MHHS Design Release Note
Interim Release 5.4 Release
Date: 07-02-2024

Document owner	Document number	Version
Design Team	**DEL1275**	**V1.0**
Status:	Date	Classification
Final	**07/02/2024**	**Public**

1 Contents

1.1 Change Record

Date	Author	Version	Change Detail
01/02/2024	MHHS Design Team	0.1	Initial Draft
07/02/2024	MHHS Design Team	1.0	Final version

1.2 Reviewers

Reviewer	Role

2 INTRODUCTION

These are the release notes for Interim Release 5.4 of the MHHS Design.

Use Release Notes to keep up with what's going on. Release notes provide a summary of what's new and what issues have been resolved within the design.

3 OVERVIEW

Interim Release 5.4 is a patch to Interim Release 5.

Improvements:

- Changes to correct Swagger
- Changes to correct DES138 – Interface Catalogue

Interim Release 5.4 constitutes an updated version of Swagger, which has been uplifted to address found misalignments.

The below DINs delivered the changes in Swagger.

- MHHS-DIN-874
- MHHS-DIN-878
- MHHS-DIN-879
- MHHS-DIN-880
- MHHS-DIN-881
- MHHS-DIN-882
- MHHS-DIN-887
- MHHS-DIN-889
- MHHS-DIN-894

Further guidance on the Release.

Versioning:

Interim Releases are NOT a blanket updating of all the design artefacts and models to the next release number. Each Document artefact is separately version controlled and tracked. Interim releases are a collection of updated artefacts which are updated. The version number depends on the last revision of the artefact. Thus, an interim release will publish and consists of documents at different version numbers. Some documents contain multiple models, interfaces, or report definitions which each have a version number. The artefacts' own document version number may contain different objects at different version numbers depending on the changes made to the artefact.

Versions of design artefacts with tracked changes is available on the Red-Lined Design Artefacts page.

Below are the Design Interim Releases and their corresponding Swagger Versions, including the dates of publication and the upliftment of the DIP Simulator to the related Interim Release. Additionally, there is a column to indicate the effective date of each Interim Release during Systems Integration Testing.

Interim Release	Design Interim Release Published	Swagger Version	SIT Effective From Date	DIP Simulator Uplifted
IR2	05-Jul-23	1.2	30-Oct-23	11-Aug-23
IR2.1	11-Oct-23	1.2.1	30-Oct-23	20-Oct-23
IR2.2	08-Nov-23	1.2.2	08-Nov-23	08-Nov-23
IR2.3	29-Nov-23	1.2.3	20-Dec-23	15-Dec-23
IR3	02-Aug-23	1.3	11-Mar-24	03-Nov-23
IR4	30-Aug-23	1.4	11-Mar-24	03-Nov-23
IR5	04-Oct-23	1.5	11-Mar-24	03-Nov-23
IR5.1	17-Oct-23	1.5.1	11-Mar-24	03-Nov-23
IR5.2	14-Dec-23	1.5.2	11-Mar-24	05-Jan-24
IR5.3	17-Jan-24	1.5.3	11-Mar-24	26-Jan-24
IR6	01-Nov-23	1.6	10-Jun-24	22-Mar-24
IR7	31-Jan-24	1.7	10-Jun-24	22-Mar-24
IR8	03-Apr-24	1.8	02-Sep-24	21-Jun-24

JSON/YAML:

The best online tool we recommend verify the extent of the changes is: https://www.textcompare.org/yaml/. Comparing the YAML between versions 1.5 and 1.5.4 are clearly shown.

3.1 Release Feedback

Any queries or feedback on this release or the contents of this release note please contact us via Design@MHHSprogramme.co.uk

4 Impacted Artefacts

The following table contains a list and versions of design artefacts/documents which have been updated.

