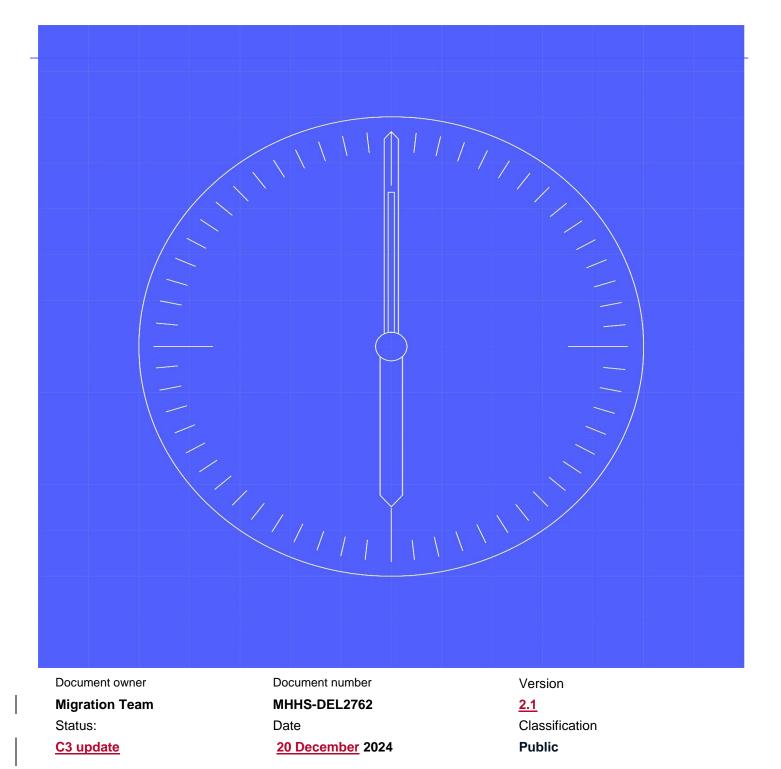


[06] Migration Governance and Escalation Framework





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1.2 Change Record

Date	Author	Version	Change Detail
13/06/2024	Migration Team	v0.1	Migration Framework Consultation 2
05/07/2024	Migration Team	V0.2	Updated following Industry Consultation Comments
20/12/2024	Migration Team	<u>V2.1</u>	Draft for Consultation 3

1.3 References

Docume	ent	Publisher	Published	Additional Information
REF-1	MHHS-DEL2426-[01] Migration Framework Foundations v2.1	Migration Team	20/12/2024 (Draft)	Migration FW
REF-2	MHHS-DEL2427-[02] Migration Framework - Principles and	Migration Team	20/12/2024 (Draft)	Migration FW
	Guidelines v2.1			
REF-3	MHHS-DEL2428-[03] Migration Capacity Calculations - Method	Migration Team	20/12/2024 (Draft)	Migration FW
	Statements v2.1			
REF-4	MHHS-DEL2429-[03a] Calculations Monitoring and Control -	Migration Team	20/12/2024 (Draft)	Migration FW
	Parameters v2.1			
REF-5	MHHS-DEL2430-[04] Migration Requirements and Processes	Migration Team	20/12/2024 (Draft)	Migration FW
	<u>v2.1</u>			
REF-6	MHHS-DEL2431-[04a] Migration Business Process Models v2.1	Migration Team	20/12/2024 (Draft)	Migration FW
REF-7	MHHS-DEL2762-[05] Migration Choreography v2.1	Migration Team	20/12/2024 (Draft)	Migration FW
REF-8	MHHS-DEL2763-[06] Migration Governance and Escalation	Migration Team	20/12/2024 (Draft)	Migration FW
	Framework v2.1			
REF-9	MHHS-DEL2764-[07] Migration Data Requirements and Reports	Migration Team	20/12/2024 (Draft)	Migration FW
	<u>v2.1</u>			
REF-10	MHHS-DEL961 – Migration Design Document v1.4	Migration Team	12/06/2024	
REF-11	MHHS-DEL953 – Data Assessment Report	Migration Team	21/02/2023	
REF-12	MHHS-DEL1128 – Migration, Cutover and Data Strategy v1.0	Migration Team	02/06/2023	
DEE 12	MHHS-DEL1648 - Migration Thresholds Document v1.1	Migration Team	20/11/2023	
NEF-13	MITTO-DEL 1046 - Migration Thresholds Document V1.1	Migration ream	<u>20/12/2024</u>	
REF-14	MHHS-DEL813 – Overarching Test Data Approach and Plan	Testing Team	19/07/2023	
REF-15	MHHS-DEL1181 – Data Cleanse Plan v2.1	Migration Team	04/06/2024	
REF-16	MHHS-DEL1792 - M15 Acceptance Criteria v1.1	Migration Team	20/12/2024 (Draft)	
REF-17	MHHS-DEL3359 – Terminology and Glossary v2.1	Migration Team	20/12/2024 (Draft)	Migration FW

