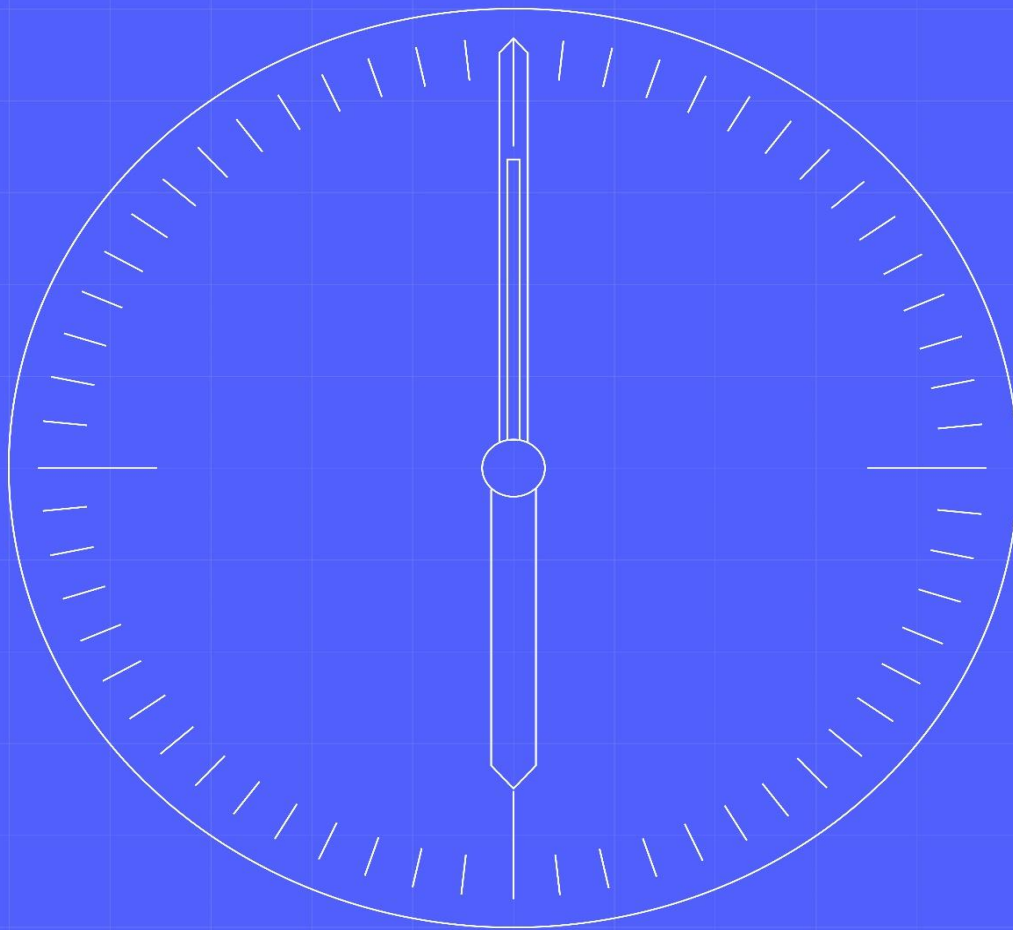


MHHS Design Release Note

Interim Release 8.1

Release Date: 12-06-2024



Document owner

Design Team

Status:

Final

Document number

DEL1275

Date

11/04/2024

Version

V1.0

Classification

Public

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1.1 Change Record

Date	Author	Version	Change Detail
07/06/2024	Design Team	0.1	Initial Draft
11/06/2024	Design Team	1.0	Final

1.2 Reviewers

Reviewer	Role

2 INTRODUCTION

These are the release notes for Interim Release 8.1 of the MHHS Design.

Use Release Notes to keep up with what's going on especially with regard to the changes in Swagger. Release notes provide a summary of what issues have been resolved within the design.

3 OVERVIEW

Here's what's new or updated within **Interim Release 8.1**

Improvements:

- Changes to correct Swagger
- Changes to DES138 to align to swagger
- Changes to various other artefacts that includes, but not limited to: ECS reports, BP Diagrams, Requirements etc.
- Changes to BCS Solution docs, further information in "Additional Change Information" section
- New guidance documentation around DIP API and Webhooks

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	DES138 Version	Swagger Version	SIT Effective from Date	DIP Simulator Uplifted
IR2	05-Jul-23	5.2.1	1.2	30-Oct-23	11-Aug-23
IR2.1	11-Oct-23	5.2.2	1.2.1	30-Oct-23	20-Oct-23
IR2.2	08-Nov-23	5.2.2	1.2.2	08-Nov-23	08-Nov-23
IR2.3	29-Nov-23	5.2.2	1.2.3	20-Dec-23	15-Dec-23
IR3	02-Aug-23	5.3.2	1.3	11-Mar-24	03-Nov-23
IR4	30-Aug-23	5.4.1	1.4	11-Mar-24	03-Nov-23
IR5	04-Oct-23	5.5.2	1.5	11-Mar-24	03-Nov-23
IR5.1	17-Oct-23	5.5.3	1.5.1	11-Mar-24	03-Nov-23
IR5.2	14-Dec-23	5.5.4	1.5.2	11-Mar-24	05-Jan-24
IR5.3	17-Jan-24	5.5.4	1.5.3	11-Mar-24	26-Jan-24
IR5.4	07-Feb-24	5.5.5	1.5.4	SIT start date for participant	09-Feb-24
IR5.5	03-Apr-24	5.5.6	1.5.5	To be advised by SIT Release Manager	19-Apr-24
IR6	01-Nov-23	5.6.1	1.6	10-Jun-24	22-Mar-24
IR7	31-Jan-24	5.7.1	1.7	10-Jun-24	22-Mar-24

IR7.1	06-Mar-24	5.7.2	1.7.1	10-Jun-24	22-Mar-24
IR7.2	03-Apr-24	5.7.3	1.7.2	10-Jun-24	TBC
IR8	03-Apr-24	5.8.1	1.8	02-Sep-24	21-Jun-24
IR8.1	12-Jun-24	5.8.2	1.8.1	02-Sep-2024	TBC

The following table provide the version of the swagger definitions for the IFs & REPs against each interim release:

Release	IF-001 to IF050	IF-061 to IF065	REPs
IR 8.1	011	011	008
IR 8	011	002	008
IR 7.x	010	001	007
IR 6	009	-	006
IR 5.x	008	-	005

Design Models:

Design Models available on the collaboration are also updated in line with the published artefact models within the release.

JSON/YAML:

JSON and YAML files published for V1.8.1 are in line with the latest version of the DES138 Data interface catalogue, these files will continue to be aligned with future releases.

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	V5.8.2	Meter to Bank, Metering Changes, MPAN Ownership	Interface corrections
E2E002 - Requirements	V3.4	Supporting Documents	Requirement corrections
DEL961 – Migration Design Document	V1.4	Migration Design, Supporting Document	Migration corrections
DEL974 – Migration Design Requirements Log	V1.2	Migration Design	Requirement corrections
E2E001 – End-to-End Solution Architecture	V3.7	Supporting Documents	Solution Design Correction
MHHSP - ERI011B – ECS Reports - External	V5.7	Supporting Documents	Data Correction
EDI021_ISD_Entities	V5.7	Supporting Documents	Data Items Correction
BP008 – Change of Energisation	V5.2	Metering Changes	Process Corrections
BP010 - Change of Registration Data	V5.5	MPAN Ownership	Process Corrections
BPD010 - Change of Registration Data	V5.3	MPAN Ownership	Process Description Corrections
BRS003 - Registration Service requirements	V5.7	Supporting Documents	Requirement corrections
BRS004 - Supplier Overview	V5.5	Supporting Documents	Requirement corrections
BRS005 - LDSO Overview	V5.3	Supporting Documents	Requirement corrections
METH001_SDS_Validation_Estimation	V5.4	Supporting Documents	Method Corrections
METH002_MDS_Method_Statement	V5.5	Supporting Documents	Method Corrections
METH005_UMSO_Method_Statement	V5.2	Meter to Bank	Method Corrections
MHHSPROGRAMME-DataCatalogue-1.8.1-domain.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-DataCatalogue-1.8.1-domain.yaml	V1.8.1	Supporting Documents	Updated Swagger definitions

