Market Assurance Processes for the Irish Retail Electricity Market

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Version 3.0 Final for Use

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CHANGE HISTORY

Version	Status	Issue Date	Author	Comments
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2.2	Draft	04/02/2020	Laura Delargy	Updated for RMDS comments
2.3	Draft	13/07/2020	Sarah Fuller	For IGG approval
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DOCUMENT CONTROLS

Reviewer	Role	Responsibility	Date
Sarah Fuller	Gemserv	Technical Review	17/12/2019, 30/01/2020
Elizabeth Montgomerie	Gemserv	Technical Review	28/01/2020
Hanna Laatio-McDonnell	Gemserv	Quality Review	04/02/2020
RMDS	Market Design	Approval of updates	19/07/2020
IGG		Approver	23/06/2021

Introduction

PURPOSE

The Assurance Strategy sets out when an Assurance Process applies and what conditions require the specific types of Assurance Processes. This document describes in detail the Market Assurance Processes that underpin the Assurance Strategy for the Irish Electricity Retail Market (the Market).

This document will provide the reader with sufficient information to understand:

- the types of Assurance Processes,
- which Assurance Processes apply to their circumstances,
- the stages contained within the different Assurance Processes,
- the various assurance assessment techniques,
- what is expected of organisations wishing to pass assurance to participate in sectors of the Irish Electricity Retail Market,
- how long the process is likely to take, and
- who to contact for advice and guidance.

The reader is advised to read the associated Market Assurance Strategy prior to reading this document. If there are any inconsistency between the provisions of this document and the Market Assurance Strategy, the provisions of the latter shall prevail.

BACKGROUND

To assure compliance with the Market Design, and on-going compliance as it changes, the Commission for Regulation of Utilities (CRU) requires an independent assurance service procured through the Retail Market Design Service (RMDS).

All existing Market Participants in the Irish Electricity Retail Market have undergone the Market Entry Assurance Processes, either as part of Market opening or later. New Market Participants are also required to undertake such assurance, prior to entering the Market; and existing participants prior to entering a new Market Segment, to meet the requirements of the Assurance Strategy.

The purpose of assurance is to give confidence to the CRU and all Market Participants that potential risks that may cause Market disruption are mitigated. The organisation providing the assurance service is referred to as the Assurance Body throughout this document.

OBLIGATION ON MARKET PARTICIPANTS TO UNDERGO ASSURANCE

Market Entry

The Market Entry Assurance Process applies to:

- Organisations wishing to participate in the Electricity Retail Market for the first time. These organisations are referred to as new entrants in this document and may wish to become a Large or Small Supplier, a Self-Supplier, Export Only Supplier, or a Demand-Side Unit (DSU). Different levels of assurance apply to each type of new entrant.
- Large or Small Suppliers who have already undergone an assurance assessment and been approved to operate for certain Market Segments; and who plan to enter a new Segment(s). The scope of the assurance in this case is proportionate and limited to the new Market Segment(s) involved.

The Market Segments each type of Supplier can enter is summarised in the following table

Market Role	**Market Segments**						
	Non-Interval (Non-Domestic)	Non-Interval (Domestic)	Interval (QH)	Pre-payment	Un-metered	Self-Supplier/ DSU	Export-Only
Large Supplier	✓	✓	✓	✓	✓	×	×
Small Supplier	✓	✓	✓	✓	✓	×	×
Self-Supplier/DSU	×	×	×	×	×	✓	×
Export Only	×	×	×	×	×	×	✓

Market Design Release

A Market Design Release includes all changes to the operation of the Market resulting from the implementation of one or more Market Change Requests. The Market Design Release Assurance Process

applies to all Market Participants operating in the Market during the implementation phase of the changes to the Market Design.

This same process will also apply, where so determined by the CRU, to the introduction of Working Practices, workarounds or any changes made centrally that materially impact Market Participants' inter-operation processes.

Changes to ESB Networks' central systems that are outside of the above definitions will be assessed on the recommendation of RMDS and the CRU. The assurance approach to be employed will be specific to the changes and the assurance required under the Assurance Strategy.

Requalification

The Requalification Assurance Process applies to:

- Existing Market Participants who plan to introduce a Material Change1 to their systems and/or processes.
- Existing Suppliers who wish to operate outside any thresholds specified in their original approval, but within their existing Market Segments.
- Existing Suppliers whose conditions of approval mandate further assurance e.g., mandated requalification from Small to Large Supplier where the Small Supplier metering point threshold has been attained.
- Existing Suppliers who have been approved to operate but have not connected to the live central systems and, in the period since approval, one or more Market Design Releases have been completed.

[1] A Material Change represents a change to a Supplier's business and/or operational processes, and/or technical infrastructure (e.g. automation) that alters the Supplier's internal systems and methods of Market interaction from that initially assured.

Types of Assurance

An appreciation of all aspects of Market Assurance can be gained by reading this document cover to cover. However, to facilitate the reader who wishes to understand what is required for a particular situation, the document is structured around a series of diagrams comprising each type of assurance requirement which show:

- the assurance stages and the order in which they occur, and
- the inputs to and outputs from each stage.

The various triggers that initiate Market Assurance are listed below. The diagrams then contain references to the various documents, either elsewhere in this document or to an external source where a more detailed explanation will be found.

ASSURANCE TRIGGERS

New entrant to the Market

- Large Supplier
- Small Supplier
- Self-Supplier/Demand-Side Unit
- Export Only Supplier

Existing Supplier entering new Market Segment

Market Design Release

Market Participant Material Change

- Large or Small Supplier, ESB Networks or EirGrid introducing a material change to their Market-facing processes

Requalification

- Small Supplier to Large Supplier
- Inactive Supplier following a Market Design Release

LARGE SUPPLIER MARKET ENTRY ASSURANCE PROCESS

Assurance Stages	Inputs / Outputs
Process Trigger	
The Participant informs RMDS of their intention to enter the Market. RMDS informs the Assurance Body and forwards Application Form	Supplier provides: • Application Form for Market Entry
Assurance Delivery	
The Assurance Body advises the Participant and RMDS of the proposed assurance process to be applied. RMDS schedule an IPT testing slot.	Supplier provides: • Participant Questionnaire Part 1 including Declaration • SAR • Process Evidence • Outline of IT technical infrastructure • IT system specification
Business Solution Assessment Assurance Body assesses compliance and suitability of New Supplier's business processes, IT systems and recording mechanisms	Assurance Body Provides: • Outcome report to New Supplier & RMDS Supplier provides: • Participant Questionnaire Part 2 • SAR (If changed) • Test Evidence RMDS give approval to enter ITA
Integration Test Assessment Assurance Body assesses test evidence and writes report indicating the ITA segment completed and any outstanding issues	Assurance Body Provides: • Outcome report to New Supplier & RMDS Supplier provides: • Participant Questionnaire Part 3 • SAR (If changed) RMDS give approval to enter IPT
Inter-Participant Testing New supplier executes IPTs in conjunction with RMDS. Supplier gathers evidence and RMDS pass evidence to Assurance Body for assessment.	Supplier provides: Participant Questionnaire Part 4
Report to CRU Assurance Body assesses IPT evidence and writes final report indicating the assurance completed and any outstanding issues.	Assurance Body provides: • Assurance Report
CRU Decision	Assurance Body provides: •Completion Letter sent to Large Supplier and RMDS
Assurance Complete	

EXISTING LARGE SUPPLIER ENTERING A NEW MARKET SEGMENT ASSURANCE

Assurance Stages	Inputs / Outputs
Process Trigger	
The Participant informs RMDS of their intention to enter a new Market Segment. RMDS informs the Assurance Body and forwards Application Form.	Supplier provides: • Application Form for Entry to Additional Market Segment.
Assurance Delivery	
The Assurance Body advises the Participant and RMDS of the proposed assurance process to be applied. RMDS schedule an IPT testing slot	Existing Supplier provides: • Additional Market Segment Questionnaire including Declaration • SAR • Process Evidence • Outline of IT technical infrastructure and system specification • Database Definition • Test evidence including plan, test specs and results
<u>Business Solution Assessment and Integration Test Assessment (Combined)</u> Assurance Body assesses compliance and suitability of existing Supplier's business processes, IT systems and recording mechanisms	Assurance Body Provides: • Outcome report to New Supplier & RMDS Supplier provides: • SAR (If changed) RMDS give approval to enter ITA
<u>Inter-Participant Testing</u> New supplier executes IPTs in conjunction with RMDS. Supplier gathers evidence and RMDS pass evidence to Assurance Body for assessment.	Supplier provides: • Participant Questionnaire Part 4
<u>Report to CRU</u> Assurance Body assesses IPT evidence and writes final report indicating the assurance completed and any outstanding issues.	Assurance Body provides: • Assurance Report
<u>CRU Decision</u>	Assurance Body provides: • Completion Letter sent to Large Supplier and RMDS.
Assurance Complete	