1.4 Terminology

Please see REF-17 MHHS-DEL3359-Terminology and Glossary v2.1

2 Introduction

2.1 **Purpose of the Document**

This document sets out the Migration Governance and Escalation Framework overseen by the Migration Control Centre (MCC) during the execution phase of the Migration between Milestones M11 and M15.

The Migration Governance and Escalation Framework is required to ensure that Suppliers adhere to their migration plans and baselined Migration schedules within the MCC framework.

The Migration Governance and Escalation Framework will enable the MCC to govern and enact measures and interventions as defined in this document.

Note: The Migration Governance and Escalation Framework should not be confused with the BSC MHHS Governance. Framework

This document outlines the following:

- Migration Governance Framework Scope
- Migration Governance Framework Requirements
- Migration Governance Framework Approach
- Migration Governance Escalation Framework
- Thresholds and Tolerances
- Other Escalation Triggers
- Incident Triaging and Classification
- •
- Migration Governance Meetings and Reporting

This document, and supporting documents as listed in the References section, form part the MHHS Migration Plan that details the obligations, as defined in Section C12 of the Balancing and Settlement Code Section C, that defines the obligations on MHHS Market Participants relating to participation in the Migration of MHHS Metering Systems.

Where values for Parameters are defined within this document they are for illustrative purposes. The definitive source for the Parameter values is:

- REF-4 MHHS-DEL2429-[03a] Calculations Monitoring and Control Parameters v2.1
- —Also refer Capacity Calculation Methodology in REF-1 MHHS-DEL2426-[01] Migration Framework Foundations v2.1

3 Scope

The Migration Governance and Escalation Framework scope covers deviations from baselined Supplier Migration Plans as a result of behaviours which are not as a result of external factors such as Central Systems issues. A Triage process shall be identified to address incidents in order of magnitude. Suppliers and Agent Incidents shall be reported and monitored.

The scope does not cover Operational Performance of Central Services or Registration Services. Central Services and Registration Services have existing SLAs and KPIs and are therefore out of scope. The MCC will, however, require reports from those parties, in a timely manner, to actively monitor the Migration and ensure Migrating Parties have resources to meet their Migration needs.

4 Migration Governance Framework Requirements

The Migration Governance Framework has several requirements where Suppliers are not complying with their Migration Schedules.

4.1.1 Tracking

The MCC shall track deviations from Baselined Supplier Submissions at Supplier Market Participant Identifier (MPID) and LDSO MPID.

4.1.2 Random Fluctuations against the Supplier Baselined Submissions

Random fluctuations shall be monitored by the MCC but will not trigger any actions by the MCC should they remain within the tolerances. Random fluctuations in completed Migrations against the schedules are expected due to a number of issues including migrations that have failed due to data issues or other unexpected situations.

4.1.3 Reporting of Migration Issues

Migration issues that are likely to cause significant migration shortfalls shall be reported by Participants immediately such that the unused capacity can be re-allocated to other Suppliers.

4.1.4 Tolerances

Tolerances shall be defined against which Supplier migrations will trigger escalations to correct/ adjust the Suppliers migration status.

4.1.5 Escalation Processes and Consequences

The Migration Governance Framework shall set out how such escalations are treated when poor Supplier performance is identified.

The Migration Governance Framework shall set out the governance relating to different levels of poor performance.

4.1.6 Migration Governance Equitability

The Migration Governance Framework shall apply to all migrating parties regardless of their size.

