Ofgem Switching Programme
UK Link File Format Change Summary

Updated March 2021

Introduction

- Walkthrough of the consequential interface changes required by UK Link and other Xoserve systems to gas industry participants to support central switching

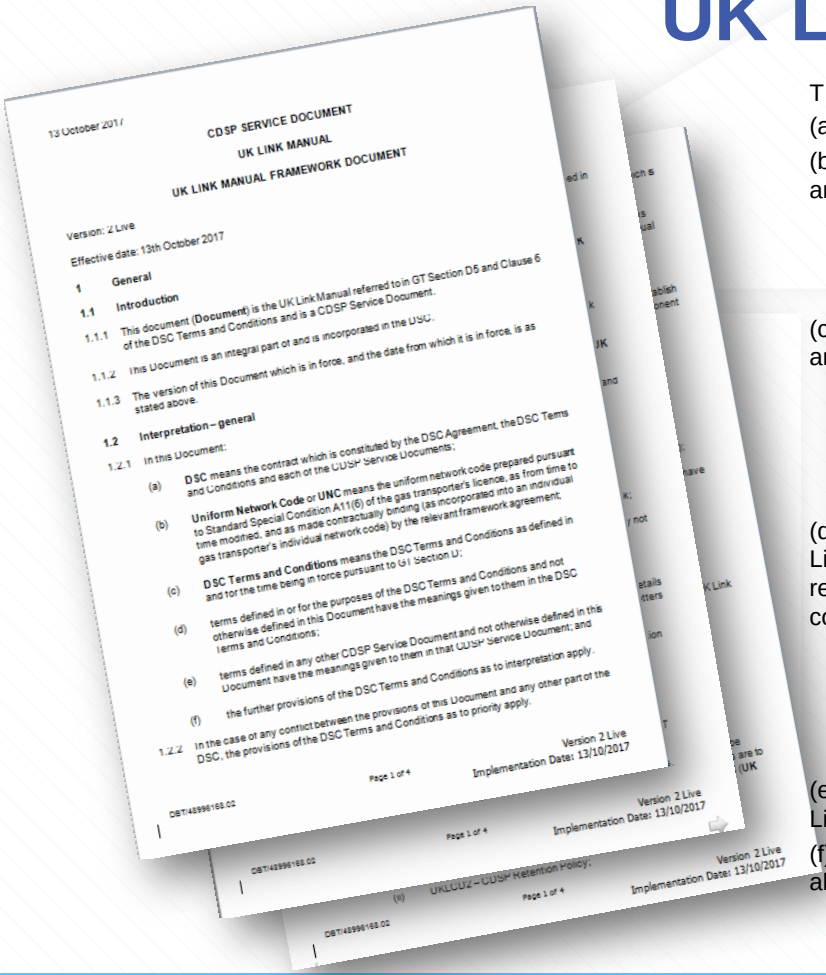
- Provide clarity on interface changes, supporting documentation and change governance processes

File Format and Interface Framework

- The **UK Link Manual** provides the framework for interfacing to UK Link along will all agreed file and record formats

- This is governed by the gas Uniform Network Code and the Data Services Contract

UK Link Manual



13 October 2017

CDSP SERVICE DOCUMENT

UK LINK MANUAL

UK LINK MANUAL FRAMEWORK DOCUMENT

Version: 2 Live

Effective date: 13th October 2017

1 General

1.1 Introduction

1.1.1 This document (**Document**) is the UK Link Manual referred to in GT Section D5 and Clause 6 of the DSC Terms and Conditions and is a CDSP Service Document.

1.1.2 This Document is an integral part of and is incorporated in the DSC.

1.1.3 The version of this Document which is in force, and the date from which it is in force, is as stated above.

1.2 Interpretation – general

1.2.1 In this Document:

(a) **DSC** means the contract which is constituted by the DSC Agreement, the DSC Terms and Conditions and each of the CDSP Service Documents;

(b) **Uniform Network Code** or **UNC** means the uniform network code prepared pursuant to Standard Special Condition A11(6) of the gas transporter's licence, as from time to time modified, and as made contractually binding (as incorporated into an individual gas transporter's individual network code) by the relevant framework agreement;

(c) **DSC Terms and Conditions** means the DSC Terms and Conditions as defined in and for the time being in force pursuant to GT Section D;

(d) terms defined in or for the purposes of the DSC Terms and Conditions and not otherwise defined in this Document have the meanings given to them in the DSC Terms and Conditions;

(e) terms defined in any other CDSP Service Document and not otherwise defined in this Document have the meanings given to them in that CDSP Service Document; and

(f) the further provisions of the DSC Terms and Conditions as to interpretation apply.

1.2.2 In the case of any conflict between the provisions of this Document and any other part of the DSC, the provisions of the DSC Terms and Conditions as to priority apply.

Page 1 of 4

Version 2 Live

Implementation Date: 13/10/2017

DBT/48996168.02

The UK Link Manual comprises of:

(a) the document which contains a description of UK Link (Description Document);

(b) the documents which set out the terms and conditions on which UK Link Users have access to and use of UK Link (UK Link Access Documents), comprising:

- (i) UKLAD1 – UK Link Terms and Conditions;
- (ii) UKLAD2 – UK Link Required Equipment; and
- (iii) UKLAD3 – UK Link File Transfer Definition;

(c) the documents which set out details of how UK Link will be made available to UK Link Users, and when it may not be available (UK Link Business Documents), comprising;

- (i) UKLBD1 – UK Link Security Operating Framework;
- (ii) UKLBD2 – UK Link IS Service Definition;
- (iii) UKLBD3 – UK Link Standards Guide; and
- (iv) UKLBD4 – Active Notification System Supplementary Document;

(d) the documents which set out in relation to Code Communications which are to be sent as UK Link Communications details of how such UK Link Communications are to be made, including in relation to the requirements of GT D Sections 5.6 and 5.8 (UK Link Communications Documents), comprising:

- (i) UKLCD1 – Code Communications Reference;
- (ii) UKLCD2 – CDSP Retention Policy;
- (iii) UKLCD3 – UK Link Interface; and
- (iv) UKLCD4 – UK Link Gemini User Guide;

(e) the document which contains procedures to be followed in the event of Code Contingency (UK Link Contingency Document); and

(f) the documents which set out a glossary of terms used in the UK Link Manual and which identify all references to the UK Link Manual in the UNC (UK Link Miscellaneous Documents), comprising:

- (i) UKLMD1 – UK Link Manual Glossary; and
- (ii) UKLMD2 – Other References to the UK Link Manual.

Agreed Interface Design Principles

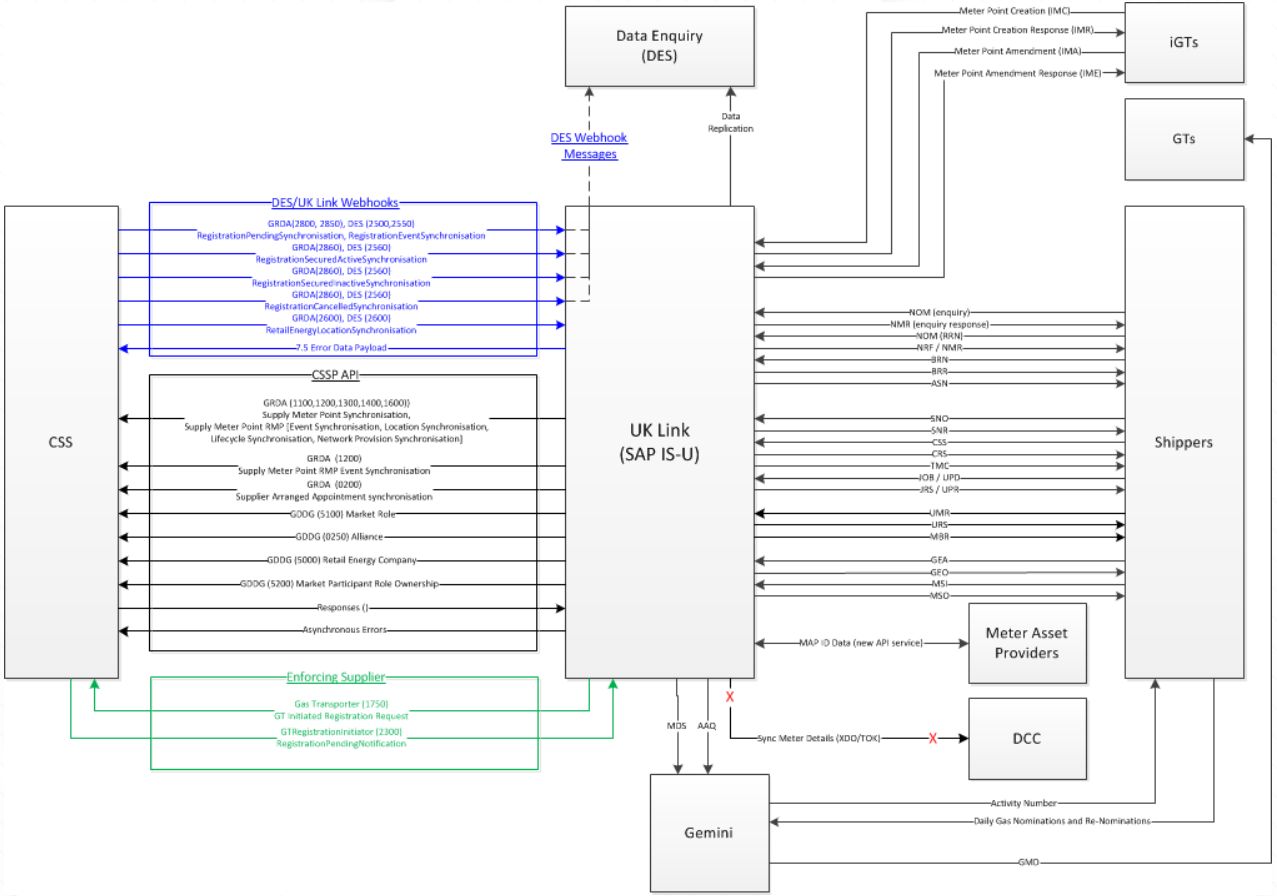
- Changes to file formats for retained switching processes to be minimised and only updated where essential.
- Where possible current file / record formats should be reused to minimise industry change.
- Where possible CSS data will be transformed by UK Link to align to current gas data formats to reduce change:
  - e.g. Domestic Indicator (Boolean) will be transformed to the Market Sector Code allowable values (D or I)

Process and Secondary Interface Scope

The below processes and following slide describe our consequential design and secondary interface scope:

- Supply Meter Point Creation
- Provision of settlement and Supply Meter Point capacity requests for a new Shipper's registration period
- Notification of Supply Meter Point Details for a confirmed Shipper registration
- Shipper ceased responsibility notifications
- Opening / Transfer Meter Reads
- Asset updates for a pending registration
- Supply Meter Point updates for a pending registration
- Provision of Shipper portfolio changes for Energy Balancing (Gemini)
- Provision of Supplier portfolio changes for smart metering

Switching Interface Flow Diagram



Core Switching Process and File Formats

Process Area	Inbound Files	Outbound Files
Supply Meter Point Creation	IMC IMA	IMR IME
Provision of settlement and meter point capacity requests for a new Shipper registration period	NOM CNF BRN SNO CSS	NRF, NMR CFR BRR SNR CRS ASN
Notification of Supply Meter Point Details for a confirmed Shipper registration		TRF TMC TRS
Shipper ceased responsibility notification		TRF TMC TRS
Opening / Transfer Meter Reads	UMR	URS MBR
Asset updates for a pending registration	JOB UPD	JRS UPR
Supply Meter Point updates for a pending registration	GEA MSI WAO MAM	GEO MSO WOR MAS
Provision of Shipper portfolio changes for Energy Balancing (Gemini)		MDS AAQ
Provision of Supplier portfolio changes for smart metering		XDO TOK

Please note that changes to the network delta files for the inclusion of REL have been removed due to licence constraints around the use of this data

Impacted UK Link File Format Summary

Interface Name	UK Link Data Flow Direction	Industry Participant / External System	Consequential Design Impact	Includes CSS Data
NOM	Inbound	Shipper	Change to current file format & Process Change	N
NOM Enquiry (API)	Inbound / Outbound	Shipper	New API	N
NMR	Outbound	Shipper	Change to current file format & Process Change	N
NRF	Outbound	Shipper	Change to current file format & Process Change	N
CNF	Inbound	Shipper	Process Change	N
CFR	Outbound	Shipper	Process Change	N
BRN	Inbound	Shipper	New Interface File / New API	N
BRR	Outbound	Shipper	New Interface File / New API	N
ASN	Outbound	Shipper	New Interface File / New API	Y
Transportation Rate	Inbound / Outbound	Shipper	New API	N
SNO	Inbound	Shipper	Process change if meter point is moving to shared from non-shared	N
SNR	Outbound	Shipper	Process change if meter point is moving to shared and file format change	N
CSS	Inbound	Shipper	Process change if meter point is moving to shared from non-shared	N
CRS	Outbound	Shipper	Process change if meter point is moving to shared and file format change	N

Impacted UK Link File Format Summary

Interface_Name	UK Link Data Flow Direction	Industry Participant / External System	Consequential_Design_Impact	Includes CSS Data
TRS	Outbound	Shipper	Process change if meter point is moving to shared and file format change	N
TRF	Outbound	Shipper	Process Change	N
TMC	Outbound	Shipper	New Interface File	N
JOB	Inbound	Shipper	Process Change	N
UPD	Inbound	Shipper	Process Change	N
UPR	Outbound	Shipper	Process Change	N
JRS	Outbound	Shipper	Process Change	N
GEA	Inbound	Shipper	Process Change	N
GEO	Outbound	Shipper	Process Change	N
MSI	Inbound	Shipper	Process Change	N
MSO	Outbound	Shipper	Process Change	N
WAO	Inbound	Shipper	Process Change	N
WOR	Outbound	Shipper	Process Change	N
MDS	Outbound	Gemini	Process Change	N
AAQ	Outbound	Gemini	Process Change	N

