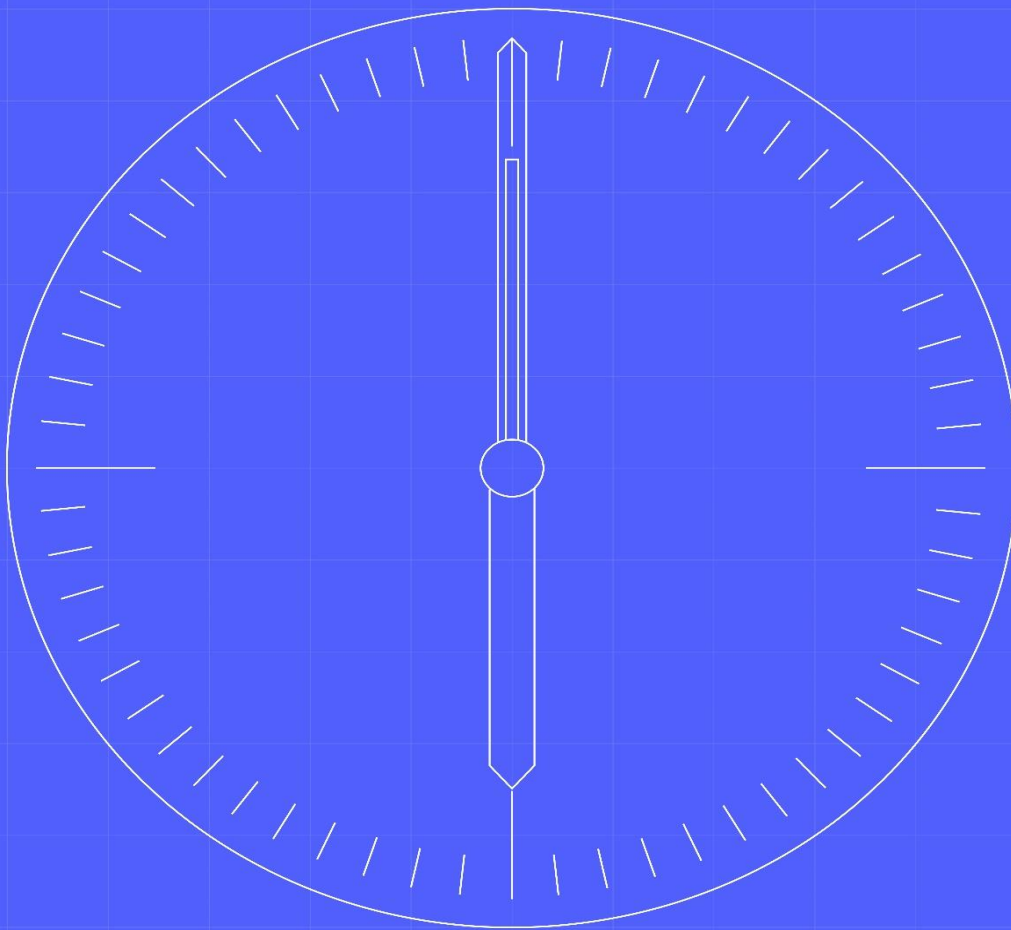


# MHHS Design Release Note

## Interim Release 5.1

### Release Date: 17-10-2023



Document owner

**Design Team**

Status:

**Final**

Document number

**DEL1275**

Date

**17/10/2023**

Version

**V1.0**

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**Public**

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## 1.1 Change Record

Date	Author	Version	Change Detail
12/10/2023	MHHS Design Team	0.1	Initial Draft
17/10/2023	MHHS Design Team	1.0	Final version

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## 1.2 Reviewers

Reviewer	Role

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## 2 INTRODUCTION

These are the release notes for Interim Release 5.1 of the MHHS Design.

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

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## 3 OVERVIEW

Interim Release 5.1 is a patch to Interim Release 5.

### Improvements:

- Changes to correct Swagger
- Changes to correct DES-138 Interface Catalogue

Interim Release 5.1 constitutes updated versions of Swagger and DES-138 Interface Catalogue which have been uplifted to address found misalignments, alongside fixing any breaking changes.

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.

### Design Models:

Design Models available on the collaboration are also updated in line with the published artefact models within the release. Design models now support relationship with requirements allowing users to drill from process through to requirements.

### JSON/YAML:

The best online tool we recommend verify the extent of the changes is: <https://www.textcompare.org/yaml/>. Comparing the YAML between versions 1.5 and 1.5.1 are clearly shown.