The Migration Governance Framework will not distinguish between Suppliers that have been issued Submission Envelopes and deminimies Suppliers.

4.1.7 MCC Interventions

The Migration Governance Framework shall set out the interventions that the MCC will have to enact on migrating Party performance issues.

5 Governance Framework Approach

5.1 Process

The framework has the following 'TIER' process:

- Track
- Inform
- Evaluate
- Rectify

5.2 Track (T)

The Migration Control Centre (MCC) is responsible for continuously tracking and analysing suppliers' migration performance against their submitted and approved migration plans.

The MCC will develop automated tools within the Migration Planning and Modelling Tool (MPMT) to flag discrepancies between planned and actual migrations. The tracking will be undertaken across all Migration participants and analysis of root cause will be undertaken where significant deviations are identified.

The MCC will track the number of initiated, failed and completed migrations. See

- MHHS-DEL2426-[01] Migration Framework Foundations v2.1
- MHHS-DEL2764-[07] Migration Data Requirements and Reports v2.1

Objective: To continuously monitor and compare Suppliers' planned migrations against their actual migration submissions.

Steps:

- Daily monitoring of migration data submissions.
- Identification and reporting of any deviations from planned migrations.
- Aggregation, analysis and reporting of deviations over-time to identify patterns of deviations

The MCC will track Supplier Migration Performance and deviations from the plan as follows:

- Deviations from Supplier submitted daily migration plans compared to supplier actual daily submissions.
- Deviations against Migration Plans are tracked at both a Rolling Daily Cumulative Level and Daily Level:
 - Large Daily deviations that could cause immediate breach of LDSO and Supplier Migration Thresholds as set out in Error! Reference source not found. or that could result in lost migration capacity.
 - Small Daily deviations may not cause significant impacts but the cumulative impacts could mean a Party may not achieve their Migration Plan.
- Deviations will consider pre-agreed migration tolerances before triggering the defined escalation process.

5.3 Inform (I)

Suppliers and Migration participants will be required / mandated to proactively report significant shortfalls in migration that could affect overall schedule adherence immediately to the MCC as soon as they become aware.

The MCC and MPMT shall triage reported incidents from Migration Participants and facilitate the reporting of such incidents and automatically escalate them based on predefined criteria.

Objective: For suppliers to proactively report expected deviations from their planned migrations, and reasons for actual deviations enabling adjustments and capacity reallocation for the current migration sprint.

- Suppliers submit immediate notifications to the MCC regarding any deviations, expected and actual.
- Log reports

5.4 Evaluate (E)

The MCC expects fluctuations in a Suppliers' migrations against their baselined schedules. These may be due to factors such as portfolio churn, numbers of errors accumulated from previous submitted migrations.

- Evaluate against the defined tolerances for acceptable variances between scheduled and completed migrations.
- Variances falling outside these tolerances will trigger automated alerts within the MPMT, prompting further review for potential escalations.
- Upon triggering an escalation tolerance, the MCC shall conduct an initial review to understand the underlying causes, such as data issues or operational setbacks and use a deviation Tolerance Level as set out below. An intervention may be required if MCC deem this is appropriate.

Objective: To assess the severity of deviations based on tracked data, and reported information, and to determine the appropriate level of escalation:

- to evaluate deviations against predefined tolerances then assign a deviation severity;
- to escalate significant deviations requiring more immediate action; and
- to document and report evaluation and escalation events.

5.5 Rectify (R)

Objective: To implement measures based on the level of escalation, addressing the deviation to minimise potential loss of migration capacity and ensure fair and appropriate handling of non-compliance.

- Development of a corrective action plan, including specific measures tailored to the nature and severity of the deviation.
- Implementation of interventions and corrective actions, which shall include but will not be limited to:
 - Identification of a correction window within which it is expected the Parties will aim to get back on track against the baselined plan;
 - o re-allocation of migration capacity to other migrating Parties within the LDSO MPID;
 - o modification of future migration plans to allow rectification of shortfalls; and
 - escalating to appropriate Programme and Regulatory Governance with details of deviation and impacts/risk cause to migration milestones.
- Monitoring the effectiveness of corrective actions and making adjustments as necessary.

