MHHS PROGRAMME
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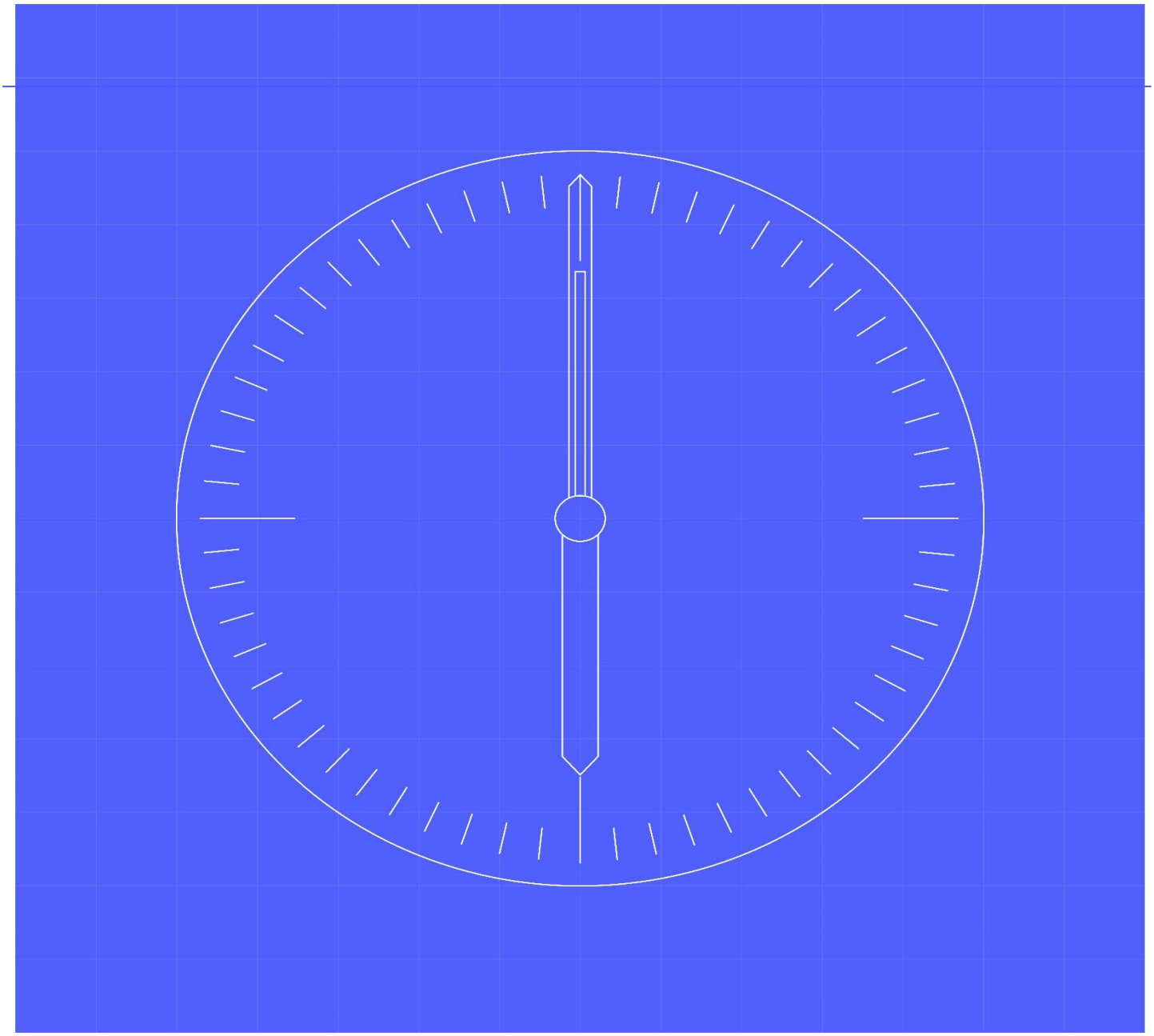
[03a] Calculation, Monitoring and Control - Parameters