Impacted UK Link File Format Summary

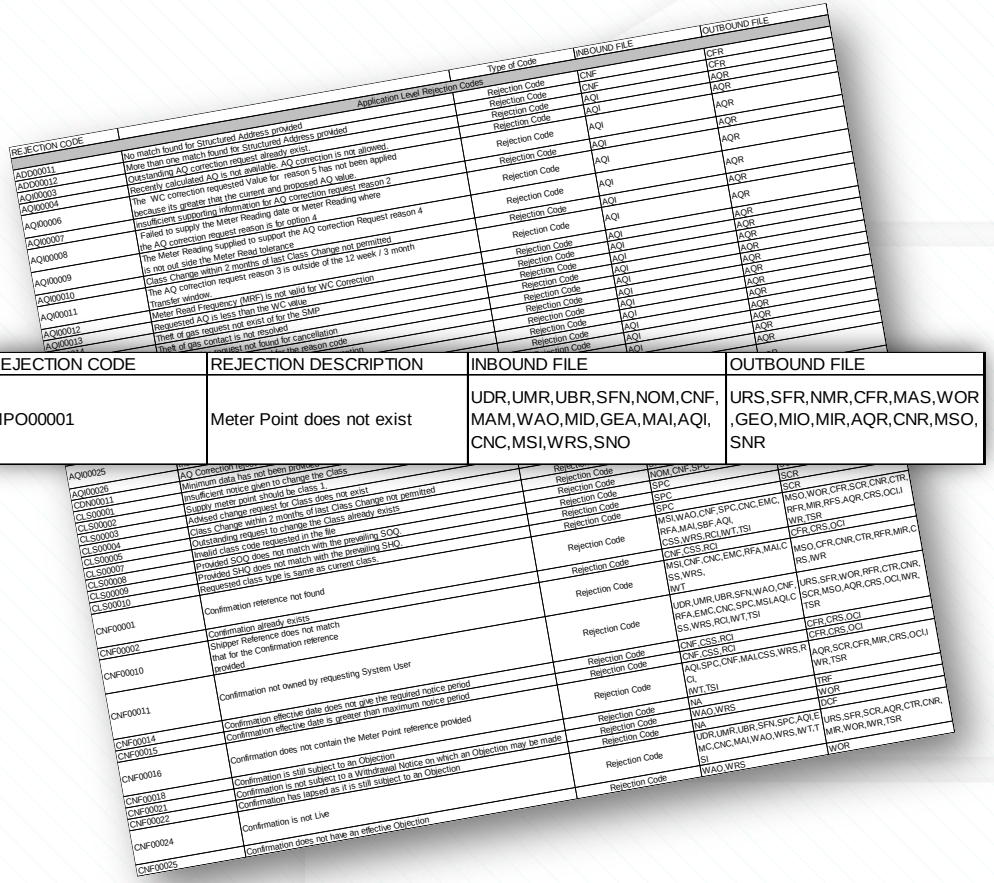
Interface_Name	UK Link Data Flow Direction	Industry Participant / External System	Consequential_Design_Impact	Includes CSS Data
XDO	Outbound	Smart DCC	Decommission	N/A
TOK	Outbound	Smart DCC	Decommission	N/A
MAM	Inbound	Shipper	Process Change	N
MAS	Outbound	Shipper	Process Change	N
IMC	Inbound	iGT	Process Change	N
IMR	Outbound	iGT	Process Change	N
IMA	Inbound	iGT	Process Change	N
IME	Outbound	iGT	Process Change	N
UMR	Inbound	Shipper	Process Change	N
URS	Outbound	Shipper	Process Change	N
MBR	Outbound	Shipper	Process Change	N

Impacted Interface Summary

Change Type	Impacted File Format Count
Change to current file format	3
Decommission	2
New API	5
New Interface File	4
Process Change	27
Awaiting decision on Shared Supply Meter Points	6

Impacted Party	Impacted File Format Count
Shipper	32
iGT	4
Smart DCC	2
Gemini	2
Total	**42**

Amendments to Rejection Codes



REJECTION CODE	REJECTION DESCRIPTION	INBOUND FILE	OUTBOUND FILE
MPO00001	Meter Point does not exist	UDR,UMR,UBR,SFN,NOM,CNF,MAM,WAO,MID,GEA,MAI,AQI,CNC,MSI,WRS,SNO	URS,SFR,NMR,CFR,MAS,WOR,GEO,MIO,MIR,AQR,CNR,MSO,SNR

Amendments are being made to retained files to reject any requests for CSS managed meter points. This introduces a number of new rejection codes that will be issued to Shippers to:

- Reject confirmation requests
- Reject Supplier amendment submissions
- Reject changes to Market Sector Code

New Rejection Codes

The following new rejection codes are being introduced to support the introduction of new files and process changes:

REJ_CODE	Proposed Description	Impacted File
CSS00001	Confirmation cannot be submitted for CSS sites	CNF, CSS
CSS00002	Supplier change cannot be submitted for CSS sites via GEA process	GEA
CSS00003	Withdrawal request or objection cannot be submitted for CSS sites	WAO
CSS00004	MSI cannot be submitted for CSS sites	MSI
CSS00005	Shipper Supplier combination provided is not valid	IMC & IMA
BRN00001	BRN was previously cancelled or has expired	BRN
BRN00002	BRN Reference number does not exist	BRN
BRN00003	BRN cannot be submitted for Non-CSS sites	BRN

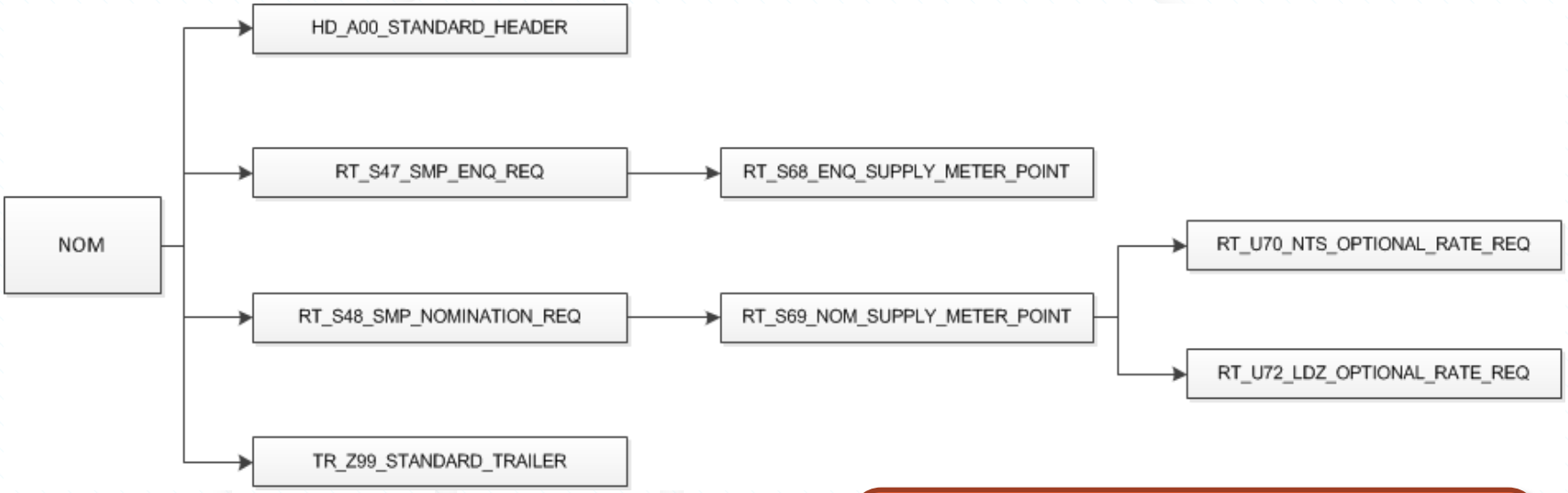
Where possible exiting errors codes will be used to support new validation failures

Impacted Gemini File Format Summary

Interface_Name	Gemini Data Flow Direction	Industry Participant / External System	Consequential_Design_Impact	Includes CSS Data
ACT	Outbound	Shipper	New Gemini activity number notification	N

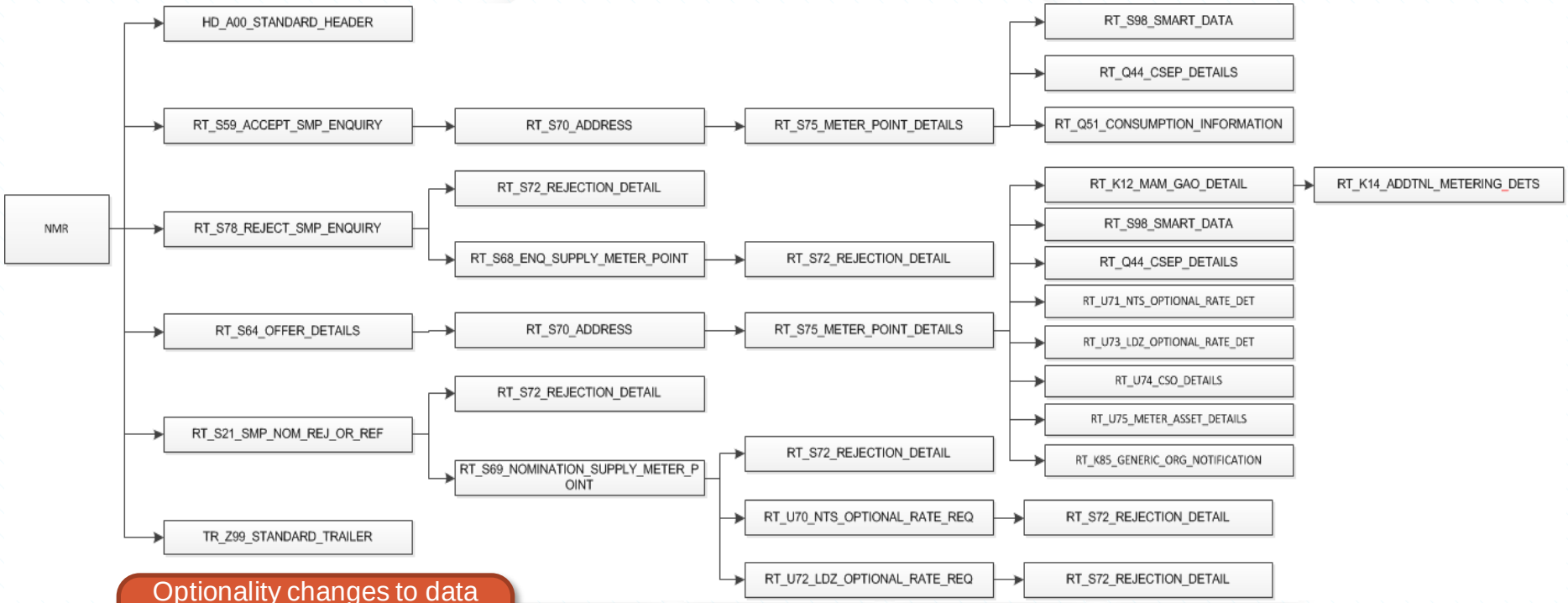
Impacted File Hierarchies

NOM File Hierarchy



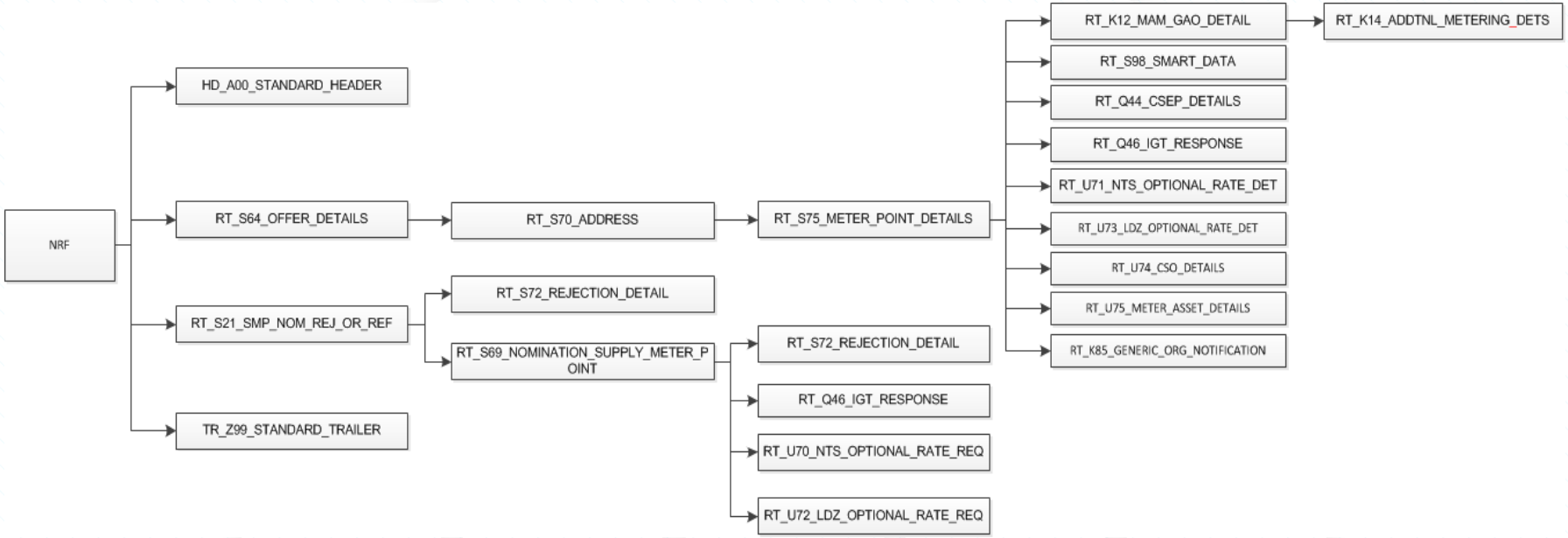
Optionality changes to data items contained within the S69 record along with processing changes. New enquiry API to support the submission of the S47 and S68 records via an API

NMR File Hierarchy



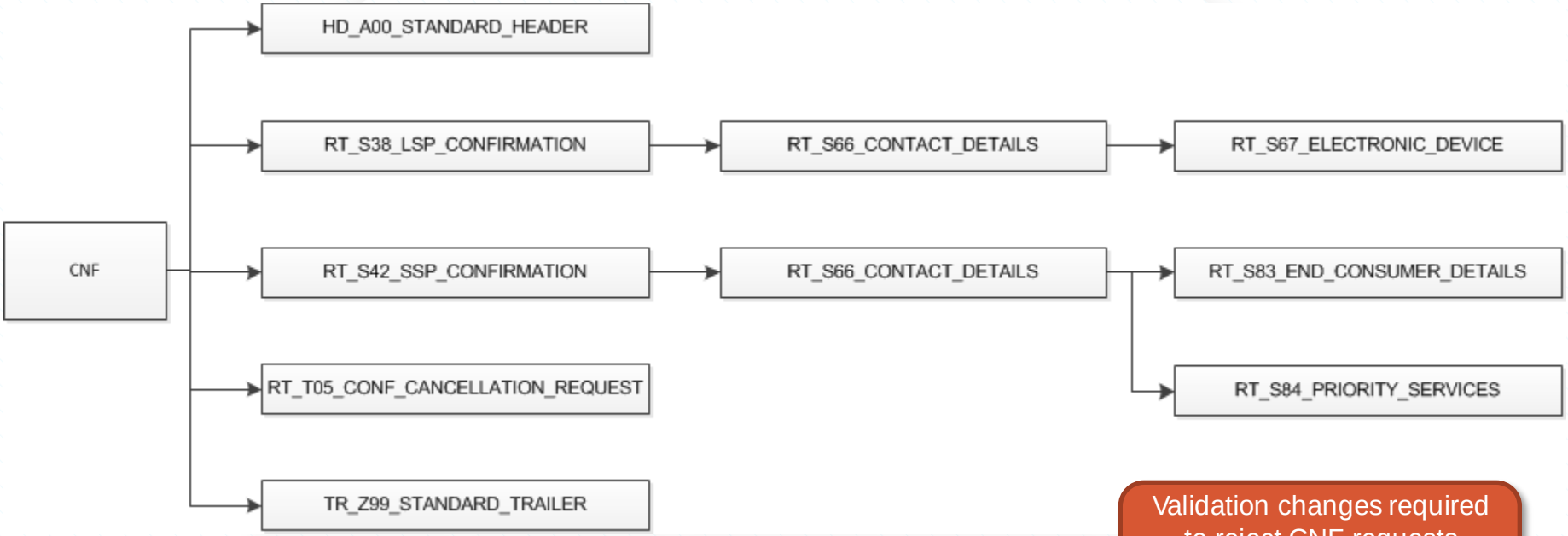
Optionality changes to data items contained within the S59, S64, S69, U70 and U72 records