MHHSPROGRAMME-DataTypes-1.8.1-domain.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-DataTypes-1.8.1-domain.yaml	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-ECS-CommonBlocks-1.8.1-domain.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-ECS-CommonBlocks-1.8.1-domain.yaml	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-ECS-Reports-1.8.1-domain.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-ECS-Reports-1.8.1-domain.yaml	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Interfaces-EventCodes-1.8.1-domain.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Interfaces-EventCodes-1.8.1-domain.yaml	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-RealCommonBlocks-1.8.1-domain.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-RealCommonBlocks-1.8.1-domain.yaml	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.8.1-resolved.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.8.1-resolved.yaml	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.8.1-swagger.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.8.1-swagger.yaml	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Examples-0.5-domain.json	V1.8.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Examples-0.5-domain.yaml	V1.8.1	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-920	DI-250 IF-007 Migration Rejection Code	Fixed
MHHS-DIN-945	CR46 - Change of Energy Direction	Fixed
MHHS-DIN-956	Rebranding of D-Flows - DES196	Fixed
MHHS-DIN-962	Remove MPAN from the list of mandatory parameters for replay/requeue	Fixed
MHHS-DIN-967	Update BP010A to show that MPL address updates from UMSO are via "Agreed Communication Method"	Fixed
MHHS-DIN-974	Align webhook response for /statusmessage to /dip-channel	Fixed
MHHS-DIN-977	Alignment of DT-13-EnvironmentTag to delivered environments	Fixed
MHHS-DIN-980	ISD versioning IR8	Fixed
MHHS-DIN-981	Incorrect Load Shape Off Peak Period	Fixed
MHHS-DIN-982	CR039 implementation	Fixed
MHHS-DIN-983	LLFC Id mandated in retained DTC flow	Fixed
MHHS-DIN-984	D0148 use within Reverse Migration	Fixed
MHHS-DIN-985	Incorrect meter reading code in section 6.1.3 of DEL961 Migration Desig	Fixed
MHHS-DIN-988	Remove IF-003 MSDeAppUpdateRM & DSDeAppUpdateRM events	Fixed
MHHS-DIN-989	Remove duplicate CAPAC from DI-596 Charge Type	Fixed
MHHS-DIN-990	Limit effective from updates to RF for appointments and energisation status changes	Fixed
MHHS-DIN-991	Confirm migration lapse behavior aligns with BAU operation	Fixed
MHHS-DIN-992	IF-016-ActivePowerRejected required field B900List should be B900	Fixed
MHHS-DIN-993	Confirmation of LDSO response times	Fixed
MHHS-DIN-995	Correlation ID removed from IF-037 AppUpdate events	Fixed
MHHS-DIN-997	PUB-007 validation to allow de-energisation on a Disconnected MPAN	Fixed
MHHS-DIN-1000	Update to error message REG1032 to refer to Local Time	Fixed
MHHS-DIN-1002	ISD M11 and M12	Fixed
MHHS-DIN-1004	DES138 OptOut Matrix for IF-003 Supplier	Fixed
MHHS-DIN-1006	Outstanding Design Query (DIN087)	Fixed
MHHS-DIN-1009	METH002 Issue with LTV Method statement	Fixed
MHHS-DIN-1015	Update routing for [MPANReconnection] and add event to Opt/In Out Matrix	Fixed
MHHS-DIN-1017	REP-002 & REP-002B need to be updated to reflect the defns in ERI011B	Fixed
MHHS-DIN-1018	Modify DIP Validation Endpoints	Fixed
MHHS-DIN-1019	Revision to the PUB-004 Secondary routing logic.	Fixed
MHHS-DIN-1020	DI-484 to be corrected to DI-081 in ERI011B	Fixed
MHHS-DIN-1021	Migration Error Code Alignment with DES138	Fixed

MHHS-DIN-1022	Implementation of CR037 (Migration Message Processing Choreography Update)	Fixed
MHHS-DIN-1024	Use of Min items = 1 to stop arrays with zero items in B9xx objects	Fixed
MHHS-DIN-1029	IF-025 and IF-026 [SSCandProfileClass] event in B032 is mandatory	Fixed
MHHS-DIN-1031	Updates to Message Response Body	Fixed
MHHS-DIN-1032	DI-103-Configurable-Register-ID need to be alphanumeric	Fixed
MHHS-DIN-1033	Updates to ISD M17/ M7 tables	Fixed
MHHS-DIN-1034	REP900 & RE901 are missing schema version ERI011B spreadsheet	Fixed
MHHS-DIN-1035	IF037 DSDeApp CustomBlock requires B002 block	Fixed
MHHS-DIN-1036	DI-432-Period-Metering-System-Metered-Data need to remove multiplier constraint	Fixed
MHHS-DIN-1037	Updates to REP-900 reports	Fixed
MHHS-DIN-1038	Clarify Migration Reqs re D0312	Fixed
MHHS-DIN-1040	Migration Deisgn: Missing B095 block in IF-003-MSDeAppRM & missing B096 block in IF-003-DSDDeAppRM	Fixed
MHHS-DIN-1041	Updates to schema version numbers for IF-061 to IF-065	Fixed
MHHS-DIN-1044	IF-009-MPANReconnection event code update	Fixed
MHHS-DIN-1047	Additional value of U (undefined) for DI-033 Energisation Status used during Migration	Fixed

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

Additional Change information

5.1.1 MHHS-DIN-962

Description of change: Remove MPAN from the mandatory list of parameters for DIP replay/queue and standardise on mandatory/null design pattern for input parameters.

Before change:

```
6960 MessageRequest:
6961   type: object
6962   required:
6963     - MPAN
6964   properties:
6965     dateTimeFrom:
6966       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-003-DateTime'
6967     dateTimeTo:
6968       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-003-DateTime'
6969     eventCode:
6970       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-004-EventCode'
6971     MPAN:
6972       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-002N-MPAN'
6973     items:
6974       type: array
6975       minItems: 1
6976       maxItems: 100
6977       items:
6978         $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-014-DIPtransactionID'
6979     version:
6980       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataCatalogue/1.8.18/components/schemas/DI-992-Schema-Version'
6981
```

After change:

```
6960 MessageRequest:
6961   type: object
6962   required:
6963     - dateTimeFrom
6964     - dateTimeTo
6965     - eventCode
6966     - MPAN
6967     - version
6968   properties:
6969     dateTimeFrom:
6970       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-003-DateTime'
6971     dateTimeTo:
6972       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-003-DateTime'
6973     eventCode:
6974       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-004-EventCode'
6975     MPAN:
6976       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-002N-MPAN'
6977     items:
6978       type: array
6979       minItems: 1
6980       maxItems: 100
6981       items:
6982         $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataTypes/1.8.18/components/schemas/DT-014-DIPtransactionID'
6983     version:
6984       $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/DataCatalogue/1.8.18/components/schemas/DI-992-Schema-Version'
6985
```

5.1.2 MHHS-DIN-974

Description of change: Align webhook response for /statusmessage to /dip-channel

MPs webhook response should return a standard response body on a 400 response:

Before change:

```
382 /dip-channel/{id}/pubconfig/{recipient-id}:
383   post:
384     summary: Configure DIP Channel Publication
385     description: Allows a Market Participant to configure the output channel
386     operationId: configurePublication
387     tags:
388       - DIP Channel Publication Configuration
389     parameters:
390       - $ref: '#/components/parameters/MessageChannel'
391       - $ref: '#/components/parameters/MessageRecipientId'
392       - $ref: '#/components/parameters/CommonSignatureHeader'
393       - $ref: '#/components/parameters/CommonSignatureDateHeader'
394       - $ref: '#/components/parameters/CommonSHA256Header'
395       - $ref: '#/components/parameters/CommonSignatureCertificateHeader'
396     requestBody:
397       required: true
398       content:
399         application/json:
400           schema:
401             $ref: '#/components/schemas/WebhookConfig'
402     callbacks:
403       outEvent:
404         ($request.body#/config.callbackURL):
405           post:
406             parameters:
407               - $ref: '#/components/parameters/CommonSignatureHeader'
408               - $ref: '#/components/parameters/CommonSignatureDateHeader'
409               - $ref: '#/components/parameters/CommonSHA256Header'
410               - $ref: '#/components/parameters/CommonSignatureCertificateHeader'
411               - $ref: '#/components/parameters/CommonMPDetails'
412             requestBody:
413               required: true
414               content:
415                 application/json:
416                   schema:
417                     $ref: '#/components/schemas/DIPMessageEgressArray' # DIN-892
418             responses:
419               '201':
420                 description: Messages Created
421                 content:
422                   application/json:
423                     schema:
424                       $ref: '#/components/schemas/StandardResponse'
425               '207':
426                 description: Some Messages Created
427                 content:
428                   application/json:
429                     schema:
430                       $ref: '#/components/schemas/StandardResponse'
431               '400': # no retry
432                 description: Bad Request
433               '401': # no retry
434                 description: Unauthorised Error
435               '403': # no retry
```