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1.1 Change Record

Date	Author	Version	Change Detail
18/03/2024	Migration Team	v0.1	Draft for Industry Consultation
19/02/2024	Migration Team	v0.2	Revised Draft for Assurance Meeting
08/05/2024	Migration Team	V1.0	Version uplifted following MCAG Interim Approval
13/06/2024	Migration Team	V1.1	Draft for Industry Consultation 2
28/06/2024	Migration Team	V1.2	Updated following Industry Consultation comments
25/07/2024	Migration Team	V2.0	Version uplifted following MCAG Interim Approval
20/12/2024	Migration Team	V2.1	Draft for Consultation 3
31/01/2025	Migration Team	V2.2	Updated following Consultation 3 Industry Review
25/02/2025	Migration Team	V3.0	Interim Approved by MCAG
14/03/2025	Migration Team	V3.1	Draft for Consultation 4
11/04/2025	Migration Team	V3.2	Updated following Industry Review
29/04/2025	Migration Team	V4.0	Upversioned following

1.2 References

Document		Publisher	Published	Additional Information
REF-01	MHHS-DEL2426-[01] Migration Framework Foundations v4.0	Migration Team	29/04/2025	Migration FW
REF-02	MHHS-DEL2427-[02] Migration Framework - Principles and Guidelines v4.0	Migration Team	29/04/2025	Migration FW
REF-03	MHHS-DEL2428-[03] Migration Capacity Calculations - Method Statements v4.0	Migration Team	29/04/2025	Migration FW
REF-04	MHHS-DEL2429-[03a] Calculations Monitoring and Control – Parameters v4.0	Migration Team	29/04/2025	Migration FW
REF-05	MHHS-DEL2430-[04] Migration Requirements and Processes v4.0	Migration Team	29/04/2025	Migration FW
REF-06	MHHS-DEL2431-[04a] Migration Business Process Models v4.0	Migration Team	29/04/2025	Migration FW
REF-07	MHHS-DEL2762-[05] Migration Choreography v4.0	Migration Team	29/04/2025	Migration FW
REF-08	MHHS-DEL2763-[06] Migration Governance and Escalation Framework v4.0	Migration Team	29/04/2025	Migration FW
REF-09	MHHS-DEL2764-[07] Migration Data Requirements and Reports v4.0	Migration Team	29/04/2025	Migration FW
REF-10	MHHS-DEL961 – Migration Design Document v1.5	Migration Team	26/03/2025	Migration FW
REF-11	MHHS-DEL953 – Data Assessment Report v1.0	Migration Team	21/02/2023	Migration FW
REF-12	MHHS-DEL1128 – Migration, Cutover and Data Strategy v1.0	Migration Team	02/06/2023	Migration FW
REF-13	MHHS-DEL1648 - Migration Thresholds Document v2.0	Migration Team	25/02/2025	Migration FW
REF-14	MHHS-DEL813 – Overarching Test Data Approach and Plan v1.0	Testing Team	19/07/2023	Migration FW
REF-15	MHHS-DEL1181 – Data Cleanse Plan v4.1	Migration Team	01/04/2025	Migration FW
REF-16	MHHS-DEL1792 - M15 Acceptance Criteria v2.0	Migration Team	25/02/2025	Migration FW
REF-17	MHHS-DEL3359 – Terminology and Glossary v4.0	Migration Team	29/04/2025	Migration FW
REF-18	MHHS Early Life Support Model v1.0	Transition & Operational Readiness Team	29/04/2025	

2 Calculation, Monitoring and Control: Parameters

2.1 Introduction

This document, and supporting documents as listed in the References section, **together with the migration timetable,** form 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.

2.2 Parameters, Data Types and Descriptions

The following table sets out the Parameters that are to be used in deriving the Scaled Supplier Capacity Envelopes, the Migration Tolerances and other items to be monitored by the Migration Control Centre. The envelopes will inform Suppliers of the Capacity within which it is expected that they shall submit their Migration Schedules.