NRF File Hierarchy



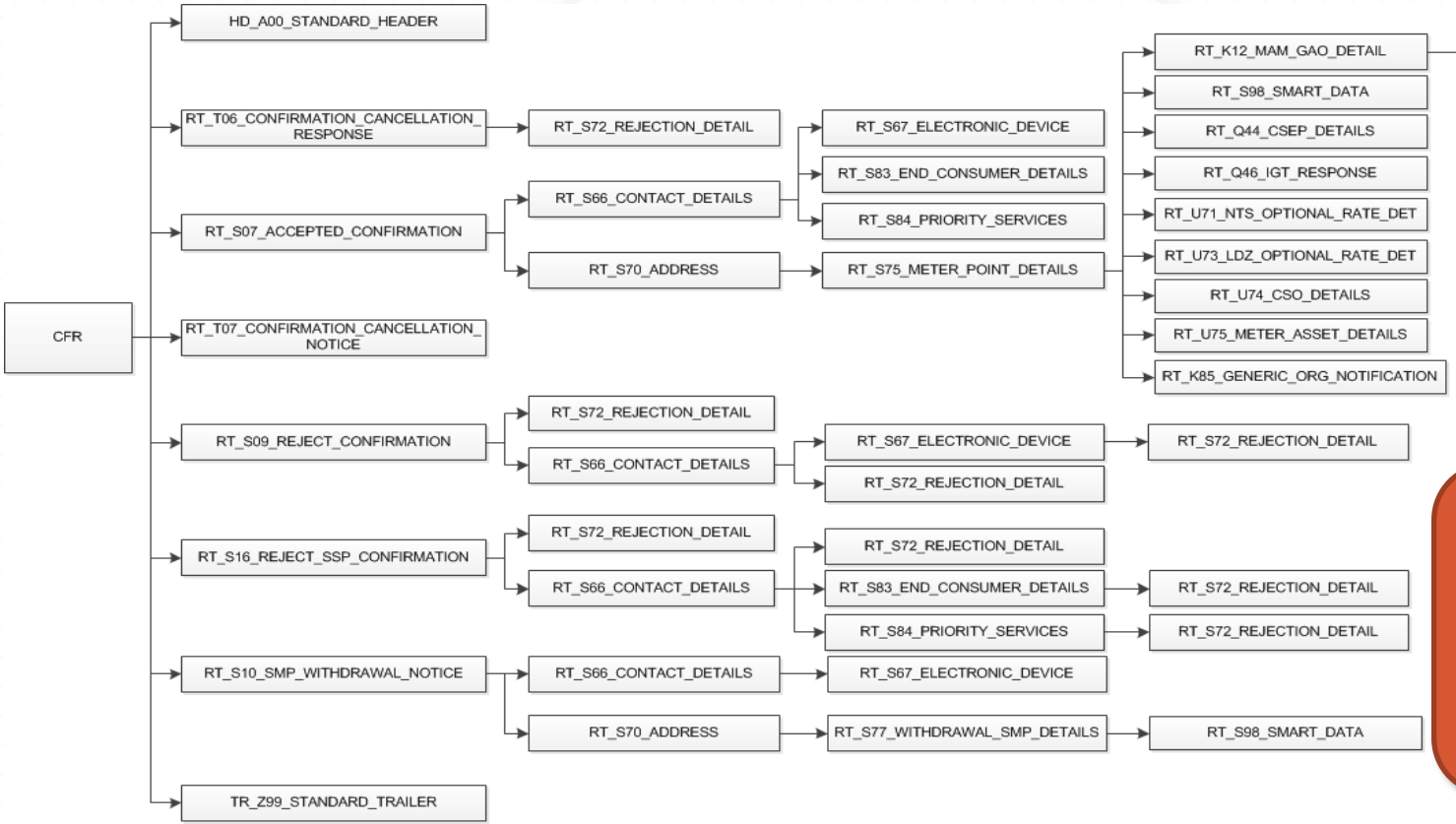
Optionality changes to data items contained within the S64, S69, U70 and U72 records

CNF File Hierarchy



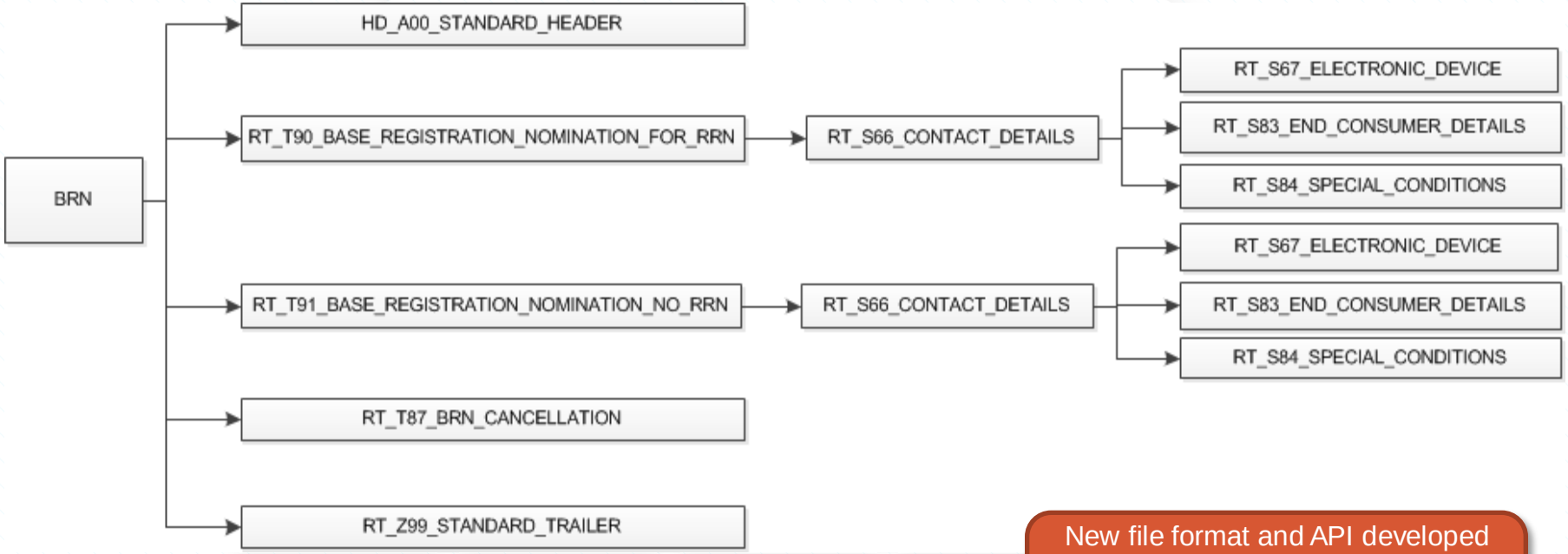
Validation changes required to reject CNF requests submitted for CSS managed Supply Meter Points

CFR File Hierarchy



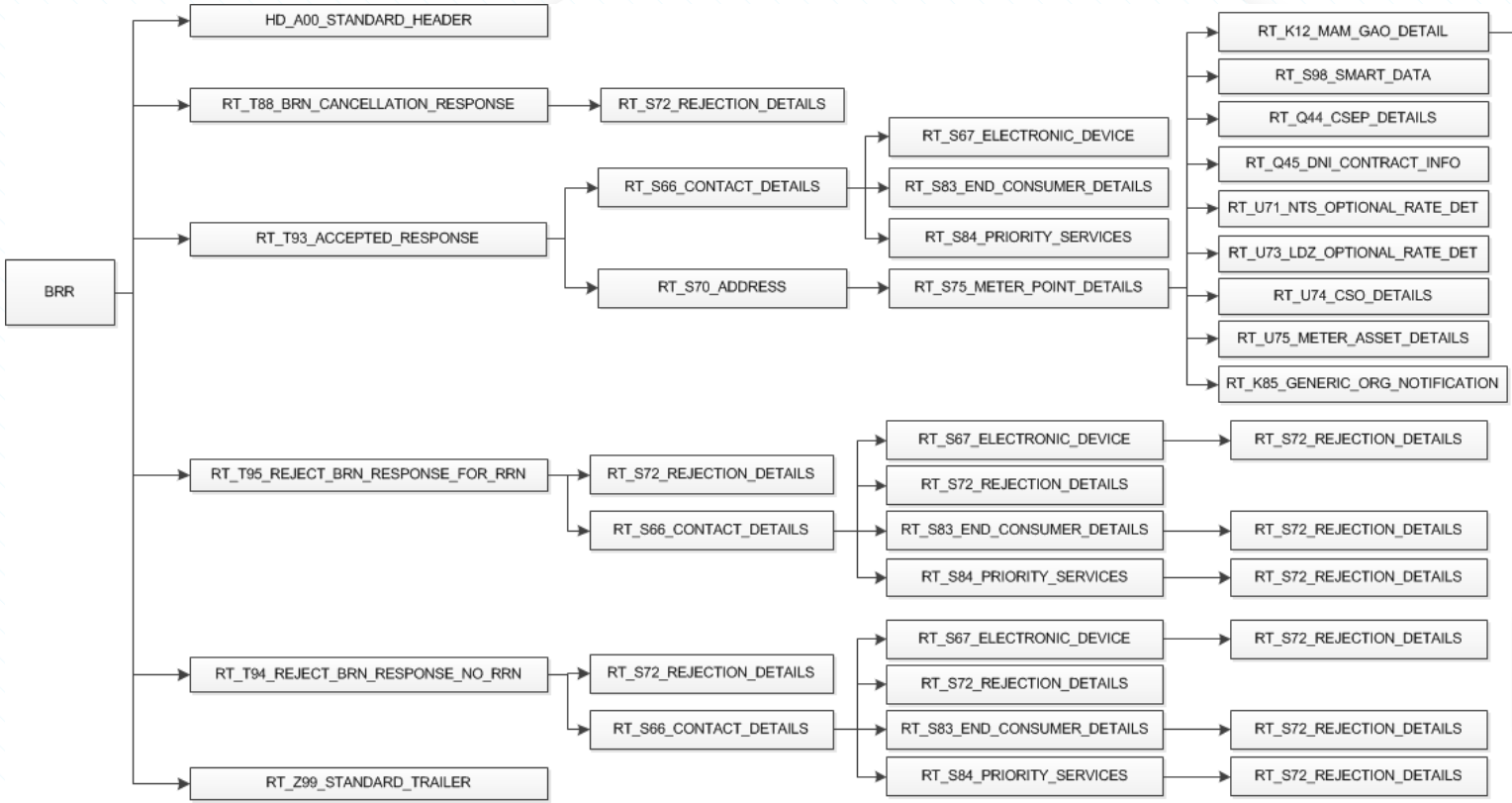
New rejection details included within the S72 record for rejected CNF requests, plus changes to the K85 record allowable values

BRN File Hierarchy



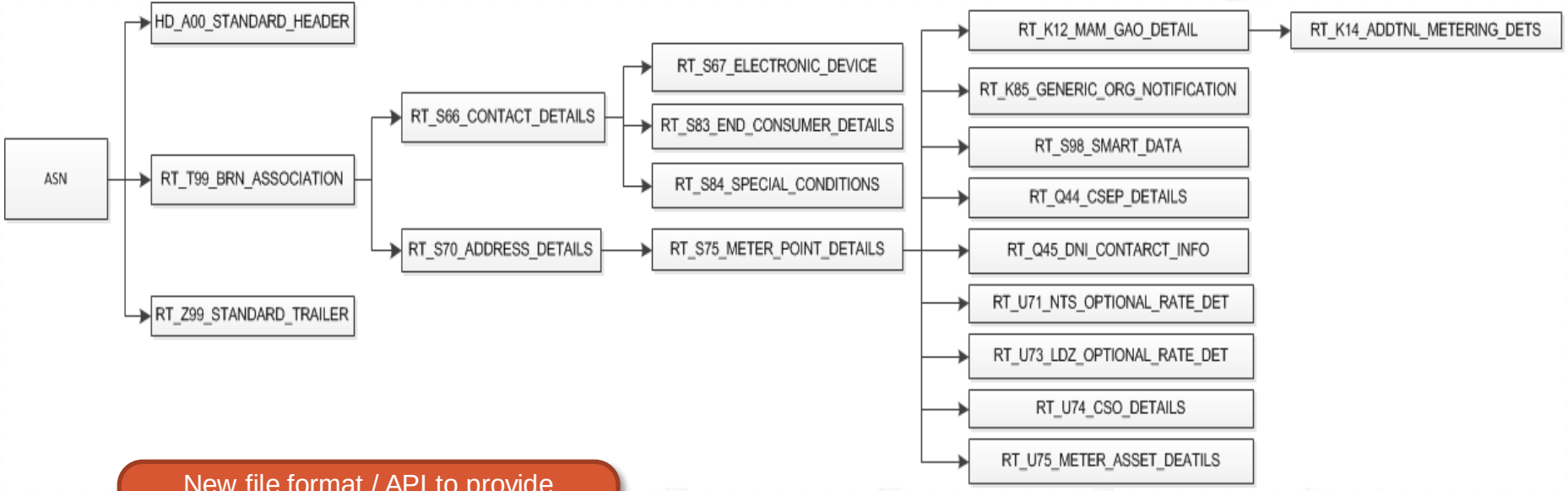
New file format and API developed to enable Shippers to submit their required settlement data in support of a new CSS registration

BRR File Hierarchy



New response file / API to support the inbound BRN file

ASN File Hierarchy



New file format / API to provide Shippers with the association details between a CSS Registration and their settlement data submission

Inputs for Shipper Transportation Rate API Interface

Below are the Inputs fields which shipper needs to provide in JSON format while accessing Shipper Transportation Rates API Interface

Record	Level	Input Fields
RT_S48_NOMENQ	Level 1	NOMINATION_SHIPPER_REF REQUESTED_DM_SOQ REQUESTED_DM_SHQ MRF_TYPE_CODE CSEP_INFORMATION SUPPLY_POINT_CLASS METER_READ_BATCH_FREQUENCY SEASONAL_LSP SEASONAL_LSP_PERIOD_START_MON SEASONAL_LSP_PERIOD_END_MON SITE_WORKS_REFERENCE
RT_S69_MPRN	Level 2	METER_POINT_REFERENCE
RT_U72_LDZ_RAT	Level 3	LDZ_OPTIONAL_RATE_APPLICABLE POSTCODE_OUTCODE POSTCODE_INCODE SPECIFIED_EXIT_POINT GRID_REFERENCE_ENTRY_POINT GRID_REFERENCE_EXIT_POINT

- Note:- Existing business rules will be applied around querying transportation rate data through API service route**(**Nomination Request or Post CSS Referable Registration Nomination)

Output Rates for Shipper Transportation Rate API Interface

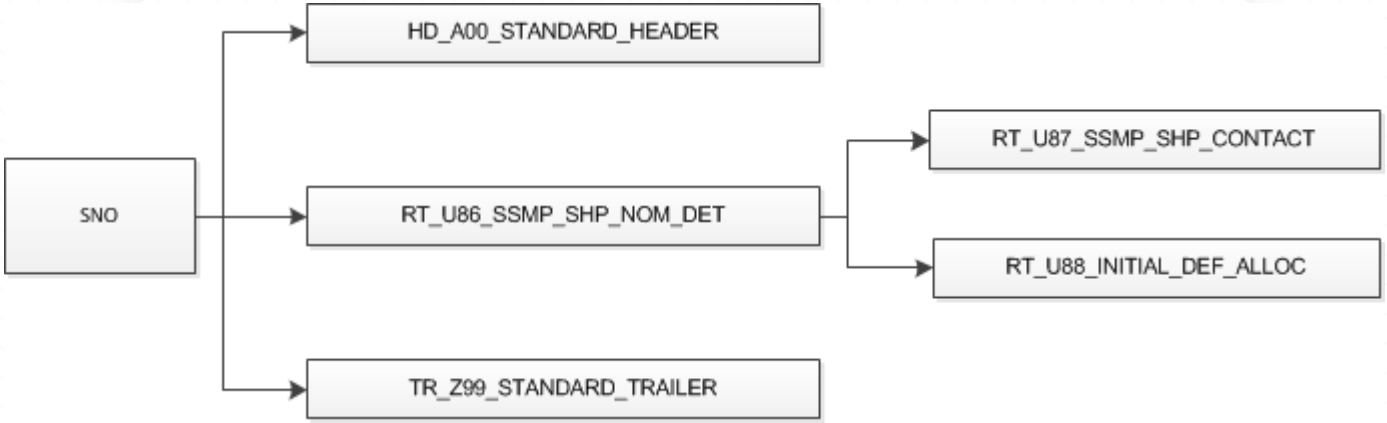
Below are the Output fields which shipper needs to consume in JSON format while accessing Shipper Transportation Rates API Interface