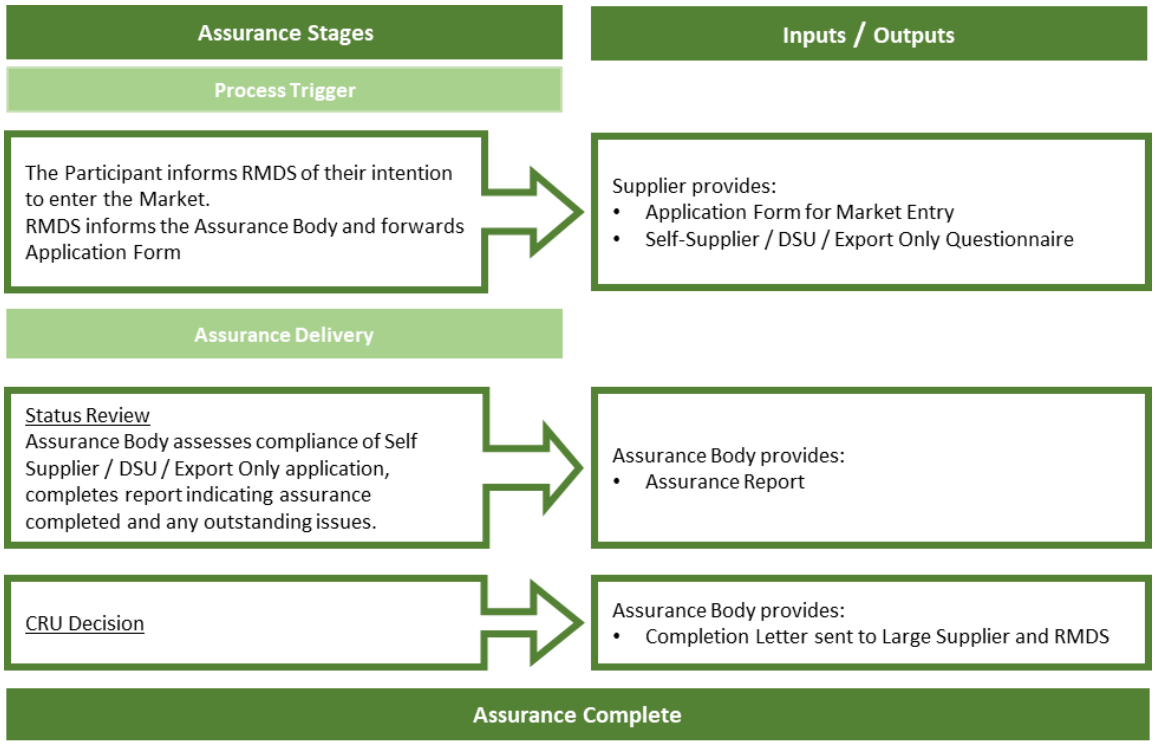
NEW SMALL SUPPLIER MARKET ENTRY ASSURANCE

Assurance Stages	Inputs / Outputs
Process Trigger	
The Participant informs RMDS of their intention to enter the Market. RMDS informs the Assurance Body and forwards Application Form	Supplier provides: • Application Form for Market Entry
Assurance Delivery	
The Assurance Body advises the Participant and RMDS of the proposed assurance process to be applied. RMDS schedule an IPT testing slot.	Supplier provides: • Small Supplier Questionnaire • SAR • Process Evidence • Outline of IT technical infrastructure • Definition of records that will be maintained
Process / Records Review Assurance Body assesses compliance and suitability of New Supplier's business processes, IT systems and recording mechanisms	Supplier provides: • Participant Questionnaire Part 2 Assurance Body Provides: • Outcome report to RMDS and New Supplier • RMDS give approval to enter IPT
Inter-Participant Testing New supplier executes IPTs in conjunction with RMDS. Supplier gathers evidence and RMDS pass evidence to Assurance Body for assessment.	Supplier provides: • Participant Questionnaire Part 3
Report to CRU Assurance Body assesses IPT evidence and writes final report indicating the assurance completed and any outstanding issues.	Assurance Body provides: • Assurance Report
CRU Decision	Assurance Body provides: • Completion Letter sent to Small Supplier and RMDS
Assurance Complete	