Format Key: A = Alphanumeric

N = Numeric

D = Date

Type Key: I = Input Data for calculations

D=Derived data from other parameters

MCC=Configurable parameter by the MCC

R = Reporting data

This document also provides the current values set by the MCC for the configurable Parameters.

2.3 Industry Ramp-up and Early Life Support

This document includes parameters related to Industry Ramp-up and Early Life Support. As the definition of Early Life Phases may be subject to change therefore related parameters in this document may require further updates.

See REF-18 MHHS Early Life Support Model v1.0

2.3.1 The following parameters shall be used in calculating Supplier Migration Capacity envelopes:

Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
Meter Point Counts and Party Identifiers					
LDSO	LDSO MPID	A	I	A valid Market Participant Identifier (MPID) for a qualified Licenced Distribution System Operator (LDSO) as set out in Industry Standing Data (ISD) Entity 45 for Market Participant Role Code "R".	**Data Source:** ISD and MDD
Supplier	Supplier Group MPID	A	I	A group of Supplier MPIDS for capacity envelope calculations which have to be: A valid Market Participant Identifier for a Supplier as set out in ISD Entity 45 with a Market Participant Role Code "X". Or A valid Market Participant Identifier for a non-qualified Supplier as set out in MDD (Market Participant ID with a Market Participant Role Code "X".	**Data Source:** ISD and MDD
Supplier Group	Supplier Group MPID	A	MCC	An identifier used to represent a group of Supplier MPIDs that a Supplier wishes to consolidate under a single MPID for the purpose of migration planning and execution. This allows for aggregated portfolio management and simplifies the migration process for the Supplier.	**Data Source:** Suppliers and MCC **NOTE:** - The MCC will provide their Supplier Group MPID to Supplier MPID mappings as part of their Submission Templates.
D	Migration Date	D	MCC	All dates upon which a migration will be initiated by a Supplier for a given Supplier Group MPID.	**Data Source:** MCC Migration Calendar
MWSD	Migration Window Start Date (Supplier Group)	D	I	Target or actual Migration Start date from when a Supplier will commence the Migration of its portfolio for the MPANs aggregated under the Supplier Group MPID.	**Data Source:** Suppliers and MCC **NOTE:** - All LDSOs related to the Supplier Group MPID for a Supplier will have the same Migration Window Start Date (Supplier Group). - The MCC will require confirmation of the Supplier current view of the Migration Start dates prior to Submission template generation.
IP	Initial Portfolio	N	D/R	The deemed initial Portfolio for all Suppliers in all LDSOs. Number of Trading Meter Points.	**Data Source:** EES (Recalculated for each Sprint to allow for Supplier Portfolio churn)
ISP	Initial Supplier (Group) Portfolio	N	D	The deemed initial Supplier Group Portfolio across all LDSO Regions. Number of Trading Meter Points.	**Data Source:** Suppliers (Supplier Group MPID mapping) and EES (Recalculated for each Sprint to allow for Supplier Portfolio churn)
ISLP	Initial Supplier (Group) LDSO Portfolio	N	D	The deemed initial Supplier Group Portfolio within a LDSO Region. Number of Trading Meter Points.	**Data Source:** Suppliers (Supplier Group MPID mapping) and EES (Recalculated for each Sprint to allow for Supplier Portfolio churn)