After change:

```
370 /dip-channel/{id}/pubconfig/{recipient-id}:
371   post:
372     summary: Configure DIP Channel Publication
373     description: Allows a Market Participant to configure the output channel
374     operationId: configurePublication
375     tags:
376       - DIP Channel Publication Configuration
377     parameters:
378       - $ref: '#/components/parameters/MessageChannel'
379       - $ref: '#/components/parameters/MessageRecipientId'
380       - $ref: '#/components/parameters/CommonSignatureHeader'
381       - $ref: '#/components/parameters/CommonSignatureDateHeader'
382       - $ref: '#/components/parameters/CommonSHA256Header'
383       - $ref: '#/components/parameters/CommonSignatureCertificateHeader'
384     requestBody:
385       required: true
386       content:
387         application/json:
388           schema:
389             $ref: '#/components/schemas/WebhookConfig'
390     callbacks:
391       outEvent:
392         ($request.body#/config.callbackURL):
393           post:
394             parameters:
395               - $ref: '#/components/parameters/CommonSignatureHeader'
396               - $ref: '#/components/parameters/CommonSignatureDateHeader'
397               - $ref: '#/components/parameters/CommonSHA256Header'
398               - $ref: '#/components/parameters/CommonSignatureCertificateHeader'
399               - $ref: '#/components/parameters/CommonMPDetails'
400             requestBody:
401               required: true
402               content:
403                 application/json:
404                   schema:
405                     $ref: '#/components/schemas/DIPMessageEgressArray' # DIN-892
406             responses:
407               '201':
408                 description: Messages Created
409                 content:
410                   application/json:
411                     schema:
412                       $ref: '#/components/schemas/StandardResponse'
413               '207':
414                 description: Some Messages Created
415                 content:
416                   application/json:
417                     schema:
418                       $ref: '#/components/schemas/StandardResponse'
419               '400': # no retry DIN-974
420                 description: Bad Request
421                 content:
422                   application/json:
423                     schema:
424                       $ref: '#/components/schemas/StandardResponse'
```

Also, status messages responses from the MP systems and the DIP need to align, hence the webhook definition is being aligned:

```

566 /statusmessage/config/{recipient-id}:
567   parameters:
568     - $ref: '#/components/parameters/MessageRecipientId'
569     - $ref: '#/components/parameters/CommonSignatureHeader'
570     - $ref: '#/components/parameters/CommonSignatureDateHeader'
571     - $ref: '#/components/parameters/CommonSHA256Header'
572     - $ref: '#/components/parameters/CommonSignatureCertificateHeader'
573   post:
574     summary: Webhook to pull a series of status messages
575     description: Allows a Market Participant to get a series of status messages
576     operationId: postStatusMsgWebhook
577     tags:
578       - Status Messages
579     requestBody:
580       required: true
581       content:
582         application/json:
583           schema:
584             $ref: '#/components/schemas/WebhookConfig'
585     responses:
586       '201':
587         description: Webhook created
588       '401':
589         description: Unauthorised Error
590     callbacks:
591       outEvent:
592         '{$request.body#/callbackURL}':
593           post:
594             parameters:
595               - $ref: '#/components/parameters/CommonSignatureHeader'
596               - $ref: '#/components/parameters/CommonSignatureDateHeader'
597               - $ref: '#/components/parameters/CommonSHA256Header'
598               - $ref: '#/components/parameters/CommonSignatureCertificateHeader'
599               - $ref: '#/components/parameters/CommonMPDetails'
600             requestBody:
601               required: true
602               content:
603                 application/json:
604                   schema:
605                     $ref: '#/components/schemas/StandardResponseArray'
606             responses:
607               '200':
608                 description: OK
609     delete:
610       summary: Delete existing Status Message configuration
611       description: Delete an existing webhook for Status Messages
612       tags:
613         - Status Messages
614       parameters:
615         - $ref: '#/components/parameters/MessageRecipientId'
616         - $ref: '#/components/parameters/CommonSignatureHeader'
617         - $ref: '#/components/parameters/CommonSignatureDateHeader'
618         - $ref: '#/components/parameters/CommonSHA256Header'
619         - $ref: '#/components/parameters/CommonSignatureCertificateHeader'
620       responses:
621         '204':
622           description: No Content
623         '401':
624           description: Unauthorised Error
625

```

```

637 /statusmessage/config/{recipient-id}:
638   parameters:
639     - $ref: '#/components/parameters/MessageRecipientId'
640     - $ref: '#/components/parameters/CommonSignatureHeader'
641     - $ref: '#/components/parameters/CommonSignatureDateHeader'
642     - $ref: '#/components/parameters/CommonSHA256Header'
643     - $ref: '#/components/parameters/CommonSignatureCertificateHeader'
644   post:
645     summary: Webhook to pull a series of status messages
646     description: Allows a Market Participant to get a series of status messages
647     operationId: postStatusMsgWebhook
648     tags:
649       - Status Messages
650     requestBody:
651       required: true
652       content:
653         application/json:
654           schema:
655             $ref: '#/components/schemas/WebhookConfig'
656     responses:
657       '201':
658         description: Messages Created
659         content:
660           application/json:
661             schema:
662               $ref: '#/components/schemas/StandardResponseArray'
663       '207':
664         description: Some Messages Created
665         content:
666           application/json:
667             schema:
668               $ref: '#/components/schemas/StandardResponse'
669       '400': # no retry
670         description: Bad Request
671         content:
672           application/json:
673             schema:
674               $ref: '#/components/schemas/StandardResponse'
675       '401': # no retry
676         description: Unauthorised Error
677       '403': # no retry
678         description: Forbidden
679       '404': # no retry
680

```

5.1.3 MHHS-DIN-977

Description of change: Environment Naming Alignment

Align DT-013-EnvironmentTag to the actual list of environments being deployed by Avana.

Before change:

```

287 DT-013-EnvironmentTag:
288   description: Environment Tag
289   type: string
290   minLength: 3
291   maxLength: 10
292   enum:
293     - PROD
294     - PREPROD
295     - SIT
296     - UIT
297     - DEV
298   example: 'DEV'
299

```

After Change:

```

288 DT-013-EnvironmentTag:
289   description: Environment Tag
290   type: string
291   minLength: 3
292   maxLength: 10
293   enum:
294     # - PROD
295     # - PREPROD
296     - PRD
297     - SITB
298     - SIT
299     - UIT
300     - DEV
301   example: 'DEV'
302

```

5.1.4 MHHS-DIN-988

Description of change: Remove IF-003 MSDeAppUpdateRM & DSDeAppUpdateRM events

This includes the removal of the associated validation endpoints as well

Before change:

```
428 # IF 003 - Notification of Reverse Migrationand De-Appointment
429 # DIN-602 create variants for each eventcode
430 # DIN-919 Add B002 block to each message variant
431
432 IF-003-Payload:
433   oneOf:
434     - $ref: '#/components/schemas/IF-003-MSDeAppRM'
435     - $ref: '#/components/schemas/IF-003-DSDeAppRM'
436     - $ref: '#/components/schemas/IF-003-MSDeAppUpdateRM'
437     - $ref: '#/components/schemas/IF-003-DSDeAppUpdateRM'
438     - $ref: '#/components/schemas/IF-003-ReverseMigNotification'
439
440
441 IF-003-MSDeAppRM:
442
443
444 IF-003-DSDeAppRM:
445
446
447 # end IF-003-DSDeAppRM
448
449 IF-003-MSDeAppUpdateRM:
450
451
452 # end IF-003-MSDeAppUpdateRM
453
454 IF-003-DSDeAppUpdateRM:
455
456
457 # end IF-003-DSDeAppUpdateRM
458
459 IF-003-ReverseMigNotification:
460
461
462
```

After Change:

```
429 # IF 003 - Notification of Reverse Migrationand De-Appointment
430 # DIN-602 create variants for each eventcode
431 # DIN-919 Add B002 block to each message variant
432 # DIN-988 Remove IF-003-DSDeAppUpdateRM & IF-003-DSDeAppUpdateRM
433
434 IF-003-Payload:
435   oneOf:
436     - $ref: '#/components/schemas/IF-003-MSDeAppRM'
437     - $ref: '#/components/schemas/IF-003-DSDeAppRM'
438     - $ref: '#/components/schemas/IF-003-MSDeAppUpdateRM'
439     - $ref: '#/components/schemas/IF-003-DSDeAppUpdateRM'
440     - $ref: '#/components/schemas/IF-003-ReverseMigNotification'
441
442
443 IF-003-MSDeAppRM:
444
445
446 IF-003-DSDeAppRM:
447
448
449 # end IF-003-DSDeAppRM
450
451 IF-003-MSDeAppUpdateRM:
452
453
454 # end IF-003-MSDeAppUpdateRM
455
456 IF-003-DSDeAppUpdateRM:
457
458
459 # IF-003-DSDeAppUpdateRM & IF-003-DSDeAppUpdateRM removed
460
461 IF-003-ReverseMigNotification:
462
```