Artefact	Version Number	Theme	Impact
DES-138 Interface Catalogue	**V5.5.5**	Meter to Bank, Metering Changes, MPAN Ownership	Interface corrections
MHHSPROGRAMME-DataCatalogue-1.5.4-domain.json	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-DataCatalogue-1.5.4-domain.yaml	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-DataTypes-1.5.4-domain.json	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-DataTypes-1.5.4-domain.yaml	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Interfaces-EventCodes-1.5.4-domain.json	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Interfaces-EventCodes-1.5.4-domain.yaml	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-RealCommonBlocks-1.5.4-domain.json	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-RealCommonBlocks-1.5.4-domain.yaml	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.5.4-resolved.json	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.5.4-resolved.yaml	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.5.4-swagger.json	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.5.4-swagger.yaml	**V1.5.4**	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Examples-0.3-domain.json	**V0.3**	Supporting Documents	Updated Swagger definitions

MHHSPROGRAMME-Examples-0.3-domain.yaml	**V0.3**	Supporting Documents	Updated Swagger definitions

5 Resolved Issues

All fixes Design Issue Notifications (DINs) and the Request for Change (RFCs) to MHHS Design since the last release that have been resolved in this release are included in the list below:

DIN/RFC Ref	Description	Status
MHHS-DIN-874	Consent Granularity not nullable and N - no consent	Fixed
MHHS-DIN-878	IMS-SendMTD variant for IF-035 does not contain properties B070, B071 and B019 to align with DES-138	Fixed
MHHS-DIN-879	Change B099 to be a single block rather than a list in IF-035	Fixed
MHHS-DIN-880	DI-059 Contains "MAIN" in DI-059-Meter-Type enum, should be MAIN_ to align with ISD	Fixed
MHHS-DIN-881	IF-024 missing required attributes in blocks	Fixed
MHHS-DIN-882	New swagger file ErrorCodes to describe MHHS error messages and updates to error messages in DES138	Fixed
MHHS-DIN-887	Addition of 905 existing meter listing block to all events in IF-006	Fixed
MHHS-DIN-889	Property "type: object" missing from IF-024 variants in Swagger	Fixed
MHHS-DIN-894	DI-123-SSC is nullable in IR7, needs to be the same in IR5.x	Fixed

Refer to additional change information below and the published DIN log for further information on DINs listed.

5.1 Additional Change information

5.1.1   MHHS-DIN-874

Description of change

Swagger/ DES-138 Interface Catalogue updated so that DI-838-Supplier-Proposed-Consent-Granularity and DI-017 Consent Granularity includes N - No Consent in the list of allowable values. DI-838 updated to be Mandatory no nulls. DI-838 description updated to align with the data item name in Swagger.

This DIN has two separate changes, please see screenshots below:

Before change 1:

After change 1:

Before change 2:

After change 2:

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).

5.1.2   MHHS-DIN-878

Description of change

Updated Swagger IF-035-IMS-SendMTD: to include B070, B071 and B019 as optional fields in this variant. Please refer to screenshots below:

Before change:

After change:

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).
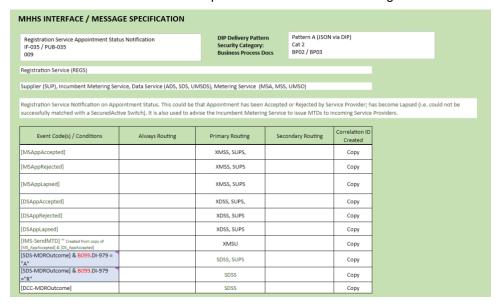
5.1.3   MHHS-DIN-879

Description of change

Updated Swagger IF-035 SDS-MDROutcome variant and made B099 a single block rather than a list. Please refer to screenshots below:

Before change:

```
5873   IF-035-SDS-MDROutcome:
5874     description: MHHS Common Block for IF-035 MDROutcome
5875     type: object
5876     additionalProperties:
5877       false
5878     required:
5879       - CommonBlock
5880       - CustomBlock
5881     properties:
5882       CommonBlock:
5923
5924
5925       CustomBlock:
5926         description: IF035 Custom data block for SDS-MDROutcome
5927         type: object
5928         additionalProperties:
5929           false
5930         required:
5931           - B012
5932           - B092
5933           - B099List
5934         properties:
5935           B012:
5936             # Service Provider Appointment Requesting Supplier
5937             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.5.4#/components/schemas/B012'
5938           B013:
5939             # CSS Switch ID
5940             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.5.4#/components/schemas/B013'
5941           B092:
5942             # SDS MDR Outcome
5943             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.5.4#/components/schemas/B092'
5944           B099List:
5945             type : array
5946             items:
5947             # Response Block
5948               $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.5.4#/components/schemas/B099'
5949
5950
```