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### 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](mailto:Design@MHHSprogramme.co.uk)

## 4 Impacted Artefacts

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

Artefact	Version Number	Theme	Impact
DES-138 Interface Catalogue	V5.5.3	Meter to Bank, Metering Changes, MPAN Ownership	Interface corrections
MHHSPROGRAMME-DataCatalogue-1.5.1-domain.json	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-DataCatalogue-1.5.1-domain.yaml	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-DataTypes-1.5.1-domain.json	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-DataTypes-1.5.1-domain.yaml	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Interfaces-EventCodes-1.5.1-domain.json	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-Interfaces-EventCodes-1.5.1-domain.yaml	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-RealCommonBlocks-1.5.1-domain.json	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-RealCommonBlocks-1.5.1-domain.yaml	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1..1-resolved.json	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.5.1-resolved.yaml	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.5.1-swagger.json	V1.5.1	Supporting Documents	Updated Swagger definitions
MHHSPROGRAMME-SubmitEvents-1.5.1-swagger.yaml	V1.5.1	Supporting Documents	Updated Swagger definitions

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

## 5 Resolved Issues

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

DIN/RFC Ref	Description	Status
MHHS-DIN-681	DI-824 textual description (Column D) in the Interfaces is inconsistent with the textual description (Column D) in the Data Catalogue. This DIN is to ensure the textual description is consistent in the Interfaces to the Data Catalogue and that found in Swagger.	Fixed
MHHS-DIN-689	Minor differences between DES138 & swagger from sims & ems audit	Fixed
MHHS-DIN-690	Updated MDR IF Optionality Matrix to reflect correct values per current CR23 Design. Existing Values were not correct	Fixed
MHHS-DIN-691	DI-138 / DI-140 Customer Direct Contract Holder(s) - Changed to Data Type DT006N in DES138 to correctly align with Swagger	Fixed
MHHS-DIN-692	DI-161 Settlement Run Number - made mandatory in IF-013 to correctly align with Swagger	Fixed
MHHS-DIN-693	DI-838 Supplier Nominated Consent - DES138 Updated to show as Nullable (Swagger already aligned)	Fixed
MHHS-DIN-694	Update event code [EnergisationStatusFailure] to [EnergisationStatusChange] for IF-007-EnergisationStatusChange	Fixed
MHHS-DIN-695	LDSO IF Optionality - PUB-009 Corrected from NonApplicable to Optional = YES PUB-013 Corrected from NonApplicable to Optional = YES PUB-026 SSCPProfileClass Corrected from N/A to Optional = YES PUB-040 Corrected from N/A to Optional = YES REGS: PUB019 Related MPAN Events corrected from N/A to Optional = No	Fixed
MHHS-DIN-696	Add B023 is required for IF-018-EnergyDirection and IF-018-MUMIndicator	Fixed
MHHS-DIN-697	Add required field to common block in IF-023	Fixed
MHHS-DIN-698	Add B059 to required field in IF-040	Fixed
MHHS-DIN-699	Remove B068 from required fields for IF-036 DSAppActive	Fixed
MHHS-DIN-700	Remove recipient id from request body of API call as already specified on path	Fixed
MHHS-DIN-702	Update validation rules to clarify that days refer to calendar days in IF-025 and IF-034	Fixed
MHHS-DIN-703	Clarify that B032 is only sent where available in Registration Service in IF-001, IF-002, IF-033 and IF-036	Fixed
MHHS-DIN-704	Update DI-135 and DI-136 to be set to Mandatory in IF-025/IF-026 and to be non-nullable, so that a date is always provided for SMSO and IHD even where setting the value to null.	Fixed
MHHS-DIN-706	Clarified that Unmetered check will not apply for [LinkedImportExportRemove] event in IF-019	Fixed

MHHS-DIN-707	Updated IF-033 to show primary routing is to XDSP and XDMP	Fixed
MHHS-DIN-708	Audit of swagger IF-004 B093 block is mandatory	Fixed
MHHS-DIN-719	Allow Configurable Register ID's (DI-103) to be provided with min length of 1 and max length of 2 in both swagger and DES138 so that, for example, either 1 or 01 are accepted.	Fixed
MHHS-DIN-720	Allow Profile Class (DI-122) to be provided with min length of 1 and max length of 2 in both swagger and DES138 so that, for example, either 1 or 01 are accepted.	Fixed
MHHS-DIN-722	Remove Recipient Roles from A0.always object as roles are always resolved to DIP Ids	Fixed
MHHS-DIN-723	OffPeakDeclarationProportion spelt on B097 spelt incorrectly	Fixed
MHHS-DIN-724	Add REP-002B & IF-004 to the enumerated list for DT-000	Fixed
MHHS-DIN-727	Added [ReadingOnSite] to routing table for Data Service in IF-041	Fixed

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

## 5.1 Additional Change information

### 5.1.1 MHHS-DIN-681

#### Description of change

DI-824 textual description (Column D) in the Interfaces is inconsistent with the textual description (Column D) in the Data Catalogue. This DIN is to ensure the textual description is consistent in the Interfaces to the Data Catalogue and that found in Swagger. This is a screenshot of the description in DES-138 for the DI-824 data item.

DI-824	Incoming (Next) Metering Service EffectiveFrom Date	The Date from which next/incomomg Metering Service appointment is/was effective
--------	---	---

This is a screenshot of the description of the DI-824 data item in Swagger. The description is consistent.

```
DI-824-Incoming-Metering-Service-Effective-From-Date:
# The Date from which next/incomomg Metering Service appointment is/was effective
$ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataTypes/1.5.1#/components/schemas/DT-003-DateTime'
```

#### Testing Impact

None, this is a textual change.

