

MAM Manual

Introduction, Portfolio, Miscellaneous Data Updates & Standard Response File

Version 19



Published on behalf of National Grid plc

Version Control

Version	Date	Name	Notes
1.0	02/08/2002	Ann Bibb	First Draft
2.0	22/08/2002	Ann Bibb	Review meeting 13/08/02 and feedback from Customers incorporated. Added: • Appointment/De-appointment process flows • Standard Response files • Validation details • Exceptions • File formats to request and receive a metering price • Hierarchy, file formats and text relating to Data Updates • Separate work request file formats for install, remove and exchange assets • Notify work progress formats
3.0*	27/09/2002	Ann Bibb	Review meeting 18/09/02 and feedback from Customers incorporated. Removed references to contingency and availability (incorporated into System User Agreement) Amended formatting errors and changed all references from Shipper to Supplier. Added: • Footnote to confirm the relevant RGMA version • Record numbers to hierarchy diagrams • Timescales to process flow diagrams • Clarification on headers and trailers • Expanded text to aid clarification • Response Codes Amended: MDD Removed Query process flow as agreed References to match RGMA v 2.3*

Page 2 of 167

		1			
4.0	15/11/2002	Ann Bibb	Feedback from review meetings 11/10/02 and 16/10/02 incorporated. Identified conditional fields on hierarchy diagrams Sample files Amended: In line with RGMA v 2.4* As agreed via MDIG		
5.0		Ann Bibb	Feedback from reviewers and meetings 28/11/02 and 9/12/02 incorporated. Separated into Sections and amended Appendix to Section I.		
6.0	07/03/2003	Mark Thompson	Page by Page Walkthrough of Version 5.0 Completed on 13 th /14 th February. Most comments incorporated. Main changes as follows; • Addition of PEMS • Compliance with Version 2.6, 2.7, 2.8 RGMA Baseline • Document reverted to one file with full contents page • Formatting issues resolved – Page Numbering		
7.0	24/04/2003	Mark Thompson	Page Numbering and Section Numbering back in Process Flows from MDIG Walkthrough's Included New Responses codes added to Appendix A0057 from Char 100 to Char 5		
8.0	23/05/2003	Mark Thompson	Clarification on Appointment & De-Appointment lead times Standard Response Files RSENQ removed Supplier Response Files additions Supplier Short Code change in 1.4 Non Standard Quote form re worked Format change of Appointment/De-Appointment Flow Re-Section for Cancel De-Appointment Dual Billing Report Format inclusion Clean up of MDD Values Changes to section 8 Invoicing Invoicing Appendix Updated to version 1.6 Addition of No MPRN Process Addition of MAP File Suspension of ORQUO/ONQUO		

9.0	12/09/2003	Mark Thompson/Nino Barresi	 Document References added All file formats re-visited after detailed technical walkthrough MDD / TDD update Inclusion of MDD/TDD appendix Exceptional Scenarios removed, inclusion of new matrix post MDIG Miscellaneous Data Updates functionality explanation File Format for "Other Visit" Included Policy Pre Notification File Format included Adversarial Meter Works Section added PEMS work notification added Invoicing Section re worked and new sample files, Supporting data files format included New MAP Report added Inclusion of Meter + Box as standard Job Incoming & Outgoing Batch Schedule updated Partial Completion Text Added
10	28/11/2003	Mark Thompson/Nino Barresi	Version 10 – System Baseline Version Inclusion of Partially Completed Jobs for Asset Works Works Work Scenarios Matrix Faux Rental Invoice Removal of Sample Files pending validation Updated Response Files "RESPN" File Format revisions following National Grid Metering Internal Design Walkthrough Changes resulting from Supplier Questions Matrix Reposition File Format Inclusion Other Visit – Clarification File Formats Communications Alternatives table updated Misc Data Updates clarity included OSUPD updateable items reviewed and amended Invoice Sample files updated. Batch Schedule Updated File Content Updated to reflect Rainbow Functionality

11	7/5/04	Nino	Updates included:
		Barresi/Mark Thompson	"29_Supplier- Version11Updates v.:
			Suite of documents circulated through MDIG during April04 Updated ONUPD optionality reflecting current Rainbow functionality Calculation of correction factors Provision of MPRN following work acceptance Updated invoicing section Exception procedures for meter worker Meter model Qmax table Fax template for queries