5.1.5 MHHS-DIN-989

Description of change: Remove duplicate CAPAC from DI-596 Charge Type

Before change:

```
2144 DI-596-Charge-Type:
2145   description: Charge Type
2146   type: string
2147   maxLength: 5
2148   example: Fixed
2149   enum:
2150     - CAPAC # DIN-845
2151     # - XCSAP # removed - assume XSCAP is correct
2152     - FIXED
2153     - CAPAC
2154     - XSCAP
2155     - REACT
2156     - RED
2157     - AMBER
2158     - GREEN
2159     - YELLO
2160     - BLACK
2161     - SUPER
2162     - ZERO
2163
```

After Change:

```
2145 DI-596-Charge-Type:
2146   description: Charge Type
2147   type: string
2148   maxLength: 5
2149   example: Fixed
2150   enum:
2151     # - CAPAC # DIN-845 #DIN-989
2152     # - XCSAP # removed - assume XSCAP is correct
2153     - FIXED
2154     - CAPAC
2155     - XSCAP
2156     - REACT
2157     - RED
2158     - AMBER
2159     - GREEN
2160     - YELLO
2161     - BLACK
2162     - SUPER
2163     - ZERO
```

5.1.6 MHHS-DIN-992

Description of change: IF-016-ActivePowerRejected required field B900List should be B900

Before change:

```
2232 IF-016-ActivePowerRejected:
2233 description: IF-016 replay of IF-014 Rejected - UTC Settlement Period Consumption Data
2234 type: object
2235 additionalProperties:
2236   false
2237 required:
2238   - CustomLock
2239   - CustomLock
2240 properties:
2241   CustomLock:
2242     #
2243     description: Copy of IF014 Custom data block
2244     type: object
2245     additionalProperties:
2246       false
2247     required:
2248       - B054
2249       - B067
2250       - B900List
2251     properties:
2252       B054:
2253         $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonLocks/1.8.18/components/schemas/B044'
2254       B067:
2255         $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonLocks/1.8.18/components/schemas/B067'
2256       B900:
2257         $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonLocks/1.8.18/components/schemas/B900'
2258     type: object
2259     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonLocks/1.8.18/components/schemas/B900'
```

After Change:

```
2232 IF-016-ActivePowerRejected:
2233 description: IF-016 replay of IF-014 Rejected - UTC Settlement Period Consumption Data
2234 type: object
2235 additionalProperties:
2236   false
2237 required:
2238   - CustomLock
2239   - CustomLock
2240 properties:
2241   CustomLock:
2242     #
2243     description: Copy of IF014 Custom data block
2244     type: object
2245     additionalProperties:
2246       false
2247     required:
2248       - B054
2249       - B067
2250       - B900 # DIN-992
2251     properties:
2252       B054:
2253         $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonLocks/1.8.18/components/schemas/B044'
2254       B067:
2255         $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonLocks/1.8.18/components/schemas/B067'
2256       B900:
2257         $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonLocks/1.8.18/components/schemas/B900'
2258     type: object
2259     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonLocks/1.8.18/components/schemas/B900'
```

5.1.7 MHHS-DIN-995

Description of change: Correlation ID removed from IF-037 AppUpdate events

Before change:

No swagger update required

After Change:

5.1.8 MHHS-DIN-1017

Description of change: REP-002 & REP-002B need to be updated to reflect the defns in ERI011B

REP-002

The ERI011B – ECS Reports spreadsheet has the R027 – Distributor ID as a repeating block, meaning that Suppliers will receive 1 REP-002 for each combination of Distributor and GSP Group.

REP-002B

Similarly, the REP-002B has R009 as a repeating block

Before change:

```
50 # REP-002 Supplier report for DMS - aggregated data
51 #
52 REP-002-CustomLock:
53 description: REP002 Custom data block - Supplier report for DMS - aggregated data
54 type: object
55 additionalProperties:
56   false
57 properties:
58   R007:
59     # Settlement Run Execution
60     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R007'
61   R009:
62     # Settlement Run Execution
63     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R009'
64   R009B:
65     # Supplier MPID
66     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R009'
67   REP002-R027:
68     # Distributor ID
69     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/REP002-R027'
70   #
71   #
72   #
73   #
74   #
75   #
76 # REP-002A Embedded Network report for DMS - aggregated data
77 #
78 # REP-002B LISO report for DMS - aggregated data - new for release 1.5 (9/2023), REP-002 has been split into REP-002
79 # (supplier) and REP-002B (LISO)
80 #
81 #
82 REP-002B-CustomLock:
83 description: REP002 Custom data block - LISO report for DMS - aggregated data
84 type: object
85 additionalProperties:
86   false
87 properties:
88   #DIN-881 added 2 blocks below
89   R027:
90     # Distributor ID
91     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R027'
92   R011:
93     # GSP Group
94     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R011'
95   R007:
96     # Settlement Run Execution
97     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R007'
98   R009:
99     # Settlement Run Execution
100    $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R009'
101   REP002B-R009:
102    # Supplier MPID
103    $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/REP002B-R009'
```

After Change:

```
50 # REP-002 Supplier report for DMS - aggregated data
51 #
52 REP-002-CustomLock:
53 description: REP002 Custom data block - Supplier report for DMS - aggregated data
54 type: object
55 additionalProperties:
56   false
57 properties:
58   R007:
59     # Settlement Run Execution
60     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R007'
61   R009:
62     # Settlement Run Execution
63     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R009'
64   R009B:
65     # Supplier MPID
66     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R009'
67   REP002-R027:
68     # Distributor ID
69     description: array of Distributor IDs # DIN-1017
70     type: array
71     items:
72       $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/REP002-R027'
73   #
74   #
75   #
76 # REP-002A Embedded Network report for DMS - aggregated data
77 #
78 # REP-002B LISO report for DMS - aggregated data - new for release 1.5 (9/2023), REP-002 has been split into REP-002
79 # (supplier) and REP-002B (LISO)
80 #
81 #
82 REP-002B-CustomLock:
83 description: REP002 Custom data block - LISO report for DMS - aggregated data
84 type: object
85 additionalProperties:
86   false
87 properties:
88   #DIN-881 added 2 blocks below
89   R027:
90     # Distributor ID
91     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R027'
92   R011:
93     # GSP Group
94     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R011'
95   R007:
96     # Settlement Run Execution
97     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R007'
98   R009:
99     # Settlement Run Execution
100    $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/R009'
101   REP002B-R009:
102    # Supplier MPID
103    description: array of Suppliers # DIN-1017
104    type: array
105    items:
106      $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonLocks/1.8.18/components/schemas/REP002B-R009'
```

5.1.9 MHHS-DIN-1018

Description of Change: Modify DIP Validation Endpoints

All the validation end-points have been updated so they accept an array of messages rather than a single message. This is to align with the structure of the main dip-channel submission API.

5.1.10 MHHS-DIN-1020

Description of Change: DI-484 to be corrected to DI-081 in ERI011B

RecCo request to update ECS reports to use DI-081 rather than DI-484

Before change

```
137 #B01:
138   description: Consumption data by Settlement Period
139   type: object
140   additionalProperties:
141     false
142   properties:
143     settlementPeriod:
144       $ref: '#/components/schemas/01-484-Settlement-Period'
145     settlementPeriodDuration:
146       $ref: '#/components/schemas/01-484-Settlement-Period-Duration'
147     totalUncontractedVolume:
148       $ref: '#/components/schemas/01-487-Total-Uncontracted-Volume'
149     totalNumberEnergisedPPWs:
150       $ref: '#/components/schemas/01-487-Total-Number-Energised-PPWs'
151     totalNumberEnergisedPPWs:
152       $ref: '#/components/schemas/01-488-Total-Number-De-energised-PPWs'
153   required:
154     - settlementPeriod
155     - settlementPeriodDuration
156     - totalUncontractedVolume
157     - totalNumberEnergisedPPWs
158     - totalNumberDeEnergisedPPWs
```

```
161 #B02:
162   description: Embedded Consumption data by Settlement Period
163   type: object
164   additionalProperties:
165     false
166   properties:
167     settlementPeriod:
168       $ref: '#/components/schemas/01-484-Settlement-Period'
169     settlementPeriodDuration:
170       $ref: '#/components/schemas/01-484-Settlement-Period-Duration'
171     embeddedTotalUncontractedVolume:
172       $ref: '#/components/schemas/01-487-Embedded-Total-Uncontracted-Volume'
173     totalNumberEnergisedPPWs:
174       $ref: '#/components/schemas/01-487-Total-Number-Energised-PPWs'
175     totalNumberDeEnergisedPPWs:
176       $ref: '#/components/schemas/01-488-Total-Number-De-energised-PPWs'
177   required:
```

```
588 #B03:
589   description: Settlement Period Duration
590   type: object
591   properties:
592     settlementPeriodDuration:
593       $ref: '#/components/schemas/01-484-Settlement-Period-Duration'
594   required:
595     - settlementPeriodDuration
```