### 5.1.2 MHHS-DIN-689

#### Description of change

The following changes have been made to Swagger as defined on the table below to fix minor inconsistencies between Swagger and DES-138.

IF-025	B068	DI-018	Custom Block: B068, Field: Consent Granularity Effective From Date Interface Catalogue, Data Catalogue tab specifies 'DI-018' is 'Mandatory no nulls' but Swagger specified nullable so Swagger has been updated so that 'DI-018' is Mandatory no nulls using 'DT-003'.
IF-003	B009	DI-023	Custom Block: B009, Field: Data Service Effective from Date Interface Catalogue, Data Catalogue tab specifies 'DI-023' is 'Mandatory no nulls' but Swagger specified nullable so Swagger has been updated so that B009 is Mandatory no nulls using 'DT-003'.
IF-039	B020	DI-140	Custom Block: 'B020', Field: Customer Direct Contract MS DIP ID Interface Catalogue - Different DI-Reference on Swagger, Use 'DT-006N' in Swagger for 'DI-140'.

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IF-003	B095	DI-501	Custom Block: 'B095', Field: Reverse Migration Incoming MOP MPID Interface Catalogue specifies min length of 4, but no min length specified in Swagger, use 'DT-027'
IF-003	B096	DI-503	Custom Block: 'B096', Field: Reverse Migration Incoming DC MPID Interface Catalogue specifies min length of 4, but no min length specified in Swagger, use 'DT-027'
IF-039	B020	DI-842	Custom Block: 'B020', Field: Assigned MDR DIP ID Interface Catalogue - Different DI-Reference on Swagger so using 'DT-006' in 'DI-842'.

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## Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).



### 5.1.3 MHHS-DIN-690

#### Description of change

Updated MDR IF Optionality Matrix to reflect correct values per current CR23 Design. Existing Values were not correct. This has been updated in DES-138 as per screenshots below.

- For IF-006, the MDR column values have been updated from N/A to Yes for those highlighted below.
- For IF-007, the MDR column values have been updated from N/A to Yes for those highlighted below.

NOTE: Matrix is subject to CR#29 LDSO Message Optionality & a possible further CR from REGS re processing of Annual Consumption. Options shown are based on those recommended by the programme assuming CR#29/23 are approved.

\*MDR - Options shown are for an MDR which has chosen to Opt In to DIP communications as part of CR#23

Interface	Publication	Event Code	DIP Role												
			Supplier	Data Service			Metering Service			LDSO	EES	MDR*	MDS	REGS	LSS
				SDS	ADS	UMSDS	MSS	MSA	UMSO						
		[MSDeAppUpdateRM]	N/A	No	No	No	No	No	No	YES	No	N/A	No	N/A	N/A
		[DSDeAppUpdateRM]	N/A	No	No	No	No	No	No	YES	No	N/A	No	N/A	N/A
IF-004	PUB-004	[CommsHubInfo]	No	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IF-005	PUB-005	[MeterInstall]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	
		[MeterRemoval]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	
		[MeterExchange]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	
		[MeterUpdate]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	
		[MeterHistoryUpdate]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	
IF-006	PUB-006	[MeterInstall]	No	No	No	N/A	No	No	N/A	YES	No	Yes	N/A	N/A	N/A
		[MeterRemoval]	No	No	No	N/A	No	No	N/A	YES	No	Yes	N/A	N/A	N/A
		[MeterExchange]	No	No	No	N/A	No	No	N/A	YES	No	Yes	N/A	N/A	N/A
		[MeterUpdate]	No	No	No	N/A	No	No	N/A	YES	No	Yes	N/A	N/A	N/A
		[MeterHistoryUpdate]	No	No	No	N/A	No	No	N/A	YES	No	N/A	N/A	N/A	N/A
IF-007	PUB-007	[EnergisationStatusChange]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	N/A	No	N/A
		[EnergisationStatusFailure]	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

- For IF-018, the MDR column values have been updated from No to N/A for those highlighted below.
- For IF-020, the MDR column values have been updated from No to N/A for those highlighted below.

Interface	Publication	Event Code	DIP Role										
			Supplier	Data Service			Metering Service			LDSO	EES	MDR*	
				SDS	ADS	UMSDS	MSS	MSA	UMSO				
IF-018		[AddressChg]	No	No	No	No	No	No	No	No	YES	No	N/A
		[GSPChg]	No	No	No	No	No	No	No	No	YES	No	N/A
		[DUOSTariffIDChg]	No	No	No	No	No	No	No	No	YES	No	N/A
		[DomPremInd]	No	No	No	No	No	No	No	No	YES	No	N/A
		[EnergyDirection]	No	No	No	No	No	No	No	No	YES	No	N/A
		[DCCEnrolment]	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A
	[MUMIndicator]	No	No	No	YES	No	No	No	YES	YES	No	N/A	
IF-019		[LinkedImportExportCreate]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	N/A
		[LinkedImportExportAdd]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	N/A
		[LinkedImportExportRemove]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	N/A
		[RelatedCreate]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		[RelatedAdd]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	[RelatedRemove]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IF-020		[LinkedImportExportCreate]	No	No	No	N/A	No	No	N/A	YES	No	N/A	
		[LinkedImportExportAdd]	No	No	No	N/A	No	No	N/A	YES	No	N/A	
		[LinkedImportExportRemove]	No	No	No	N/A	No	No	N/A	YES	No	N/A	
		[RelatedCreate]	No	No	No	N/A	No	No	N/A	YES	No	N/A	
		[RelatedAdd]	No	No	No	N/A	No	No	N/A	YES	No	N/A	
		[RelatedRemove]	No	No	No	N/A	No	No	N/A	YES	No	N/A	