12	04/08/2004	Nino Barresi/Mark Thompson	"Matrix of Supplier comments for Versio	
13	03/10/2005	Nino Barresi/Jan Eglinton	Various – See MAM Manual (v13) Modification Log & 12 th July 04 Cutover Changes	
14	24/10/05	Nino Barresi/Jan Eglinton	No changes to this section of the MAM Manual. Amendments to section 3.31 of Asset Works.	
15			Various; Name change from Transco to National Grid (Ref. Mod 26) Text added for Date Convention for De-Appointment Flows (Ref. Mod 28) Update Transaction Request Communication Alternatives table (Ref. Mod 32) Spelling, grammatical & layout corrections	
16	13/12/10	Suzanne Callington	Version number of document amended from v15 to v16 to reflect updates required within Asset Works, Volume 2 - linked to modification proposal 42 (Material Master Invoicing Codes).	
17	20/09/11	Laura Barnes	Version number of document amended from v16 to v17 to reflect updates required within Asset Works, Volume 2 - linked to modification proposal 46	
18	07/05/13	Suzanne Callington	Version number of document amended from v17 to v18 to reflect updates required within Asset Works, Volume 2 - linked to modification proposal 47	
19	02/09/14	Ian Seaman	 Version number of document amended from V18 to V19 to reflect updates required as per Modification 54 I&C SAP system implementation. Additional File Headers and Transactions required for the new I&C SAP System. Reference to Rainbow be construed and read as a reference to the I&C SAP System. Reference to a Rainbow file in the MAM Manual will also be construed and read as a reference to the equivalent I&C SAP System file as per appendix 	

1	INT	RODUCTION	8
	1.1	DOCUMENT REFERENCES	8
	1.2	BACKGROUND	8
	1.3	THE METERING SYSTEM	
	Ватсн	FILE TRANSMISSION	13
	1.4	HEADERS AND TRAILERS	
	1.5	FILE EXTENSIONS	18
	1.6	FILE CONTENT	20
	1.7	CALCULATION OF METER POINT CONVERSION FACTOR:	22
	1.8	TRANSACTION REQUEST COMMUNICATION ALTERNATIVES	
	1.9	CONTRACT REFERENCES	24
2	POF	RTFOLIO	26
	2.1	Portfolio Overview	26
	2.2	PORTFOLIO PROCESS FLOW – CHANGE OF SUPPLIER	
	2.3	METER ASSET PRICES (MAP) REPORT	
	2.4	METER ASSET PRICES REPORT DATA HEIRARCHY (MAP)	29
	2.5	METER ASSET PRICES REPORT FILE FORMAT (MAP)	30
	QUOTA	TION FOR METERING PRICES SUMMARY (ORQUO/ONQUO)	
	2.6	REQUEST FOR METERING PRICE DATA HIERARCHY - ORQUO	
	2.7	REQUEST METERING PRICE FILE FORMAT: ORQUO	
	2.8	NOTIFICATION OF METERING PRICE DATA HIERARCHY (ONQUO)	
	2.9	NOTIFICATION OF METERING PRICE FILE FORAT: ONQUO	
	2.10	PORTFOLIO APPOINTMENT REQUEST (ONAGE)	45
	2.11	APPOINTMENT REQUEST DATA HIERARCHY (ONAGE)	48
	2.12	PORTFOLIO APPOINTMENT FILE FORMAT: ONAGE	
	PORTFO	DLIO DE-APPOINTMENT REQUEST	
	2.13	PORTFOLIO DE-APPOINTMENT DATA HIERARCHY	
	2.14	DE-APPOINTMENT FLOW FILE FORMAT (ONAGE)	
	2.15	Provide Metering Details	67
	2.16	NOTIFY METERING DETAILS POST APPOINTMENT – ONUPD	
	2.19	NOTIFY METERING DETAILS POST APPOINTMENT FILE FORMAT (ONUPD)	
	2.19.1	PROVIDE ASSET DETAILS FILE FORMAT - ONUPD	
	2.20	ASSET DATA MISMATCH PROCESS FLOW	
	2.21	PORTFOLIO BATCH FILE VALIDATION (ONAGE)	
	2.22	WORK IN PROGRESS	91
3	MIS	CELLANEOUS DATA UPDATES	93
	3.1	NATIONAL GRID METERING DATA UPDATES	93
	3.2	PROVIDE ASSET DETAILS HIERARCHY (ONUPD)	95
	3.3	PROVIDE ASSET DETAILS FILE FORMAT - ONUPD	97
	3.4	MISCELLANEOUS DATA UPDATES FOR DATA AMENDMENTS RESULTING FROM FOUND	AND
	REMOV	ED ASSETS	105
	3.5	NATIONAL GRID METERING DATA UPDATES FOR FOUND AND REMOVED ASSETS	106
	3.6	NATIONAL GRID METERING DATA UPDATES FOR FOUND AND REMOVED ASSETS	
	HIERAI	RCHY	107
	3.7	NATIONAL GRID METERING DATA UPDATES FOR FOUND AND REMOVED ASSETS FILE	
	FORMA	TS	
	20	Chetomed Data Updates	112