After change

```
137 #B01:
138   description: Consumption data by Settlement Period
139   type: object
140   additionalProperties:
141     false
142   properties:
143     settlementPeriod:
144       $ref: '#/components/schemas/01-484-Settlement-Period'
145     settlementPeriodDuration:
146       $ref: '#/components/schemas/01-484-Settlement-Period-Duration'
147     totalUncontractedVolume:
148       $ref: '#/components/schemas/01-487-Total-Uncontracted-Volume'
149     totalNumberEnergisedPPWs:
150       $ref: '#/components/schemas/01-487-Total-Number-Energised-PPWs'
151     totalNumberDeEnergisedPPWs:
152       $ref: '#/components/schemas/01-488-Total-Number-De-energised-PPWs'
153   required:
154     - settlementPeriod
155     - settlementPeriodDuration
156     - totalUncontractedVolume
157     - totalNumberEnergisedPPWs
158     - totalNumberDeEnergisedPPWs
```

```
161 #B02:
162   description: Embedded Consumption data by Settlement Period
163   type: object
164   additionalProperties:
165     false
166   properties:
167     settlementPeriod:
168       $ref: '#/components/schemas/01-484-Settlement-Period'
169     settlementPeriodDuration:
170       $ref: '#/components/schemas/01-484-Settlement-Period-Duration'
171     embeddedTotalUncontractedVolume:
172       $ref: '#/components/schemas/01-487-Embedded-Total-Uncontracted-Volume'
173     totalNumberEnergisedPPWs:
174       $ref: '#/components/schemas/01-487-Total-Number-Energised-PPWs'
175     totalNumberDeEnergisedPPWs:
176       $ref: '#/components/schemas/01-488-Total-Number-De-energised-PPWs'
177   required:
178     - settlementPeriod
179     - settlementPeriodDuration
180     - embeddedTotalUncontractedVolume
181     - totalNumberEnergisedPPWs
182     - totalNumberDeEnergisedPPWs
```

```
588 #B03:
589   description: Settlement Period Duration
590   type: object
591   properties:
592     settlementPeriodDuration:
593       $ref: '#/components/schemas/01-484-Settlement-Period-Duration'
594   required:
595     - settlementPeriodDuration
```

5.1.11 MHHS-DIN-1024

Description of Change: Use of Min items = 1 to stop arrays with zero items

Before change:

B900

```
2809 #B900:
2810   description: MQID (B045) Settlement Day Consumption periods (B901)
2811   type: object
2812   additionalProperties:
2813     false
2814   required:
2815     - MQID
2816     - settlementDayConsumptionPeriods
2817   properties:
2818     MQID:
2819       $ref: '#/components/schemas/B045'
2820     settlementDayConsumptionPeriods:
2821       type: array
2822       maxItems: 200
2823       items:
2824         $ref: '#/components/schemas/B901'
```

After Change:

```
2012 #B900:
2013   description: MQID (B045) Settlement Day Consumption periods (B901)
2014   type: object
2015   additionalProperties:
2016     false
2017   required:
2018     - MQID
2019     - settlementDayConsumptionPeriods
2020   properties:
2021     MQID:
2022       $ref: '#/components/schemas/B045'
2023     settlementDayConsumptionPeriods:
2024       type: array
2025       minItems: 1 # DIN-1024
2026       maxItems: 200
2027       items:
2028         $ref: '#/components/schemas/B901'
```


B901

```
2030 B901:
2031   description: Settlement Day (B046) - SP consumption data (multiple child) block (B047)
2032   type: object
2033   additionalProperties:
2034     false
2035   required:
2036     - settlementDay
2037     - consumptionPeriods
2038   properties:
2039     settlementDay:
2040       $ref: '#/components/schemas/B046'
2041     consumptionPeriods:
2042       type: array
2043       maxItems: 48
2044       items:
2045         $ref: '#/components/schemas/B047'
2046
```

```
2030 B901:
2031   description: Settlement Day (B046) - SP consumption data (multiple child) block (B047)
2032   type: object
2033   additionalProperties:
2034     false
2035   required:
2036     - settlementDay
2037     - consumptionPeriods
2038   properties:
2039     settlementDay:
2040       $ref: '#/components/schemas/B046'
2041     consumptionPeriods:
2042       type: array
2043       minItems: 1 # DIN-1024
2044       maxItems: 48
2045       items:
2046         $ref: '#/components/schemas/B047'
2047
```

B902

```
2048 B902:
2049   description: MQID (B045) Supplier Consumption Amendment Requests (B073) #MHS-DIN-357 Typo
2050   type: object
2051   additionalProperties:
2052     false
2053   required:
2054     - MQID
2055     - supplierConsumptionAmendmentRequests
2056   properties:
2057     MQID:
2058       $ref: '#/components/schemas/B045'
2059     supplierConsumptionAmendmentRequests:
2060       type: array
2061       items:
2062         $ref: '#/components/schemas/B073'
2063
```

```
2048 B902:
2049   description: MQID (B045) Supplier Consumption Amendment Requests (B073) #MHS-DIN-357 Typo
2050   type: object
2051   additionalProperties:
2052     false
2053   required:
2054     - MQID
2055     - supplierConsumptionAmendmentRequests
2056   properties:
2057     MQID:
2058       $ref: '#/components/schemas/B045'
2059     supplierConsumptionAmendmentRequests:
2060       type: array
2061       minItems: 1 # DIN-1024
2062       items:
2063         $ref: '#/components/schemas/B073'
2064
```

B903

```
2131 B903:
2132   description: Load shaping SP
2133   type: object
2134   additionalProperties:
2135     false
2136   properties:
2137     settlementDay:
2138       $ref: '#/components/schemas/B046'
2139     LSGSettlementPeriods:
2140       type: array
2141       items:
2142         $ref: '#/components/schemas/B904'
2143
```

```
2131 B903:
2132   description: Load shaping SP
2133   type: object
2134   additionalProperties:
2135     false
2136   properties:
2137     settlementDay:
2138       $ref: '#/components/schemas/B046'
2139     LSGSettlementPeriods:
2140       type: array
2141       minItems: 1 # DIN-1024
2142       items:
2143         $ref: '#/components/schemas/B904'
2144
```

B904

```
2163 B904:
2164   description: Load shaping child record SP
2165   type: object
2166   additionalProperties:
2167     false
2168   properties:
2169     LSGGroup:
2170       $ref: '#/components/schemas/B051'
2171     LSGGroupSettlementPeriods:
2172       type: array
2173       items:
2174         $ref: '#/components/schemas/B052'
2175
```

```
2163 B904:
2164   description: Load shaping child record SP
2165   type: object
2166   additionalProperties:
2167     false
2168   properties:
2169     LSGGroup:
2170       $ref: '#/components/schemas/B051'
2171     LSGGroupSettlementPeriods:
2172       type: array
2173       minItems: 1 # DIN-1024
2174       items:
2175         $ref: '#/components/schemas/B052'
2176
```

B906

```
2196 B906:
2197   description: Meter-Map History
2198   type: object
2199   required:
2200     - existingMeter
2201     - historyMAP
2202   additionalProperties:
2203     false
2204   properties:
2205     existingMeter:
2206       $ref: '#/components/schemas/B033'
2207     historyMAP:
2208       type: array
2209       items:
2210         $ref: '#/components/schemas/B034'
2211
```

```
2206 # Two variants of 906 - one where B034 is mandatory, the other its optional
2207 B906:
2208   description: Meter-Map History
2209   type: object
2210   required:
2211     - existingMeter
2212     - historyMAP
2213   additionalProperties:
2214     false
2215   properties:
2216     existingMeter:
2217       $ref: '#/components/schemas/B033'
2218     historyMAP:
2219       type: array
2220       minItems: 1 # DIN-1024
2221       items:
2222         $ref: '#/components/schemas/B034'
2223
```

B906a

```
2212 B906a:
2213   description: Meter-Map History
2214   type: object
2215   required:
2216     - existingMeter
2217   additionalProperties:
2218     false
2219   properties:
2220     existingMeter:
2221       $ref: '#/components/schemas/B033'
2222     historyMAP:
2223       type: array
2224       items:
2225         $ref: '#/components/schemas/B034'
2226
```

```
2224 B906a:
2225   description: Meter-Map History
2226   type: object
2227   required:
2228     - existingMeter
2229   additionalProperties:
2230     false
2231   properties:
2232     existingMeter:
2233       $ref: '#/components/schemas/B033'
2234     historyMAP:
2235       type: array
2236       minItems: 1 # DIN-1024
2237       items:
2238         $ref: '#/components/schemas/B034'
2239
```

B910

```
2266 B910:
2267   description: Meter details - MAP history
2268   type: object
2269   additionalProperties:
2270     false
2271   properties:
2272     existingMeter:
2273       $ref: '#/components/schemas/B036'
2274     historyMAP:
2275       type: array
2276       items:
2277         $ref: '#/components/schemas/B075'
2278
```

```
2266 B910:
2267   description: Meter details - MAP history
2268   type: object
2269   additionalProperties:
2270     false
2271   properties:
2272     existingMeter:
2273       $ref: '#/components/schemas/B036'
2274     historyMAP:
2275       type: array
2276       minItems: 1 # DIN-1024
2277       items:
2278         $ref: '#/components/schemas/B075'
2279
```