Segment		Rate Fields
RT_S64_OFFER_DETAILS	Level 1	EXIT_CAPACITY_LDZ_ECN
RT_S64_OFFER_DETAILS	Level 1	NTS_COMMODITY_CHARGE
RT_S64_OFFER_DETAILS	Level 1	LDZ_COMMODITY_CHARGE
RT_S64_OFFER_DETAILS	Level 1	LDZ_CAPACITY_CHARGE
RT_S64_OFFER_DETAILS	Level 1	LDZ_CUSTOMER_CHARGE
RT_Q44_CSEP_DETAILS	Level 1	CSEP_ADMIN_CHARGE_RATE
RT_Q44_CSEP_DETAILS	Level 1	IGT_INFILL_CHARGE_RATE_EFF_DAT
RT_Q44_CSEP_DETAILS	Level 1	IGT_INFILL_RATE
RT_Q44_CSEP_DETAILS	Level 1	IGT_METERING_RATE
RT_Q44_CSEP_DETAILS	Level 1	IGT_METER_CHARGE_RATE_EFF_DATE
RT_Q44_CSEP_DETAILS	Level 1	IGT_TRANSPORTATION_RATE
RT_Q44_CSEP_DETAILS	Level 1	IGT_TRANSPORTATION_RATE_TYPE
RT_Q44_CSEP_DETAILS	Level 1	IGT_TRANS_CHARGE_RATE_EFF_DATE

Rates Made available via Shipper Transportation Rate API Interface

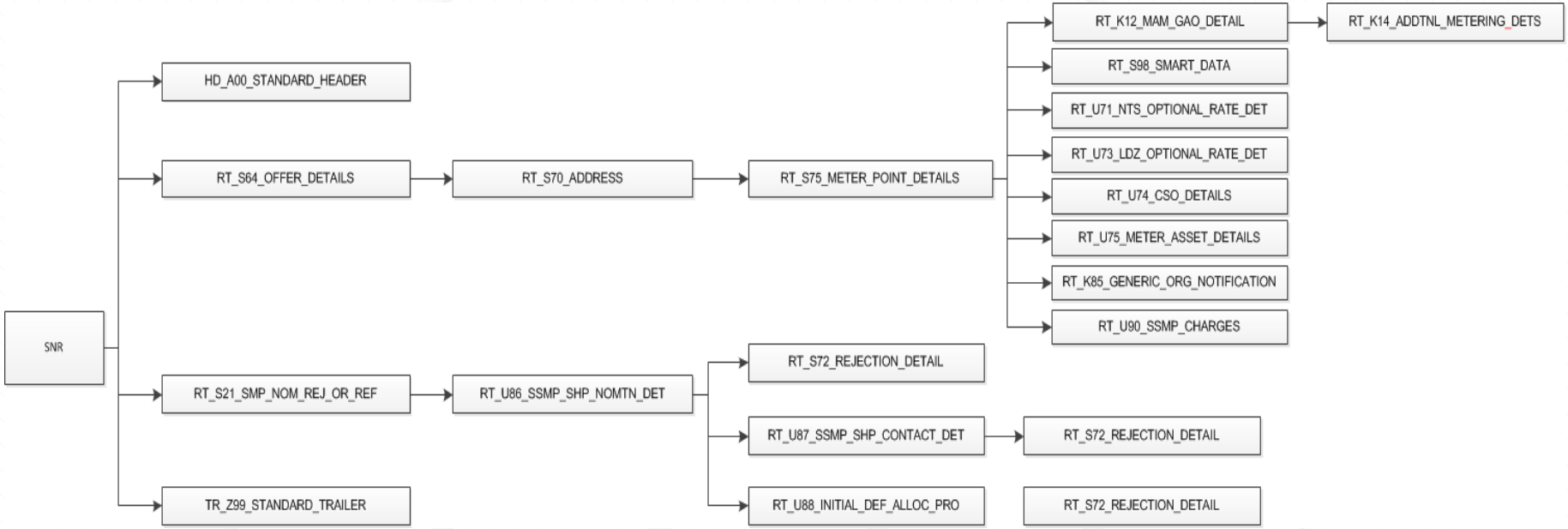
Record	Level	Rate Fields
RT_U71_NTS_OPT_RATE_DET	Level 1	NTS_OPTIONAL_RATE
RT_U73_LDZ_OPT_RATE_DET	Level 1	LDZ_OPTIONAL_RATE
RT_U74_CSO_DETAILS	Level 1	CSEP_ADMIN_CHARGE_RATE
RT_U75_METER_ASSET_DETAILS	Level 1	MAC_METER_ASSET_CHARGE_I MAC_METER_ASSET_CHARGE_M MAC_METER_ASSET_CHARGE_P CAC_CORRECTOR_ASSET_CHARGE_I CAC_CORRECTOR_ASSET_CHARGE_M CAC_CORRECTOR_ASSET_CHARGE_P DAC_DRE_I DAC_DRE_M DAC_DRE_P
RT_U90_SSMP_CHARGES	Level 1	SSMP_AGENT_NON_SETUP_CHARGE SSMP_AGENT_NON_TRANSFER_CHARGE SSMP_AGENT_NON_DAILY_CHARGE SSMP_AGENT_TELE_SETUP_CHARGE SSMP_AGENT_TELE_TRANSFER_CHARG SSMP_AGENT_TELE_DAILY_CHARGE SSMP_TRANS_NON_SETUP_CHARGE SSMP_TRANS_NON_TRANSFER_CHARGE SSMP_TRANS_NON_DAILY_CHARGE SSMP_TRANS_TELE_SETUP_CHARGE SSMP_TRANS_TELE_TRANSFER_CHARG SSMP_TRANS_TELE_DAILY_CHARGE

SNO File Hierarchy



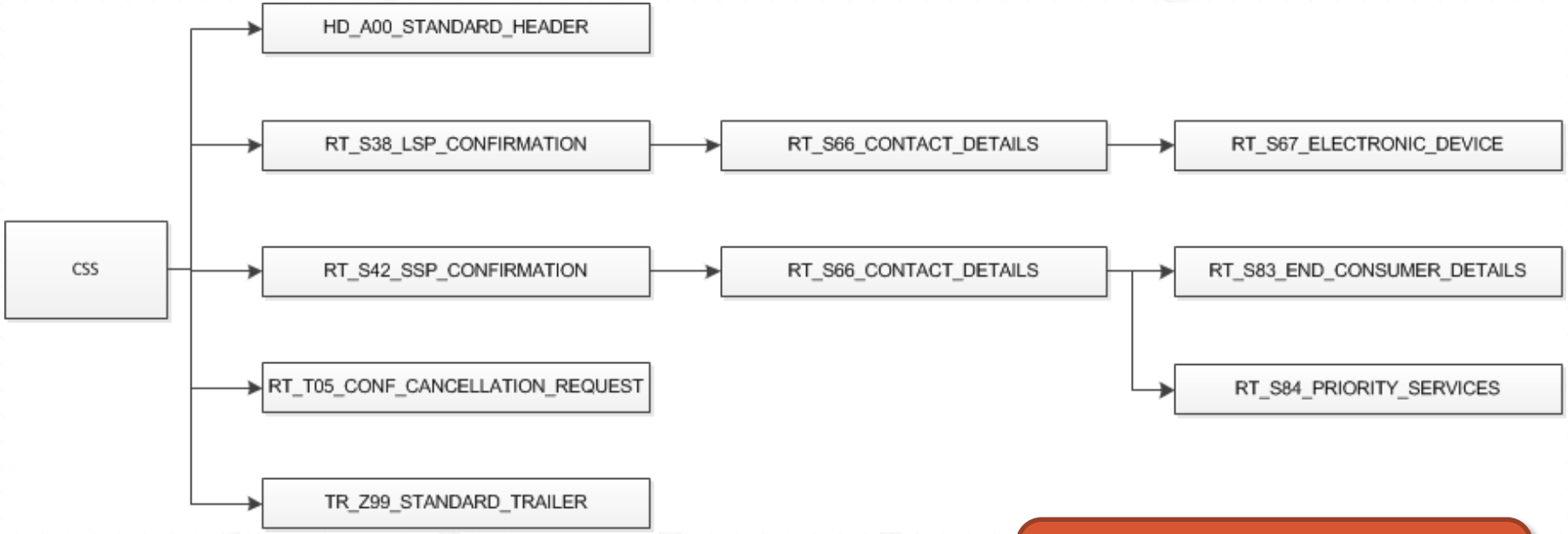
Process change required if meter point is moving to shared from non-shared

SNR File Hierarchy



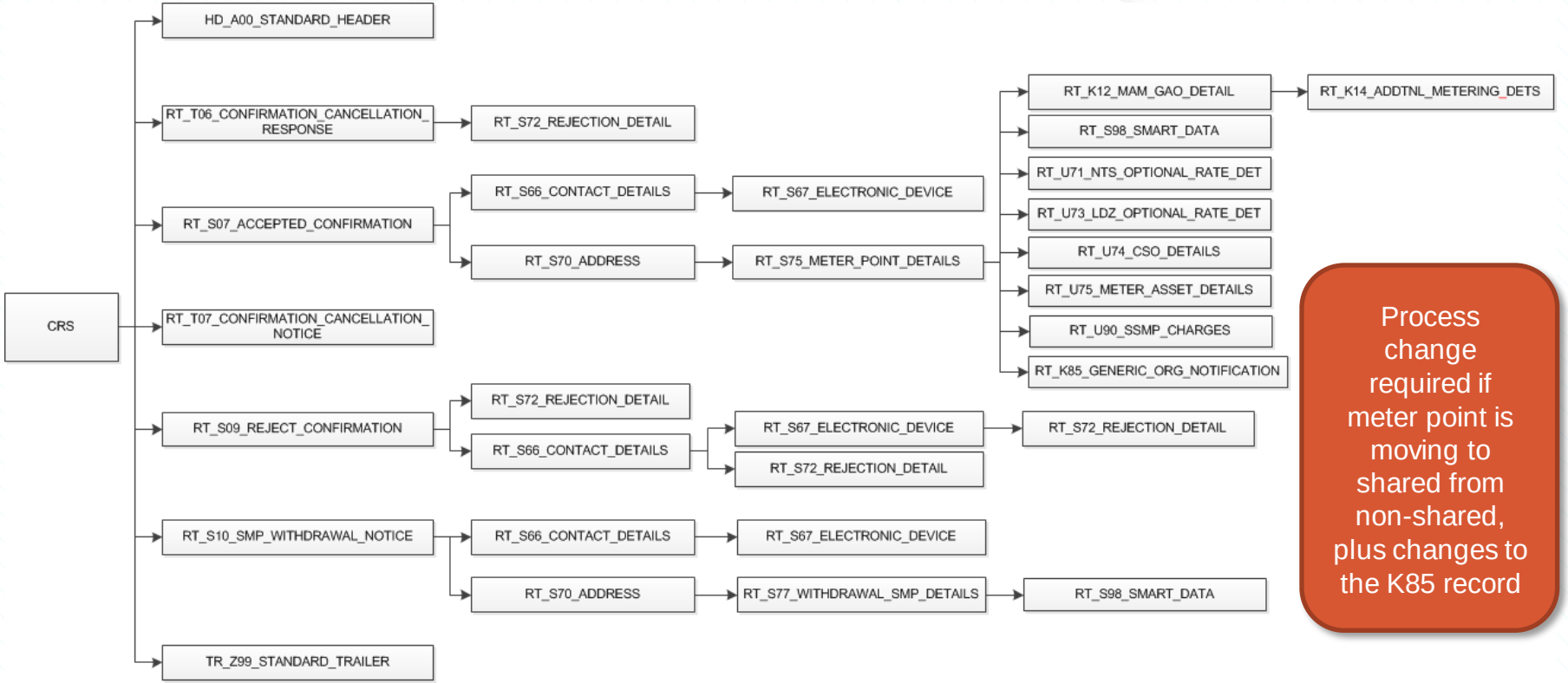
Process change required if meter point is moving to shared from non-shared , plus changes to the K85 record

CSS File Hierarchy



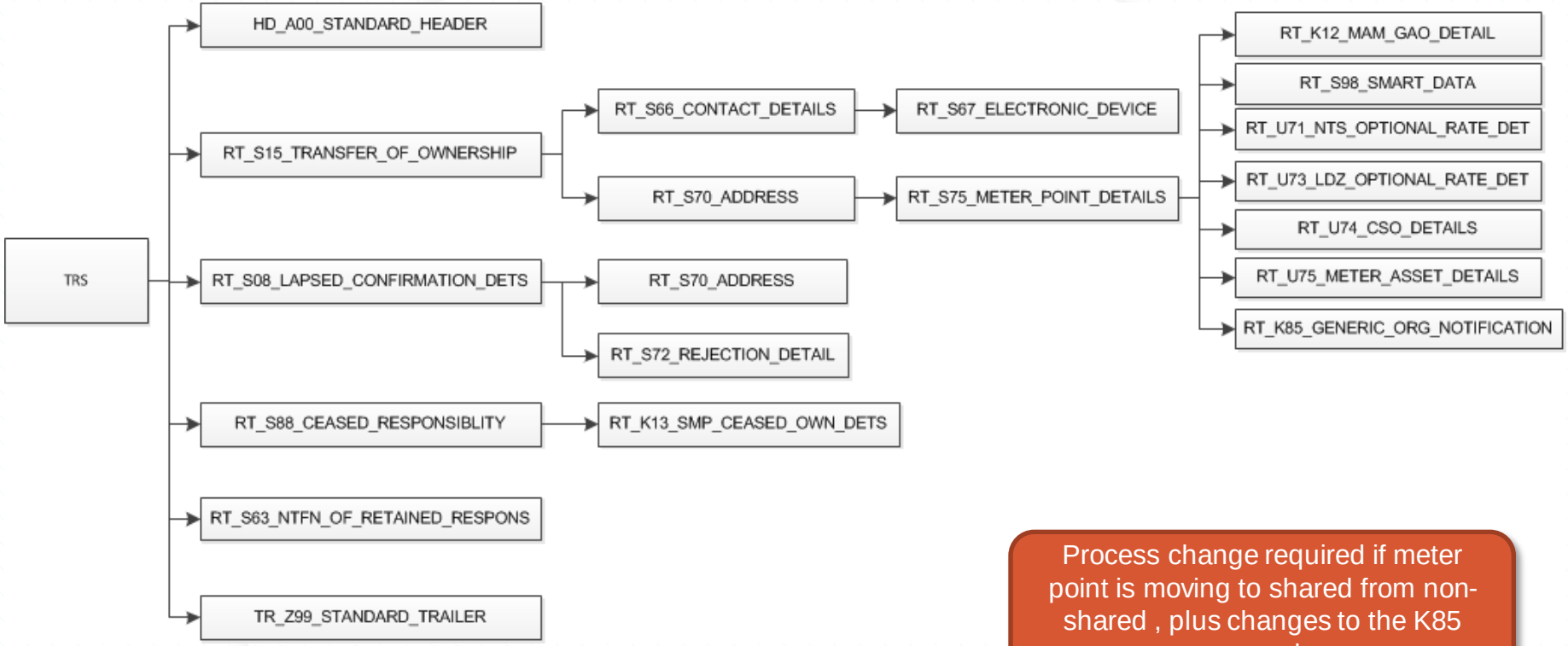
Process change required if meter point is moving to shared from non-shared