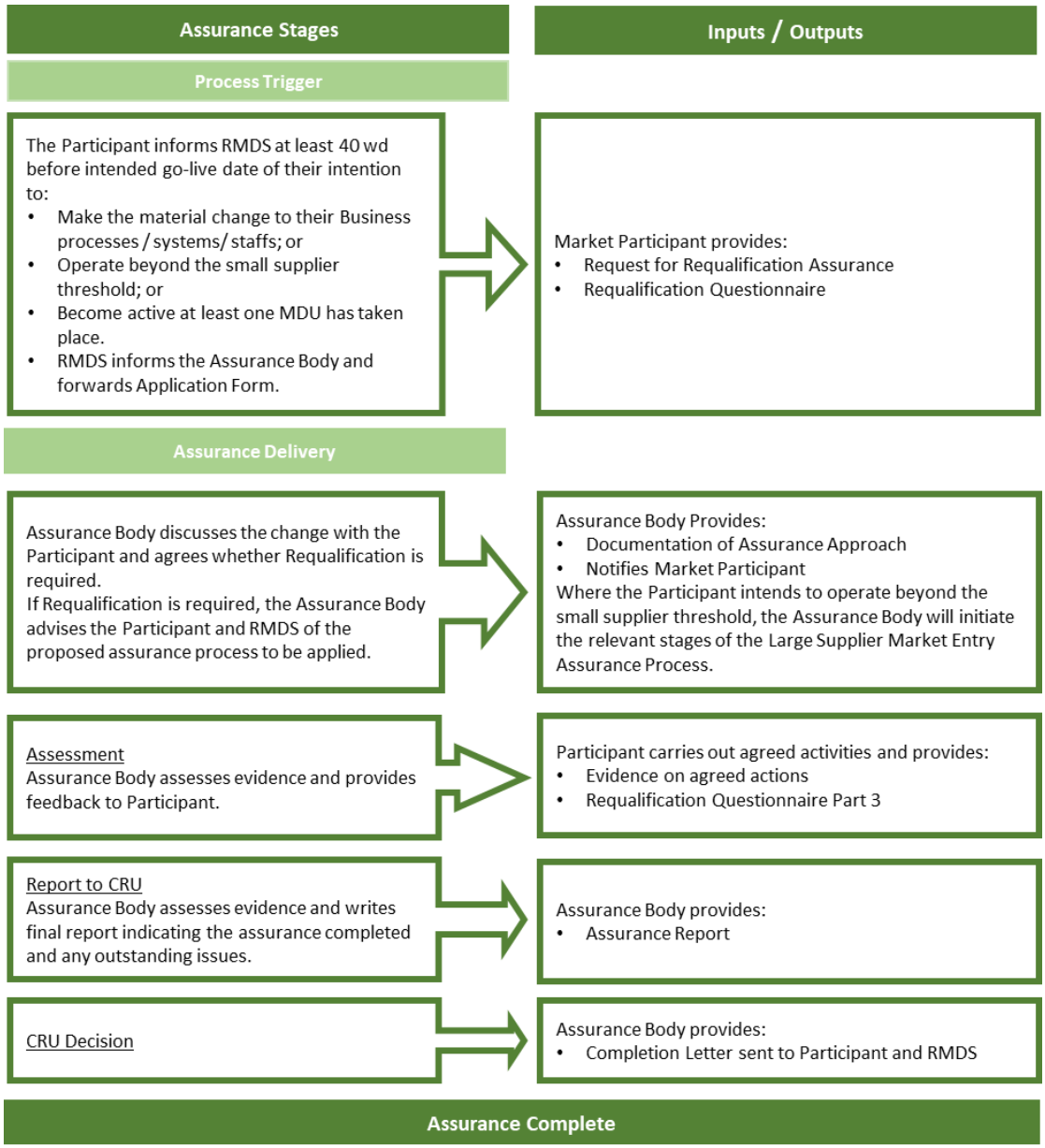
EXISTING SMALL SUPPLIER ENTERING NEW MARKET SEGMENT ASSURANCE

Assurance Stages	Inputs / Outputs
Process Trigger	
The Participant informs RMDS of their intention to enter the Market Segment. RMDS informs the Assurance Body and forwards Application Form.	Existing Supplier provides: • Application Form for Entry to additional Market Segment.
Assurance Delivery	
The Assurance Body advises the Participant and RMDS of the proposed assurance process to be applied. RMDS schedule an IPT testing slot.	Supplier provides: • Small Supplier Questionnaire (as applicable) • SAR • Process Evidence • Outline of IT technical infrastructure • Definition of records that will be maintained
Process / Records Review Assurance Body assesses compliance and suitability of New Supplier's business processes, IT systems and recording mechanisms	Supplier provides: • New Segment Participant Questionnaire Assurance Body Provides: • Outcome report to RMDS and New Supplier RMDS give approval to enter IPT
Inter-Participant Testing New supplier executes IPTs in conjunction with RMDS. Supplier gathers evidence and RMDS pass evidence to Assurance Body for assessment.	Supplier provides: • Participant Questionnaire Part 3
Report to CRU Assurance Body assesses IPT evidence and writes final report indicating the assurance completed and any outstanding issues.	Assurance Body provides: • Assurance Report
CRU Decision	Assurance Body provides: • Completion Letter sent to Small Supplier and RMDS
Assurance Complete	

SELF-SUPPLIER/DEMAND-SIDE UNIT/EXPORT ONLY SUPPLIER MARKET ENTRY ASSURANCE



REQUALIFICATION



MARKET DESIGN CHANGES

Assurance Stages	Inputs / Outputs
Process Trigger	
The CRU approves and IGG provides: • List of MCR's in release • MCR Details	Assurance Body provides: • Assurance approach and Strategy • Self-Assessment Documents: ✓Participant Questionnaire ✓SAR • IPT Scenarios RMDS propose test service slot for IPT execution. IGG discusses and agrees Assurance documents and IPT test slot.
Assurance Delivery	
<u>Self-Assessment Review</u> The Assurance Body assesses preparedness of Market Participants based on Self-Assessment Documents and supporting evidence received. Formal assessments are included as necessary as part of the Participant Self-Assessment review.	Market Participants provide: • Participant Questionnaire • SAR • Process Evidence • Preferred timing for their IPT execution. RMDS schedules IPT Slots per participant. Assurance Body notifies RMDS of Market Participants that are prepared for IPT.
<u>Inter-Participant Testing</u> Market Participants execute IPTs in conjunction with RMDS. Market Participants and RMDS gather evidence and pass to Assurance Body.	Market Participant provides: • IPT Evidence
<u>Report to CRU</u> Assurance Body assesses IPT evidence and writes final report indicating the assurance completed and any outstanding issues.	Assurance Body provides: • Go / No-go recommendation
<u>CRU Decision</u>	RMDS provides: • Go / No-go decision notified to Market Participants • Cut-over and Go-live
Assurance Complete	

ASSURANCE APPLICABILITY SUMMARY

Assurance Type	Assurance Document			Assurance Stage			
	Application Form	Questionnaire	SAR	BSA	ITA	Process/Records Review	IPT
New Entrant							
Large Supplier	✓	✓	✓	✓	✓	×	✓
Small Supplier	✓	✓	✓	×	×	✓	✓
Self- Supplier/ DSU/Export Only	✓	✓	×	×	×	×	×
New Segment (s)							
Large Supplier	✓	✓	✓	✓	✓	x	✓
Small Supplier	✓	✓	✓	✓	✓		
Requalification							
Small to Large Supplier	✓	✓	✓		✓	x	✓
Material Change	✓	✓	Dependant on risk assessment of Material Change				
Market Design Changes							
Large Supplier	×	✓[2]	x	x	x	x	✓
Small Supplier	×	✓[2]	x	x	x	x	✓[3]
Central Systems TSO	×	✓[2]	x	Site visit[4]		x	✓

[2] Bespoke Questionnaires will be developed based upon the content of the Market Design changes after an initial risk assessment

[3] Usually voluntary but the CRU may mandate this for fundamental updates

[4] One or more site visits are usually included, dependent on risk assessment

The Assurance Process Assessment Stages

The Market Design baseline contains the requirements to which the Market Participant's processes and systems must comply for inter-operation in the Market. The Assurance process stages are described below.

These stages are applicable to different assurance situations. In some cases, the stages may be combined, the depth of assessment reduced or increased, or they may be omitted. Notwithstanding this, the underlying techniques of assurance still apply, and an understanding of these techniques will help to smooth the Assurance Process and potentially reduce timescales.

BUSINESS SOLUTION ASSESSMENT (LARGE SUPPLIER)

The aim of the BSA Stage is to gain assurance that the Market Participant's systems and processes have been or are being designed and built in such a way that they will meet the requirements of the Market Design. The BSA also looks at management procedures (see below).

The BSA Stage should take place at an early stage in the lifecycle of the new entrant's project so that any resulting revisions to the requirements or design can be incorporated prior to system build/procurement.

Market Participants are required to document their business processes and system designs to the extent necessary to demonstrate compliance with the Market Design baseline. A Participant Questionnaire (PQ) and a Self-Assessment Return (SAR) containing a checklist of requirements are provided for completion and returned to the Assurance Body, together with the formal process and design documents. The Assurance Body will carry out an assessment of information provided and may follow with a site visit in some instances to gain a fuller understanding of the Participant's design, especially where there is a significant degree of automation involved.

Key areas of assessment will include:

- compliance with the Market Design,
- systems architecture,
- system functionality vs. business procedures,
- coherence of procedures and systems,
- message processing and validation,
- test planning and management,
- problem management, and
- change and configuration management.

Any issues identified are formally documented as areas of concern, and the Market Participant is expected to propose and agree corrective actions. The results of the actions are then verified. An outcome report is produced on completion of the BSA, which is sent to the new entrant and RMDS for information. If corrective actions are completed in a timely manner, then a positive outcome can be reported. Otherwise, the report will be updated on completion of the corrective actions.

BSA Documents Required

The Participant is required to provide the following prior to the commencement of BSA:

- A plan for their project that shows all their Assurance stages and the project activities on which they depend. Timings must be appropriate for those dependencies. The plan may be included within a more comprehensive project plan.
- A completed Application Form, with the declaration signed by an appropriate company executive.
- For Large Suppliers, the BSA section of the Participant Questionnaire.
- A Self-Assessment Return (SAR)[5] with:
  - the message routing worksheet completed except for test references; and
  - all other worksheets fully completed.
- Satisfactory responses to requests from the Assurance Body for clarification on the above items.
- A start date and duration agreed with the Assurance Body.

The Participant is required to provide the following on commencement of BSA:

- a copy of all documented business processes and detailed instructions referred to in their SAR,
- a copy of all systems specifications and design documents referred to in their SAR,
- a definition of the records that the Participant intends to maintain,
- a copy of the schematics of system architectures of all systems referred to in their SAR, and
- an organisation chart of their organisation and of their project.

BSA Exit Criteria

The Business Solution Assessment stage is completed when the Assurance Body has closed all areas of concern following resolution by the Participant.

Closure of all areas of concern is not a mandatory entry criterion for any other Assurance stage. However, the nature of a specific concern may mean that it must be closed before some other stage of Assurance can be commenced.

[5] Provided by the assurance body, noting the expectations for the Participant to complete.

INTEGRATION TEST ASSESSMENT (LARGE SUPPLIER)

The Integration Testing Assessment (ITA) Stage follows the BSA Stage.