	3.9	MISCELLANEOUS DATA UPDATE PROCESS FLOW (ONUPD)	115
	3.10	CUSTOMER DATA UPDATES PROCESS FLOW (OSUPD)	116
	3.11	CUSTOMER DATA UPDATE DATA HIERARCHY (OSUPD)	
	3.12	CUSTOMER DATA UPDATE FILE FORMAT (OSUPD)	118
4	ST	ANDARD RESPONSE FILE	124
	4.1	STANDARD RESPONSE OVERVIEW	124
	4.2	STANDARD RESPONSE DATA HIERARCHY (RRJOB, RNAGE, RSUPD, RNJOB, R 127	(NUPD)
	4.3	STANDARD RESPONSE FILE FORMAT	128
	4.4	Examples	131
	4.5	SUPPLIER RESPONSE FILES	132
5	S AI	PPENDIX	133
	5.1	MDD/TDD VALUES	133
	5.2	CSV Examples	148
	5.3	CALCULATION OF METER POINT CONVERSION FACTOR	150
	5.4	QUERY FAX TEMPLATE	151
	5.5	CONTRACT REFERENCE	152
	5.6	ONJOB TO ONUPD MAPPING DOCUMENT	158
	5.7	RESPONSE CODES USED BY SUPPLIERS FOR TRANSACTION/FILE REJECTIONS:	159
	5.8	CONTRACT REFERENCE	162
	5.9	MOD 54 references	167

1 Introduction

1.1 Document References

Document	Version	Date of Issue
IX Operational Guideline	2	11 th July 2003
National Grid Metering Web Portal	3.0	05 th May 2004
User Guidelines		
RGMA Processes & Data	3.1	22 nd March 2004
RGMA Appendix	3.2	22 nd March 2004
Contingency Document	1.0	08 th September 2003
Query Operational Guidelines	1.9	
Systems User Agreement	TW4237I	06 th May 2004
General Conditions of Contract for	TW4828I	06 th May 2004
Adversarial Meter Works		
Agreement & General conditions of	TW4757N	06 th May 2004
contract for below seven bar		
Transactional Meter Works		
Agreement & General conditions of	TW4608N	06 th May 2004
contract for above seven bar Meter		
Works		
Agreement and general Conditions	TW4057N	06 th May 2004
of contract for the provision and		
maintenance of metering equipment		
Rainbow System Validation	2.1	20 th April 2004
Document		

1.2 Background

Separation of National Grid's metering business necessitates the implementation of a contractual regime to replace the obligations laid down in the Network Code. To facilitate this change the Metering Contract Group (MCG) has developed a suite of metering contracts to support the new contractual framework Two subgroups of the MCG, the Metering Invoice Sub Group (MISG) and the Metering Data Issues Group (MDIG) have in parallel developed file formats and processes to be used between Suppliers and National Grid Metering post separation. The RGMA baseline forms the basis of these file formats. Where optionality exists within the RGMA baseline or where commercial processes are not specified, these have been the subject of discussion and agreement at MISG and MDIG. Two such examples are Query Resolution and Invoicing.

The MAM Manual has been separated into three sections for ease of reference;

- Asset Works
- Asset Portfolio
- Queries & Invoicing

Sections 2, 4, 5 and 6 of this manual are based upon the RGMA baseline document, and to the extent that there are any variations from the baseline, these relate to agreement at MDIG that optional data fields be made mandatory or to agreement that such variations are not material. Explanatory text has been added to clarify the application of these processes. Sections 1, 33 of Asset Portfolio volume, and sections 1 and 2 of the Queries & Invoicing volume incorporate those processes that RGMA has defined as commercial, i.e. where the formats have been defined by MDIG and MISG. Whilst these have been subject to commercial agreement, the general composition of these file formats is as far as possible consistent with the RGMA output.

1.3 The Metering System

The Rainbow System is being introduced to support National Grid's regulated metering business after its separation from the Transportation business. Rainbow will manage all aspects of metering, including:

- Work Requests
- Work Notifications
- Asset Maintenance
- Portfolio Maintenance
- Change of Supplier/MAM
- Invoicing
- · Metering Enquiries (Asset Data and Billing)

The MAJ/IAJority of transactions are expected via batch files, through the Enhanced Information Exchange (IX). However, a Web Portal facility (See 1.1 Document References for Web Document) will also be available to Suppliers to allow them to view portfolio details, to submit metering queries, request standard work and provide some data updates.

Rainbow will hold details of "regulated" assets, i.e. where the Gas Act Owner is National Grid GT. The relevant asset details relating to meter, converters and dataloggers have been migrated from "Sites and Meters" and (data will be updated on a regular basis up to cutover). Following implementation, there will generally be no interaction between the GT and Metering systems.