- For IF-024, the MDR column values have been updated from N/A to Yes for those highlighted below.
- For IF-026, the MDR column values have been updated from N/A to Yes for those highlighted below.

Interface	Publication	Event Code	DIP Role												
			Supplier	Data Service			Metering Service			LDSO	EES	MDR*	MDS	REGS	LSS
				SDS	ADS	UMSDS	MSS	MSA	UMSO						
IF-024		[SN-Vacant]	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		[SN-NoComms]	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	Yes	N/A	N/A	N/A
		[SN-RemoteEnabled]	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	Yes	N/A	N/A	N/A
		[SN-RemoteDisabled]	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	Yes	N/A	N/A	N/A
		[SN-SupplierAC]	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	[SN-OffPeakDec]	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IF-025		[ConsentGranularity]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A
		[IHInfo]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A
		[SMSO]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A
		[SSCandProfileClass]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A
IF-026		[ConsentGranularity]	No	No	No	YES	N/A	N/A	N/A	N/A	No	YES	N/A	N/A	N/A
		[IHInfo]	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
		[SMSO]	No	No	N/A	N/A	No	No	N/A	N/A	No	YES	N/A	N/A	N/A
		[SSCandProfileClass]	No	N/A	N/A	N/A	N/A	N/A	N/A	Yes	No	N/A	N/A	N/A	No
IF-027		[ConsumptionAmendment]	N/A	No	No	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

## Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.4 MHHS-DIN-691

#### Description of change

DI-138 / DI-140 Customer Direct Contract Holder(s) - Changed to Data Type DT006N in DES-138 to correctly align with Swagger. This has been updated in the Data Catalogue tab in DES-138 as per the screenshot below. DI-138 and DI-140 are blocks used in IF-001, IF-002, IF-038 and IF-039.

DI-138	Customer Direct Contract DS DIP ID	The DIP ID of the Data Service that has recorded the existence of a Customer Direct Contract for that MPAN.	N/A	Registration Service	Data Service	Public		DT-006N	Mandatory nullable
DI-140	Customer Direct Contract MS DIP ID	The DIP ID of the Metering Service that has recorded the existence of a Customer Direct Contract for that MPAN.	N/A	Registration Service	Metering Service	Public		DT-006N	Mandatory nullable

#### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.5 MHHS-DIN-692

#### Description of change

DI-161 Settlement Run Number - made mandatory in IF-013 to correctly align with Swagger. This has been updated in the Data Catalogue in DES-138 as per screenshot below.

DI-161	Run Number	The identifier, unique within an Agent system, which identifies a run of that system.	N/A	ECS	ECS	Public			Mandatory no nulls
--------	------------	---	-----	-----	-----	--------	--	--	--------------------

Swagger has been updated as shown on the screenshot below for no nulls.

```
DI-161-Run-Number:
  description : The identifier, unique within an Agent system, which identifies a run of that system.
  type : number
  maximum: 9999999
  example : 1234567
```

Swagger has been updated as shown on the screenshot below for IF-013 to make this mandatory.

```
IF-013-Payload {
  description: IF-013 Notification of Defaulted UTC Settlement Period Consumption Data
  CommonBlock* > {...}
  CustomBlock* {
    description: IF013 Custom data block
    B043* B043 > {...}
    B049* B049 {
      description: Settlement Period Run Info
      settlementRunExecutionDate* DT-003-DateTime > [...]
      settlementCode* DI-160-Settlement-Code > [...]
      runNumber* DI-161-Run-Number > [...]
    }
    B067* B067 {
      description: Connection Type
      connectionTypeIndicator* DI-015-Connection-Type-Indicator > [...]
      connectionTypeEffectiveFromDate* DT-003-DateTime > [...]
    }
    B920List* > [...]
  }
}
```

#### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

---

## 5.1.6 MHHS-DIN-693

### Description of change

DI-838 Supplier Nominated Consent – DES-138 has been updated so the data item is nullable as shown on the screenshot of the Data Catalogue tab from DES-138. DI-838 is a block used in IF-031, IF-032, IF-033, IF-034 & IF-035.