Internal testing by each applicant is an essential and required activity to ensure compliance with Market Design requirements. ITA should be carried out soon after completion of the Participant's internal testing, with the prime objective of verifying that the Participant has carried out satisfactory testing of their systems and processes. The ITA Stage verifies that:

- Testing has included a set of end-to-end, integrated tests that cover the Market Design functions. This may be referred to as Integration Testing, Acceptance Testing, User Acceptance Testing, Functional Testing, or some other term.
- The testing programme is complete.
- The test outcomes have been reviewed by a competent person.
- Any problems have been fixed and re-tests run as required.
- Results show that the processes and systems are functioning as expected.

There is a section of the Participant Questionnaire to be completed for ITA and test references should be added to the SAR in advance of the ITA Stage commencing. An assessment will then be carried out, usually based on evidence provided to the Assurance Body at its offices.

Any issues identified are formally documented as areas of concern and the Participant is expected to propose and agree corrective actions. The results of the actions are then verified. Gemserv provides written confirmation of the outcome, any corrective actions to be taken, and the next steps on completion of the ITA Stage. If corrective actions are completed in a timely manner, then a positive outcome can be reported. Otherwise, the report will be updated on completion of the corrective actions.

ITA Entry Criteria

The Participant is required to meet the following entry criteria prior to the commencement of the ITA Stage.

The Participant must:

- have completed the BSA Stage,
- have no outstanding Findings from the BSA Stage whose correction would require any internal integration tests to be repeated,
- have completed internal Integration testing,
- have submitted the following documents to the Assurance Body prior to the assessment:
    - the ITA section of the Participant Questionnaire, and
    - the SAR updated to include test references,

- have responded satisfactorily to requests for clarification from the Assurance Body on the above, and
- have agreed a start date and duration with the Assurance Body.

ITA Documents Required

The Participant is required to provide the following on commencement of the ITA Stage:

- a copy of the versions of all documented business processes, detailed instructions, systems specifications, records details, architectures, and organisation charts that were used as the basis of internal integration testing,
- copies of schematics of system architectures, if changed,
- project and company organisation charts, if changed, and
- a complete set of internal Integration test scripts and test results.

ITA Exit Criteria

The ITA Stage is completed when the Assurance Body has closed all areas of concern produced during ITA following resolution by the Participant. The closure of all areas of concern is not a mandated entry criterion for any other Assurance stage. However, the nature of a specific concern may mean that it must be closed before some other stage can be commenced.

ITA Notes

- Test evidence is inspected on a sampling basis to obtain a level of assurance that Integration Testing has been carried out in an effective manner.
- The Participant's test plan must include tests that, in total, exercise a substantial range of Market scenarios sufficient to prove the robustness of the Participant's processes.
- Test execution must follow the Participant's defined business processes.
- Tests must be executed in a fully integrated environment. Where processes are carried out on behalf of the Participant by a third-party service operator, these must be included in the tests.
- Test evidence must include prints or electronic copies of the messages involved as well as 'before' and 'after' screenshots of screen, database, or other relevant record types to indicate that appropriate actions have occurred, and that data is contiguous throughout the test.
- Test results must be collated and indexed so that it is clear to which test and test step evidence relates.
- Where the SAR references manual business processes, these must be exercised wherever they form part of a test scenario. Any documents that would normally be produced in normal business operations must be produced and retained as evidence (e.g., letters or contracts). Simulations are acceptable.

PROCESS & RECORDS REVIEW (SMALL SUPPLIER)

In this stage the supplier's business processes and record-keeping procedures are reviewed to verify their adequacy to support small-scale operations in the Market. Successful completion of this stage is an entry criterion for Inter-Participant Testing.

As a minimum the following should be covered:

- all applicable market processes (e.g., Change of Supplier processes, Meter Readings),
- the order of events for each of these,
- the population of outgoing Market Messages, including the source for populating data items,
- the processing of data from incoming Market Messages, including use of incoming data items for updating internal records, and
- the maintenance of appropriate records to support the above.

Process/Records Review Entry Criteria

In order that the Assurance Body may commence the Process/Records Review Stage the Participant is required to:

- have defined the records that they intend to maintain for the purposes of supporting their registered metering points,
- have documented all their market-facing business processes, and
- submit the above along with the following documents, duly completed, to the Assurance Body:
  - the Small Supplier Questionnaire, and
  - the Self-Assessment Return (SAR) (test references do not need to be completed as they will not be applicable to a Small Supplier).

Process/Records Review Exit Criteria

The Process/Records Review Stage can be considered complete when:

- the Assurance Body has completed its review, and
- any Findings have been satisfactorily addressed by the Participant.

INTER-PARTICIPANT TESTING (LARGE AND SMALL SUPPLIERS)

The purpose of Inter-Participant Testing (IPT) is to gain assurance that the 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 utilising the full Market technical infrastructure. Some operational time constraints may be relaxed.

The scenarios to be exercised are defined in the form of descriptive storyboards and are approved by the industry for this purpose. This technique uses a central test service which is provided by ESB Networks; the set-up of this is co-ordinated by RMDS. This is available coincident with pre-planned market testing or otherwise at about a month's notice, and therefore planning and co-ordination are essential for managing:

- the schedule for testing, including any re-tests,
- the creation of test data, and
- problem processing.

The tests are run by the Participant and ESB Networks, coordinated by RMDS. Both the Participant and ESB Networks produce appropriate evidence of each test step to support the test outcomes. This will include, but is not limited to, message prints, screenshots, reports, and file, and database prints.

All evidence is sent to RMDS, who will collate the evidence and forward to the Assurance Body on a step-by-step basis. The Assurance Body will assess the evidence as it is received and compare it with the expected results. Any discrepancies will be reported. Any tests that fail will need to be re-run. However, the Assurance Body will, where practicable, discuss options with the Participant and RMDS to try and find a pragmatic way forward. Issues, follow-up, and reporting are documented and dealt with in the same manner as in previous stages.

IPT Entry Criteria

In order to commence Inter Participant Testing the Participant is required to:

- have completed all preceding stages of the Assurance Process applicable to them; and
- have no outstanding areas of concern that would affect the outcome of a test scenario,
- submit the following documents to the Assurance Body prior to the start of execution:
    - the IPT section of the Participant Questionnaire (Large Supplier only), and
    - a fully completed and up-to-date SAR, where this has changed from the end of the preceding stage,
- respond satisfactorily to any requests for clarification from the Assurance Body following receipt by them of the above,
- agree a plan for scenario execution with RMDS, and
- agree and/or validate with RMDS the data to be used during the scenario execution.

IPT Exit criteria

IPT may be considered complete when:

- all applicable scenarios have been satisfactorily completed,
- the Assurance Body has closed any areas of concern following resolution by the Participant, and

- all scenarios have been adjudicated as “passed” by the Assurance Body.

IPT Notes

- All scenarios must be carried out in a timely manner in accordance with the agreed schedule to avoid unnecessary delay to any other Participants involved in the testing.
- The execution of a scenario may be abandoned only with the agreement of RMDS, which will consider the impact on all Participants concerned.
- It is the Participant’s responsibility to follow the scenarios and complete all steps as required.
- The Participant must collect the relevant evidence stipulated by each scenario to demonstrate compliance with the Market Design, its business processes, and its systems, submitting this to the Assurance Body via RMDS. The types of evidence required are as for ITA above. Standing documents that have not changed do not need to be resubmitted.
- RMDS will also collect evidence and submit this to the Assurance Body.
- The Assurance Body will verify that actual results match the expected results. Where there is a discrepancy a Problem Report will be raised.

THE ASSURANCE PROCESS DOCUMENTS

PARTICIPANT QUESTIONNAIRE

The Participant Questionnaire (PQ) is a textual document that seeks to ascertain, through several questions, a high-level view of the Participant's aspirations and preparedness to operate in compliance with the Market Design or with the Market Design Release, as appropriate. The Participant is asked to respond to the questions and, where applicable, identify the evidence that supports its response. The PQ contains guidance for the types of response and evidence that is anticipated, and these should be replaced with the Participant's own text.

The PQ for some Assurance Processes has several sections, and in these situations each section may need to be submitted as an input to a stage of the Assurance Process.

SELF-ASSESSMENT RETURN

The Self-Assessment Return (SAR) is a document with several tables. It provides a concise way for the Participant to provide detailed information about its documented business processes and IT applications. The Participant can also identify where specific Market Design requirements are covered within these processes and/or systems and where they have been tested.