Following separation it will be necessary to interact separately with National Grid Metering and National Grid GT and, where appropriate, submit individual notifications to both parties. Examples where multi-transactions may still be required are shown below.

Metering	National Grid GT	
Request meter exchange	Submit subsequent Asset Notification	
Request meter removal	Submit subsequent Asset Notification	
Submit portfolio appointment	Submit (nomination) confirmation request	
Submit query (e.g. duplicate meter)	Submit query (ConQuest)	
Submit billing enquiry (e.g. inaccurate	Submit transportation invoice query	
multiplication factor)		

Where appropriate Rainbow will validate transactions against the details held within the database. This includes validation of data and confirmation that a valid contract exists between the Supplier and National Grid Metering. The usual file and record validation will also be undertaken in accordance with the recommendations of the RGMA Steering Group. Data exchanges, both requests to National Grid Metering

and responses to the Supplier, will be in the agreed industry standard "Record" format.

In this Manual, where data fields or entire Records included within the relevant RGMA format are not required by National Grid Metering, they will be ignored. This will further facilitate the use of the flows throughout the Industry. Consumer is used this means the gas user.

Dataloggers:

Rainbow only holds details of legacy DM loggers and no new logger information will be added to Rainbow post separation. ONUPD and ONJOB will therefore only contain asset details in respect of legacy DM loggers. This will include model code, manufacturer, serial number and YOM. However, where any logger/ recording device is disconnected as a result of work, the comment field within the transaction dataset within ONJOB will always advise the Supplier that the device needs to be reconnected.

Batch Schedule

Run times referred to in this section are actual run times. For details on services levels for files transported over Enhanced IX are covered in the System User Agreement.

Incoming Files

Job Description	Run Times	Run Days	RGMA Reference	National Grid Metering Reference
Process Appointment Request	21:00 after de- appointment file has been run.	All Days*	ONAGE	
Process De-appointment Request	20:30	All Days	ONAGE	
Process Work Requests	09.00, 10.39, 12.18, 13.57, 15.36, 17.15	All Days	ORJOB	
Request Quote for Metering Prices (Not currently available)	18:00	Working Days	ORQUO	
Customer Data Updates	20:30	All Days		OSUPD#
Process Query Submission	04:00, 09:00, 11:30, 14:00, 16:30	Working Days		OSENQ#
Response to Asset Update			RNUPD	

^{*} All days means every day, including weekends and bank holidays

[#] Commercially agreed filenames are in the same style as the RGMA baseline. The 2nd character has been changed from "R"equest to "S"ubmit, to differentiate. The first 3 characters must be unique to facilitate file handling.

Response to	RNJOB	
Work Notification		
Response to	RNQUO	
Quote for		
Metering Prices		
Notification		
(Not currently		
available)		
Response to		RNENQ
Query Notification		

The contract defines the latest time that a file can be received before it is deemed to be received on the next day or working day.

Portfolio Appointment/De-appointment Requests = 20:00 Work Requests = 17:00 Query Submission = 16:30 Data Amendments = 18:00

Response Files from Suppliers will be monitored at regular intervals throughout the day.

Outgoing Files

Let Description But Times But Days Botto				
Job Description	Run Times	Run Days	RGMA Referenc e	National Grid Metering Reference
Response to Appointment/ De-appointment	Post 20:00 (Dependent on ONAGE batch run)	All Days*	RNAGE	
Provide Asset Details (Following successful Appointment Request)	18:00	All Days	ONUPD	
Provide Asset Details (Following data amendment)	Overnight (after all other processing)	All Days	ONUPD	
Response to Work Requests	09.00, 10.30, 12.00, 13.30, 15.00, 17.15	All Days	RRJOB	
Work Notifications (Including Progress Updates) & including unsolicited ONJOB's	14:00, 18:00, 22:00	All Days	ONJOB	
Response to Request for Metering Prices (Not currently available)	18:00	Working Days	RRQUO	
Notification of Metering Price(Not currently available)	18:00	Working Days	ONQUO	
Response to Customer Data Updates	18:00	All Days		RSUPD [#]
Response to Query	Overnight (after all other processing)	Working Days		RSENQ [#]
Query Progress Notification	Overnight (after all other processing)	Working Days		ONENQ
Rental Invoice Transmission	By 09:00	12 th Business Day of the Month		MAV/IAV MAJ/IAJ MAH/IAH MFV/IFV
Work Invoice Transmission	By 09:00	12 th Business Day of the Month		AWI/IWI AWH/IWH
Submit Supporting Invoice Information	By 09:00	May be prior to 12 th Business Day of the Month but no later		MDA/GDA MDC/GDC MDN/GDN MFN/GFN MFC/GFC
Metering Asset Prices Report (MAP)	N/A	Not Applicable (see Section 2.3)	MAP	

^{*} All days means every day, including weekends and bank holidays

Commercially agreed filenames are in the same style as the RGMA baseline. The 2nd character has been changed from "R"equest to "S"ubmit, to differentiate. The first 3 characters must be unique to facilitate file handling

Batch File Transmission

All batch file transactions to and from National Grid Metering will be via the Enhanced Information Exchange (IX) Network.