DI-838	Supplier Proposed Consent Granularity	Proposed Supplier Consent Granularity for a period of SP Appointment	N/A	Registration Service	Supplier	Public			Mandatory nullable
--------	---------------------------------------	--	-----	----------------------	----------	--------	--	--	--------------------

### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

---

## 5.1.7 MHHS-DIN-694

### Description of change

Update event code [EnergisationStatusFailure] to [EnergisationStatusChange] for IF-007-EnergisationStatusChange as can be seen on the Swagger screenshot below. This is shown on the screenshot of Swagger below.

```
IF-007-Payload:
  description: IF007 - Change of Energisation Status
  oneOf:
    - $ref: '#/components/schemas/IF-007-EnergisationStatusChange'
    - $ref: '#/components/schemas/IF-007-EnergisationStatusFailure'

IF-007-EnergisationStatusChange:
  description: IF007 Message for Energisation Status Change
  type: object
  additionalProperties:
    false
  required:
    - CommonBlock
    - CustomBlock
  properties:
    CommonBlock:
      type: object
      required:
        - S0
        - S1
        - M0
      properties:
        S0:
          description: Sender Header block
          type: object
          additionalProperties:
            false
          properties:
            interfaceID:
              type: string
              enum: ['IF-007']
            schemaVersion:
              description: Version of the message schema used
              in the exchange
              type: string
              example: '009'
              enum:
                - '009'
            eventCode:
              type: string
              enum:
                - '[EnergisationStatusChange]'
          # DIN-694
```

### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

---

5.1.8 MHHS-DIN-695

The following changes have been made to DES-138 in relation to LDSO IF optionality:

- For IF-009 and 13, the LDSO column values have been updated from N/A to Yes for those highlighted below.
- For IF-026, the LDSO column values have been updated from N/A to Yes for those highlighted below.
- For IF-040, the LDSO column values have been updated from N/A to Yes for those highlighted below.

IF-009	PUB-009	[MPANDisconnection]	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	No	N/A	N/A	N/A	N/A
		[CSSDeRegistration]	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	No	N/A	No	N/A	N/A
IF-013	PUB-013	[ActivePowerDefaulted]	No	No	No	No	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A
		[SSCandProfileClass]	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	No	N/A	N/A	N/A	No
IF-040		[AnnualConsumption]	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	YES	No	N/A	N/A	No	N/A

The following changes have been made to DES-138 in relation to REGS IF optionality:

- For IF-019, the REGS column values have been updated from N/A to No for those highlighted below.

IF-019		[LinkedImportExportCreate]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A
		[LinkedImportExportAdd]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A
		[LinkedImportExportRemove]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A
		[RelatedCreate]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A
		[RelatedAdd]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A
		[RelatedRemove]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	N/A	

The following changes have been made to DES-138 in relation to UMSO IF optionality:

- For IF-043, the UMSO column values have been updated from No to N/A for those highlighted below.

IF-043		[ConnectionTypeChange]	No	No	No	No	No	No	N/A	YES	No	N/A	No	N/A	N/A
--------	--	------------------------	----	----	----	----	----	----	-----	-----	----	-----	----	-----	-----

All the above changes are on the 04\_IF\_OptOut\_Matrix tab in DES-138.

Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.9 MHHS-DIN-696

#### Description of change

As can be seen on the following two screenshots, B023 block has been marked as required for both IF-018-EnergyDirection and IF-018-MUMIndicator. This change has been made in Swagger.

```
IF-018-EnergyDirection {
  description: IF-018 Used for event codes EnergyDirection
  CommonBlock* > {...}
  CustomBlock* {
    B013 B013 > {...}
    B023* B023 > {...}
  }
}
```

```
IF-018-MUMIndicator {
  description: IF-018 Used for event codes MUMIndicator
  CommonBlock* > {...}
  CustomBlock* {
    B013 B013 > {...}
    B023* B023 > {...}
  }
}
```

#### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.10 MHHS-DIN-697

#### Description of change

As can be seen on the following screenshot, B912 block / array is marked as required in IF-023. This change has been made in Swagger.

```
IF-023-Payload {
  description: IF-023 Load Shape Total Data
  CommonBlock* > {...}
  CustomBlock* {
    B912List* [
      Load shape data (totals)
      B912 {
        description: Load shaping Totals
        settlementDay B046 > {...}
        LSGTotals [
          B913 {
            description: Load shaping child record Totals
            LSGGroup B051 > {...}
            LSAnnualConsumption B054 > {...}
            LSTTotals > {...}
          }
        ]
      }
    ]
  }
}
```

#### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

---

### 5.1.11 MHHS-DIN-698

#### Description of change

As can be seen on the following screenshot, B059 block has been marked as required for IF-040. This change has been made in Swagger.

```
IF-040-Payload {
  description: IF040 Notification of ECS Calculated Consumption
  CommonBlock* > {...}
  CustomBlock* {
    description: IF040 Custom data block
    B059* B059 {
      description: Annual Consumption
      annualConsumption* DT-016-Decimal-9-3 > [...]
      annualConsumptionEffectiveFromDate* DT-003-DateTime > [...]
      annualConsumptionQualityIndicator* DI-150-Annual-Consumption-
        Quality-Indicator > [...]
    }
  }
}
```

#### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

---

### 5.1.12 MHHS-DIN-699

#### Description of change

As can be seen on the following screenshot, B068 block has been marked as not required for IF-036 DSAppActive. This change has been made in Swagger.

```
IF-036-DSAppActive {
  CommonBlock* > {...}
  CustomBlock* {
    description: IF036 Custom data block for event code
      DSAppActive
    B012* B012 > {...}
    B013 B013 > {...}
    B015* B015 > {...}
    B019 B019 > {...}
    B005 B005 > {...}
    B016 B016 > {...}
    B022* B022 > {...}
    B023* B023 > {...}
    B024* B024 > {...}
    B025* B025 > {...}
    B026* B026 > {...}
    B027 B027 > {...}
    B028* B028 > {...}
    B068 B068 > {...}
    B029 B029 > {...}
    B030 B030 > {...}
    B031 B031 > {...}
    B032 B032 > {...}
    B905List > [...]
    B035List > [...]
    B037List > [...]
  }
}
```

## Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.13 MHHS-DIN-700

#### Description of change

Remove recipient id from request body (in the Message Request object) of API call as this is already specified on path. This applies to replay and requeue API endpoints. This change has been in Swagger as can be seen on the screenshot below.

The screenshot displays the Swagger UI for the MHHS-DIN-700 API. On the left, there are several API endpoints listed under 'DIP Channel Publication Configuration', 'DIP Channel Replay/Requeue', 'Status Messages', and 'Schemas'. The 'MessageRequest' schema is highlighted. The schema definition shows a 'MessageRequest' object with the following properties:

```
MessageRequest:
  type: object
  required:
    - MPAN
    - recipientID
  properties:
    datetimeFrom:
      $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataTypes/1.5.1#/components/schemas/DT-003-DateTime'
    datetimeTo:
      $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataTypes/1.5.1#/components/schemas/DT-003N-DateTime'
    eventCode:
      $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataTypes/1.5.1#/components/schemas/DT-004N-EventCode'
    MPAN:
      $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataTypes/1.5.1#/components/schemas/DT-002N-MPAN'
    transactionIDs:
      type: array
      minItems: 1
      maxItems: 100
      items:
        $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataTypes/1.5.1#/components/schemas/DT-014-DIPTransactionID'
    recipientID:
      # the indented (logical) recipient of the original message
      $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataTypes/1.5.1#/components/schemas/DT-006-DIPParticipantID'
```

## Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.14 MHHS-DIN-702

#### Description of change

Update validation rules in DES-138 to clarify that days refer to calendar days in IF-025 (Supplier Advisory Notification to Data Service) and IF-034 (Supplier Service Provider Appointment Request Response). This can be seen on the screenshot below for validation rules in IF-025 below:

If event type [ConsentGranularity]
[DI-017] Consent Granularity must equal valid value in ISD M17 given current [Reg.EnergyDirection] & [Reg.DomesticPremiseIndicator] combination
Consent Granularity EffectiveFromDate [DI-018] must be <= [SYS Date]+30 (Calendar Days)
Consent Granularity EffectiveFromDate [DI-018] must be >=Max([SSD] or [ConsentLastUpdatedDate] + 1)
Consent Granularity EffectiveFromDate [DI-018] must be >= [SYS Date] - 5 (Calendar Days)
Consent Granularity EffectiveFromDate [DI-018] must be <= [Reg.CurrentSupplierEndDate] if exists
If event type [SMSO]
if [REG.MkSegment] <> "Smart" then SMSO ID [DI-134] must = <null>
if SMSO EffectiveFrom [DI-135] < Max ([Reg.CurrentSupplierSSD] or [Reg.PrevSMSOEffFromDate] + 1)
if SMSO EffectiveFrom [DI-135] > [SYSDate]
SMSO EffectiveFromDate [DI-135] must be >= [SYS Date]-5 (Calendar Days)
is SMSO ID [DI-134] is valid on SMSO EffectiveFromDate [DI-135]
If [DI-134] is NOT null AND DI[135] is null



This can be seen on the screenshot below for validation rules in IF-034 below:

```
Check if MDR Date is not future dated
if (event = [SDS-MDRUpdate] OR Event = [DSAppSPResponse]) AND [DI-841] > SYSDATE + 5 (Calendar Days)
```

### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

## 5.1.15 MHHS-DIN-703

### Description of change

Updated B032 to show as sent where available in Registration Service in IF-001, IF-002, IF-033 and IF-036. Changes have been made in DES-138, updated in each of the Interfaces as per the screenshot below.

