabeth Montgomerie	Assurance Specialist	Reviewer	11 May 2022
Oonagh Delaney	RMDS Business Analyst	Reviewer	30 May 2022
Lindsay Sharpe	RMDS Manager	Reviewer	30 May 2022
Patrick Moran	RMDS Business Analyst	Reviewer	30 May 2022
CRU	Regulator	Approver	20 June 2022
IGG	Industry Governance Group	For Information	Next available IGG



Introduction

RETAIL MARKET CHANGES

BACKGROUND

Until 25 September 2021, ESB Networks and NIE Networks shared a joint TIBCO software-based solution to provide market message functionality to facilitate the electricity retail market for both RoI and NI. The solution consisted of a central hub and EMMAs (Electricity Market Message Application) hosted by each Market Participant. The solution allowed for the exchange of market messages between ESB Networks/NIE Networks and the respective Market Participants, including ‘change of supplier’ requests and the provision of meter point data. This is known as the “TIBCO Hub”.

In October 2020, the Northern Ireland Utility Regulator (UR) directed NIE Networks to proceed with System Separation from the joint TIBCO Hub. This project created separate TIBCO Hubs for the NI and RoI markets, with NI moving to a new Hub and the RoI remaining on the current one. Currently both Hubs are hosted in NIE Networks’ data centres.

In November 2020, both NIE Networks and ESB Networks engaged with TIBCO Application Support Team (NIE Networks), as the ‘TIBCO Hub’ provider, to direct it to deliver a project that covered the following:

- System Separation
- Upgrade of TIBCO components for the Hubs
- Redevelopment of Webforms.

The next phase of this programme of work is to relocate the RoI Hub from NIE Networks’ data centres into ESB IT Delivery infrastructure in Dublin. This project is referred to as the ‘RoI Hub Relocation Project’. The approach is to build a new ESB Market Hub on new Infrastructure in the ESB datacentres, and to replace the existing DB2 database platform with SQL server.

ASSURANCE APPROACH

This document describes the Assurance Approach that will be followed by Gemserv, as the RoI Assurance Body. Gemserv will deliver market assurance for the Hub Relocation material changes in the RoI Retail Market. The cutover is scheduled for 10 – 12 February 2023.

This change will involve EirGrid, ESB Networks 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 (RoI Assurance Body)	Assurance Lead	To lead the independent assurance activities as outlined in this document to provide confidence that the risks from Relocating the Hub to the RoI Retail Market operation are appropriately mitigated.
RMDS	Retail Market Design Service	To lead the assurance function for the RoI 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 ESB Networks.
IGG	Industry Governance Group	To facilitate the assurance activities in RoI and to ensure that this assurance strategy does not and will not be negatively impacted by external impacts.
Market Participants & ESB Networks	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.

TABLE 1: ROLES



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 Authorities	On completion of Self-Assessments Briefing post Formal Assessments On completion of all IPT (final report)	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
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 & ESB Networks	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

TABLE 2: COMMUNICATION PLAN



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 project will relocate through building a new RoI Tibco Hub in ESB datacentres in RoI, and at the same time decommission the existing Hub located in NI data centres. The existing DB2 database platform will be replaced with MS SQL server. These changes include both Production and Test EMMAs. For further details, see Details of Changes (pages 10 – 13, below).

ASSURANCE SCOPE – IN

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

- RoI Electricity Retail Market
- ESB Networks
- Large Suppliers
- Small Suppliers.

ASSURANCE SCOPE - OUT

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

- Gas Market
- NI Electricity Market
- Wholesale Market.

DETAILS OF CHANGES

ESB Networks Scope

The following ESB Networks activities are in scope for the project:

- Build the RoI Retail Market Hub in ESB data centres:
 - ◆ Purchase and commission ESX clusters in ESB data centres
 - ◆ Build new Virtual Linux and Windows Servers on ESX clusters
 - ◆ The provision and commissioning of hosting infrastructure and associated local configurations for the new ESB Hub. (e.g., servers, load balancers, networking and connectivity, firewalls, back-end system integration).