Suppliers who have not had access to IX prior to cutover will be able to communicate via an IX dial up facility.

Current Protocol for IX Files

The Current protocol may be referred to as 8.3

Originator identified	Environment	Priority	Number	Extension
by IX	e.g. P	i.e. N	e.g. 123456	e.g. ABC

Environment – is sometimes referred to as the Test Flag. Users select T for Testing or P for Production.

The Priority status is a standard (Normal) priority, currently used for all files.

The Number is a unique number supplied by the originator (unique by participant).

The Extension refers to the current extensions, as detailed in the UK-Link and Proteus Manuals.

Environment + Priority + Number = 8 characters e.g. "PN123456" File Extension = 3 characters

Hence the reference to the protocol of 8.3

Currently, IX automatically attaches the originator's ID to the file as it passes through the gateway. This is derived from the directory from which the file originates. As explained above, the 3 character file extension dictates where the file is directed to within National Grid

New protocol

The changes to the IX for separation means that participants will now add the destination of the file to the existing protocol. IX directs the file according to the destination, as opposed to the National Grid destination being derived from the file extension (e.g. GTM = National Grid Metering Reading Services).

New Protocol is 5.8.3 e.g.

Incoming Appointment file to National Grid Metering

Destination	Environment	Priority	Number	Extension
GTM01	e.g. P	i.e. N	e.g. 123456	e.g. ONA

Outgoing Response to Appointment File from National Grid Metering

Destination	Environment	Priority	Number	Extension
GTM01*	e.g. P	i.e. N	e.g. 234567	e.g. RNA

The originator includes the **destination** address =5 characters i.e. GTM01 Environment + Priority + Number = 8 characters e.g. "PN123456" File Extension = 3 characters

Hence the reference to the protocol of 5.8.3.

* Note: Communications to and from NGM always have a destination address of GTM01.

The originator of the file incorporates the destination, which facilitates communication between participants, rather than the original framework, which only allowed batch transfers between National Grid and Shippers.

The originator's ID replaces the destination address provided by the originator as the file passes through IX, in the same manner as the current process.

The file extension can still be utilised to identify the type of file that is being sent, but it is not used to determine the destination for the file. The number of characters in the file extension remains the same (3 characters). For a full list of these, see section 1.5.

Where possible, National Grid Metering have used the first 3 characters of the recommended RGMA filenames, else logical extensions have been determined.

Suppliers should be aware that the file generation numbers sent by National Grid Metering do not directly map to the file generation numbers submitted by suppliers (e.g. if a supplier submits TN000001.ONA, the responding RNA file will not have the same generation number. The number used by National Grid Metering is system generated)

Further information surrounding the use of IX can be obtained by reference to the Operational Guidelines document (See 1.1Document References).

Guidance in relation to the size of inbound and outbound files can be found in the System User Agreement.

1.4 Headers and Trailers

Each batch file transaction must be preceded by a single Header record and succeeded by a single Trailer record. A file will typically contain a number of relevant other Transactions and records within these, but may not contain any other records. A file will only be accepted for registered Suppliers who have a valid contract in place with National Grid Metering.

The file format for these records is detailed below and the record has been incorporated into the data hierarchy diagrams throughout this manual.

Heade	r	1 (per	r File)				
Attribute Number	Optional or Mandator y	Field Lengt h	Field Format	Description	Ke y	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier	*	HEADR	MDD
A0179	M	5	Char	File Type Code	*	For full list of values, see section 5.1 MDD/TDD values. Will always be RESPN for response files sent by National Grid Metering.	MD D
A0180 *	M	3	Char	Market Participant Abbreviate d Name	*	Market Participant abbreviated name as per MDD. Should match the first three characters of the originator's IX short code e.g. GTM when receiving files from National Grid Metering Supplier MDD value when sending files to National Grid Metering	MD D
A0181 #	M	5	Char	Originator Role Code		Values: MAM - when receiving files from National Grid Metering , SUP - when sending files to National Grid Metering	MD D
A0182 *	M	3	Char	Market Participant Abbreviate d Name	*	Market Participant abbreviated name as per MDD. Should match the first three characters of the recipient's IX short code. e.g. • GTM when sending files to National Grid Metering • Supplier MDD value when receiving files from National Grid Metering	MD D
A0183 #	M	5	Char	Recipient Role Code		Values: MAM - when sending files to National Grid Metering, SUP - when receiving files from National Grid Metering	MD D
A0184	М	8	Date	Created Date			
A0185	М	6	Time	Created Time			