B032 - MPAN Legacy Info (Mandatory for Traditional Meters / Optional for other Meters OR where not available in Registration Service)										
DI-122	Profile Class	A legacy classification, maintained by Suppliers, retained solely to assist with the undersading of allocation of gross consumption to individual Settlement Periods.	Supplier (ISD)		String 2	M	C	Mandatory for Traditional Meters		
DI-124	Profile Class Effective From Date	The Date from which the current Profile Class became Effective	Registration Service	DT-003N	String 25	M	C	Required if [DI-122] not null		YYYY-MM-DDTHH:MM.SS±TZH:TZM
DI-123	SSC	A legacy classification, maintained by Suppliers, retained solely to assist with the undersading of allocation of gross consumption to individual Settlement Periods.	Supplier (ISD)		String 4	M	C	Mandatory for Traditional Meters		
DI-125	SSC Effective From Date	The Date from which the current Profile Class became Effective	Registration Service	DT-003N	String 25	M	C	Required if [DI-123] not null		YYYY-MM-DDTHH:MM.SS±TZH:TZM

### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

## 5.1.16 MHHS-DIN-704

### Description of change

Updated DI-135 and DI-136 to be set to Mandatory in IF-025 / IF-026 and to be non-nullable. This update has been made to the Data Catalogue in DES-138.

DI-135	SMSO EffectiveFrom Date	The first inclusive calendar date that a Smart Metering System Operator ID is the provider of communications services to a Metering System (applies only to certain types of SMETS1 Metering).	J1838	Registration Service	Supplier	Public		DT-003	Mandatory no nulls
DI-136	IHD Status EffectiveFrom Date	The first inclusive calendar date that a supplier provided a notable IHD status.	J1836	Registration Service	Supplier	Public	MPAN_Supplier	DT-003	Mandatory no nulls

### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

---

### 5.1.17 MHHS-DIN-706

#### Description of change

Updated validation rules so that Unmetered check will not apply for [LinkedImportExportRemove] event in IF-019. The following changes were made in the DES-138 Interface Catalogue as per the screenshot below.

<b>IF Event = [LinkedImportExportCreate], [LinkedImportExportAdd], [LinkedImportExportRemove]</b>
Check eligibility to propose change to MPAN Relationships
If Event = [LinkedImportExport*] and [SO.SenderID] <> [Reg.CurrentSupplierID] for MPAN [DI-073] OR MPAN [DI-074]
<b>IF Event = [LinkedImportExportCreate], [LinkedImportExportAdd]</b>
Check no MPANs provided have Market Segment of "Unmetered"
if MPAN [DI-073] or any [DI-074] has Market Segment of Unmetered
Check MPANs provided have Connection Type of "Unmetered"
if MPAN [DI-073] or any [DI-074] has Connection Type of Unmetered

#### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.18 MHHS-DIN-707

#### Description of change

Updated IF-033 (Registration Service Request for Service Appointment) to show primary routing is to XDSP and XDMP. This change can be seen on the screenshot from DES-138 Interface Catalogue.

Event Code(s) / Conditions	Always Routing	Primary Routing	Secondary Routing	Correlation ID Created
[MSAppSPRequest]		XMSP		Copy
[DSAppSPRequest]		XDSP		Copy

#### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.19 MHHS-DIN-708

#### Description of change

Update IF-004 B093 block so that the block is marked as required as per the screenshot from Swagger below.

```
IF-004-Payload {
  description: IF005 Message
  CommonBlock* > {...}
  CustomBlock* {
    description: IF004 Custom data block
    B093* B093 > {...}
  }
}
```

#### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.20 MHHS-DIN-719

#### Description of change

Updated Data Catalogue for DI-103 (Configurable Register ID) to Min length of 1 (from 2) and updated Swagger accordingly. Added REGEX to Swagger. Regex takes the form `^\d{1,2}$`. The screenshot from DES-138 can be seen below.

DI-103	Configurable Register ID	Register ID relating to a specific configurable (billing) register on a Smart or Advanced Meter	N/A	Data Service	Data Service	Public			Mandatory no nulls	String	1
--------	--------------------------	---	-----	--------------	--------------	--------	--	--	--------------------	--------	---

The screenshot from Swagger can be seen below:

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

## Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.21 MHHS-DIN-720

#### Description of change

Updated Data Catalogue for DI-122 (Profile Class) to Min length of 1 (from 2) and updated Swagger accordingly. Added REGEX to Swagger. Regex takes the form `^d{1,2}$`. In the DES-138 Interface Catalogue we can see the following changes:

DI-122	Profile Class	A legacy classification, retained solely for a subset of Traditional Meters, to assist with the allocation of gross consumption to individual Settlement Periods.	J0071	Registration Service	Supplier (ISD)	Public	MPAN_Profile		Mandatory nullable	String	1
--------	---------------	---	-------	----------------------	----------------	--------	--------------	--	--------------------	--------	---

The screenshot from Swagger can be seen below:

```
DI-122-Profile-Class:
# DIN-720 update
description: A legacy classification, retained solely for a subset of Traditional Meters, to assist with the allocation of gross consumption to individual Settlement Periods.
type: string # MHHS-DIN-367 - updated to string from integer
nullable: true
minLength: 1
maxLength: 2
pattern: ^d{1,2}$
example: '02'
```

## Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

### 5.1.22 MHHS-DIN-722

#### Description of change

Update to Swagger to remove Recipient Roles from A0.always. In the existing Swagger 1.5, we can see the following in the A0 block, that contains a nested array of Participant roles and ID's.

```
A0 {
  description: Addressing block
  primaryRecipients* > [...]
  secondaryRecipients* > [...]
  always*
    nullable: false
    Always Recipient - array of Ids; set by DIP
    {
      anyOf ->
        DT-009N-DIPParticipantRole >
        [...]
        DT-006N-DIPParticipantID >
        [...]
    }
}
```

In Swagger 1.5.1, we can see the Participant Roles have been removed, so there is just an array of Participant IDs.

```
A0 v {
  description:      Addressing block
  primaryRecipients* > [...]
  secondaryRecipients* > [...]
  always*          v [
                    Always Recipient - array of Ids; set by DIP
                    DT-006N-DIPParticipantID string
                    nullable: true
                    minLength: 10
                    maxLength: 10
                    example: 1009012345
                    DIP Participant Id
                  ]
}
```

## Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

---

### 5.1.23 MHHS-DIN-723

#### Description of change

Updated spelling in Swagger so that 'OffPeakDeclarationProportion' spelt 'OffPeakDeclatationProportion' on B097. The changes have been made to Swagger can be seen on the screenshot below.

```
B097:
  description: Offpeak Declaration
  type: object
  additionalProperties:
    false
  required:
    - offPeakDeclarationDate
    - offPeakDeclarationProportion
  properties:
    offPeakDeclarationDate:
      $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataCatalogue/1.5.1#/components/schemas/DI-510-Offpeak-Declaration-Date'
    offPeakDeclarationProportion:
      $ref: 'https://api.swaggerhub.com/domains/MHHSPROGRAMME/DataCatalogue/1.5.1#/components/schemas/DI-511-Offpeak-Declaration-Proportion'
```

## Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

## 5.1.24 MHHS-DIN-724

### Description of change

Add REP-002B (Embedded Network report (LDSO) for DUoS – aggregated data) & IF-004 (Comms Hub Information) to the enumerated list for DT-000 as can be seen on the screenshot below for the Swagger.

```

DT-000-InterfaceID:
  description: Interface ID
  type: string
  minLength: 6
  maxLength: 6
  example: IF-007
  enum:
    # list of allowable INFs
    - IF-001 # Notification of Change of Supplier
    - IF-002 # Notification to New Supplier of Site Information
    - IF-003
    - IF-004
    - IF-005 # Metering Service MTD Updates to Registration
    - IF-006 # Registration Service Notification of MTD Updates
    - IF-007 # Change of Energisation Status Outcome
    - IF-008
    - IF-009
    - IF-013
    - IF-014
    - IF-015
    - IF-016
    - IF-018
    - IF-019
    - IF-020
    - IF-021
    - IF-022
    - IF-023
    - IF-024
    - IF-025
    - IF-026
    - IF-027
    - IF-028
    - IF-031
    - IF-032
    - IF-033
    - IF-034
    - IF-035
    - IF-036
    - IF-037
    - IF-038
    - IF-039
    - IF-040
    - IF-041
    - IF-043
    - IF-044
    - IF-045
    - IF-047
    - IF-050
    - REP-002
    - REP-002A
    - REP-002B
    - REP-003
    - REP-004
    - REP-006
    - REP-007
    - REP-008
    - REP-009
    - REP-900
    - REP-901
  
```

### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

## 5.1.25 MHHS-DIN-727

### Description of change

Added [ReadingOnSite] to routing table for Data Service in IF-041 as can see on the screenshot below. This change has been made in IF-041 in DES-138.

Routing Rules	Event Code(s) / Conditions	Always Routing	Primary Routing	Secondary Routing	Correlation ID Created
	MS: [ReadingRemv], [ReadingInstl], [ReadingEnergisationChg], [ReadingOnSite]			SUPC, XDSC, LDSO	No
	DS: [ReadingRemv], [ReadingInstl], [ReadingRemote], [ReadingEnergisationChg], [DSEstimate], [ReadingOnSite]			SUPC, LDSO	No
	SDS: [ReadingCOS], [ReadingOnSite]			SUPC, LDSO	No
	SUP: [ReadingCOR], [ReadingCOS], [SupplierAgreedCOS], [ReadingOverride]		Data Service, Supplier	LDSO	No

### Testing Impact

There is no testing impact as these changes relate to SIT functional testing for IR 5 (not yet started).

---

## 6 Unaffected Artefacts

All the other Interim Release 5 files are unaffected by this Interim Release 5.1 patch.

---

## 7 Issues/Limitations

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

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

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

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

If there are discrepancies following the Interim Release 5.1 changes in the Swagger/YAML and the DES-138 Interface Catalogue versions; these are not going to be updated retrospectively for any previous Interim Releases.

---

## 8 Past Releases

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

Version Number*	Release Date	Release type
5.0	21/02/2023	Baseline
5.1	14/06/2023	Interim Release 1
5.2	05/07/2023	Interim Release 2
5.3	02/08/2023	Interim Release 3
5.4	30/08/2023	Interim Release 4
5.5	04/10/2023	Interim Release 5
5.2.1	11/10/2023	Interim Release 2.1

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