After change:

```
5873   IF-035-SDS-MDROutcome:
5874     description: MHHS Common Block for IF-035 MDROutcome
5875     type: object
5876     additionalProperties:
5877       false
5878     required:
5879       - CommonBlock
5880       - CustomBlock
5881     properties:
5882       CommonBlock:
5923
5924
5925       CustomBlock:
5926         description: IF035 Custom data block for SDS-MDROutcome
5927         type: object
5928         additionalProperties:
5929           false
5930         required:
5931           - B012
5932           - B092
5933           - B099 # DIN-879
5934         properties:
5935           B012:
5936             # Service Provider Appointment Requesting Supplier
5937             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.5.4#/components/schemas/B012'
5938           B013:
5939             # CSS Switch ID
5940             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.5.4#/components/schemas/B013'
5941           B092:
5942             # SDS MDR Outcome
5943             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.5.4#/components/schemas/B092'
5944           B099: # DIN-879
5945             # Response Block
5946             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.5.4#/components/schemas/B099'
5947
```

This has also necessitated in an update to DES138 to the routing information for IF-035:

MHHS INTERFACE / MESSAGE SPECIFICATION

Registration Service Appointment Status Notification IF-035 / PUB-035 009	**DIP Delivery Pattern** **Security Category:** **Business Process Docs**	Pattern A (JSON via DIP) Cat 2 BP02 / BP03

Registration Service (REGS)

Supplier (SUP), Incumbent Metering Service, Data Service (ADS, SDS, UMSDS), Metering Service (MSA, MSS, UMSO)

Registration Service Notification on Appointment Status. This could be that Appointment has been Accepted or Rejected by Service Provider; has become Lapsed (i.e. could not be successfully matched with a SecuredActive Switch). It is also used to advise the Incumbent Metering Service to issue MTDs to incoming Service Providers.

Event Code(s) / Conditions	Always Routing	Primary Routing	Secondary Routing	Correlation ID Created
[MSAppAccepted]		XMSS, SUPS,		Copy
[MSAppRejected]		XMSS, SUPS		Copy
[MSAppLapsed]		XMSS, SUPS		Copy
[DSAppAccepted]		XDSS, SUPS,		Copy
[DSAppRejected]		XDSS, SUPS		Copy
[DSAppLapsed]		XDSS, SUPS		Copy
[IMS-SendMTD] ~ Created from copy of [MS_AppAccepted] & [DS_AppAccepted]		XMSU		Copy
[SDS-MDROutcome] & B099.DI-979 = "A"		SDSS, SUPS		Copy
[SDS-MDROutcome] & B099.DI-979 ="R"		SDSS		Copy
[DCC-MDROutcome]		SDSS		Copy

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).

5.1.4   MHHS-DIN-880

Description of change

Updated "MAIN" in DI-059-Meter-Type enum in swagger, to be "MAIN_" to align with ISD. Please refer to screenshots below:

Before change:

```
405    DI-059-Meter-Type:
406        description : The type of meter, in relation to its capabilities. E.g. AMR.S1, S2, S2ADE
407        type : string
408        maxLength : 5
409        example : S2CDE
410
411        enum:
412    #        - val   # Description
413            - CHECK # Check
414            - H     # Half Hourly
415            - K     # Key
416            - LAG_  # Lag
417            - LEAD_ # Lead
418            - MAIN  # Main
419            - N     # Non-Half Hourly
```

After change:

```
405    DI-059-Meter-Type:
406        description : The type of meter, in relation to its capabilities. E.g. AMR.S1, S2, S2ADE
407        type : string
408        maxLength : 5
409        example : S2CDE
410
411        enum:
412    #        - val   # Description
413            - CHECK # Check
414            - H     # Half Hourly
415            - K     # Key
416            - LAG_  # Lag
417            - LEAD_ # Lead
418            - MAIN_ # Main # DIN-880
419            - N     # Non-Half Hourly
```

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).

5.1.5   MHHS-DIN-881

Description of change

DIN-811 missed IF-024-SN-NoComms needing the correct required attributes field set, therefore have updated swagger to include relevant changes. Please refer to the screenshots below:

Before change:

After change:

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).