CRS File Hierarchy



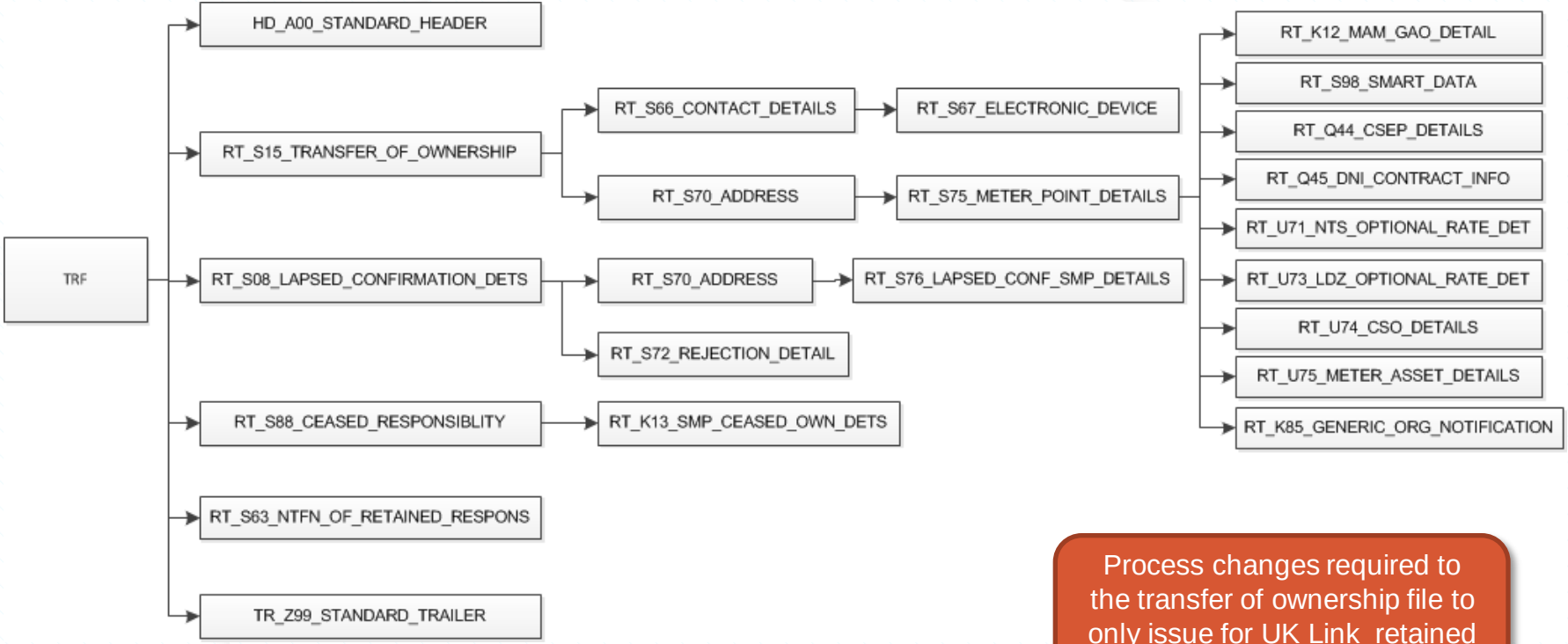
Process change required if meter point is moving to shared from non-shared, plus changes to the K85 record

TRS File Hierarchy



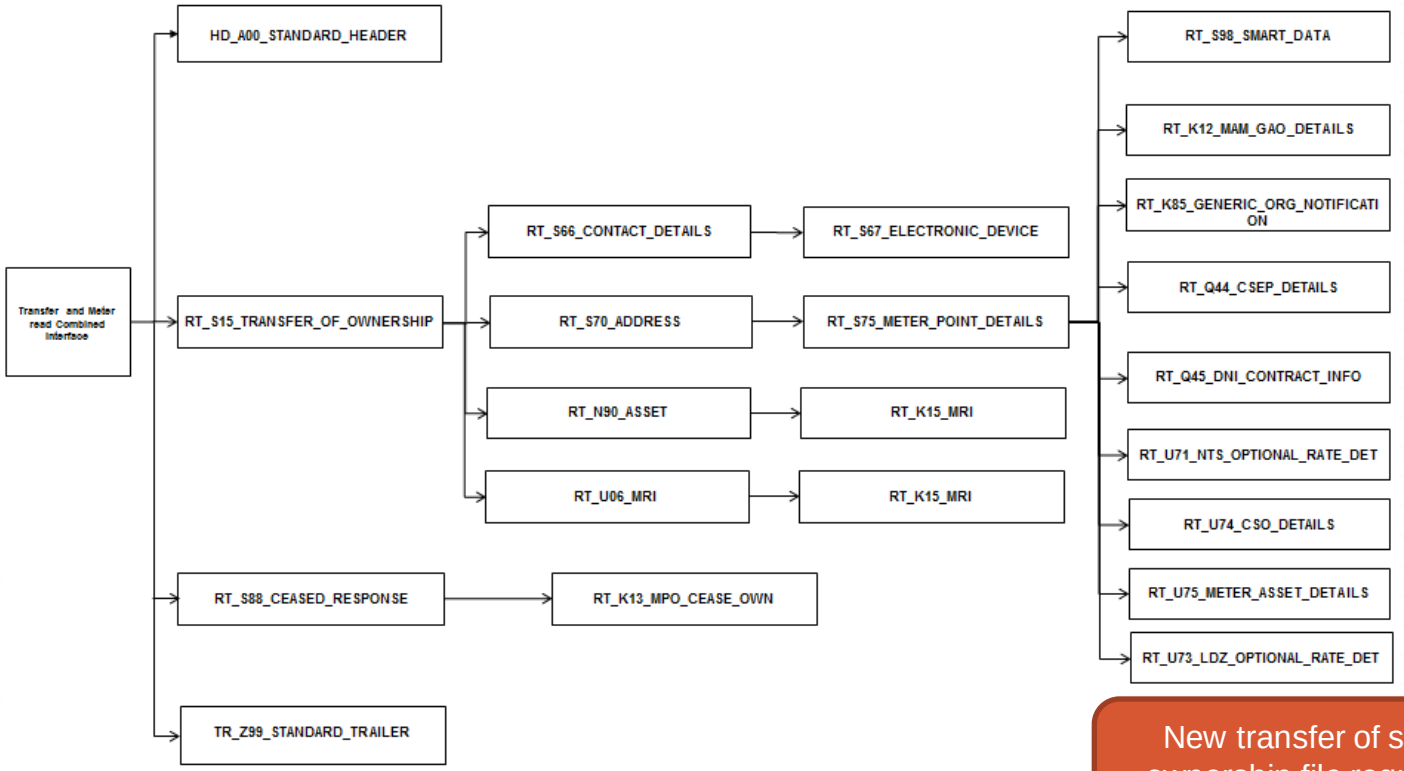
Process change required if meter point is moving to shared from non-shared , plus changes to the K85 record

TRF File Hierarchy



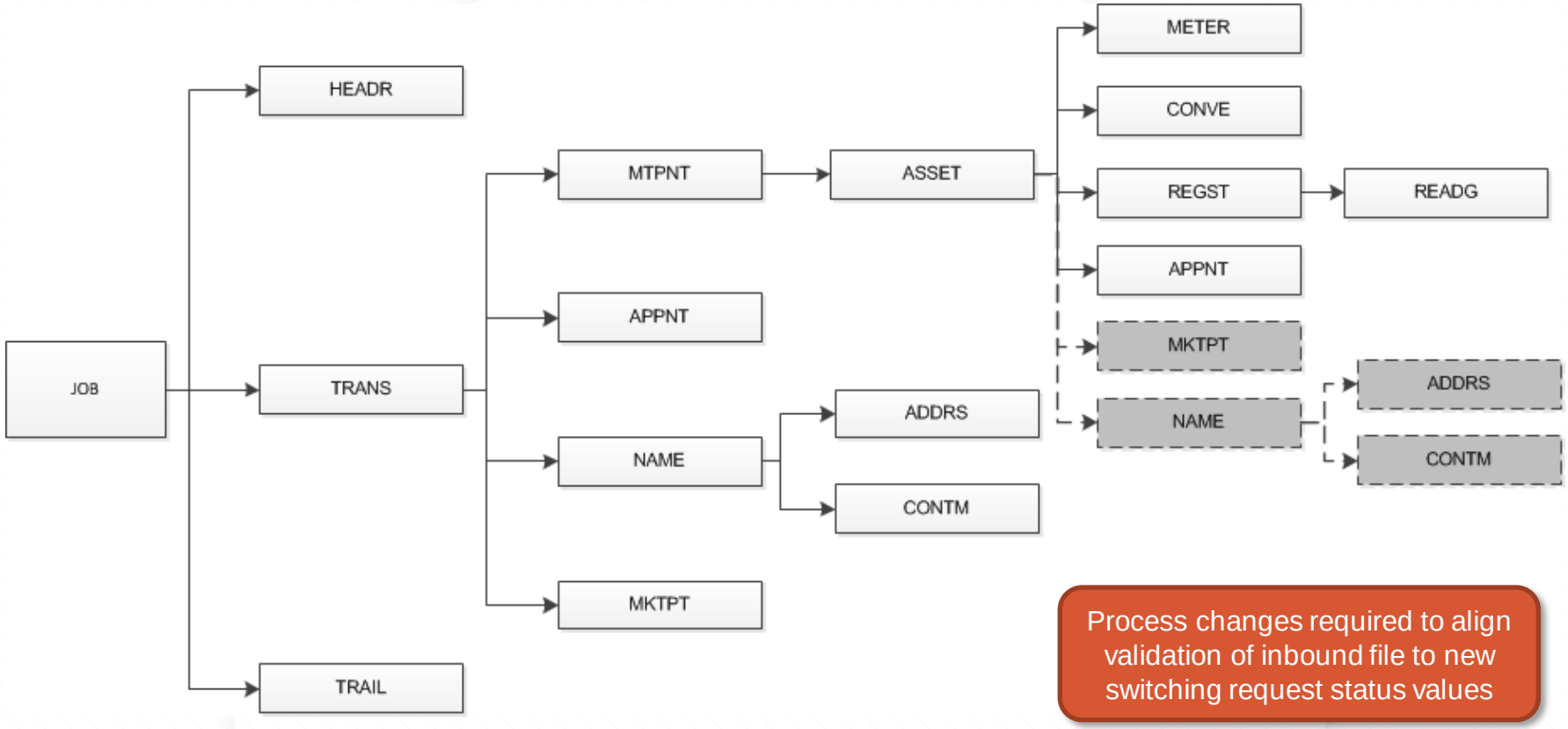
Process changes required to the transfer of ownership file to only issue for UK Link retained switching sites

TMC File Hierarchy



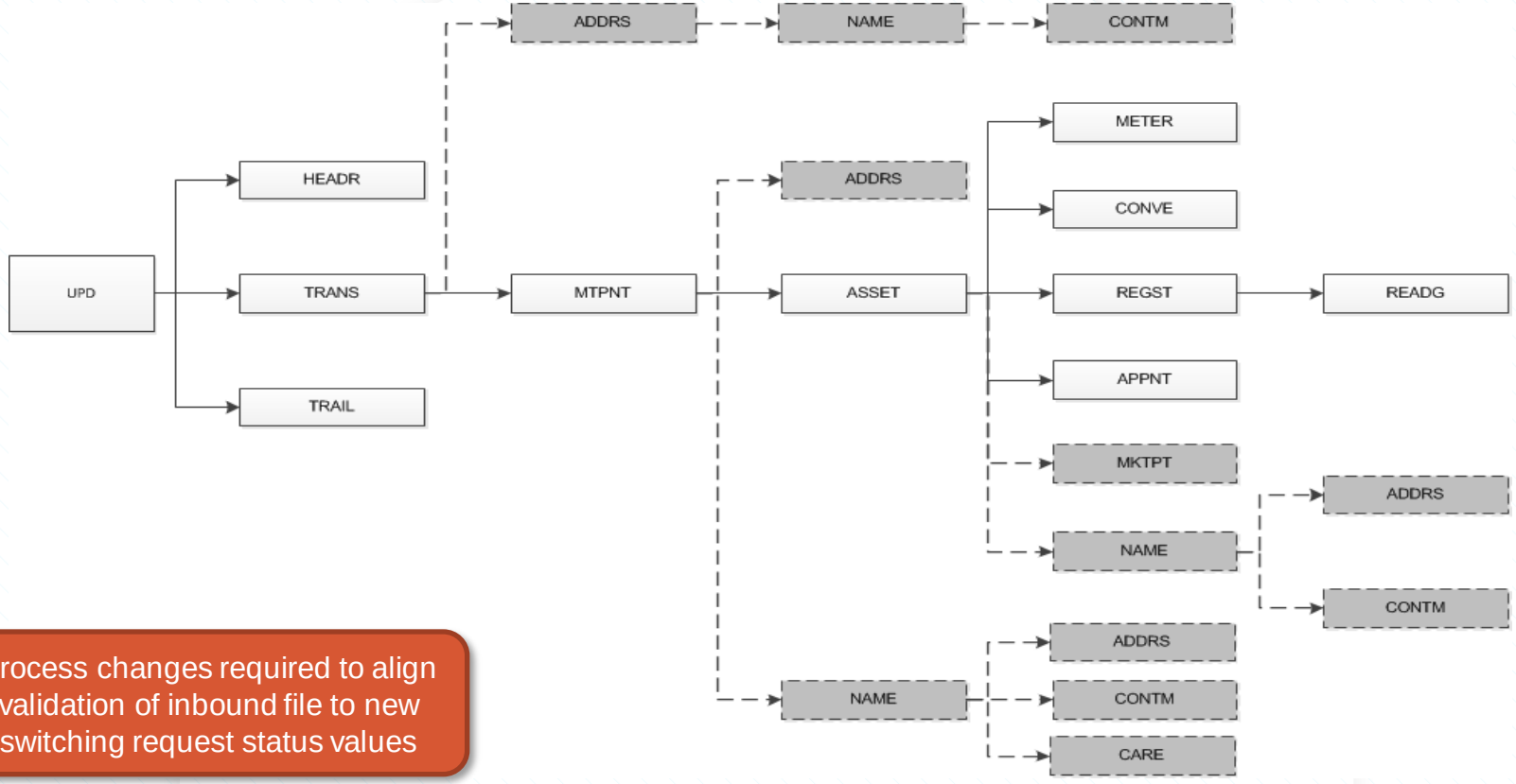
New transfer of shipper ownership file required for CSS managed sites

JOB File Hierarchy



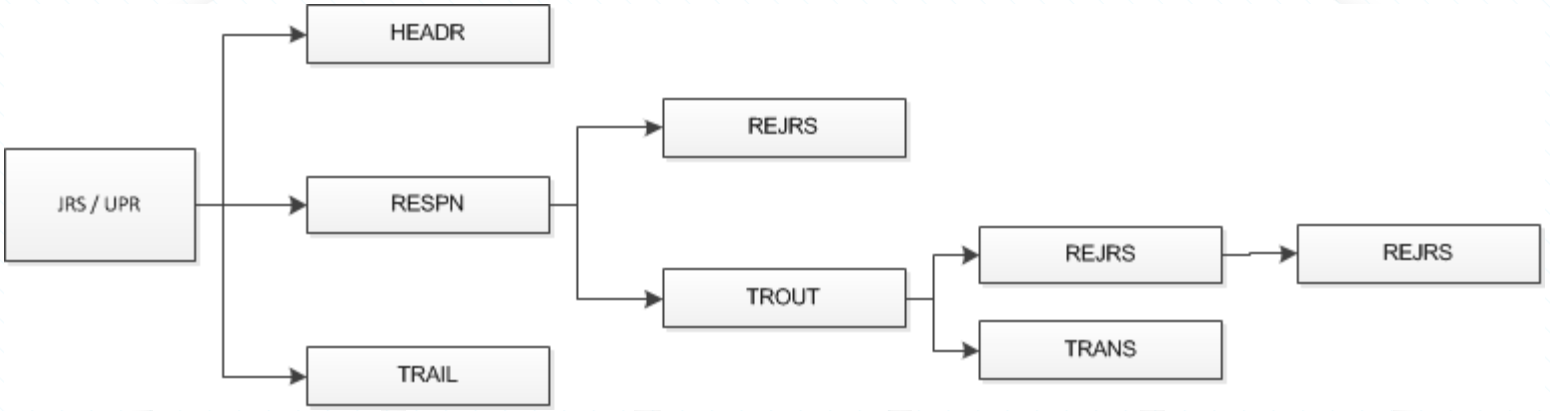
Process changes required to align validation of inbound file to new switching request status values