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Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
LMPC	LSDO Metering Point Count	N	D	The deemed number of Metering Points within an LDSO Region. Number of Trading Meter Points.	**Data Source:** EES
CSMT	Central Service Migration Threshold	N	MCC	The unadjusted daily Central Service Migration. Per Migration day	**Data Source:** MCC and latest MHHS-DEL1648- Migration Threshold Document **NOTE:** - This threshold may be flexed from time to time between 200K and 280K for each migration day. - All Migration Working Days with associated CSMT are defined the Migration Calendar.
LT_R	LDSO Threshold	N	D	Threshold per LDSO Registration Service / MPID given the impact that migration will have on those individual services. Upper Limit for a given LDSO Threshold Tier for the number of daily migrations permitted Per LDSO	**Data Source:** MCC (Tier definitions) and EES (LDSO sizes) NOTE: Originally based on MHHS-DEL1648- Migration Threshold Document.
LTT	LDSO Threshold Tier	N	MCC	The LDSO Threshold Tier a LDSO belongs to according to its LSDO Metering Point Count	**Data Source: Data Source:** MCC NOTE: Originally based on MHHS-DEL1648- Migration Threshold Document. **Default Values:** See below
LTT_5	LDSO Threshold Tier 5	N	MCC	LDSO Threshold **Tier 5** range and upper limit for number of Migration per day	**Default Values for** $LTT_{5:}$ LSDO Metering Point Count $Range_5$: **< 900K** LT_5: **10,000**
LTT_4	LDSO Threshold Tier 4	N	MCC	LDSO Threshold **Tier 4** range and upper limit for number of Migration per day	**Default Values for** $LTT_{4:}$ LSDO Metering Point Count $Range_4$: **>= 900K to < 1,400K** LT_4: **15,000**
LTT_3	LDSO Threshold Tier 3	N	MCC	LDSO Threshold **Tier 3** range and upper limit for number of Migration per day	**Default Values for** $LTT_{3:}$ LSDO Metering Point Count $Range_3$: **>= 1,400K to < 2.0M** LT_3: **20,000**
LTT_2	LDSO Threshold Tier 2	N	MCC	LDSO Threshold **Tier 2** range and upper limit for number of Migration per day	**Default Values for** $LTT_{2:}$ LSDO Metering Point Count $Range_2$: **>=2.0M to < 3.0M** LT_2: 30,000
LTT_1	LDSO Threshold Tier 1	N	MCC	LDSO Threshold **Tier 1** range and upper limit for number of Migration per day	**Default Values for** $LTT_{1`:}$ LSDO Metering Point Count $Range_1$: **>= 3.0M** LT_1: **40,000**

Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
DLT	De minimis LDSO Threshold	N	D	The Deminimis Threshold for LDSO Regions based on the LDSO Threshold Tier Upper Limit for the given LDSO.	**Default Value:** **150,000**
DLFC	De minimis LDSO Factor	N	D	A factor to be applied to the Central Service Migration Threshold to allow for migrations within De minimis LDSO Regions. - Per Day	**Data Source** MCC Migration Calendar, Supplier Migration Start Date, EES **Calculated:** As Per Method Statement
DLTF	De minimis LDSO Threshold Flag	A	D	A Flag used to identify LDSO MPIDs as being below the Deminimis LDSO Threshold. (DLT) Either True "T" or False "F"	**Calculated:** As Per Method Statement
DSLT	De minimis Supplier LDSO Threshold	N	MCC	A configurable De minimis Threshold for Suppliers Groups within an LDSO to be excluded from Scaled Supplier Capacity Envelope Calculations.	**Default Value:** **40,000**
DSLFC	De minimis Supplier LDSO Factor	A	D	A factor to be applied to allow capacity for De minimis Supplier Migrations within an LDSO Region. - Per day D	**Calculated:** As Per Method Statement De minimis Active **Suppliers Total** MPAN Count in LDSO/ Total MPAN Count in LDSO
DSLPTF	De minimis Supplier LDSO Threshold Flag	A	D	A Flag used to identify Supplier MPIDs as being below the De minimis Supplier Portfolio Threshold. Either True "T" or False "F"	**Calculated:** As Per Method Statement
ACSMT	Adjusted Central Service Migration Threshold	N	D	The Central Service Migration Threshold adjusted for LDSOs below the De minimis LDSO Threshold.	**Data Source:** **NOTE:**
ULMT	Unadjusted LDSO Migration Threshold	N	D	The unadjusted daily Threshold for a Distribution region as set out in the MHHS-DEL1648- Migration Threshold Documentv1.0.	**Calculated:** LT (calculated from EES data) See LDSO Tiers
RCFC	Reserved Capacity Factor	N	MCC	A Factor to be applied to the Unadjusted LDSO Migration Threshold to calculate the Reserved Capacity - Linked to Reserved Capacity and LDSO Reserved Capacity	**Default Value:** **1.02**
LRC	Reserved Capacity	N	D	A Capacity Reserved for re-tries and re-migrations where Reverse Migration has been undertaken - Per LDSO	**Calculated:** **(UMLT * RCF) – UMLT** **e.g. 800 Migrations**
LRCFC	LDSO Reserved Capacity Factor	N	MCC	A Factor to be applied to the Unadjusted LDSO Migration Threshold to calculate the Reserved Capacity - Per LDSO	**Default Value:** **1.02**
ALMT	Adjusted LDSO Migration Threshold	N	D	The adjusted LDSO Migration Threshold based upon the Adjusted Central Service Migration Threshold and the Reserved Capacity.	**Calculated:** As Per Method Statement

Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
SLSF	Supplier LDSO Scaling Factor	N	D	A configurable daily factor to be applied to the proportional Supplier Capacity Envelope within a LDSO Region. - Per Supplier Group - Per Day	**Default Values:** **Industry Ramp Up:** 0:1 (To be configured daily to meet ELS requirements per manual by MCC) **Supplier Ramp Up:** 0.1 **Core Migration Window:** 1.0 **Ramp Down**: 0.1 **Calculated:** Using: - Supplier Group Migration Start Date., - Industry Ramp Up duration - Supplier Ramp Up duration - Core Migration Window duration - Ramp Down duration
SSLCE	Scaled Supplier LDSO Capacity Envelope	N	D	The calculated proportional daily Supplier Group LDSO Capacity Envelope after the Supplier Scaling Factor has been applied.	**Calculated:** As Per Method Statement
IRUW	Industry Ramp Up Window	N	MCC	The number of [weeks] defined for the Industry Ramp Up following MHHS Programme Milestone M11. - Per Supplier Group based Migration Start Date - Bounded by MCC – Fixed end date	**Default (Calendar Period):** - **ELS End Date (13 Weeks)** -
SRUW	Supplier Ramp Up Window	N	MCC	The number of days defined for a Supplier to Ramp Up. - Per Supplier Group -	**Calculated (Calendar Days):** - **Default:22 Migration Days** **NOTE:** - **Supplier Ramp up will apply to everyone starting from the SIT non MVC date**
CMW	Core Migration Window	N	D	The number of days used for calculation of the core Migration period for the Migration Envelopes. - Per Supplier Group based Migration Start Date - Per Group based on Supplier Ramp Up period duration preference	**Calculated (Calendar Days):** **132 Migration Days**
SRDW	Supplier Ramp Down Window	N	D	The derived number of [Months] after the Core Migration Window until the Programme Milestone M15. - Per Supplier Group	**Calculated:** **Period defined by -** **M15 end date- (Ramp Up + CMW)**

Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
$RURP_{min}$	Ramp Up Range Percentage Minimum	N	MCC	For Supplier Group LDSOs: In the first month following a Supplier's migration start date the minimum percentage of MPANs that must be migrated within each LDSO Region where the Supplier has registered MPANs. This ramp up constraint will apply to Supplier's LDSO regions that are identified as following Envelope Rules or De minimis Rules.	**Default Value:** **0.05 (5%)**
$RURP_{max}$	Ramp Up Range Percentage Maximum	N	MCC	For Supplier Group LDSOs: In the first month following a Supplier's migration start date the maximum percentage of MPANs that can be migrated within each LDSO Region where the Supplier has registered MPANs. This ramp up constraint will apply to Supplier's LDSO regions that are identified as following Envelope Rules or De minimis Rules.	**Default Value:** **0.1 (10%)**
CMWCP	Core Migration Window Completion Percentage	N	MCC	For Enveloper Supplier Group LDSOs: The Target percentage of a Suppliers Migrations that are expected to have completed by the end of their Core Migration Window.	**Default Value:** **0.9 (90%)**
DDPRU	De minimis Number of Migration Days Post Ramp UP	N	MCC	For De minimis Supplier Group LDSOs: Upon successful conclusion of the Supplier Ramp Up the remaining MPANS must be migrated in no fewer than the Migration Day Minimum Migration Dates.	**Default Value:** **20 Days**
DSP	De minimis Submission Percentage	N	MCC	For De minimis Supplier Group LDSOs: The percentage of an LDSO Threshold that a De minimis Suppliers cannot exceed on any individual Migration Date.	**Default Value:** **0.1 (10%) of LDSO Threshold**
SSLPT	Small Supplier LDSO Portfolio Threshold	N	MCC	The Total Supplier MPAN count within and LDSO below which no Supplier submission constraints will be applied, in terms of numbers for Migration allowed per migration working day.	**Default Value:** **500 Trading MPANs**
EMT-L1	Excess Migration Tolerance Level 1	N	MCC	The configurable Migration Tolerance which is set to monitor fluctuations on migrations above the Supplier submission which will not result in any action by the MCC. - Per Day - Cumulative (Rolling period)	**Default Value:** **+ 5%**

Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
SMT-L1	Shortfall Migration Tolerance Level 1	N	MCC	The configurable Migration Tolerance which is set to monitor fluctuations on migrations below the Supplier submission which will not result in any action by the MCC. - Per Day - Cumulative (Rolling period)	**Default Value:** **- 5%**
EMT-L2	Excess Migration Tolerance Level 2	N	MCC	The configurable Migration Tolerance which is set to monitor fluctuations on migrations above the Supplier submission which will not result in an intervention by the MCC. - Per Day - Cumulative (Rolling period)	**Default Values:** **>+5 and <+ 10%**
SMT-L2	Shortfall Migration Tolerance Level 2	N	MCC	The configurable Migration Tolerance which is set to monitor fluctuations on migrations below the Supplier submission which will not result in an intervention by the MCC. - Per Day - Cumulative (Rolling period)	**Default Values:** **<- 5% and >-10%**
EMT-L3	Excess Migration Tolerance Level 3	N	MCC	The configurable Migration Tolerance which is set to monitor fluctuations on migrations above the Supplier submission which will result in an escalation to the appropriate governance. - Per Day - Cumulative (Rolling period)	**Default Value:** **> +10%**
SMT-L3	Shortfall Migration Tolerance Level 3	N	MCC	The configurable Migration Tolerance which is set to monitor fluctuations on migrations below the Supplier submission which will result in an escalation to the appropriate governance. - Per Day - Cumulative (Rolling period)	**Default Value:** **<- 10%**
MMID	Migration Message Initiation Date	D	R	The date of the submission of the Migration Initiation (IF031) message by a Supplier. Note: Secondary MPANs Migration Status will be based on the IF-031 message for the Primary MPAN.	**Data Source: IF031 Message:** **Message Initiation Date**
MMAD	Migration Message Appointment (Effective From) Date	D	R	The Appointment Effective Date specified in the (IF031) message. Note: Secondary MPANs Migration Status will be based on the IF-031 message for the Primary MPAN.	**Data Source: IF031 Message:** **Effective Date (Service Provider Appointment Date)**

Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
MAO_{def}	Migration Activation Offset (Default)	D	R	Calculated by the MCC in working days. The Interval between the initiation of a migration process (Migration Initiation Date) and the Appointment Effective Date. Note: • These are working days, excluding weekends and UK bank holidays, but do not account for specific Migration Non-Working Days (e.g., contract rounds). • The working days, migration days, and migration non-working days are defined in the Migration Calendar provided by the MCC. • Ensures there is a predictable number of migration appointment messages (IF036) and allows the MCC to protect network capacity in-line with the migration thresholds document.	**Default Value:** **5 Working Days**
FF	Fast Feed Back Period		MCC	A Short constrained "Fast feedback" period to allow suppliers to ensure systems stability early in an efficient manner on the Forward CoA migrations during part of their ramp-up periods only according to the specific rules. See Section "Capacity Considerations for the Initiation and Completion of Migration Messages" in REF-01 MHHS-DEL2426[01] Migration Framework Foundations v4.0	Suppliers can apply to the MCC for an extension to the Fast Feed Back Period. The MCC will consider the applications on a case by case basis and grant extensions where it is deemed appropriate.
MAO_{min}	Fast Feed Back Period - Migration Activation Offset (Minimum)	D	C	Applies to Fast Feedback Period ONLY. The lower boundary of the Migration Activation Offset range during the Supplier Hypercare sub-phase of Ramp-up. It sets the minimum number of working days allowed between the Migration Initiation Date and the Migration Appointment Date during this phase. • Enables expedited processing for testing and fast feedback loops. • Ensures rapid assessment of migration readiness while maintaining manageable volumes.	**Default Value:** **2 Working Days**

Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
MAO_{max}	Fast Feed Back Period - Migration Activation Offset (Maximum)	D	C	Applies to Fast Feedback Period ONLY. The upper boundary of the Migration Activation Offset range during the Supplier Hypercare sub-phase of Ramp-up. It sets the maximum allowable gap of 4 working days between the Migration Initiation Date and the Migration Appointment Date for this phase.	**Default Value:** **4 Working Days**
MAO_{act}	Migration Activation Offset (actual)	D	R	Outturn Measurement for MCC tracking and reporting. The Interval between the - initiation of a migration process (Migration Initiation Date) – Actual Submission of PUB31 received. - Actual completion of the Appointment Effective Date when PUB36 received. *REPORTING DATA ITEM*	**Calculated:** **Data Source: IF031 Message and IF036 Message:** ***MMAD - MMID*** **Effective Date (Service Provider Appointment Date)**
XRUF	Extended Ramp-up Flag	A	MCC	Indicates when a Supplier has successfully applied for a ramp up extension period, so the additional Ramp-up Extension period be applied in addition to their existing ramp-up period. NOTE: This is not available to Suppliers with an Industry Ramp-up period. Note: this option is only available until M14.	Default Value: False (no Supplier Ramp-up extension) True: Supplier Ramp-up extension enabled
XSRUW	Extended Ramp-up Window	N	MCC	The number of days defined for a Supplier to Ramp Up to be extended by • Per Supplier Group Note: this option is only available until M14.	Calculated (Migration Days): Default: 22 Migration Days (added to the SRUW)
XCMW	Lost Migration Days (Extended Core Migration Window)	N	MCC	The number of days confirmed by the MCC to be added to a given Supplier's Core Migration Window Per Supplier Group Note: this option is only available until M14 as Supplier migrating from M14 will only have a 6 Month Core Migration Window which cannot be extended. Additional Capacity may need to be released if Migration Days are lost post M14.	Calculated (Migration Days): Default:0 Migration Days

Abbrev	Parameter	Format	Type	Description/Comments	Date Source/Calculation / Notes / Default Value
DOF	Daily Opt-in Flag	A	MCC	A Flag that identifies that a Supplier has opted-in to providing their Migration Submissions at a daily level. There will also be an option to revert to weekly granularity at the next sprint cycle for the sprints following the sprint that is subject to daily planning.	True: Supplier has opted-in or False: Supplier has not opted-in

Note: the configurable parameters set out above will be revised and updated by the MCC once more is understood about the Qualification wave, Supplier Target Migration Start Dates, and subsequent modelling of Migration Capacity, and therefore may be the subject to change in accordance with the process in MHHS-DEL2426-[01] Migration Framework Foundations v4.0