MHHS Design Release Note
Interim Release 8.1
Release Date: 12-06-2024

Document owner	Document number	Version
Design Team	**DEL1275**	**V1.0**
Status:	Date	Classification
Final	**11/04/2024**	**Public**

1 Contents

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 swager 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

		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-EnvironmenTag 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 MSDeAppUdateRM & 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	
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-DSDeAppRM	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/requeue and standardise on mandatory/null design pattern for input parameters.

Before change:

After change:

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:

After change:

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/CommonSignatureCertifcateHeader'
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
580        requestBody:
581          required: true
582          content:
583            application/json:
584              schema:
585                $ref: '#/components/schemas/WebhookConfig'
586
587        responses:
588          '201':
589            description: Webhook created
590
591          '401':
592            description: Unauthorised Error
593
594
595      callbacks:
596        outEvent:
597          '{$request.body#/callbackURL}':
598            post:
599              parameters:
600                - $ref: '#/components/parameters/CommonSignatureHeader'
601                - $ref: '#/components/parameters/CommonSignatureDateHeader'
602                - $ref: '#/components/parameters/CommonSHA256Header'
603                - $ref: '#/components/parameters/CommonSignatureCertifcateHeader'
604                - $ref: '#/components/parameters/CommonMPODetails'
605
606              requestBody:
607                required: true
608                content:
609                  application/json:
610                    schema:
611                      $ref: '#/components/schemas/StandardResponseArray'
612              responses:
613                '200':
614                  description: OK
615
616      delete:
617        summary: Delete existing Status Message configuration
618        description: Delete an exisiting webhook for Status Messages
619        tags:
620          - Status Messages
621        parameters:
622          - $ref: '#/components/parameters/MessageRecipientId'
623          - $ref: '#/components/parameters/CommonSignatureHeader'
624          - $ref: '#/components/parameters/CommonSignatureDateHeader'
625          - $ref: '#/components/parameters/CommonSHA256Header'
626          - $ref: '#/components/parameters/CommonSignatureCertifcateHeader'
627
628        responses:
629          '204':
630            description: No Content
631          '401':
632            description: Unauthorised Error
633
```

```
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/CommonSignatureCertifcateHeader'
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
651        requestBody:
652          required: true
653          content:
654            application/json:
655              schema:
656                $ref: '#/components/schemas/WebhookConfig'
657
658    # DIN-974 -Align Callback to DIP Status Message defn
659
660      callbacks:
661        outEvent:
662          '{$request.body#/config.callbackURL}':
663            post:
664              parameters:
670
671              requestBody:
672                required: true
673                content:
674                  application/json:
675                    schema:
676                      $ref: '#/components/schemas/StandardResponseArray'
677
678              responses:
679                '201':
680                  description: Messages Created
681                  content:
682                    application/json:
683                      schema:
684                        $ref: '#/components/schemas/StandardResponse'
685
686                '207':
687                  description: Some Messages Created
688                  content:
689                    application/json:
690                      schema:
691                        $ref: '#/components/schemas/StandardResponse'
692
693                '400': # no retry
694                  description: Bad Request
695                  content:
696                    application/json:
697                      schema:
698                        $ref: '#/components/schemas/StandardResponse'
699
700                '401': # no retry
701                  description: Unauthorised Error
702                '403': # no retry
703                  description: Forbidden
704                '404': # no retry
```

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 Avanade.

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'
```

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 MSDeAppUdateRM & DSDeAppUpdateRM events

This includes the removal of the associated validation endpoints as well

Before change:

After Change:

5.1.5   MHHS-DIN-989

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

Before change:

After Change:

5.1.6   MHHS-DIN-992

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

Before change:

After Change:

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:

After Change:

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   **After change**

5.1.11   MHHS-DIN-1024

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

Before change: **After Change:**

B900

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) #MHHS-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) #MHHS-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            LSGroup:
2170                $ref: '#/components/schemas/B051'
2171            LSGroupSettlementPeriods:
2172                type: array
2173                items:
2174                    $ref: '#/components/schemas/B052'
2175
2176    B913:
```

```
2163    B904:
2164        description: Load shaping child record SP
2165        type: object
2166        additionalProperties:
2167            false
2168        properties:
2169            LSGroup:
2170                $ref: '#/components/schemas/B051'
2171            LSGroupSettlementPeriods:
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 vairants 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
2291        items:
2292          $ref: '#/components/schemas/B075'
2293
```

```
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      LSGroup:
2184        $ref: '#/components/schemas/B051'
2185      LSAnnualConsumption:
2186        $ref: '#/components/schemas/B054'
2187      LSTTotals:
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      LSGroup:
2184        $ref: '#/components/schemas/B051'
2185      LSAnnualConsumption:
2186        $ref: '#/components/schemas/B054'
2187      LSTTotals:
2188        type: array
2189        minItems: 1 # DIN-1024
2190        items:
2191          $ref: '#/components/schemas/B053'
2192  ##
```

B920

B922

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

IF-026

5.1.13 MHHS-DIN-1031

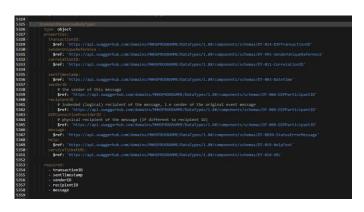**Description of Change:** Updates to Message Response Body

Changes

Introduced new data types

DT-014N-DIPTransactionID
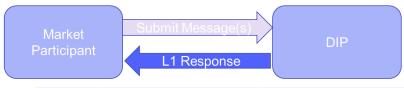
DT-995N-SenderUniqueReference

Before change:

After Change:

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 0000000000
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

2

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

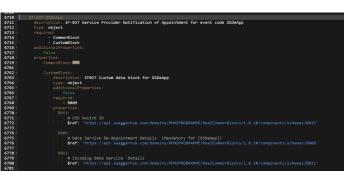Description of Change: DI-103-Configurable-Register-ID need to be alphanumeric

Before change: **After Change:**

5.1.15   MHHS-DIN-1035

Description of Change: IF037 DSDeApp CustomBlock requires B002 block

Before change: **After Change:**

5.1.16 MHHS-DIN-1036

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

Before change:

After Change:

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:

  o DI-612 Site DUoS Tariff ID

  o DI-566 List of MPANs

  o DI-567 Misaligned multi MPAN site

  o DI- 568 Site Capacity

- Update DI-565 LDSO Billing Site ID to data type of String(30)

REP-900 Structure

Before

After

R900-03 block

Before

After

R900-04 block

Before change:

After change:

DI-565 amendment

Before change:

After change:

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:	After Change:

IF-003-MSDeAppRM:

IF-003-DSDeAppRM:

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:

After Change:

5.1.21 MHHS-DIN-1047

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

Before change:

After Change:

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.