UPD File Hierarchy



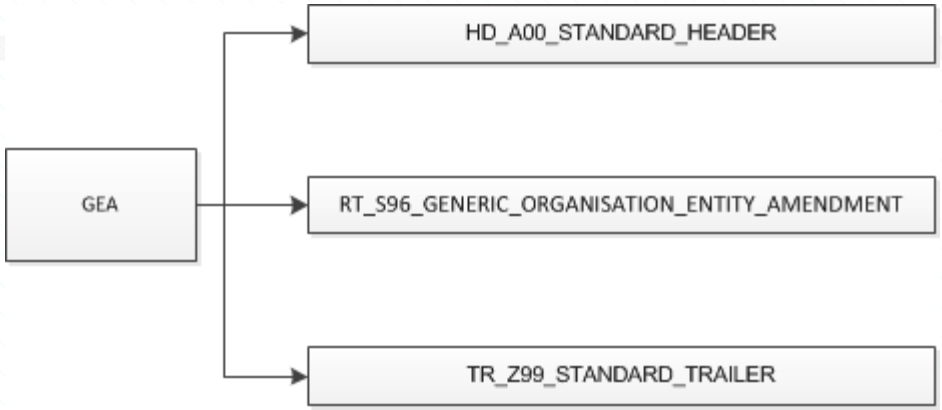
Process changes required to align validation of inbound file to new switching request status values

JRS / UPR File Hierarchies



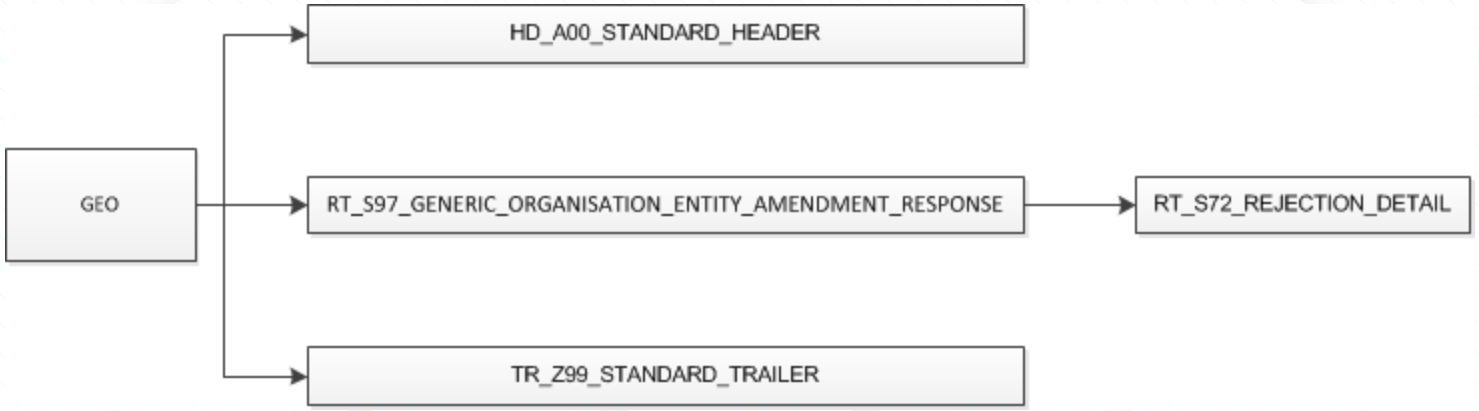
Process changes required to support generation of outbound file following submission rules changes on inbound JOB and UPD files

GEA File Hierarchy



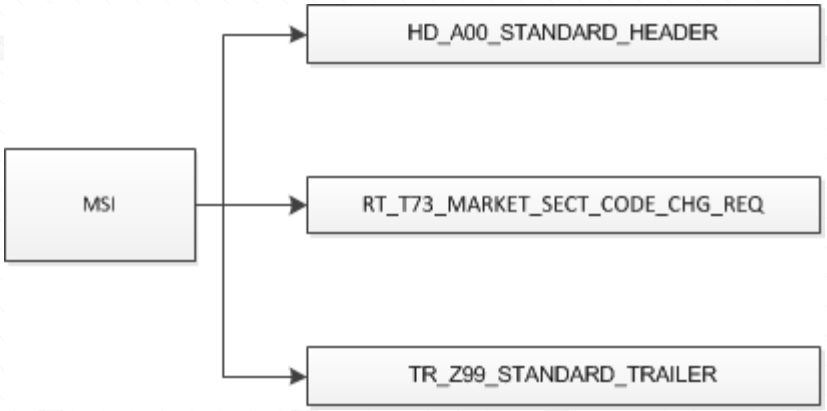
Process changes required to reject any Supplier update requests for Supply Meter Points being managed by CSS

GEO File Hierarchy



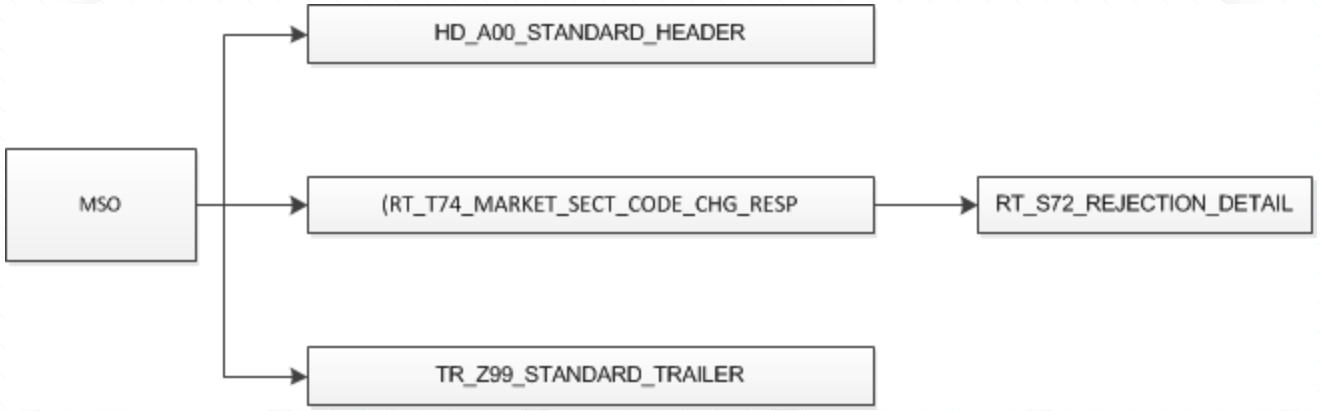
New rejection details included within the S72 record for rejected GEA requests

MSI File Hierarchy



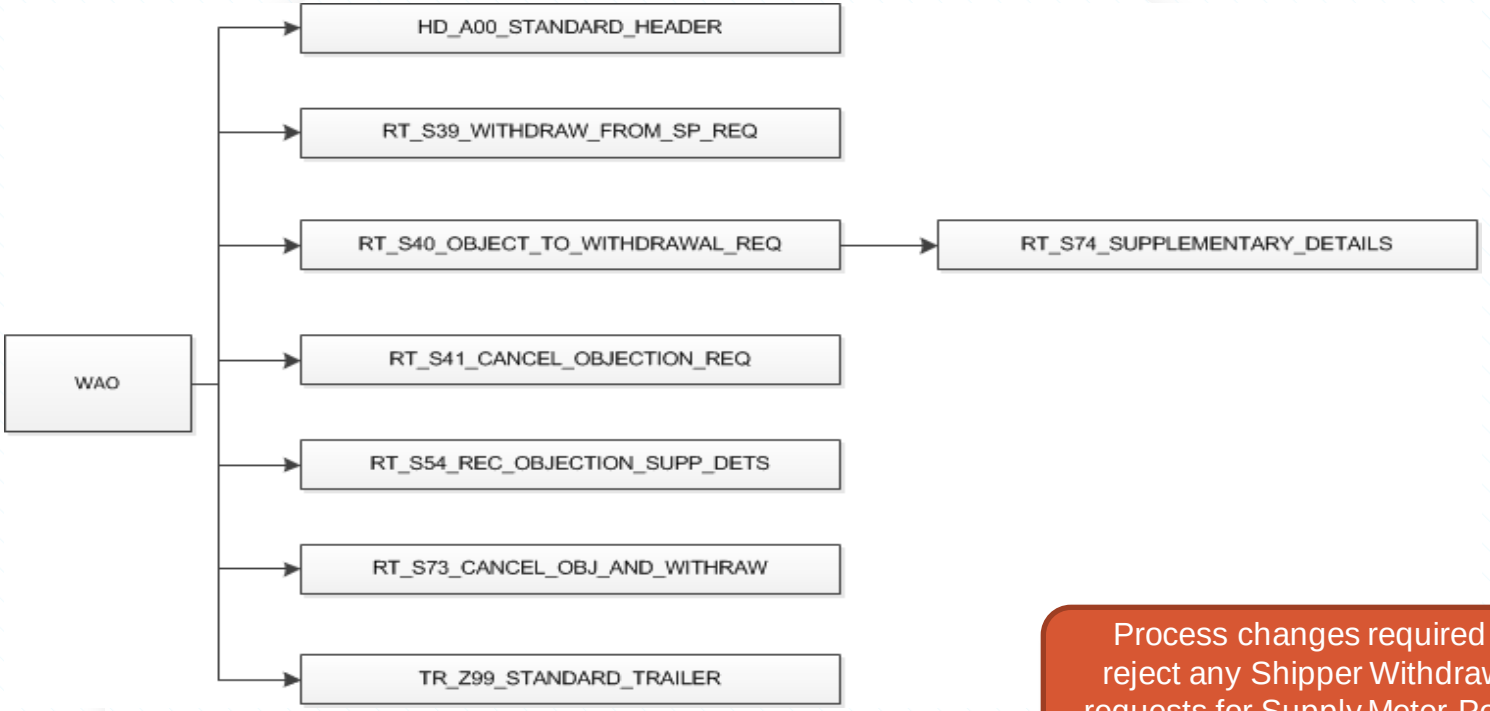
Process changes required to reject any Market Sector Code update requests for Supply Meter Points being managed by CSS

MSO File Hierarchy



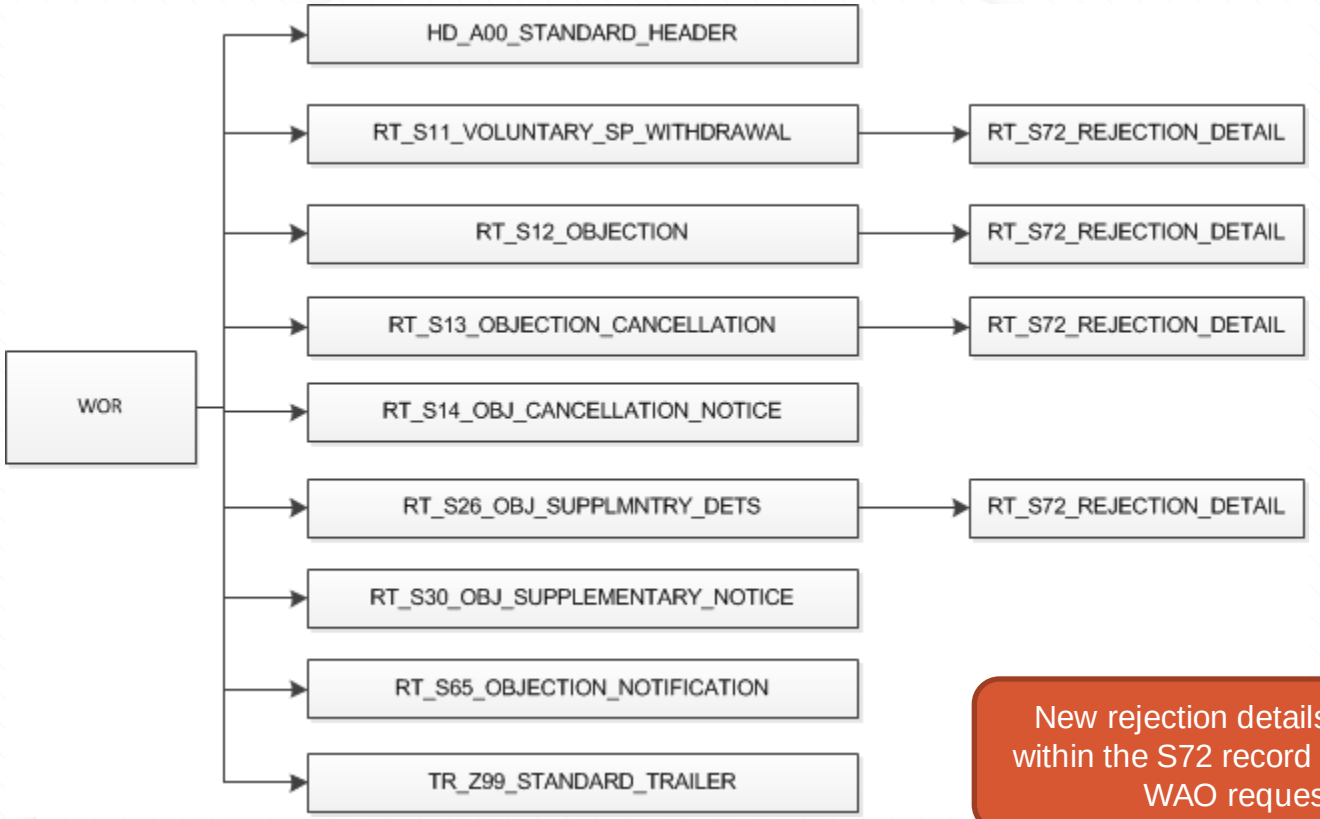
New rejection details included within the S72 record for rejected MSI requests.