[#] Alias = Role Code (A0126)

-

^{*} Alias = (A0064)

A0186	М	8	Char	File Identifier	*	Unique for the Originator. Identifies the file contained within (e.g. PN123456)	
A0187	M	5	Char	File Usage Code	*	Identifies the environment the file is being used for PRDCT - Production TST01 - Test 01 TST02 - Test 02 TST03 - Test 03	MDD
A0188	М	10	Numbe r	Record Count	*	Not including the Header and Trailer	
A0189	М	10	Numbe r	Transactio n Count	*	Not including the Header and Trailer	

Trailer		1 (per F	ile)				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		TRAIL	MDD

The information supplied within the Header identifies the originator and the recipient of the file. It also provides information surrounding the file content and the number of records contained within each file. This enables some basic validation to be undertaken and the table below outlines some of the checks carried out by National Grid Metering on incoming files. The response codes in Section 0 provides a comprehensive list of exceptions.

Validation Level	Data item	Attribute Number	RGMA Reference	RGMA Record	Condition Required to Pass Validation
Header Validations	File Type	A0179	File Type Code	Header	File Type is Valid
Header Validations	Originator Role	A0181	Originator Role	Header	Originator Role is 'SUP'
Header Validations	Recipient Role	A0183	Recipient Role	Header	Recipient Role is 'MAM'
Header Validations	Record Count	A0188	Record Count	Header	Record Count tallies with the value in the Header
Header Validations	Transaction Count	A0189	Transaction Count	Header	Transaction Count tallies with the value in the Header
Header Validations	File Identifier	A0186	File Identifier	Header	File identifier is unique for the originator in role
Header Validations	Market Participant Abbreviated Name	A0180	Originator ID	Header	Must match the first three characters of the IX short code for the originator
Header Validations	Date	A0184	Created Date	Header	Date must not be in the future
Header Validations	Date	A0184	Created Date	Header	Date format must be YYYYMMDD
Header Validations	Time	A0184	Created Time	Header	Time format must be HHMMSS (24hr clock)
Header Validations	File Type	A0179	File Type Code	Header	File extension matches the (1 st 3 characters of the) File Type Code

Header Validations	File Identifier	A0186	File Identifier	Header	File Identifier exactly matches Filename (e.g. PN123456)
Header Validations	Supplier Name	A0182	Market Participant Abbreviated Name	Header	Market Participant Name matches the equivalent File Originator Name
Header Validations	File Identifier	A0186	File Identifier	Header	Where the File Identifier is missing, the file will be rejected and the Filename will be returned in the File Identifier field

Only one file type can be submitted within a file, but many transactions can be sent within that file.

Files can only be submitted by one originator, and the originator must match the equivalent IX sender code.

The makeup of each file is therefore:

1 HEADER

1 to many TRANSACTION (of the same file type)

1 TRAILER

The counts in the HEADER Record should reflect all the transaction and record counts in the file including any records that are not required by National Grid Metering. The header and trailer should not be included in this count.

MAP File

For the treatment of headers and trailers relating to this report please refer to Section 2.3.

1.5 File Extensions

The following table details the file extensions to be used when sending batch file transactions to and from National Grid Metering via the Enhanced Information Exchange (IX) Network.

Incoming Files (to National Grid Metering)	Extension
Portfolio Appointment	ONA
Portfolio De-appointment	ONA
Request Quotation of Metering Prices (Not currently available)	ORQ
Submit Work Request	ORJ
Submit Asset Update	OSU
Submit Query	OSE
Provide Asset Details Response	RNU
Asset Work Notification Response	RNJ
Query Notification Response	RNE
Metering Price Quotation Response (Not currently supported)	RNQ
Outgoing Files (From National Grid Metering)	
Portfolio Appointment Response	RNA
Portfolio De-appointment Response	RNA
Request Metering Price Quotation Response (Not currently supported)	RRQ
Work Request Response	RRJ
Asset Update Response	RSU
Query Response	RSE
Provide Asset Details	ONU
Metering Price Quotation (Not currently supported)	ONQ
Asset Work Notification	ONJ
Query Notification	ONE
Meter Asset Prices(MAP) Report	MAP
Metering Asset Invoice	MAV/IAV
Metering Asset Standard Adjustment Invoice	MAJ/IAJ
Metering Asset Ad Hoc Adjustment Invoice	MAH/IAH
Asset Works Invoice	AWI/IWI
Asset Works Ad Hoc Adjustment Invoice	AWH/IWH
Invoice Asset Detail File - Adjustments	MDA/GDA