6 Governance Escalation Framework

6.1 Triggering an Escalation

The Governance Framework will set out three levels of daily or cumulative tolerances:

- Level 1 Minor / ad-hoc deviations;
- Level 2 Moderate deviations, recurring deviations; and
- Level 3 Significant deviations, systematic deviations or recurring non-compliance.



Figure 1 - Daily or Cumulative Tolerance Levels

Deviation tolerance levels shall be assigned based on the scale and nature of the deviation.

6.2 Tolerance Breach Level 1

Detailed Description

Minor / ad-hoc deviations

Random fluctuations where Level 2 and 3 tolerances not exceeded.

or

• Irregular/intermittent deviations / No identifiable adverse trend.

Action

• Monitor and seek clarification from Supplier and other participants in the Supplier's migration where required.

6.3 Tolerance Breach Level 2

Detailed Description

Moderate deviations, recurring deviations:

• Level 2 tolerance exceeded. See Example in Appendix A.

or

• Identifiable adverse trend.

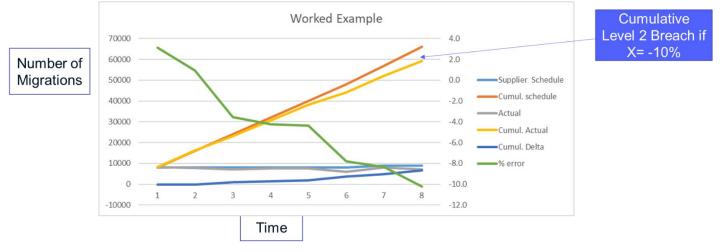
Action

• Requires enhanced additional commination / support to address underlying issues.

- Agreement of a Correction Window with the MCC.
- Capacity re-allocation (ceded capacity confirmed by Supplier).
- Report from Suppliers and other participants in the Supplier's migration on why deviations occurred.

6.4 Tolerance Breach Level 2 – Worked Example

Day/ Week	1	2	3	4	5	6	7	8
Supplier Schedule	8000	8000	8000	8000	8000	8000	9000	9000
Cumul. schedule	8000	16000	24000	32000	40000	48000	57000	66000
Actual	8250	7900	7000	7500	7600	6000	8000	7000
Cumul. Actual	8250	16150	23150	30650	38250	44250	52250	59250
Cumul. Delta	-250	-150	850	1350	1750	3750	4750	6750
% error	3.1	0.9	-3.5	-4.2	-4.4	-7.8	-8.3	-10.2





6.5 Tolerance Breach Level 3

Detailed Description

Significant deviations, systematic deviations or recurring non-compliance

• Level 3 tolerances exceeded. See Example in Appendix A.

and/or

• Regular breaches / Strong Identifiable adverse trend.

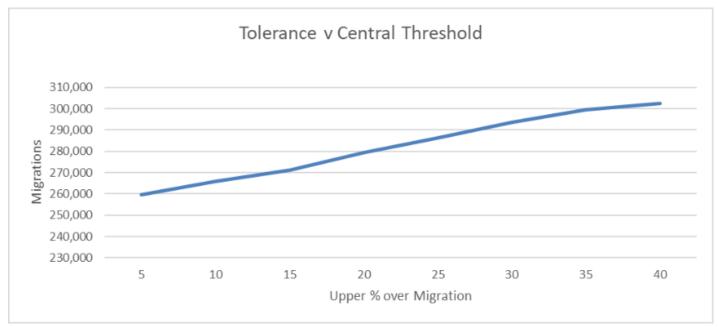
Action

- Higher level escalation to delegated Authorities/ Programme governance / Parties outside the MCC.
- Additional communication / support to address underlying issues to indicate severity.
- Mandatory remediation plans, and increased oversight.
- Capacity re-allocation to other Suppliers may be sanctioned (ceded capacity taken from Supplier).
- Reduction in future Supplier Capacity Allocation.

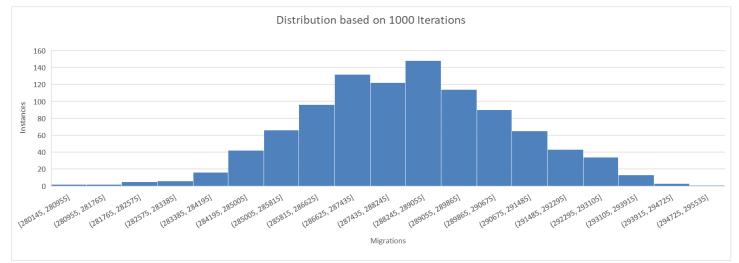
7 Tolerances

The Tolerances for escalations and the escalation routes will be set out in a later consultation.