B911

```
2280 B911:
2281   description: Related Meter details - MAP history
2282   type: object
2283   additionalProperties:
2284     false
2285   properties:
2286     existingMeter:
2287       $ref: '#/components/schemas/B038'
2288     historyMAP:
2289       type: array
2290     items:
2291       $ref: '#/components/schemas/B075'
2292
```

```
2280 B911:
2281   description: Related Meter details - MAP history
2282   type: object
2283   additionalProperties:
2284     false
2285   properties:
2286     existingMeter:
2287       $ref: '#/components/schemas/B038'
2288     historyMAP:
2289       type: array
2290       minItems: 1 # DIN-1024
2291       items:
2292         $ref: '#/components/schemas/B075'
2293
```

B912

```
2145 B912:
2146   description: Load shaping Totals
2147   type: object
2148   additionalProperties:
2149     false
2150   properties:
2151     settlementDay:
2152       $ref: '#/components/schemas/B046'
2153     LSGTotals:
2154       type: array
2155       items:
2156         $ref: '#/components/schemas/B913'
2157
```

```
2145 B912:
2146   description: Load shaping Totals
2147   type: object
2148   additionalProperties:
2149     false
2150   properties:
2151     settlementDay:
2152       $ref: '#/components/schemas/B046'
2153     LSGTotals:
2154       type: array
2155       minItems: 1 # DIN-1024
2156       items:
2157         $ref: '#/components/schemas/B913'
2158
```

B913

```
2177 B913:
2178   description: Load shaping child record Totals
2179   type: object
2180   additionalProperties:
2181     false
2182   properties:
2183     LSGGroup:
2184       $ref: '#/components/schemas/B051'
2185     LSAnnualConsumption:
2186       $ref: '#/components/schemas/B054'
2187     LSTotals:
2188       type: array
2189       items:
2190         $ref: '#/components/schemas/B053'
2191
```

```
2177 B913:
2178   description: Load shaping child record Totals
2179   type: object
2180   additionalProperties:
2181     false
2182   properties:
2183     LSGGroup:
2184       $ref: '#/components/schemas/B051'
2185     LSAnnualConsumption:
2186       $ref: '#/components/schemas/B054'
2187     LSTotals:
2188       type: array
2189       minItems: 1 # DIN-1024
2190       items:
2191         $ref: '#/components/schemas/B053'
2192
```


B920

```

2067 B920:
2068   description: MQID (B045) Settlement Day Consumption periods with default (B901)
2069   type: object
2070   additionalProperties:
2071     false
2072   required:
2073     - MQID
2074     - settlementDayConsumptionPeriods
2075   properties:
2076     MQID:
2077       $ref: '#/components/schemas/B050'
2078     settlementDayConsumptionPeriods:
2079       type: array
2080       items:
2081         $ref: '#/components/schemas/B922'
2082

```

```

2067 B920:
2068   description: MQID (B045) Settlement Day Consumption periods with default (B901)
2069   type: object
2070   additionalProperties:
2071     false
2072   required:
2073     - MQID
2074     - settlementDayConsumptionPeriods
2075   properties:
2076     MQID:
2077       $ref: '#/components/schemas/B050'
2078     settlementDayConsumptionPeriods:
2079       type: array
2080       minItems: 1 # DIN-1024
2081       items:
2082         $ref: '#/components/schemas/B922'
2083

```

B922

```

2085 B922:
2086   description: Settlement Day (B046) and defaulted data (B048)
2087   type: object
2088   additionalProperties:
2089     false
2090   required:
2091     - settlementDay
2092     - defaultedConsumptionPeriods
2093   properties:
2094     settlementDay:
2095       $ref: '#/components/schemas/B046'
2096     defaultedConsumptionPeriods:
2097       type: array
2098       items:
2099         $ref: '#/components/schemas/B048'
2100

```

```

2085 B922:
2086   description: Settlement Day (B046) and defaulted data (B048)
2087   type: object
2088   additionalProperties:
2089     false
2090   required:
2091     - settlementDay
2092     - defaultedConsumptionPeriods
2093   properties:
2094     settlementDay:
2095       $ref: '#/components/schemas/B046'
2096     defaultedConsumptionPeriods:
2097       type: array
2098       minItems: 1 # DIN-1024
2099       items:
2100         $ref: '#/components/schemas/B048'
2101

```

5.1.12 MHHS-DIN-1029

Description of Change: IF-025 and IF-026 [SScandProfileClass] event in B032 is mandatory

Before change:

After Change:

IF-025

```

4385 IF-025-SScandProfileClass:
4386   type: object
4387   additionalProperties:
4388     false
4389   required:
4390     - CommonBlock
4391     - CustomBlock
4392   properties:
4393     CommonBlock:
4394       CustomBlock:
4395         description: IF025 Custom data block
4396         type: object
4397         additionalProperties:
4398           false
4399         properties:
4400           # CSS Switch ID
4401           B032:
4402             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B032'
4403           # NPAN Legacy Info (Optional - Provided for Traditional Meters only )
4404           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B032'
4405

```

```

4385 IF-025-SScandProfileClass:
4386   type: object
4387   additionalProperties:
4388     false
4389   required:
4390     - CommonBlock
4391     - CustomBlock
4392   properties:
4393     CommonBlock:
4394       CustomBlock:
4395         description: IF025 Custom data block
4396         type: object
4397         additionalProperties:
4398           false
4399         required:
4400           - B032 #DIN-1029
4401         properties:
4402           # CSS Switch ID
4403           B032:
4404             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B032'
4405           # NPAN Legacy Info (Optional - Provided for Traditional Meters only )
4406           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B032'
4407

```

IF-026

```

4603 IF-026-SScandProfileClass:
4604   type: object
4605   additionalProperties:
4606     false
4607   required:
4608     - CommonBlock
4609     - CustomBlock
4610   properties:
4611     CommonBlock:
4612       CustomBlock:
4613         description: IF-026 Custom data block for SScandProfileClass
4614         type: object
4615         additionalProperties:
4616           false
4617         properties:
4618           # CSS Switch ID
4619           B032:
4620             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B032'
4621           # NPAN Legacy Info (Optional - Provided for Traditional Meters only )
4622           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B032'
4623

```

```

4603 IF-026-SScandProfileClass:
4604   type: object
4605   additionalProperties:
4606     false
4607   required:
4608     - CommonBlock
4609     - CustomBlock
4610   properties:
4611     CommonBlock:
4612       CustomBlock:
4613         description: IF-026 Custom data block for SScandProfileClass
4614         type: object
4615         additionalProperties:
4616           false
4617         required:
4618           - B032 #DIN-1029
4619         properties:
4620           # CSS Switch ID
4621           B032:
4622             $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B032'
4623           # NPAN Legacy Info (Optional - Provided for Traditional Meters only )
4624           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B032'
4625

```

5.1.13 MHHS-DIN-1031

Description of Change: Updates to Message Response Body Changes

Introduced new data types

DT-014N-DIPTransactionID

DT-995N-SenderUniqueReference

Before change:

```

5324 StandardResponseBodyType:
5325   type: object
5326   properties:
5327     transactionID:
5328       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-014-DIPTransactionID"
5329     senderUniqueReference:
5330       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-995-SenderUniqueReference"
5331     correlationID:
5332       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-011-CorrelationID"
5333     sentTimestamp:
5334       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-003-DateTime"
5335     senderID:
5336       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-006-DIPParticipantID"
5337     recipientID:
5338       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-006-DIPParticipantID"
5339     DIPConnectionProviderID:
5340       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-006-DIPParticipantID"
5341     message:
5342       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-009N-StatusErrorMessage"
5343     help:
5344       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-019-HelpText"
5345     serviceTicketURL:
5346       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-018-URL"
5347   required:
5348     - transactionID
5349     - sentTimestamp
5350     - senderID
5351     - recipientID
5352     - message
5353

```

After Change:

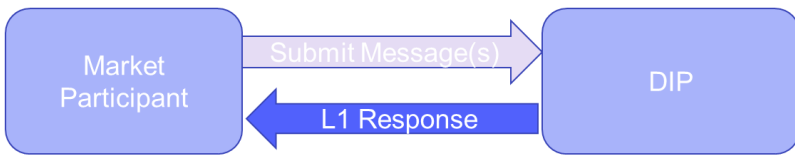
```

6936 StandardResponseBodyType:
6937   type: object
6938   properties:
6939     transactionID:
6940       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-014N-DIPTransactionID"
6941     senderUniqueReference:
6942       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-995N-SenderUniqueReference"
6943     correlationID:
6944       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-011N-CorrelationID"
6945     sentTimestamp:
6946       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-003-DateTime"
6947     senderID:
6948       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-006-DIPParticipantID"
6949     recipientID:
6950       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-006-DIPParticipantID"
6951     DIPConnectionProviderID:
6952       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-006N-DIPParticipantID"
6953     message:
6954       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-009N-StatusErrorMessage"
6955     help:
6956       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-019N-HelpText"
6957     serviceTicketURL:
6958       $ref: "https://api.swaggerhub.com/domains/MHHS/PROGRAMME/DataTypes/1.88/components/schemas/DT-018N-URL"
6959   required:
6960     - transactionID
6961     - senderUniqueReference
6962     - correlationID
6963     - sentTimestamp
6964     - senderID
6965     - recipientID
6966     - DIPConnectionProviderID
6967     - message
6968     - help
6969     - serviceTicketURL

```

Hence the use of the response body for L1 & L3 transactions can be summarised:

API Response Guidelines – L1 Validation



When a MP submits a message or a series of messages to the DIP the DIP will respond with the one of the following response code and (optional) response bodies :

	Category	Response Codes
2xx	Successful	201, 207
4xx	Client Errors	400, 401, 403, 404, 405, 408, 413, 429
5xx	Server Errors	500, 501, 502, 503, 504, 505

Only 201, 207 & 400 (optional) will have accompanying response body or bodies

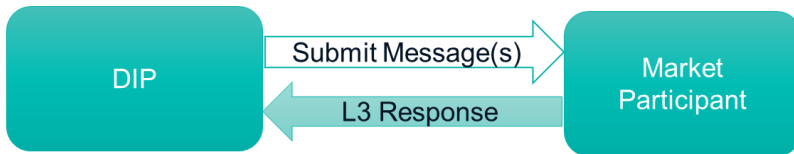
201, 207 will a response body for each message in the transaction (at present 207 is not actually generated)

400 will have a single response body

From release 8.1 the Response Body adopts the mandatory null design pattern so to align with message bodies

Response Body:	
transactionID*	Generated by the DIP to uniquely identify the message
senderUniqueReference*	Submitted by the MP to identify their message
correlationID*	Generated by the DIP - only a few IFs will create a Correlation ID
sentTimestamp*	Generated by the DIP – the time this response was sent
senderID*	The Sender ID of the message i.e. the DIP which uses the Id 000000000
recipientID*	The DIP Id of the MP that sent the message
DIPConnectionProviderID*	If a DCP sent the message, then the DCP of the message
message*	Information pertaining to the error condition
help*	Further information
serviceTicketURL*	not yet implemented

Webhook Response Guidelines – L3 Validation



The DIP will Post messages to MPs webhooks. The DIP will expect the following response from the webhook (these align to the L1 responses seen on the previous slide):

	Category	Response Codes
2xx	Successful	201, 207
4xx	Client Errors	400, 401, 403, 404, 405, 408, 413, 429
5xx	Server Errors	500, 501, 502, 503, 504, 505

Only 201, 207 & 400 (optional) should have a single response body or multiple bodies

201, 207 should have a response body for each message in the transaction

400 will have a single response body

From release 8.1 the Response Body adopts the mandatory null design pattern so to align with message bodies

Response Body:

transactionID*	The transaction Id passed with the corresponding message
senderUniqueReference*	Submitted by the message sender to identify their message
correlationID*	Generated by the DIP - only a few IFs will create a Correlation ID
sentTimestamp*	Generated by the MP – the time this response was sent
senderID*	The MPs DIP Id
recipientID*	The DIP Id of either the DIP (i.e. 0000000000) or the intended recipient of the response, i.e. sender of the original message
DIPConnectionProviderID*	If a DCP is the recipient, then the DCP ID of the recipient
message*	Information pertaining to the error condition
help*	Further information
serviceTicketURL*	not yet implemented

3

5.1.14 MHHS-DIN-1032

Description of Change: DI-103-Configurable-Register-ID need to be alphanumeric

Before change:

```

848 DI-103-Configurable-Register-ID:
849 # DIN-719 update
850 description: Register ID relating to a specific configurable (billing) register on a Smart Meter
851 type: string
852 minLength: 1
853 maxLength: 2
854 pattern: ^\d{1,2}$
855 example: '01'
856
    
```

After Change:

```

849 DI-103-Configurable-Register-ID:
850 # DIN-719 update
851 description: Register ID relating to a specific configurable (billing) register on a Smart Meter
852 type: string
853 minLength: 1
854 maxLength: 2
855 pattern: ^\d{1,2}$
856 example: '01'
857
858
    
```

5.1.15 MHHS-DIN-1035

Description of Change: IF037 DSDApp CustomBlock requires B002 block

Before change:

```

6716 IF037DSDApp:
6717 description: IF-037 Service Provider Notification of Appointment for event code DSDApp
6718 type: object
6719 required:
6720 - CommonBlock
6721 - CustomBlock
6722 additionalProperties:
6723 false
6724 properties:
6725 CustomBlock:
6726 description: IF037 Custom data block for DSDApp
6727 type: object
6728 additionalProperties:
6729 false
6730 required:
6731 - B009
6732 properties:
6733 # CSS Switch ID
6734 B011:
6735 $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/RealCommonBlocks/1.8.19/components/schemas/B011'
6736 B009:
6737 # Data Service De-Appointment Details (Mandatory for [DSDApp])
6738 $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/RealCommonBlocks/1.8.19/components/schemas/B009'
6739 B011:
6740 # Incoming Data Service Details
6741 $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/RealCommonBlocks/1.8.19/components/schemas/B011'
6742
    
```

After Change:

```

6716 IF-037DSDApp:
6717 description: IF-037 Service Provider Notification of Appointment for event code DSDApp
6718 type: object
6719 required:
6720 - CommonBlock
6721 - CustomBlock
6722 additionalProperties:
6723 false
6724 properties:
6725 CustomBlock:
6726 description: IF037 Custom data block for DSDApp
6727 type: object
6728 additionalProperties:
6729 false
6730 required:
6731 - B009
6732 properties:
6733 # CSS Switch ID
6734 B011:
6735 $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/RealCommonBlocks/1.8.19/components/schemas/B011'
6736 B009:
6737 # Data Service De-Appointment Details (Mandatory for [DSDApp])
6738 $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/RealCommonBlocks/1.8.19/components/schemas/B009'
6739 B011:
6740 # Incoming Data Service Details
6741 $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/RealCommonBlocks/1.8.19/components/schemas/B011'
6742 B002:
6743 # Added DIN-1035
6744 # Incoming Metering Service Details
6745 $ref: 'https://api.swaggerhub.com/domains/MHSPROGRAMME/RealCommonBlocks/1.8.19/components/schemas/B002'
6746
    
```

5.1.16 MHHS-DIN-1036

Description of Change: DI-432-Period-Metering-System-Metered-Data need to remove multiplier constraint

Before change:

```
1516 DI-432-Period-Metering-System-Metered-Data:
1517   description : The metered data for a Metering System.
1518   type : string
1519   maxLength : 13
1520   multipleOf : 0.001
1521
```

After Change:

```
1516 DI-432-Period-Metering-System-Metered-Data:
1517   description : The metered data for a Metering System.
1518   type : string
1519   maxLength : 13
1520   # multipleOf : 0.001 #DIN-1036
1521
```

5.1.17 MHHS-DIN-1037

Description of change: Updates to REP-900 reports

Changes made to the REP900 report are:

- REP900-03 to be a parent of REP900-04
- Remove DI-563 (LDSO Billing Account Reference) from REP900-03 as it is redundant with Site Id and Invoice Number also included in the message
- Add GSP Group ID to the REP900-03 site record
- Move the following data items from R900-03 to REP900-04 as they can all change for a site and are specific to the invoice raised:
 - DI-612 Site DUoS Tariff ID
 - DI-566 List of MPANs
 - DI-567 Misaligned multi MPAN site
 - DI- 568 Site Capacity
- Update DI-565 LDSO Billing Site ID to data type of String(30)

REP-900 Structure

Before

```
297 # REP900
298
299 # REP-900 Custom data block
300 description: REP900 Custom data block
301 type: object
302 additionalProperties:
303   false
304 properties:
305   # LDSO Billing Distributor Info
306   $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonBlocks/1.08/components/schemas/R900-01'
307   # LDSO Billing Supplier Info
308   $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonBlocks/1.08/components/schemas/R900-02'
309   # LDSO Billing Site Info
310   type: array
311   items:
312     # LDSO Billing Site Info
313     description: LDSO Billing Site Info
314     type: array
315     items:
316       $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonBlocks/1.08/components/schemas/R900-03'
317   # DIN-859
318   # Invoice Data
319   description: LDSO Billing Invoice Data
320   type: array
321   items:
322     $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonBlocks/1.08/components/schemas/R900-04'
323
324
```