ASSURANCE APPROACH (MARKET DESIGN CHANGES)

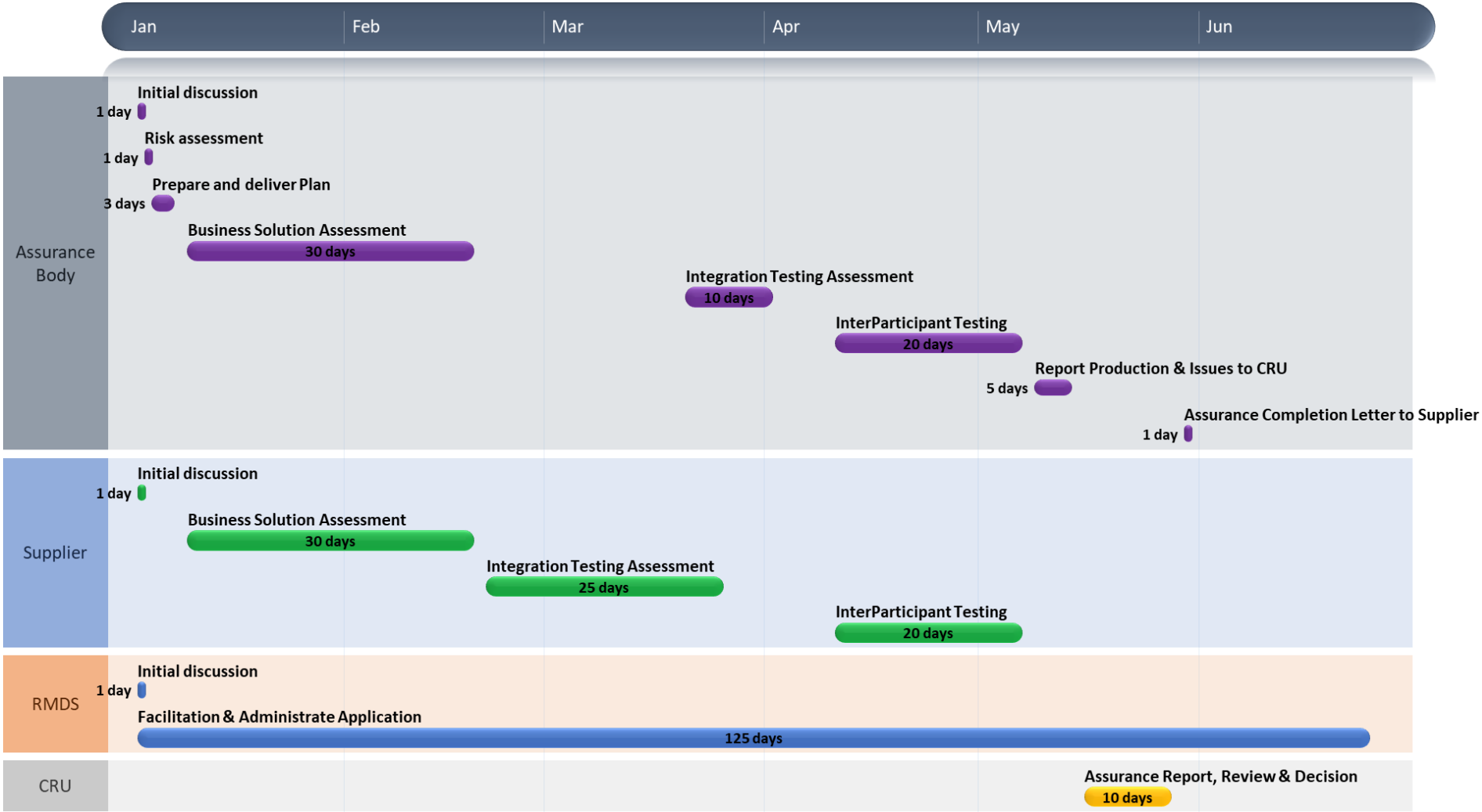
This is a document produced by the Assurance Body. It sets out the how the assurance is to be achieved for an impending Market Design change. It will include the techniques to be used (e.g., questionnaire, SAR, IPT and, where IPTs are proposed, a descriptive title for each).

ASSURANCE PROCESS TIMESCALES

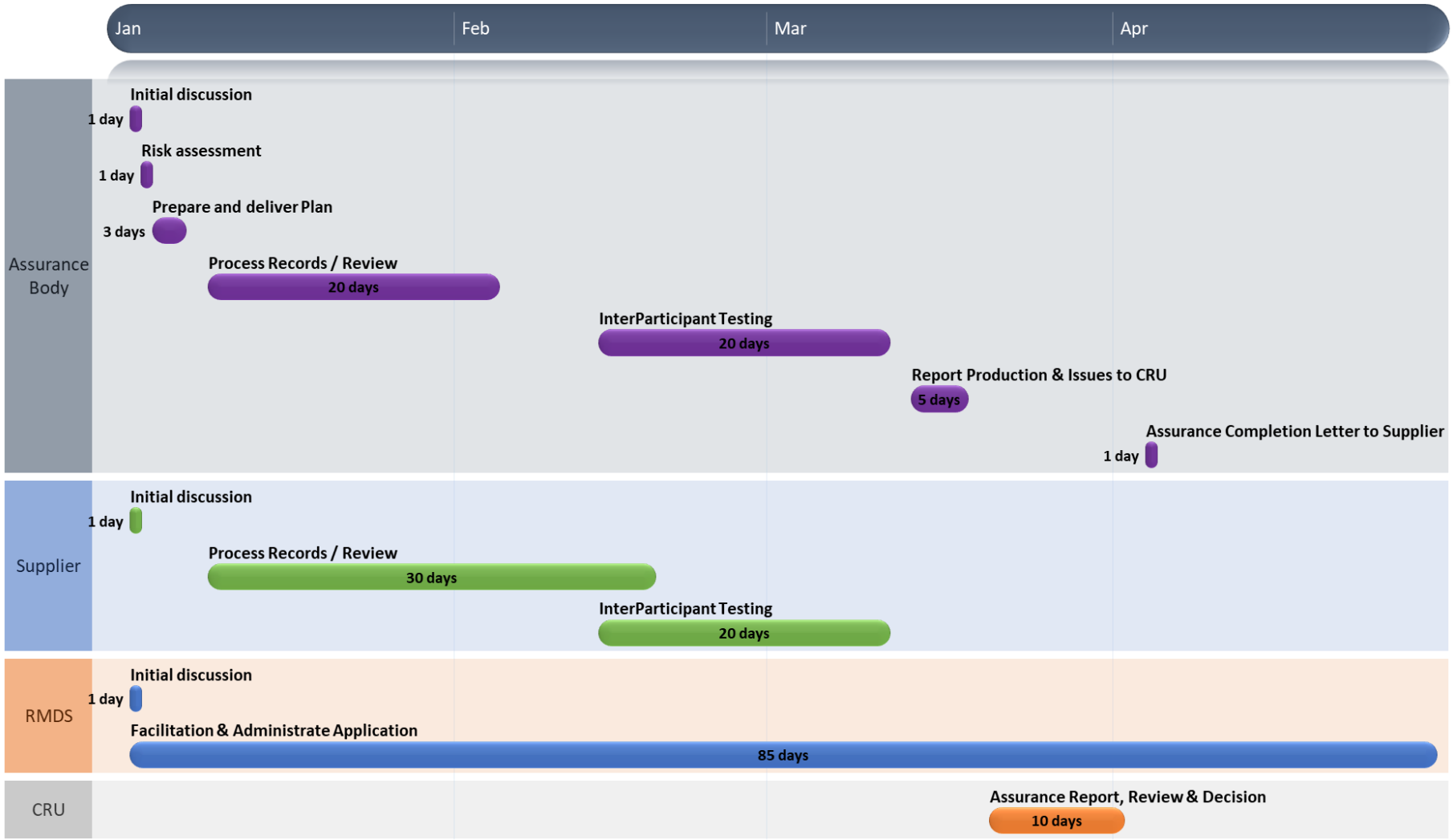
The following timescales are provided only as a very general guide for outline planning purposes in relation to the Market Entry Assurance activities, each individual application will have its own unique requirements and where the process involves other parties there will be dependencies on availability of systems.