Invoice Asset Daily Count File	MDC/GDC
Invoice Asset Detail File	MDN/GDN
Pre Appointment Liquidated Damages (PALD) Invoice	MFV/IFV
PALD Invoice Asset Details File	MFN/GFN
PALD Asset Daily Count File	MFC/GFC

1.6 File Content

Metering batch files must be sent in Comma Separated Variable (CSV) format, and the following conditions must apply:

- The file will be in a subset of ASCII should not include any ASCII graphic characters
- The file can include any other characters listed below
- The file should not include any double quotes other than as the text delimiters
- All text should be enclosed in double quotes with no trailing spaces
- Empty text fields should be represented by a set of double quotes ("")
- Leading zeroes should be removed from numeric fields; these are only separated by commas and not enclosed in quotation marks
- Any decimal values less than 1 should include 0 before the decimal point e.g. 0.75
- Zero numeric fields should be reduced to a single zero if the field is mandatory, if the field is optional with no value, then it will be empty commas (,,).
- If an optional numeric field exists at the end of a record, but no value is provided, then the record should end with a comma
- If a mandatory numeric field exists at the end of a record, then the record should end with the appropriate numeric value
- If a mandatory text field exists at the end of a record, then the record should end with the relevant value included in a set of quotes ("ABC")
- If an optional text field exists at the end of a record, then the record should end with a set of double quotes ("")
- All data items must be separated by a comma
- A new line feed should separate each new record
- Records and attributes that are "not required" or "X" will be ignored, but the records are counted in the HEADER record.
- Records must be in the correct order, else they may be rejected (e.g. addresses must be in the correct order even though the type may be provided
- Date and Time fields are numeric unless otherwise stated and therefore do not need double quotes.
- Any number values including a decimal place are shown as XX,YY where the X value represents the total numbers and the Y value the number of decimal places e.g. 15,2 is a maximum field length of 13 whole numbers, followed by up to 2 decimal places.
- Post Code Outcode and Post Code Incode should be separated by a space and follow the following format, any transaction which do not follow the format will be rejected

Format
AAN NAA
AANN NAA
AANA NAA
AN NAA
ANN NAA
ANA NAA

- Datasets which are not required and are provided will not be rejected
- Where an attribute provided has a value greater than the field size, the transaction will be rejected.

- Attributes which are not required (x'd) need to be represented with a comma
 followed by a comma, where the attribute is text (char), double quotes should
 be supplied e.g., "",
- MDD values held in Rainbow are stored as CAPITAL letters and therefore
 when interacting with Rainbow Suppliers should always use CAPITALS for
 MDD values else transaction will be rejected.

N.B. For an example of how CSV files should be provided to National Grid Metering refer to section 5.2.

The table below shows the acceptable characters:

addresses

Letters, upper case	'A' to 'Z'
Letters, lower case	'a' to 'z'
Numerals	0 to 9
Space Character	
Full Stop	
Comma	,
Hyphen/minus sign	-
Opening Parentheses	
Closing Parentheses	
Oblique stroke (slash)	
Apostrophe	·
Plus sign	+
Colon	:
Equals sign	=
Question mark	?
Exclamation mark	!
Quotation mark	"
Percentage sign	%
Ampersand	&
Asterisk	*
Semi-colon	•
Less than sign	<
Greater than sign	>
Reserved for Use as:	
,	Delimiter or Component data element separator
<lf></lf>	Group delimiter (Line Feed)
"	Value preceding and succeeding a character to restore its
	normal meaning.
At sign. Used when	@
representing email	

1.7 Calculation of Meter Point Conversion factor:

National Grid metering will calculate and provide a meter point conversion factor:

- Within an ONJOB, following meter work involving meter installation or exchanges
- Within ONUPD, following Appointment
- On request. In this instance the process is manual and utilises email as the means of communication. National Grid Metering will provide an email box account for this purpose:

Process:

- Supplier provides MPRN and address details to National Grid Metering within the template shown in appendix 5.3 Request for Calculation of Meter Point Conversion Factor template.
- National Grid Metering will calculate the appropriate conversion factor for that meter point and return the details to the Supplier by the same means.

National Grid Metering will update Rainbow to reflect the new conversion factor

Template is captured as an Appendix in 5.3.

1.8 Transaction Request Communication Alternatives

Whilst it is anticipated that large volume transactions will be transmitted in batch files via IX, WEB functionality is also supported for a number of transaction types. In exceptional circumstances where a Supplier is unable to access the IX network and the WEB does not provide an alternative means of communication, National Grid Metering may support a limited amount of communication for a limited period by "Other" means, subject to prior agreement between the customer and NGM.