After

```
299 # REP900
300
301 # REP-900 Custom data block
302 description: REP900 Custom data block
303 type: object
304 additionalProperties:
305   false
306 properties:
307   # LDSO Billing Distributor Info
308   $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonBlocks/1.08/components/schemas/R900-01'
309   # LDSO Billing Supplier Info
310   $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonBlocks/1.08/components/schemas/R900-02'
311   # LDSO Billing Site Info
312   description: LDSO Billing Site Info
313   type: array
314   items:
315     # LDSO Billing Site Info
316     description: LDSO Billing Site Info
317     type: array
318     items:
319       $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/ECS-CommonBlocks/1.08/components/schemas/R900-03'
320   # DIN-859 # DIN-1837 move R900-04 block to nested in R900-03
321
```


5.1.18 MHHS-DIN-1040

Description of Change:

Missing B095 block in IF-003-MSDeAppRM & missing B096 block in IF-003-DSDeAppRM

Before change:

IF-003-MSDeAppRM:

```
446 IF-003-MSDeAppRM:
447   description: IF-003 Notification of Reverse Migration De-Appointment
448   type: object
449   additionalProperties:
450     false
451   required:
452     - CommonBlock
453   properties:
454     CustomBlock:
455       description: MHHS Custom Block for IF-003 eventcode MSDeAppRM
456       type: object
457       additionalProperties:
458         false
459       required:
460         - B013
461         - B008
462         - B002
463       properties:
464         B013:
465           # CSS Switch ID
466           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B013'
467         B008:
468           # Metering Service De-Appointment Details (Mandatory for [MSDeAppRM])
469           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B008'
470         B002: #DIN-919
471           # Incoming Supplier Information (Mandatory)
472           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B002'
```

After Change:

```
446 IF-003-MSDeAppRM:
447   description: IF-003 Notification of Reverse Migration De-Appointment
448   type: object
449   additionalProperties:
450     false
451   required:
452     - CommonBlock
453   properties:
454     CustomBlock:
455       description: MHHS Custom Block for IF-003 eventcode MSDeAppRM
456       type: object
457       additionalProperties:
458         false
459       required:
460         - B013
461         - B008
462         - B002
463       properties:
464         B013:
465           # CSS Switch ID
466           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B013'
467         B008:
468           # Metering Service De-Appointment Details (Mandatory for [MSDeAppRM])
469           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B008'
470         B002: #DIN-919
471           # Incoming Supplier Information (Mandatory)
472           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B002'
473         B095: #DIN-1040
474           # Incoming MDP (optional)
475           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B095'
```

IF-003-DSDeAppRM:

```
526 IF-003-DSDeAppRM:
527   description: IF-003 Notification of Reverse Migration De-Appointment eventcode DSDeAppRM
528   type: object
529   additionalProperties:
530     false
531   required:
532     - CommonBlock
533     - CustomBlock
534   properties:
535     CommonBlock:
536       description: IF-003 Custom data block for DSDeAppRM
537       type: object
538       additionalProperties:
539         false
540       required:
541         - B013
542         - B009
543         - B002
544       properties:
545         B013:
546           # CSS Switch ID
547           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B013'
548         B009:
549           # Data Service De-Appointment Details (Mandatory for [DSDeAppRM])
550           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B009'
551         B002: #DIN-919
552           # Incoming Supplier Information (Mandatory)
553           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B002'
```

```
526 IF-003-DSDeAppRM:
527   description: IF-003 Notification of Reverse Migration De-Appointment eventcode DSDeAppRM
528   type: object
529   additionalProperties:
530     false
531   required:
532     - CommonBlock
533     - CustomBlock
534   properties:
535     CommonBlock:
536       description: IF-003 Custom data block for DSDeAppRM
537       type: object
538       additionalProperties:
539         false
540       required:
541         - B013
542         - B009
543         - B002
544       properties:
545         B013:
546           # CSS Switch ID
547           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B013'
548         B009:
549           # Data Service De-Appointment Details (Mandatory for [DSDeAppRM])
550           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B009'
551         B002: #DIN-919
552           # Incoming Supplier Information (Mandatory)
553           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B002'
554         B096: #DIN-1040
555           # Incoming DC (optional)
556           $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/RealCommonBlocks/1.8.18/components/schemas/B096'
```

5.1.19 MHHS-DIN-1041

Description of Change:

Updates to schema version numbers for IF-061 to IF-065

5.1.20 MHHS-DIN-1044

Description of Change: IF-009-MPANReconnection event code update

The event code for IF-009-MPANReconnection need to be [MPANReconnection] rather than [MPANDReconnection]

Before change:

```
1851 IF-009-MPANReconnection: # DIN-788
1852 description: IF009 Message for MPAN Reconnection
1853 type: object
1854 additionalProperties:
1855   false
1856 required:
1857   - CommonBlock
1858   - CustomBlock
1859 properties:
1860   CommonBlock:
1861     description: MHHS Common Block for IF-009 MPAN Reconnection
1862     type: object
1863     additionalProperties:
1864       required:
1865         - CustomBlock
1866         - MPANDReconnection
1867     properties:
1868       SB:
1869         description: Sender Header block
1870         type: object
1871         additionalProperties:
1872           false
1873         properties:
1874           interfaceID:
1875             type: string
1876             enum: ['IF-009']
1877           schemaVersion:
1878             description: Version of the message schema used in the exchange
1879             type: string
1880             example: '011'
1881             enum:
1882               - '011'
1883               - '011'
1884             eventCode:
1885               type: string
1886               enum:
1887                 - '[MPANDReconnection]'
1888             required:
1889               - interfaceID
1890               - schemaVersion
1891               - eventCode
1892
1893
```

After Change:

```
1722 IF-009-MPANReconnection: # DIN-788
1723 description: IF009 Message for MPAN Reconnection
1724 type: object
1725 additionalProperties:
1726   false
1727 required:
1728   - CommonBlock
1729 properties:
1730   CommonBlock:
1731     description: MHHS Common Block for IF-009 MPAN Reconnection
1732     type: object
1733     additionalProperties:
1734       required:
1735         - CustomBlock
1736         - MPANReconnection
1737     properties:
1738       SB:
1739         description: Sender Header block
1740         type: object
1741         additionalProperties:
1742           false
1743         properties:
1744           interfaceID:
1745             type: string
1746             enum: ['IF-009']
1747           schemaVersion:
1748             description: Version of the message schema used in the exchange
1749             type: string
1750             example: '011'
1751             enum:
1752               - '011'
1753               - '011'
1754             eventCode:
1755               type: string
1756               enum:
1757                 - '[MPANReconnection]' # DIN-1044
1758             required:
1759               - interfaceID
1760               - schemaVersion
1761               - eventCode
1762
1763
1764
```

5.1.21 MHHS-DIN-1047

Description of Change: Additional value of U (undefined) for DI-033 Energisation Status used during Migration

Before change:

```
231 DI-033-Energisation-Status:
232 description: Indicates if the metering point is considered energised (i.e. connected to
233 the distribution system) and therefore active for settlement purposes.
234 type: string
235 minLength: 1
236 maxLength: 1
237 example: D
238 enum:
239   - D # De-Energised
240   - E # Energised
```

After Change:

```
240 DI-033-Energisation-Status:
241 description: Indicates if the metering point is considered energised (i.e. connected to
242 the distribution system) and therefore active for settlement purposes.
243 type: string
244 minLength: 1
245 maxLength: 1
246 example: D
247 enum:
248   - D # De-Energised
249   - E # Energised
250   - U # Undefined # DIN-1047
```

5.1.22 **MHHS-DIN-983**

Description of change: Added Data Item Rule to the **D0387 'Metering System Half Hourly Volume Adjustments'** stating that LLFC Id should be populated with DUoS Tariff Id for MHHS Metering Systems.

Impacted Documents:

- DES196 - D-Flow and Interface Mapping v1.3
- D0387 - Metering System Half Hourly Volume Adjustments - v1.0

For the latest documents please find them here: <https://www.mhhsprogramme.co.uk/design/baselined-design-artefacts/mhhs-impacts-to-data-transfer-network-dtn-flows>

Screenshot of change:

78M	MPAN Cores	1-*			G							
					1							MPAN Core
					1							GSP Group Id
					1							Distributor Id
					1							Line Loss Factor Class Id
												For MHHS Metering Systems the value shall be populated with the equivalent DUoS Tariff Id Data Item.

6 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.

7 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
5.5.4	07/02/2024	Interim Release 5.4
5.7.1	06/03/2024	Interim Release 7.1
5.5.5	03/04/2024	Interim Release 5.5
5.7.2	03/04/2024	Interim Release 7.2
5.8	03/04/2024	Interim Release 8
5.7.3	08/05/2024	Interim Release 7.3

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