These timescales also do not include the time needed for readiness activities by the Participant (of business processes and/or designs, applications, test plans etc.). It is estimated that the process of Market Entry is typically six to nine months from giving notice of Entry. Each Participant is strongly advised to discuss their circumstances with RMDS no later than the notice period stated below:

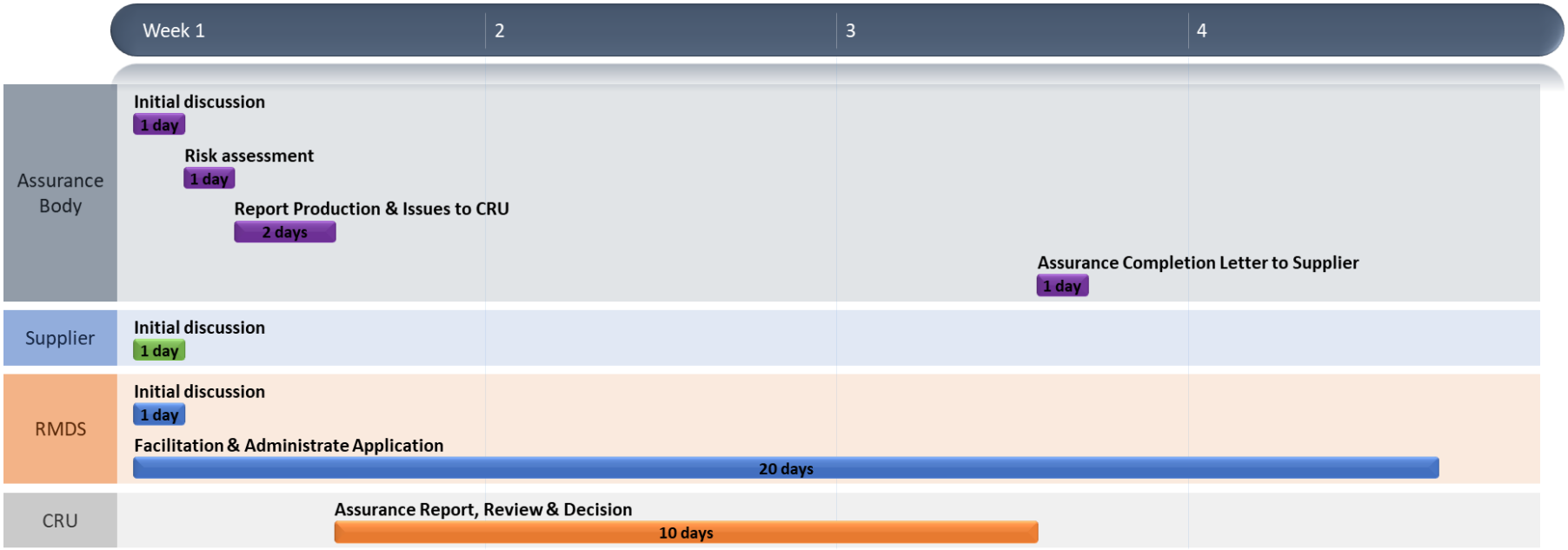
MARKET ENTRY/ENTRY TO ADDITIONAL MARKET SEGMENT (LARGE SUPPLIER)



MARKET ENTRY/ENTRY TO ADDITIONAL MARKET SEGMENT (SMALL SUPPLIER)



SELF-SUPPLIER/DEMAND-SIDE UNIT/ EXPORT ONLY SUPPLIER MARKET ENTRY ASSURANCE



ADDITIONAL CONSIDERATIONS

REQUALIFICATION ASSURANCE

Material Change

When existing Participants make a Material Change to their systems or exceed defined thresholds, they will be subject to Requalification to assure ongoing compliance with the Market Design.
Participants should contact RMDS as soon as it has been determined that the change is, or may be, material, so that an assessment of the Requalification requirements can be made. As a minimum, Participants are required to inform RMDS of a Material Change through submitting the Requalification for Material Change Application form and questionnaire as early as possible once a change is identified, and no less than 40 working days before the proposed implementation date.

The Assurance Body will complete an initial review of the Requalification questionnaire and within five Working Days contact the Participant to arrange a meeting to discuss the requisite Assurance requirements. Please note that it is changes to systems, processes and staff that determine whether a change is Material. The table below gives examples of typical events that may require Requalification. A change to any one of these may be Material, and a combination of changes in any one of these areas that are not of themselves material individually may also be Material.

Types of change	Not Likely	Possibly	Very Likely
System Change	Change to non-industry-facing system (e.g., pure billing system)	Significant change to industry-facing system	
		Replacement of industry-facing system with established, proven system	Replacement of industry-facing system with a new, unproven system.
	Change to user interface		Replacement of EMMA with other message interface mechanism
	Bulk migration of industry data (e.g., moving from one site or database to another, or moving from hardware to cloud) using industry processes		Bulk migration of industry data but not using industry processes
Process Change	Process updates for improvement of accuracy and clarity	Manual industry-facing process replaced by automated process	Multiple industry-facing manual processes replaced by automated processes
	Minor process changes to reflect changing reporting structure or internal company policy	Process updates for improvement of accuracy and clarity	Major rewrite of process
Staff Change	Routine staff turnover	Multiple changes to key staff due to internal reorganisation or acquisition of/by new company	Relocation, reorganisation, acquisition or change in service provider resulting in total staff replacement
Threshold[6]	Increasing level of activity within the threshold	Activity oscillating around the threshold (usually within 10%)	Planned growth that will result in activity permanently in excess of the threshold

TABLE 1: TYPICAL MATERIAL CHANGES AND IMPACTS

[6] For Small Suppliers only

The approach is one of verifying that "due diligence" has been applied by the Participant. Thus, the assurance will comprise checking that the Participant has:

- carried out an impact assessment for the change,
- designed the change(s) and subjected it to independent internal review,
- implemented and tested it, and
- planned for its introduction into the live Market.

Where Inter-Participant Testing is required, this is supported by ESB Networks' central test service, which is provided through RMDS and is available coincident with pre-planned Market testing or otherwise at a minimum of a month's notice. Many changes will not require this type of testing, and the assurance for most changes can take place at any time.

Assessment for changes under the Requalification process may comprise some or all the assessment stages under the Market Entry assessment process. However, such assessment will be contingent on the nature of the change and may place greater emphasis on change and configuration management. The following Requalification activities apply where the Requalification process is triggered by a change:

- Initial discussions between the Participant and the Assurance Body regarding the planned changes and any potential assurance requirements.
- Agreement of an assurance plan between the Participant and the Assurance Body. The objectives should be such that:
    - as far as practical, assurance review points should coincide with an appropriate subset of project review points,
    - appropriate documents defined within the Participant's project will often provide any required evidence, so that there may be no need to carry out additional activities and prepare additional documentation solely for the purpose of achieving the necessary assurance requirements, and
    - for large programmes of work, it may be appropriate to sub-divide the work into two or more Requalifications as agreed between the Assurance Body and the Participant; and
- Carrying out and completing the agreed plan.

Completion of Requalification will be when:

- all the planned assurance activities have been completed and all Findings closed by the Assurance Body,
- the Assurance Body's evaluation report has been received by the CRU, and
- the CRU has approved the implementation of the change prior to the change becoming operational.

Inactive Supplier becomes active

A Supplier who gained approval for Market Entry but who has not connected to the live central systems and, in the period since approval, one or more Market Design Releases have been completed, will be subject to Requalification before it may commence operation. This will involve the Supplier being asked to demonstrate compliance with the current Market Design Release, essentially requiring the Supplier to carry out Assurance activities already completed by active Market Participants at the time of the current and any intervening releases.

Re-Qualification triggered by thresholds (for Small Suppliers only)

The Requalification process will normally comprise some or all of the techniques under the Market Entry assessment process. However, such assessment will be contingent on the targets in the Participant's business plan. Where the Supplier plans to exceed the current threshold, the Large Supplier Market Entry Assurance Process will apply and, following successful completion of this and approval by the CRU, the Supplier will then be classified as a Large Supplier.

Where the Participant is also introducing a Material Change, which may well be the case in an expanding business and very likely where the Large Supplier approach is applicable, the assurance for the Material Changes will be carried out in parallel. These will depend on the nature of the changes to business processes and systems, the planned volume of registrations and other pertinent factors. In this way, the Participant will be subject to only one assurance programme.