The Tolerances need to be set to protect the Migration Thresholds that are set both centrally and at LDSO level. Modelling the impacts of both under and over Migration have been modelled by applying randomised percentages of over/ under Migrations, to the capacity envelopes, to enable the Tolerances to be set to protect the Thresholds and to ensure Migration Capacity is not wasted. Using a randomised factor of 1 to N (based on the capacity envelopes) suggests the central migration may be breached if during a peak Migration Period over migrations are between 1 and 35%.

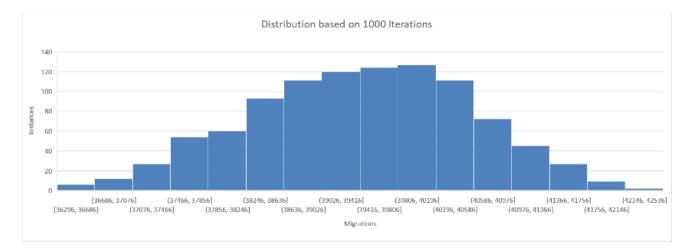


Modelling over Migrations between 5% and 25% gives the following distribution at central system level based on 1000 iterations:



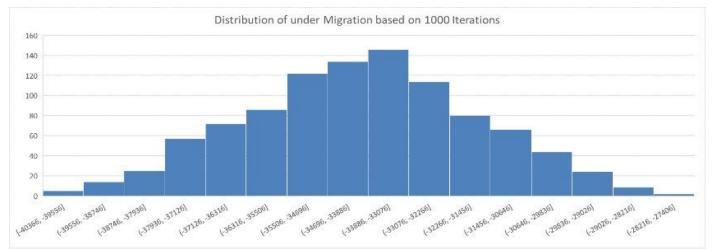
The distribution suggests that even at the lower end we would be hitting the 280,000 K Migrations per day which the MCC are setting as an upper limit for the Migration Capacity calculations. However, LDSO Migration Thresholds also need to be protected.

Modelling a Large LDSO (Migration Threshold 40,000k per day) gives the following distribution with over Migrations set between 5% and 25%:



This suggest that even at the mid-range (circa 15%) the LDSO Tolerance could be breached.

The impact of under Migration was also modelled on the same basis giving the following distribution of under Migration based on the same 5 to 25 % range:



The Migration team have considered the information from the above modelling and considered the submission levels in the initial planning exercise which showed greater excess capacity would be available than in the above modelling. <u>Therefore, the Migration Team</u> and are proposing that intending to set the initial the Migration Tolerances are set as follows:

LEVEL	TOLERANCE %	ACTION
Excess Migration Tolerance Level 1	Between 0 and +5	No action: expected fluctuation
Excess Migration Tolerance Level 2	Over +5 and less than +10	Level 2 breach contact from MCC to understand why additional unplanned Migrations
Excess Migration Tolerance Level 3	<u>>+10</u>	Escalation to appropriate governance
Shortfall Migration Tolerance Level 1	Between 0 and -5	No action: expected fluctuation
Shortfall Migration Tolerance Level 2	less than -5 and greater than -10	Level 2 breach contact from MCC to understand why additional unplanned Migrations
Shortfall Migration Tolerance Level 3	less than -10	Escalation to appropriate governance

Where Suppliers have proactively informed the MCC of L2 and L3 expected deviations, the MCC may seek to not apply the escalation measures.

The MCC will always retain the right to apply escalation measures even if Suppliers have proactively informed the MCC. The MCC will not seek to sanction parties that are acting in good faith. The MCC will not apply escalation measures if Supplier migration schedule deviations are caused by:

- DIP performance;
- DCC performance;
- LDSO performance;
- MCC intervention Request by MCC for Supplier to adjust / pause migration; and
- Ad-Hoc material issues discovered by Suppliers which require an immediate reduction or pause to their Migrations.