- ◆ Facilitate Access for TIBCO Application Support Team (NIE Networks) to Install and configure the Tibco solution on the new environments; Dev Test IPT Pre-Production and To-be Production
 - ◆ Build five (5) new Test EMMA's to Support testing and the enduring solution with latest software versions in line with Market Participants configuration, including the upgrade of the ESB Networks Test EMMA's to Oracle 19c in advance of July 2022 EOS
 - ◆ Implement a Business Continuity Solution; design and build a Disaster recovery/High Availability solution for the Market Message Hub, options were put forward to the DAG during Design phase and the recommendation to implement a HA dual site solution was approved by the Project Board during the design phase.
 - ◆ Complete a CSRA (Cyber security Risk Assessment) for the solution
 - ◆ Implementation of alerting and monitoring in ESB environment
 - ◆ Implementation of IP and Security Configuration
 - ◆ Implement Certificates on ESB environments
 - ◆ Enable remote access for Tibco Application Support Team for ongoing support of the solution
 - ◆ Retire Current ESB Test EMMA's.
- Software & Licensing: The provision or supply of any application software media and licensing to support the commissioning and/or operations of the new ESB Hub. This is an ESB responsibility. The purchase of temporary licenses for the project term is in scope, the transition of the management of the perpetual licenses is also in scope for the transition.
 - Test EMMAs: Build of five (5) large Test EMMAs, which will include an Application, a Gateway and an Oracle database for each.
 - Facilitate the Migration of the Hub Database (from DB2) to SQL, build new Windows Servers and install SQL, run configuration scripts for new environments.
 - Update Network configuration and Repoint RoI Market Participant EMMA's to new Hub; Circa 24 Market Participant's test EMMA's and circa 24 Market Participant's Production EMMA's to repoint to new Hubs.
 - Repoint ISU/PO interfaces between central retail market systems and new retail market Hubs and remove the VPN between ESB and NIE.
 - Define the Support Model for the relocated Hub:
 - ◆ Database, Hosting, Telecom's service desk and Infrastructure Support will transition to ESB at go live
 - ◆ Application and Third-party support will remain with NIE Networks (Insourcing of the Tibco Application Support Team occurred in February 2022 during the project lifecycle)
 - ◆ The End state Support Model for the RoI project will be defined as part of the Hub relocation project
 - ◆ Hypercare enhanced Support of the Solution.



- Management of Testing of the solution:
 - ◆ Technical Testing; Unit, SIT, OAT, BC/DR, PT
 - ◆ Functional Testing; UAT, (IPT).
- PEN Testing: if PEN testing is a requirement for the new ESB Hub. ESB will be responsible for the facilitation, management, and successful completion of PEN testing.
 - ◆ Facilitate Market Assurance of the change
 - ◆ The management and coordination of RoI Market Participants during the project.

TIBCO Application Support Team (NIE Networks) Scope

The following TIBCO Application Support Team (NIE Networks) activities are in scope for the project:

- Information Share, supply of the existing RoI Hub design documentation and other related artefacts from the Market Separation Project for reuse on this project.
- Installation and configuration of the TIBCO application stack on the new ESB provided infrastructure for each of the environments. Software versions will be the latest versions as defined in the design (HLD) for the new RoI Hub.
- Monitoring: Share TIBCO Application Support Team system alerting for the existing RoI Hub and support ESB with their analysis of these alerts for their own alerting scripts development for the new ESB Hub.
- TIBCO Professional Services, Supply of TIBCO vendor technical assurance professional services for project.
- DB2 Database Administrator support to ESB in the design phase with the replacement of the IBM DB2 database platform with MS SQL Server.
- Networks Technical Architect support to ESB with network change information required for the new RoI Hub.
- Security Manager support to participate in ESB led security workshops and knowledge share on the existing NI hosted RoI Hub.
- Application:
 - ◆ Development and configuration changes to stored procedures because of a change in database platform from IBM DB2 to MS SQL Server.
 - ◆ Upgrade the version of TIBCO products to the latest supported versions.
 - ◆ Application changes to support market hub integration with ESB's preferred job scheduling/automation technology.
- EMMAs:
 - ◆ Repointing the existing RoI Market Participants Test and Production EMMAs to the new RoI Hub.
- Testing:



- ◆ Support for ESB with the development of their Test Strategy and Test Plans.
- ◆ Conduct testing for the TIBCO application test cycles.
- Hypercare, Support for a six-week Hypercare warranty period post cutover.
- Provide TIBCO Application Support Team (NIE Networks) technical, project and applications governance support to the ESB led project.
- Project Management for the TIBCO Application Support Team (NIE Networks) deliverables and engagement with ESB Project Management.
- Service Management:
 - ◆ As part of the project, Service Management effort is included to provide knowledge transfer of the existing service regime, supply existing service artefacts, and attend workshops to support ESB with their development of the new ESB Hub service model and service design.
- Commissioning of five (5) new Project EMMA's
- Decommissioning of the legacy Hub NON-PROD database environments:
 - ◆ The legacy Rol Hub non-production environments will be decommissioned, post cutover to the new ESB Hub
 - ◆ The legacy Rol Hub Production database environment will remain in situ for the retention period of 190-days. A Change Request (CR) will then be raised by ESB to TIBCO Application Support Team (NIE Networks), requesting that the production infrastructure and database can be decommissioned.



Assurance Approach

To deliver assurance for the Retail Market, 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	ESB Networks	Large Supplier	Small Supplier
Self-Assessment	Readiness & Preparation for:	Awareness & Readiness for:	Awareness & Readiness for:
	Hub Upgrade and Relocation	Hub Upgrade and Relocation	Hub Upgrade and Relocation
	EMMA Repointing	EMMA Repointing	EMMA Repointing
Formal Assessment	Details of project delivery for:		
	Hub Upgrade and Relocation EMMA Repointing	n/a	n/a
IPT	Core Processes	Core Processes*	Core Processes*

*Minimum, three large and three small Suppliers only, through request for volunteers.

TABLE 3: DEPLOYED ASSURANCE TECHNIQUES

ASSURANCE TECHNIQUES TO BE DEPLOYED

Self-Assessment

The Self-Assessment technique will gather information on the ESB Networks 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 and what it may mean for them and readiness for implementation.

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

Market Participants will be issued a PQ 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. Gemserv will identify for Market Participants in the PQ 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: 29 Aug – 20 Sep 2022	ESB Networks	Project Management: <ul style="list-style-type: none">Project governanceImplementation plansTesting strategiesRisk management	Delivery of: <ol style="list-style-type: none">Best practice project management methodology in delivering the changesImplementation plan, delivery timetable & associated resourcing planTesting strategy and plan



Assurance Technique & Timeline	Market Participant	Coverage	Exit criteria
		<ul style="list-style-type: none"> ▪ Issue management ▪ Authorisation procedures and sign off ▪ Resourcing 	<ol style="list-style-type: none"> 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: <ul style="list-style-type: none"> ▪ Planning & Impact assessment ▪ Planning & Action ▪ Project Management Methodology 	Delivery of: <ol style="list-style-type: none"> 1. Confirmation of understanding of the changes for Hub Relocation and Upgrades 2. Confirmation of readiness (or planned readiness) to implement the changes 3. Actions taken (or to be taken) to cater for the changes

TABLE 4: 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 potential Covid restrictions, this may have to be carried out remotely. A site visit will ONLY be required for **ESB Networks** 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 ESB Networks, 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, ESB Networks 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: 10 – 14 Oct 2022	ESB Networks	<ul style="list-style-type: none"> ▪ ESB Networks 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 ▪ Cut-over plan, strategy, approach ▪ High Level contingency plan 	<ol style="list-style-type: none"> 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. 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

TABLE 5: FORMAL ASSESSMENT TECHNIQUE COVERAGE

Inter-Participant Testing

The purpose of Inter-Participant Testing (IPT) is to gain assurance that a Market Participant 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.