The following Requalification activities will apply:

- initial discussions between the Participant and the Assurance Body regarding the planned changes and any potential assurance requirements,
- agreement of an assurance plan between the Participant and the Assurance Body,
- provision from the Participant of any requested supporting documentation to the Assurance Body, who will assess the requirements and propose appropriate actions based on:
    - the scope of the request,
    - the Requalification thresholds set,
    - the Participant's business plan,
    - the Participant's previous Market Entry assessment,
    - the Participant's operational experience, and
- carrying out and completing the agreed plan.

MARKET DESIGN RELEASE ASSURANCE

Periodically the Market Design is modified to adjust to regulatory changes, improvements in technology, operational processes and change requests from Participants, as approved by the CRU.

Generally several Market Change Requests are implemented together and this group of changes is known as a Market Design Release. Proposed contents for each release are presented at the Industry Governance Group (IGG) meeting, for the approval by Market Participants. This is compiled and issued by RMDS.

Participants will initiate and implement changes to their own systems for their own business purposes to align with the Market Design Release. These changes may have the potential to impact on the Participants' ability to operate non-disruptively in accordance with the Market Design.

Market Participants are therefore subject to assurance of Market Design Releases to give confidence that the changes to the Market Design will be adopted in such a way as to give confidence to the Market that the risk of disruption has been mitigated.

MARKET ASSURANCE OUTSIDE MARKET DESIGN RELEASE

Modifications or improvement to operational procedures within the Market Design or the implementation of temporary fixes (workaround(s)) for one or more Market Design business process(es) outside of a Market Design Release is an occasional but necessary undertaking within the Market.

When this occurs, the proposed changes or workarounds to be implemented are presented to the IGG for the approval by Market Participants. This is compiled and issued by RMDS.

Where the changes are assessed to have a potential impact on the Market Design, Market Participants will be subject to assurance. Participants will be required to give confidence that the proposed changes or workarounds will be adopted in such a way as to prevent disruption to the Market.

GENERAL ARRANGEMENTS

The Assurance Process for a Participant comprises a series of discrete stages, in which the compliance of the Participant's business processes and systems with the Market Design is assessed from a particular perspective using a particular technique.

Each of these stages is termed an "Assessment". These are intended to broadly map onto the major stages of the Participant's own project for readiness to operate in the Market (for example design, test and go-live). This stepwise approach helps ensure that problems can be identified as early as possible so that any corrective action can be applied by the Participant as easily and economically as possible.

There is much commonality in the general approach taken for the Assessments and this is described below.

ASSESSMENT OVERVIEW

For an assessment to be possible, the Participant must design, develop, and test business procedures and instructions, records systems and possibly IT applications to ensure that they are compliant with the Market Design. The Participant retains documentary evidence to demonstrate this. The Assurance Body carries out the Assessment by:

- examining this evidence, together with the procedures, instructions, and other related information, and comparing them with the requirements,
- reporting any discrepancies that are thereby identified, and
- following up to verify that discrepancies have been corrected.

The Assessment should be timed such that all the documents, records, and information, whether electronic or paper, will already be in existence by the time of the Assessment. Apart from test evidence produced during Inter-Participant Testing, evidence should not be created dynamically within the timeframe of the assessment.

FORMAT OF ASSESSMENTS AT EACH STAGE

Assessments are usually conducted at the Assurance Body's local offices based on the evidence provided. The Participant is not required to be present. Occasionally an Assessment may be conducted partially at the Participant's site, depending on the stage of the Market Assurance Process involved and the conditions prevailing within that stage. The process employed for all Assessments is as follows:

- Opening dialogue, which may be by meeting, phone or email depending on the circumstances. Here, the objectives, scope and procedure for the Assessment are described by the Assurance Body, and the Participant describes the structure of its systems, processes, and organisation for Market operation.

- Submission of the relevant Market Assurance returns by the Participant, analysis of these by the Assurance Body and clarification dialogues as necessary.
- Submission of the Participant's evidence for the relevant assurance stage. This may comprise (but is not limited to) documented business processes, specifications, and test results. Refer to 0 for more details.
- The execution of the tests (IPT Stage only).
- Comparison of the evidence with the current Market Design or Market Design Release and discussion with the appropriate Participant staff, during which a judgement of compliance is made by the Assurance Body.
- Documentation of outcomes is in the form of areas of concern as appropriate.
- The Participant must provide a corrective action for areas of concern raised and submit evidence to show that this has been effectively implemented. When satisfied, the Assurance Body will close the area of concern.
- There is no requirement for the Participant to respond to observations.
- Where the scale or duration of the assessment requires (mainly for a new Large Supplier), daily or periodic exchanges of information take place. These are usually referred to as checkpoint meetings and will usually take place on the telephone or electronically. At these meetings, the assessment team reports its activities, gives details of any areas of concern for the day, and requests the Participant to agree these and to propose corrective actions for all areas of concern as appropriate. The Participant is asked to report its progress, any problems and anticipated activity for the following day.
- Closing dialogue, which takes place at the end of the Assessment and at which all open areas of concern (if any) and Corrective Actions for the Assessment are formally reported to the Participant's representatives.
- The assessment stage report (for lengthy assurance programmes only) is produced by the Assurance Body, addressed to the CRU, and copied to RMDS. This will contain:
    - the scope for which the Participant/Market Participant was assessed,
    - the level of assurance applied (e.g., whether a Large or Small Supplier or Self-Supplier/DSU/Export Only),
    - the Assurance carried out,
    - the number of areas of concern raised (as appropriate),
    - any areas of concern remaining (based on areas of concern not closed), and
    - whether, in the opinion of the Assurance Body, the Participant has demonstrated compliance for the stage of Assurance involved and any impact on subsequent stages of Assurance.
- Production of the outcome report.

INVOLVEMENT OF THIRD PARTIES

A Participant may use third parties to provide specific systems and services. Third parties may also carry out partial or complete business processes on behalf of the Participant. A Participant's overall business solution for entering and operating in the Market may therefore contain a mix of internal and external systems, processes, and services.

Market Entry assurance (including the execution of IPT Scenarios) encompasses all those systems, processes and services that form part of the Participant's business solution, including any third parties. The business architecture developed by the Participant should be provided to the Assurance Body as early as practicable so that any impact on the Market Entry Assurance Process can be determined.

During the Market Entry Assurance Process, evidence of compliance is sought at all points necessary for both the design and internal testing for all systems, processes and services described in the business architecture. This means that third parties may be required to become involved in testing and to provide test evidence. Evidence from third parties must be at the same level of detail as that required from the Participant.

ASSESSMENT TEAM

The assessment team comprises one or more Assessors (usually no more than two) from the Assurance Body. If more than one, one will act as Lead Assessor and will be the main point of contact for the Participant. Similarly, the Participant is expected to provide a single point of contact to act as the primary channel for communication between the Participant and the Assurance Body throughout the assessment. This is not necessarily a full-time activity.

ON-SITE ASSESSMENTS (EXCEPTIONAL)

For any on-site assessment activity required by the Assurance Body the Participant is required to provide the following:

- ready access to appropriate Participant staff to explain to the Assessors how compliance with the Market Design requirements is demonstrated by the evidence,
- a private area in which the assessment team can work,
- use of an appropriate area for the opening meeting, the daily checkpoint and closing meeting; and
- access to an unrestricted internet connection.

If there are any difficulties in providing the above, these should be discussed with the Lead Assessor well in advance of the Assessment. The Lead Assessor should be advised of local arrangements (such as hours of work, site access arrangements/restrictions or safety and evacuation procedures).

OUTCOME REPORT

On completion of all stages of the Market Entry Assurance Processes, the Assurance Body will prepare a report summarising the outcomes of each stage of the process, the status of any areas of concern, and a recommendation on the readiness of the Participant to commence operation in the Market. This will be addressed to the CRU, with copies also sent to RMDS.

The Participant will have sight of the draft report to confirm factual accuracy prior to the Assurance Body issuing the final report to the CRU and RMDS.