5.1.6   MHHS-DIN-882

Description of change

New swagger module "ResponseCodes" has been created to capture all the different response codes. Please refer to screenshots below:

After change:

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).

5.1.7 MHHS-DIN-887

Description of change

Add B905 (existing meter listing) block to the IF-006 [MeterRemoval] variant so that all IF-006 event codes have this optional block. Please refer to screenshots below:

Before change:

After change:

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).

5.1.8 MHHS-DIN-889

Description of change

Property "type: object" missing from IF-024 variants in Swagger. This needs to be added to all variants where this is missing. Please refer to details and screenshot, example, below for change:

The line "type: object" has been added to the following definitions:

- **IF-024-SN-Vacant**

- **IF-024-SN-NoComms**

- **IF-024-SN-RemoteEnabled**

- **IF-024-SN-RemoteDisabled**

- **IF-024-SN-SupplierAC**

- **IF-024-SN-OffPeakDec**

Before change:

```
3727
3728    IF-024-SN-OffPeakDec:
3729        description: MHHS Common Block for IF-024 OffPeakDec
3730        additionalProperties:
3731            false
3732        required:
3733            - CommonBlock
3734            - CustomBlock
3735        properties:
```

After change:

```
3750
3751    IF-024-SN-OffPeakDec:
3752        description: MHHS Common Block for IF-024 OffPeakDec
3753        type: object # DIN-889
3754        additionalProperties:
3755            false
3756        required:
3757            - CommonBlock
3758            - CustomBlock
3759        properties:
```

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).

5.1.9   MHHS-DIN-894

Description of change

Updates to DI-123-SSC, to be made nullable as per previous IR5.x releases. Please refer to screenshots below:

Before change:

```
889 ⌄      DI-123-SSC:
890            description : A legacy classification, retained soley for a subset of Traditional Meters,
                  to assist with the allocation of gross consumption to individual Settlement Periods.
891            type : string
892            minLength : 4
893            maxLength : 4
894            #DIN-791
895            pattern: ^\d{4,4}$
896            example : '0123'
897
```

After change:

```
894 ⌄      DI-123-SSC:
895            description : A legacy classification, retained soley for a subset of Traditional Meters,
                  to assist with the allocation of gross consumption to individual Settlement Periods.
896            type : string
897            # DIN-894
898            nullable: true
899            minLength : 4
900            maxLength : 4
901            #DIN-791
902            pattern: ^\d{4,4}$
903            example : '0123'
```

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR5 (not yet started).

6   Unaffected Artefacts

All the other Interim Release 5 files are unaffected by this Interim Release 5.4 patch.

7   Issues/Limitations

This section describes any known limitations and obstacles to the release and fixes implemented.

Certain artefacts cannot be change marked. Reference will be made to documents which identify where these changes exist within the artefacts. Artefact documents in PDF form will be issued with tracked changes on to highlight where the changes are in the document.

Certain artefacts do not include a version/change history record, change history section have been added in some cases and changes are tagged using comments to provide a reference of DIN changes made to the artefact. Within Excel while all changes are marked, not every cell is tagged with the DIN reference as it was not possible to tag groups of cells with a DIN ref.

Transition Design documents are not currently under design release, change and configuration control at this time.

If there are discrepancies following the Interim Release 5.4 changes in the Swagger/YAML, they are not going to be updated retrospectively for any previous Interim Releases.

8   Past Releases

Details of previous release please refer to the relevant release note for details:

Version Number*	Release Date	Release type
5.0	21/02/2023	Baseline
5.1	14/06/2023	Interim Release 1
5.2	05/07/2023	Interim Release 2
5.3	02/08/2023	Interim Release 3
5.4	30/08/2023	Interim Release 4
5.5	04/10/2023	Interim Release 5
5.2.1	11/10/2023	Interim Release 2.1
5.5.1	17/10/2023	Interim Release 5.1
5.6	01/11/2023	Interim Release 6
5.2.2	11/11/2023	Interim Release 2.2
5.2.3	29/11/2023	Interim Release 2.3
5.5.2	13/12/2023	Interim Release 5.2
5.5.3	17/01/2024	Interim Release 5.3
5.7	31/01/2024	Interim Release 7

* Various version numbering occurs on different documents for each release for details see previous release notes.