A selection of IPT scenarios will be performed by ESB Networks, and a small number of Large Suppliers and Small Suppliers. There is no change being made to the Market Design, as such IPT will not be required for all Suppliers. Gemserv will (via RMDS) seek volunteers to amount to three large Supplier and three small Suppliers to undertake IPT on a set of core processes. This will be designed to seek evidential proof that Hub Relocation and the Hub Upgrades has not negatively affected the ability for the market to interact as per the Retail Market Design.

Timeline: 9 – 27 January 2023

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 bodies (ESB Networks, TIBCO Application Support Team (NIE Networks)) 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

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 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 have selected the scenario coverage by:

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

An overview of the proposed set of Market Scenario tests can be found in the table below. We require three Large and three Small Suppliers to undertake IPT. 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.

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 Medium or High¹.

IPT Testing Coverage

The table below summarises the proposed test scenarios. 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.

IPT Scenarios	Market Sector Coverage
Change of Supplier, Change of Meter Configuration Code	Half Hourly Interval Metered
Change of Supplier	Quarter Hourly Interval Metered
Change of Supplier	Non-Interval Metered
Change of Supplier; Cancellation & Objection	Non-Interval Metered; Domestic
Change of Legal Entity, Change of Meter Configuration Code	Half Hourly Interval Metered
Change of Legal Entity	Quarter Hourly Interval Metered
Change of Customer Details	Non-Interval Metered

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.



IPT Scenarios	Market Sector Coverage
Readings Processing	Non-Interval Metered
Meter Problems and Damage	Non-Interval Metered
Meter Problems and Damage	Half Hourly Interval Metered
Meter Problems and Damage	Quarter Hourly Interval Metered

TABLE 6: PROPOSED IPT MARKET SCENARIO COVERAGE

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
- 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 ESB Networks
 - ◆ Test environment will be provided by ESB Networks
 - ◆ 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 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 ESB Networks and an IPT window.

Assurance milestone	Date
Assurance Approach Approved by CRU	17 Jun 2022
Self-Assessment Participant Questionnaire issued	29 Aug 2022
Market Participants Self-Assessment Participant Questionnaire Return Deadline	20 Sep 2022
Gemserv issues Self-Assessment Report to the CRU	27 Sep 2022
ESB Networks Formal Assessment performed ²	10 – 14 Oct 2022
Gemserv issues Formal Assessment Brief	4 Nov 2022
RMDS Issue IPT plan ³	18 Nov 2022
Inter-Participant Testing Window	9 – 27 Jan 2023
Gemserv Issues IPT Exit Report	31 Jan 2023
Gemserv issues Final Assurance Outcome Report to the CRU	1 Feb 2023
Cut Over	10 Feb 2023
Go Live	12 Feb 2023
Hypercare Window	13 Feb – 10 Mar 2023

TABLE 7: ASSURANCE ACTIVITIES TIMELINES

² A one-day site visit, dates to be arranged with ESB Networks.

³ Date of issue to be confirmed.

Communications to Market Participants

Updates will be provided to Market Participants at each of the IGG meeting / 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.

This table details the requirements and the delivery dates of reports to the CRU.

Report Title	Report Summary	When
Self-Assessment Outcome Report	<ul style="list-style-type: none"> ▪ Introduction ▪ Assessment methodology ▪ Assessment outcome ▪ Common themes ▪ Recommendations & next steps 	27 Sep 2022
Formal Assessment Outcome Brief Only to be issued to the CRU if any issues are identified and escalation is required	<ul style="list-style-type: none"> ▪ Introduction ▪ Assessment methodology ▪ Assessment outcome ▪ Common themes ▪ Recommendations & next steps 	4 Nov 2022
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"> ▪ Introduction ▪ Testing overview ▪ Outcome Summary 	31 Jan 2023
Final Assurance Outcome Report	<ul style="list-style-type: none"> ▪ Introduction ▪ Executive summary 	1 Feb 2023



Report Title	Report Summary	When
	<ul style="list-style-type: none">▪ Assurance approach & timeline▪ Assurance techniques<ul style="list-style-type: none">◆ Application◆ Outcomes◆ Exit Criteria▪ Cut over readiness▪ Any outstanding risks or issues▪ Recommendations & next steps	