WAO File Hierarchy



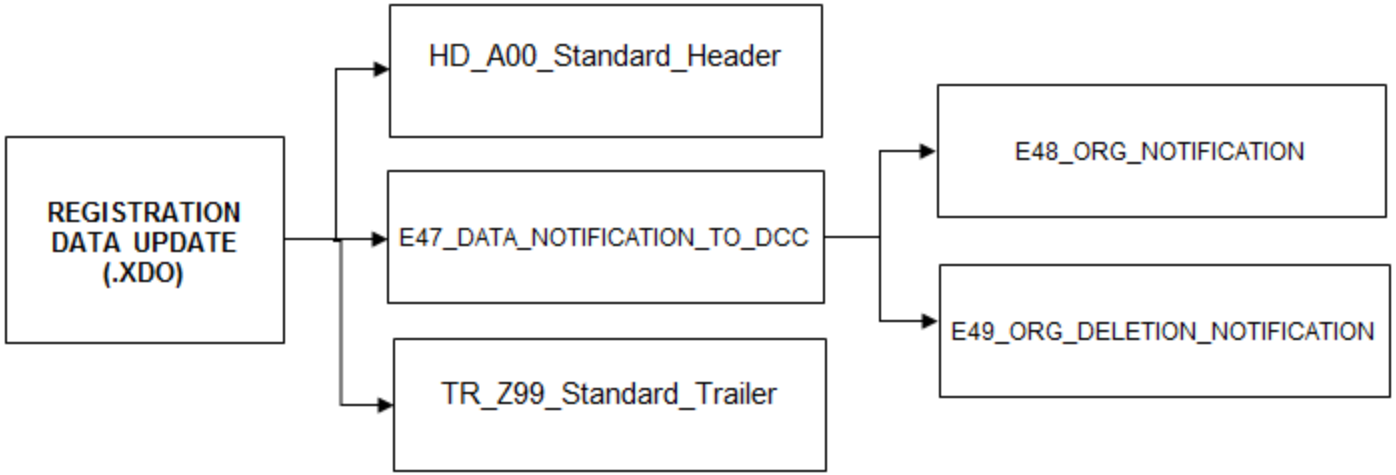
Process changes required to reject any Shipper Withdrawal requests for Supply Meter Points being managed by CSS

WOR File Hierarchy



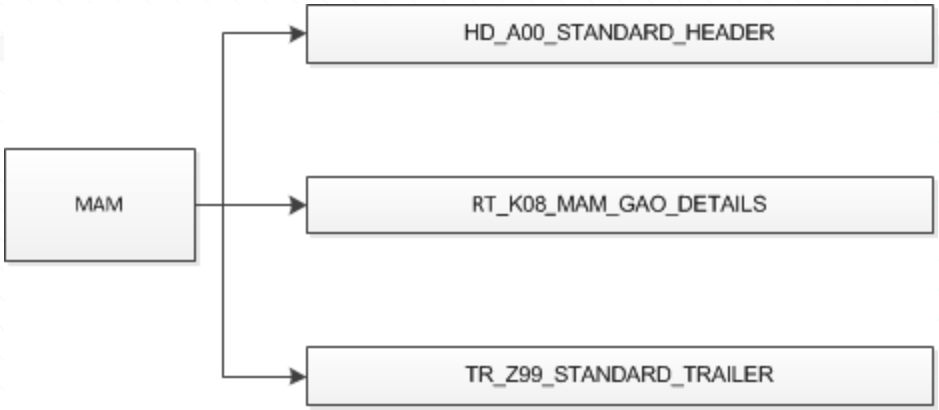
New rejection details included within the S72 record for rejected WAO requests

XDO File Hierarchy



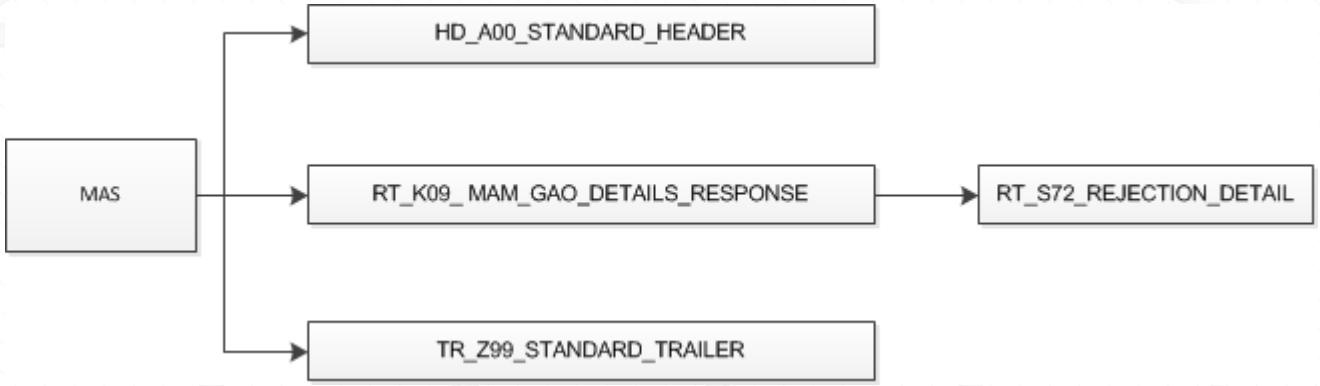
Decommissioning of redundant file, the supporting TOK file (XDO file record count summary) will also be decommissioned

MAM File Hierarchy



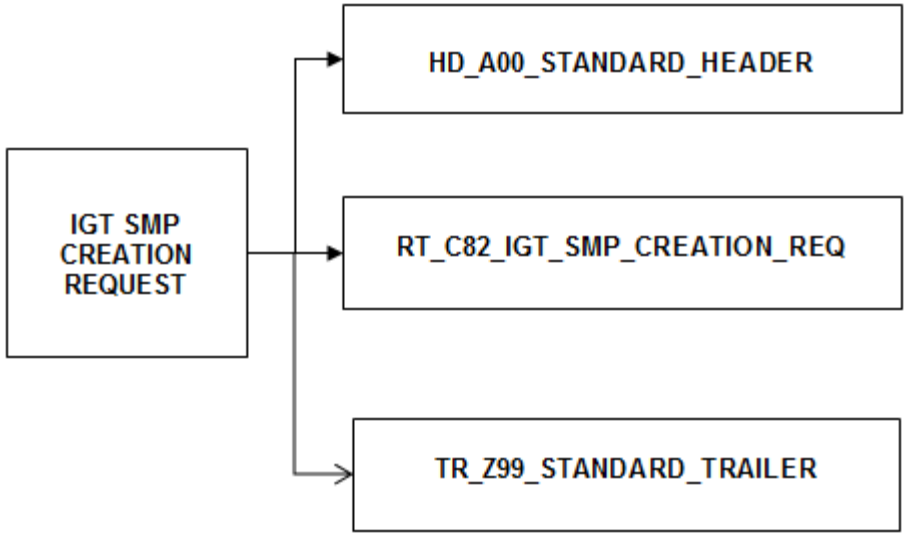
Process changes required to align validation of inbound file to new switching request status values

MAS File Hierarchy



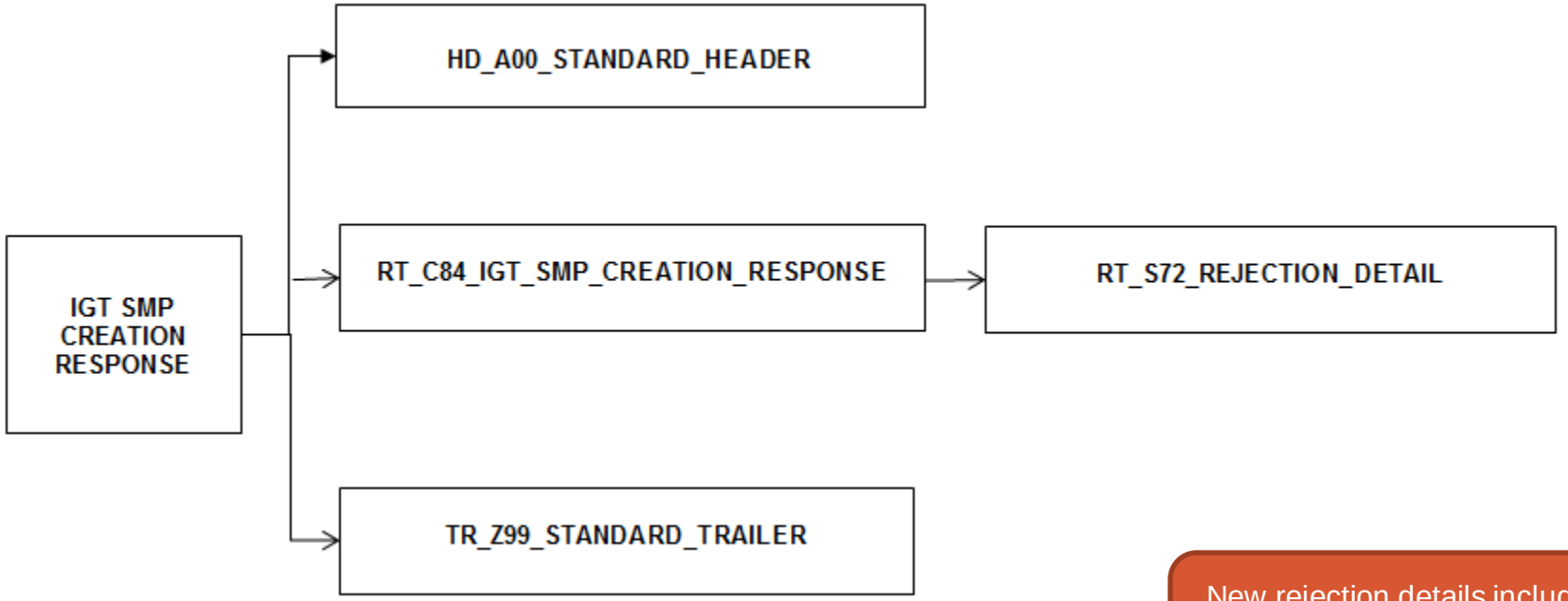
Process changes required to support generation of outbound file following submission rules changes on inbound MAM file

IMC File Hierarchy



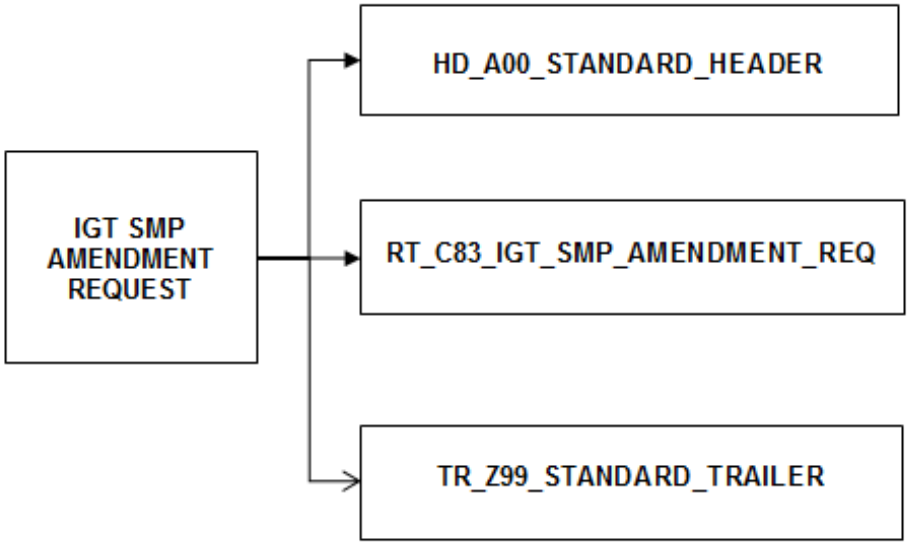
Process changes required to validate elected Shipper and Supplier relationships

IMR File Hierarchy



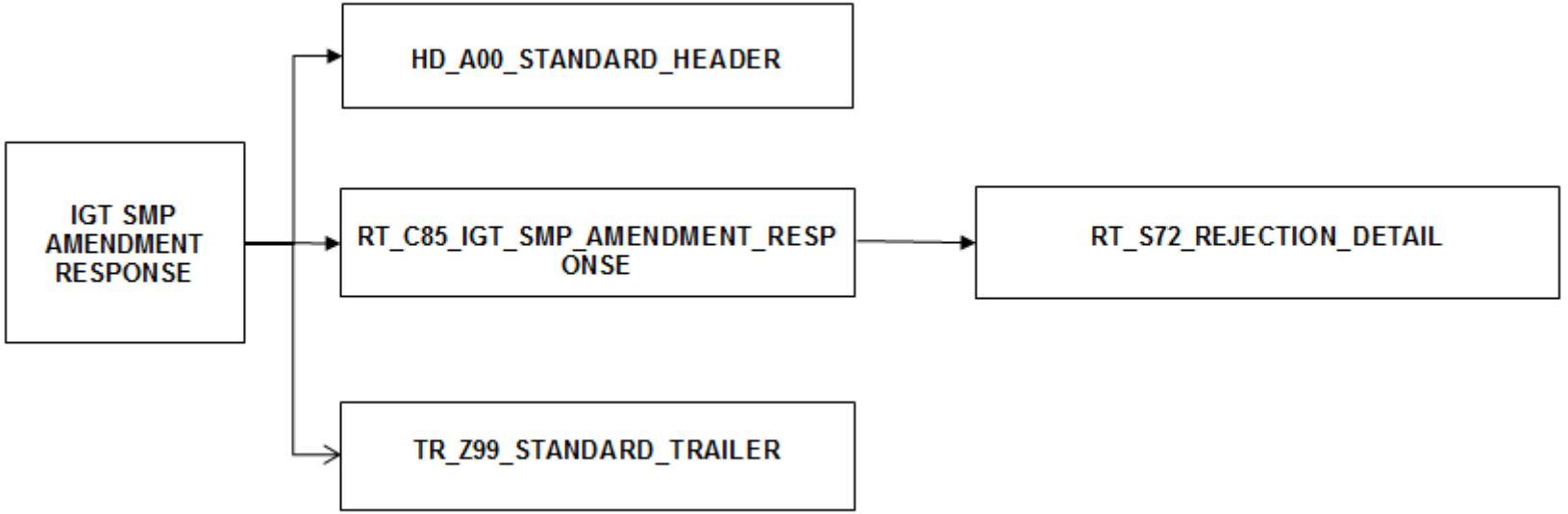
New rejection details included within the S72 record for rejected IMC requests

IMA File Hierarchy



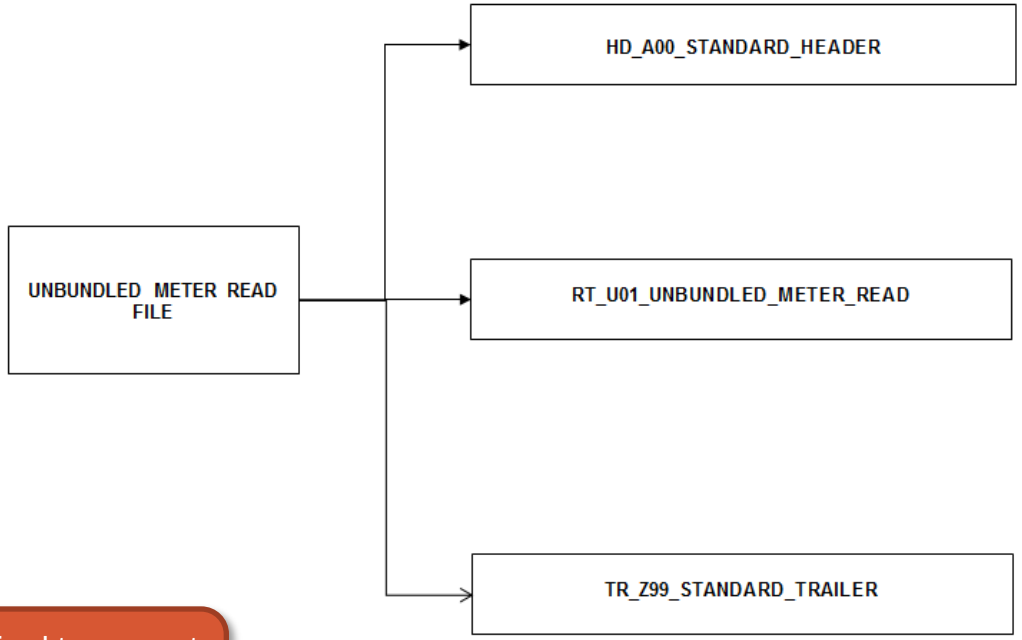
Process changes required to validate elected Shipper and Supplier relationships