8 Other Escalation Triggers

This covers escalation for non-compliance with the Migration Framework

The Governance Framework will also escalate Parties for other reasons not connected to deviations from the baselined Submissions. These include:

- Escalations for disengaged Suppliers or other disengaged migration participants.
- Escalations for Parties not adhering to the Requirements, Principles and Processes in the Migration Framework.
- Escalations for Suppliers that do not provide valid Supplier Submissions within the envelopes provided by MCC.
- Escalations for failure by migration participants to report issues and incidents.
- Escalations if data quality issues are not addressed.

9 Incident Triaging and Classification

The following are the Incident Priority Classifications:

Rating	Incident Priority	Description
P0	External Disruption (Variable)	Incidents outside the standard classification due to their nature, such as natural disasters or geopolitical events.
P1	Critical	Severe incidents that cause complete service disruption to a large number of Live MHHS Migration activities or critically impact key related operations. Requires immediate, coordinated and comprehensive response efforts.
P2	High	Significantly impact the quality of Live MHHS Migration operations but do not completely halt the migration process. Requires action to prevent escalation to critical status.
P3	Moderate	Affect a limited aspect of the Live MHHS Migration activities, with moderate impact. Resolution can be planned while the overall Migration remains operational. Requires workarounds / tactical options to be deployed within reasonable timescales. More permanent fixes may be evaluated and deployed as required.
P4	Low	Minor issues that have minimal impact on the Live MHHS Migration activities. Can be resolved at the next maintenance opportunity or remain on the backlog for suitable opportunity to deploy based on value.

The incidents will be categorised as follows:

Category	Description
Operational Readiness	failures or delays in participant readiness
Compliance and Governance	non-compliance to governance or regulation
External Disruption	large-scale disruptions due to external events
Participant Performance	inadequate performance or non-engagement
MCC Performance	governance and coordination
Technical and System Capacity	technical failures or system capacity shortcomings

10 Governance Meetings and Reporting

Each Sprint will have regular MHHS Governance Meetings with Suppliers to review performance, discuss challenges, and agree on proactive steps including:

- Communication of Escalations.
- Communication of measures taken.

Details to be covered in a later consultation.

10.1 Governance and Escalation Feedback and Continuous Improvement:

The MCC will continuously refine the governance and escalation framework based on lessons learned and the evolving migration landscape, participant behaviour and migration metrics.

11 Appendix A

11.1 Level 2 Tolerance Breach Example

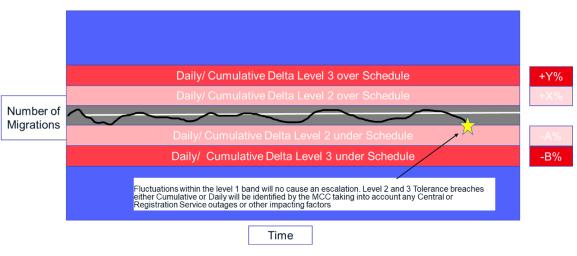
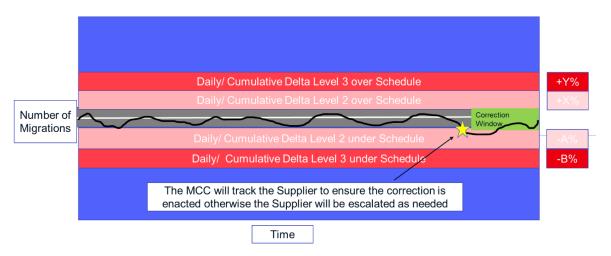


Figure 3 - Level 2 Tolerance Breach Example

11.2 Level 2 Tolerance Breach Example Correction Window





11.3 Level 3 Tolerance Breach Example

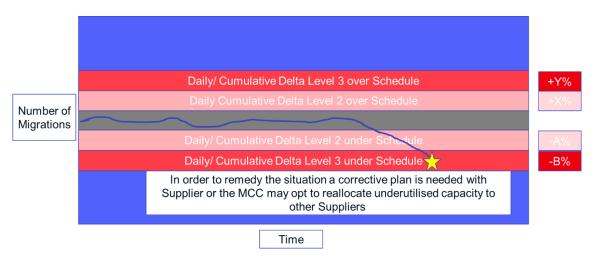


Figure 5 - Level 3 Tolerance Breach Example