TABLE 8: CRU REPORTING SUMMARY TABLE



Risk Assessment

This section summarises the risk evaluation methodology used by Gemserv and provides a risk assessment for delivery of the Hub Relocation 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. 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, ESB Networks 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 ESB Networks working collaboratively) can control the level of risk through the application of the assurance services and is not a description of how the 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 described changes may result in the Retail Market being unfit for purpose and / or noncompliant with regulations	Possible	Very High	Medium	ESB Networks	<ul style="list-style-type: none"> ▪ Self-Assessment ▪ Formal Assessment ▪ Inter-Participant Testing ▪ Communication between RMDS, Gemserv and ESB Networks
Implementing the changes may impact negatively on the Retail Market design and subsequent operation	Unlikely	Very High	Medium	RMDS	<ul style="list-style-type: none"> ▪ Self-Assessment ▪ Formal Assessment ▪ Inter-Participant Testing ▪ Communication between RMDS, Gemserv and ESB Networks
The technical testing performed by ESB Networks may identify defects and issues that will delay the implementation and later Market Releases	Possible	Very High	Medium	ESB Networks	<ul style="list-style-type: none"> ▪ Self-Assessment ▪ Formal Assessment ▪ Communication between RMDS, Gemserv and ESB Networks

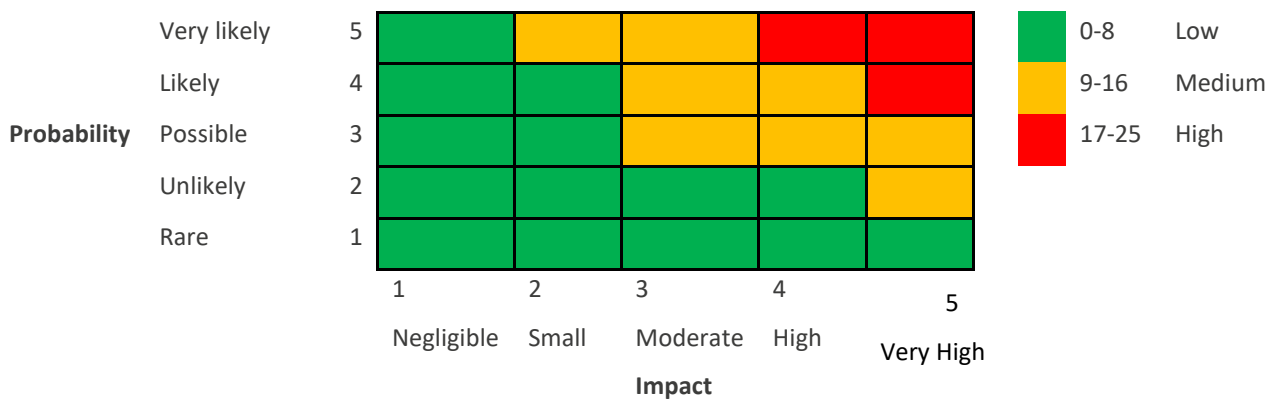


Risk	Probability	Impact	Risk rating	Risk owner	Assurance controls
ESB Networks may be unable to implement a robust project management regime resulting in the failure of the Project	Unlikely	Very High	Medium	ESB Networks	<ul style="list-style-type: none"> Initial Planning Self-Assessment Formal Assessment
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	<ul style="list-style-type: none"> Initial Planning Self-Assessment Formal Assessment (potentially)
ESB Networks may not have resources allocated to complete	Unlikely	Very High	Medium	ESB Networks	Communication between RMDS, Gemserv and ESB Networks <ul style="list-style-type: none"> Initial Planning Self-Assessment Communication between RMDS, Gemserv and ESB Networks
Market Participants may not have the resources to complete the necessary readiness activities and / or assurance activities	Unlikely	Medium	Low	Market Participants	<ul style="list-style-type: none"> Initial Planning Self-Assessment Communication between RMDS, Gemserv and ESB Networks

TABLE 9: RISK ASSESSMENT



Appendix A: Risk Assessment Scoring Matrix



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