IME File Hierarchy



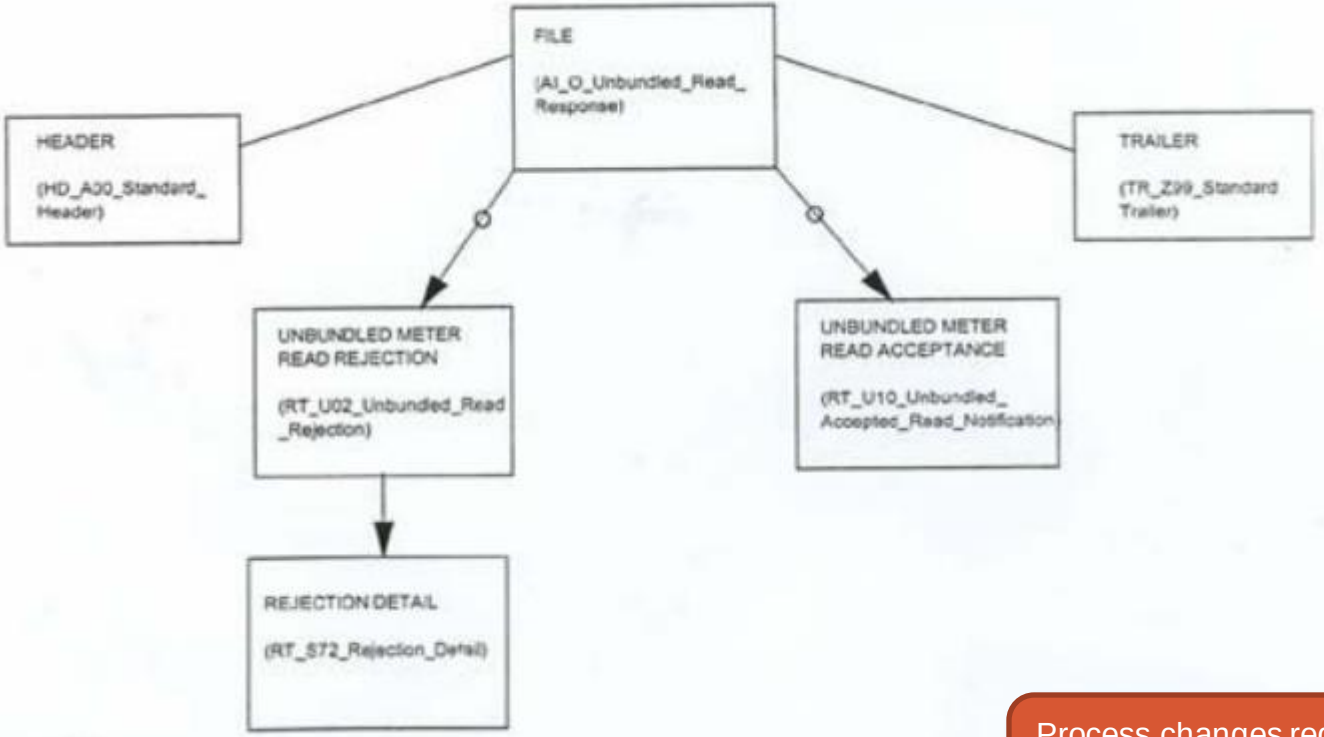
New rejection details included within the S72 record for rejected IMA requests

UMR File Hierarchy



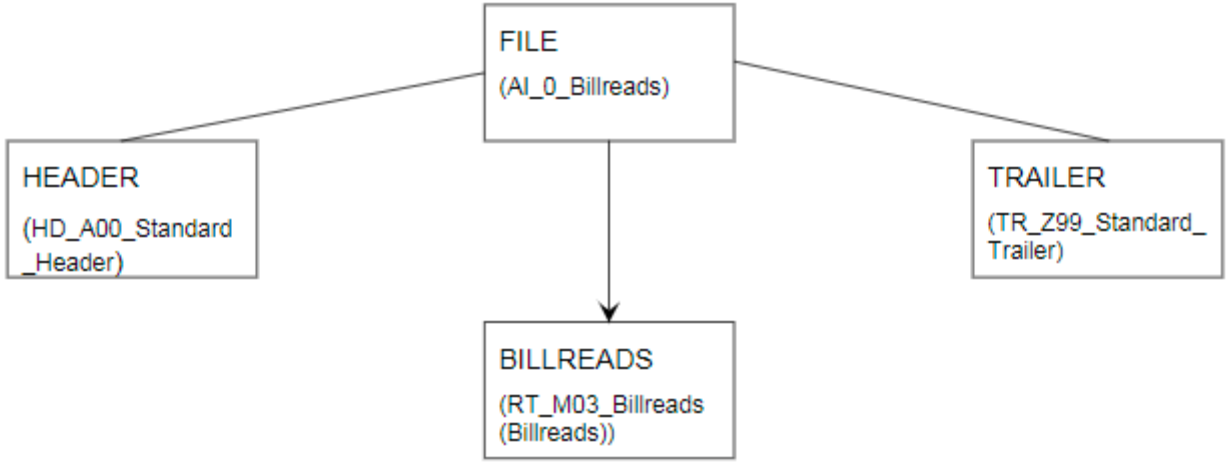
Process changes required to support the new UNC opening read submission rules for Class 4 sites

URS File Hierarchy



Process changes required to support the new UNC opening read submission rules for Class 4 sites

MBR File Hierarchy



Process changes required to support the new UNC opening read estimation rules

ASN – New T99 Record Format Example

RECORD/FIELD NAME	OPT	DOM	LNG	DEC	DESCRIPTION
TRANSACTION_TYPE	M	T	3	0	A code identifying the type of request that this record represents. VALUE: T99
METER_POINT_REFERENCE	M	N	10	0	A unique identifier for the point at which a meter is, has been or will be connected to the gas network.
BRN_REFERENCE_NUMBER	O	N	9	0	BRN reference number which uniquely identifies the submitted BRN
SUPPLY_POINT_CONFIRMATION_REFERENCE	M	T	10	0	A sequential number that uniquely identifies the Confirmation.
CSS_REFERENCE_NUMBER	M	T	30	0	Unique CSS Reference number passed by CSS for the Registration request
NOMINATION_SHIPPER_REF	O	T	30	0	A reference supplied by the System User when making a Nomination. It may be used by the System User to identify the Nomination and any subsequent Confirmation made for that Nomination.
CSS_EFFECTIVE_ DATE	O	D	8	0	The effective date of the association of the settlement data to the CSS Supplier Registration /Change of Shipper Event. FORMAT: YYYYMMDD

Please note that this extract only shows 7 of the 33 data items contained within the proposed T99 record

Gas Supply Point Switching API

Data Item	Description
Meter Point Reference Number	Unique identifier for a supply offtake point. Used to identify the meter to be switched.
Metering Point Address	The address for the metering point provided by the relevant Gas Transporter, including House Name/Number, Street etc.
Metering Point Postcode	The postcode for the metering point, provided by the relevant Gas Transporter
Retail Energy Location	**The Retail Energy Location address provided by the Central Switching Service**
Current Supplier ID	Industry identifier for the current Supplier
Meter Mechanism Code	Industry identifier for the type of equipment fitted e.g. credit or prepayment meter
GT ID	Unique Identifier for the Gas Transporter Organisation. For large Transporters, this can also be used to identify the geographical area where a metering point is located.
Meter Capacity Indicator	The maximum amount of gas that can be passed through the meter. This is provided for sites connected to a Transporter Network. The capacity of the metering point is measured in M^3.
Meter Serial Number	Identifier for metering equipment at a premises.
Annual Quantity	Annual quantity of gas assumed to be off taken over a period based on historical information. Provided in kWh.
Local Distribution Zone	This is a discrete gas system supplying gas to a region.
Smart Meter Equipment Technical Code	Specification ID of the smart meter

API updated to include the new Retail Energy Location address

Record Change Summary

Record Name	Associated File Hierarchies	Change Summary
U70	NOM, NMR & NFR	Optionality changes made to POSTCODE_OUTCODE and POSTCODE_INCODE fields to make optional
U72	NOM, NMR & NFR	Optionality changes made to POSTCODE_OUTCODE and POSTCODE_INCODE fields to make optional
S59	NMR	Optionality changes made to WITHDRAWAL_STATUS fields to make optional
S64	NOM, NMR & NFR	Optionality changes made to WITHDRAWAL_STATUS fields to make optional
S69	NOM, NMR & NFR	Optionality changes made to POSTCODE_OUTCODE and POSTCODE_INCODE fields to make optional
K85	CFR, CRS, NMR, NRF, SNR, TRF & TRS	Inclusion of MAP ID in the list of allowable values for ORGANISATION_TYPE

Gemini ACT File

- A new ACT file has been created by Gemini to support faster switching.

New ACT file hierarchy

Level	Record Name	Occurrence	Optionality
1	HD_A00_STANDARD_HEADER	1	M
1	RT_C01_ACTIVITY_DETAIL_RECORD	100	M
1	TR_Z99_STANDARD_TRAILER	1	M

New ACT C01 Record Format

RECORD/FIELD_NAME	OPT	DOM	LNG	DEC	DESCRIPTION
TRANSACTION_TYPE	M	T	3	0	DEFINITION: A code identifying the type of request that this record represents. VALUE: **C01**
BA_CODE	M	T	3	0	DEFINITION: A reference which uniquely identifies a Customer/Organisation Short Code
BA _NAME	M	T	40	0	DEFINITION: A reference which identifies a Customer/Organisation Name
BA _NUMBER	M	N	10	0	DEFINITION: A reference which uniquely identifies a Customer/Organisation
RATE_SCHEDULE	M	T	10	0	DEFINITION: A reference defines the type of Service
ACTIVITY_NUMBER	M	N	6	0	DEFINITION: The Activity Number created for the Meter ID within the Service
SERVICE_ID	M	T	15	0	DEFINITION: A reference which uniquely associated to the Service
METER_ID	M	T	10	0	DEFINITION: Unique identifier for a Meter
METER_TYPE	M	T	2	0	DEFINITION: Unique identification for the type of Meter. VALUES: **Daily Meter (DC), Daily Firm (DF), Non-Daily Meter (Aggregate) (NA), Unidentified Meter (UG)**
OPPOSITE_FLOW	M	T	1	0	DEFINITION: The indication of existence of Opposite Flow (turn down). VALUES: **Y, N** CONTEXT: Y indicates opposite flow allocation and N indicates normal flow allocation
LDZ	M	T	6	0	DEFINITION: Unique identifier to the Local Distribution Zone mapped to the Meter ID
EXIT_ZONE	M	T	3	0	DEFINITION: Unique identifier to the Exit Zone mapped to the Meter ID
EFFECTIVE_START_DATE	M	D	8	0	DEFINITION: The gas day from which the Activity Number is effective. Format: YYYYMMDD
Total			**117**		

Detailed File and Record Formats

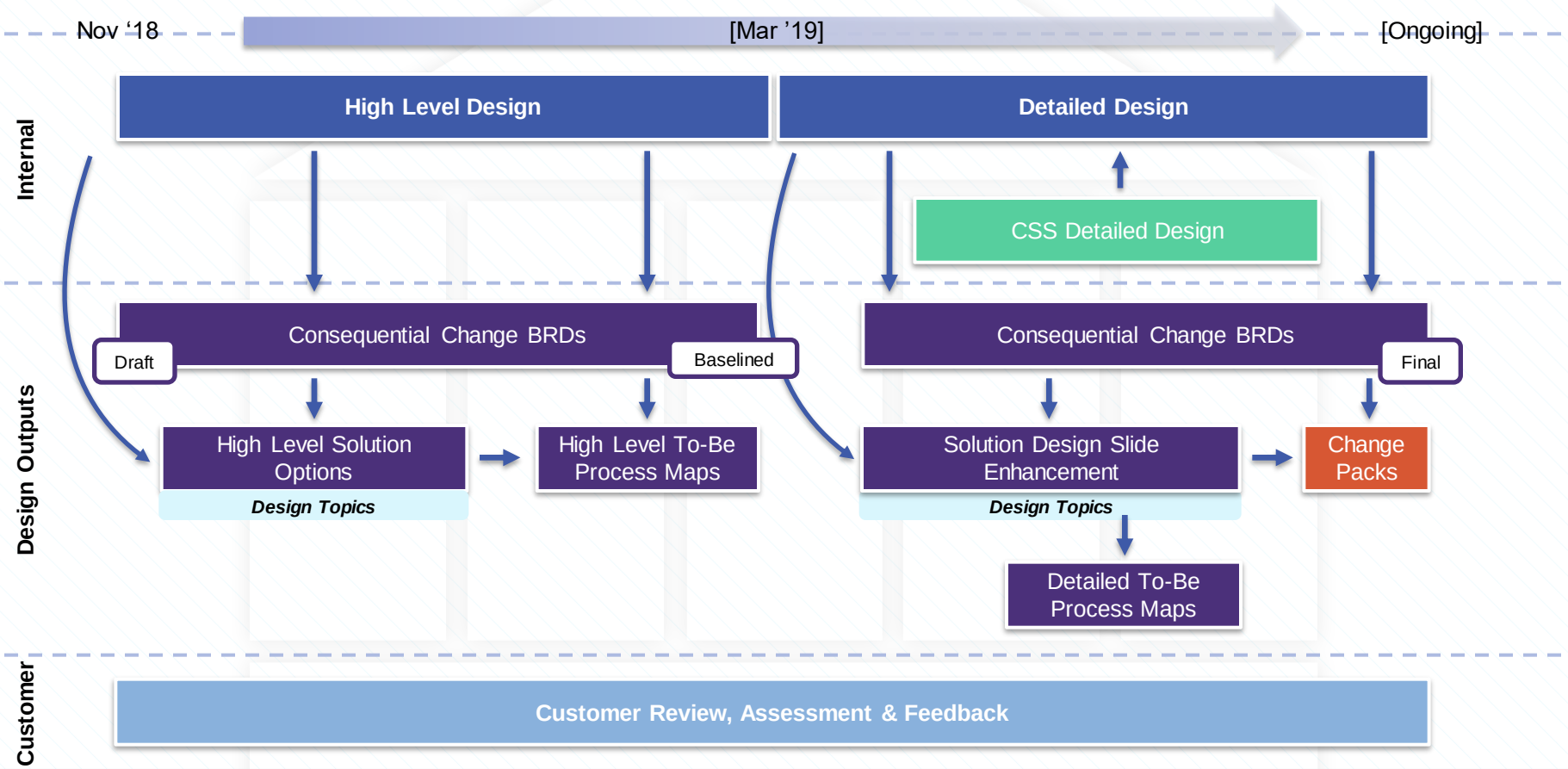
- Full details of all current and proposed file and record structures along with the API design is available to registered users of UK Link Document SharePoint Site

Governance Process

Xoserve's Governance Framework

- Xoserve are governed by the Data Services Contract which forms part of the Uniform Network Code(UNC)
- Our systems design for all changes are approved by our customers (Shippers, Gas Transporters and Independent Gas Transporters) within the framework of this contract
- Within this framework there are a number of industry work groups governed under the UNC
- These work groups include but not limited to:
  - Contract Management Committee (CoMC)
  - Change Management Committee (ChMC)
  - Delivery Sub Groups (DSG)
- As per our change governance, at the point of design solution and approval, Change Packs are issued to the Industry via the Change process for a 10 day consultation period
- DSC governance is also documented at the Joint Office website - http://www.gasgovernance.co.uk/DSC-Documents

Xoserve's Collaborative Design Journey



If you require any additional information please contact us via box.xoserve.CSS@xoserve.com

We believe in
radically simplifying the
Energy Market through maintaining
and leveraging industry assets for the benefit of all
Customer Centric
Data Driven
Change Leading
Operationally Excellent
People Powered
xoserve
Responsible Business
Assurance, commercial, suppliers, social and safety