ASSURANCE EXIT CRITERIA

Assurance is completed when:

- all applicable Assurance stages, as described above, have been completed and all exit criteria met,
- the Assurance Body has closed all the areas of concern raised in all stages following their resolution by the Participant(s) (corrective actions may include the necessity for further Market Entry Assurance and/or IPT activity),
- the Assurance Body has prepared an outcome report and submitted this to the CRU, with copies also sent to RMDS, and
- the CRU has accepted the outcome report and has decided to approve or not approve the Participant(s) to operate in the Market or for the Market Design update to go live.

REPORTING REQUIREMENTS

RMDS AND CRU

As co-ordinating and authorising bodies respectively, RMDS and the CRU will be kept informed of the progress being made by organisations undertaking the specific Assurance Processes. The CRU will authorise completion of the assurance undertaken and will provide an approval or rejection of the matter being assured, whether it be a new Supplier, a Market Design change or Material Changes being introduced by a Participant.

The Assurance Body will produce a report for the CRU, and a copy of the report will also be sent to RMDS. Prior to being sent to the CRU and RMDS, the Participant can request to have sight of the report to confirm factual accuracy. The Participant can also advise if it has any comments at this stage. Depending on the type of assurance, the report will include details on some or all the following:

- a description of the Assurance carried out,
- a summary of how the Participant completed each stage of the process,
- a description of the Material Change and/or change or removal of thresholds,
- how the Participant has managed the design, implementation and testing of the change or has prepared for increased traffic,
- a summary of Observations and Findings raised; and/or
- the Assurance Body's opinion.

The Assurance Body will keep RMDS informed of the timeframes. RMDS will contact the Participant shortly before the Participant's implementation date and arrange for ESB Networks to monitor the Market Messages and provide appropriate support should any issues arise in the early stages.

INDUSTRY GOVERNANCE GROUP (IGG)

The Assurance Body reports at each meeting of the IGG. The reports include an update on all active Assurance activities, such as new Suppliers entering the Market, Market Design change assurance and Requalifications. These reports are provided at a high level.

Appendix A: Glossary

Assessment

A series of activities comprising the following:

- the submission of evidence by the Participant to the Assurance Body,
- a review of the evidence by the Assurance Body to ensure systems and processes are compliant with the Market Design, and
- following this review, the provision of the Assurance Body's opinion as to what extent the Participant has met the assurance requirements for the Assessment.

Assurance Body

The organisation providing the assurance services described in this document.

CRU

The Commission for Regulation of Utilities.

DSU

Demand-Side Unit.

Finding

A formal report raised by the Assurance Body within a process stage that identifies:

- one or more aspects of the Market Design with which the Participant's business processes and/or systems are not compliant (together with the evidence that demonstrates this),
- where the evidence provided is insufficient to demonstrate compliance, or
- where the evidence is not provided in a timely manner.

The Participant must clear any Finding by means of a corrective action and provide evidence of its implementation.

Industry Governance Group

The Industry Governance Group (IGG) oversees the on-going operation of the Irish Electricity Retail Market and has representation from all organisations that are participating in the Market.

Market

The Electricity Retail Market in the Republic of Ireland.

Market Design Release

A single / collection of approved Market Change Request(s) that are to be implemented as a package.

Market Segment

A part of the consumer base that is defined by two factors:

- the type of metering (Interval, Non-Interval, Prepayment or Unmetered), and
- for Non-Interval metering, the type of consumer (Domestic or Non-Domestic).

Material Change

A Material Change represent changes to a Supplier's business or operational process or technical infrastructure (e.g., automation) which alters its' internal systems and methods of market interaction from that initially assured.

Observation

A formal report raised by the Assurance Body within a process stage that identifies:

- one or more instances where the operation of business processes or systems did not comply with the Market Baseline but where this is not judged to be a systematic error, or
- one or more aspects of the Participant's business processes that could be misinterpreted and, unless further clarity was given in the process, it would be possible that operations may not comply with the Market Baseline.

The Participant is not obliged to respond to an Observation.

Participant

For generic requirements the term ''Participant' is used to refer to all types of organisations that are operating, or wish to operate, in the Market. Where a requirement does not apply to all of these a more specific term(s) (e.g., new entrant, existing Participant) will be used.

Problem Report

A formal report, raised by the Assurance Body during Inter-Participant Testing, that identifies where a Participant's results are not those expected.

RMDS

The Retail Market Design Service is the reference point for the business processes and standards for the Electricity Retail Market in Ireland and related Market forums.

Appendix B: Assessment Evidence

The evidence that will be required to provide assurance for a project will be dependent on the scale, scope and nature of the change(s) involved. Typically, however, examples of evidence will include the following:

Change management

Evidence that the required change(s) is fully understood and a detailed plan for implementation has been constructed.

Detailed cutover plan

This plan should show how all the changes will be rolled out into the Participant's live environment. This may be through reminders to staff on the revised business process changes or how updating of software systems will be performed. (There will, in general, be a central plan including a series of timed tasks for the cutover day. This will be developed by RMDS in conjunction with Participants.)

Database/Records Definition

This is a part of the system specification and is a definition of the data held by the Participant for the purpose of supporting its market inter-operation and the structure of that data. This could be, for example, a database definition or spreadsheet layout.

Documented Business Processes

Whilst the Market Design provides a high-level view of events and actions, these are insufficient to define a specific Participant's internal processes for operating. Each Participant is therefore expected to set its internal processes out in some documentary form. Processes referenced as applicable to the Supplier's segment(s) in the SAR must be defined and documented to reflect the Participant's internal processes.

Such processes should describe, as a minimum:

- How to initiate a Market activity e.g., energise a meter. This should include the source, within the Participant's records, of any data required to populate a Market message.
- How to react to a Market event e.g., receipt of a specific Market message. This should include any updating of the Participant's records using the data from the message that has been received and any response that is required.
- Where there is automated processing there should be a definition of that automation.
- A definition of the records that are to be held to support Market-facing activities.

Business processes may be in any form, including textual, diagrammatic or a combination, and may refer to the Market Design as necessary.

Dress rehearsals

In the context of cutover, especially where a significant timescale is involved, evidence that the plan has been trialled at full scale, including all logistics considerations.

Fall-back plan

This plan should explain how operations will continue if there is a failure to implement the intended change(s). It will provide details on what workaround systems will be put in place, if any, and how the Participant will deal with other affected Participants. There will, in general, be a central plan developed by RMDS and discussed with Participants, and a plan that each Participant develops to ensure its own business continuity.

IT System Specification

For the automated elements of a Participant's business processes, this is a detailed definition that sets out where the requirements of the Market Design are to be embodied as system functions together with a definition of the Participant's database.

IT Technical Infrastructure

This is a high-level definition of the technical elements of the Participant's Market systems and would include such items as servers, message routers, communication links or applications. The intention is to describe the elements deployed for Market activities and the path(s) followed by Market Messages/market data.

Problem management

Evidence of the use of an effective problem management system, to capture and resolve issues during the implementation of the change.

Process/system changes

Evidence that the changes to the business process and systems that will be used to operate within the Market have been made. Where software solutions are being applied, information on the requirements, testing and test results will be evaluated.

Test Outcomes

A summary of the tests carried out, the outcomes of those tests and any re-tests that have taken place.

Test Plan

As a minimum, this comprises a list of all the individual tests (test cases) to be carried out and grouped as necessary. It may also set out the timing for the test runs and the allocation of resources.

Test Results

The detailed evidence from which the test outcomes are derived. At the minimum, this would include the results as recorded by the tester, perhaps on the test specification/script (see below). Ideally, and always in the case for Inter-Participant Testing, this will be supplemented by 'before' and 'after' screenshots of the state of the systems or database/records at each step.

This would include for example screenshots, database extracts or reports. Evidence should be taken before and after each test step, such that the effects of receiving a Market Message, are demonstrated and, conversely, from where the data that populates an outgoing Market Message is derived.

Test Specification/Script

A detailed specification of each test (case) including the initial conditions that need to be created, each step to be carried out, the expected results (this could be per step or overall) and the completion criteria. This can also be referred to as a 'script' and is usually formatted so that results can be recorded both stepwise and overall.

Test Strategy

A document that sets out the broad approach to testing, including, but not limited to, the types of testing to be included (e.g., factory acceptance test, system test or user acceptance test), the environments on which testing will take place, the types of staff to be involved, the test management structure and responsibilities.

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