The following matrix details the various types of requests that can be submitted by a Supplier and where applicable the alternative communication methods available. The preferred transmission method is marked with a "Y", and the alternatives (those marked * and in "Other" column) are supported in exceptional circumstances, as mentioned above.

Please note that where communication by post is accepted, National Grid Metering will not respond by the same method. Where post or email is acceptable in the "Other" column, Suppliers should still provide all the mandatory information as specified in the corresponding file formats.

	Batch File	WEB	Facsimile	Report via IX	Other	
Request Quotation for Asset Work		Y	Y		E-mail. Post. Telephone	
Request Asset Work (Standard)	Y (ORJOB)	Y	*		Telephone (M1 requests)	
Quotation Acceptance for Asset Work (Non`-Standard)	Y (ORJOB)		Y		E-Mail. Post	
Replan Asset Work (Standard)	Y (ORJOB)	Y	*		Telephone	
Replan Asset Work (Non-Standard)			Y		E Mail. Post	
Cancel Asset Work (Standard)	Y (ORJOB)	Y	*		Telephone	
Cancel Asset Work (Non-Standard)			Y		Email	
Request Quotation of Metering Prices(MAP) Refer to section 2.3				Y MAP	Telephone	
Request Portfolio Appointment	Y (ONAGE)				E mail	
Request Portfolio De- appointment	Y (ONAGE)				E mail	
Submit Data Update	Y (OSUPD)	Y				
Submit Query	Y (OSENQ)	Y	Y <u>#*</u> #*		Telephone, Email For fax template see section 5.4	formatted: Default Paragraph Font
View Portfolio/Work Details		Y			#* [©] Telephone available as a standard alternative to web	

^{*}Preferred route is via Web Portal

 $^{^{\}scriptscriptstyle \Phi}$ RFI Bureau facility available via telephone

Invoicing*~	Y					
-------------	---	--	--	--	--	--

1.9 Contract References

When requesting a service via Batch or Portal, Suppliers are generally required to provide the reference of the contract under which the service is provided.

The following table provides details of the contract reference which should be used to access these services.

Please note that requests for work under either of the following contracts should be made using the contract reference for the <7bar Meter Works contract:

- (i) the Agreement and General Conditions of Contract for Meter Works Not Exceeding 7 Bar (< 7 Bar Meter Works) or
- (ii) the Agreement and General Conditions of Contract for the Provision and Maintenance of Metering Equipment (P & M),

For instance, a request for a battery change or attend to a faulty meter is essentially a maintenance activity covered by the P & M contract. However for the purposes of requesting the work, Suppliers would use the reference for < 7 Bar Works contract.

File Name	Activity	Applicable Contract	Contract reference required for the purpose of the request
ONAGE	Appointment	Provision & Maintenance	Provision& Maintenance
ONAGE	De-Appointment	Provision & Maintenance	Provision& Maintenance
ORJOB	Notify of battery change or faulty meter work (e.g. D+5)	Provision & Maintenance	Below 7 bar Meter Works
ORJOB	Request Asset Works for below 7 bar	Below 7 bar Meter Works	Below 7 bar Meter Works
ORJOB	Request Asset Works for above 7 bar	Above 7 bar Meter Works	Above 7 bar Meter Works
ORJOB	Request Adversarial Meter Works	Adversarial Meters Works	Adversarial Meters Works
ONJOB	Work Notification Works for above 7 bar	Above 7 bar Meter Works	Above 7 bar Meter Works
ONJOB	Work Notification for below 7 bar	Below 7 bar Meter Works	Below 7 bar Meter Works
ONJOB	Work Notification for Adversarial Meter Works	Adversarial Meters Works	Adversarial Meters Works
OSUPD	Customer Data Update	Provision & Maintenance	Not required
OSENQ	Query Submission	Provision & Maintenance	Not required
ONENQ	Query Notification	Provision & Maintenance	Not required
MAV/IAV	Metering Asset invoice	Provision & Maintenance	Not required
MAJ/IAJ	Metering Asset Standard Adjustment Invoice	Provision & Maintenance	Not required
MAH/IAH	Metering Asset Ad-Hoc Invoice	Provision & Maintenance	Not required
AWI/IWI	Metering Asset Works	Below 7 bar Meter Works	Not required

 $[\]tilde{\ }^{*}$ If IX is down Invoice will be sent as soon as operationally feasible

	Invoice Pre-Appointment		
	Liquidated Damages n		
AWH/IWH	Metering Asset Works Ad Hoc Invoice	Below 7 bar Meter Works	Not required
MFV/IFV	Pre-Appointment Liquidated Damages	Below 7 bar Meter Works	Not required
MAP	Meter Asset Prices Report	Provision & Maintenance	Not required

2 Portfolio

2.1 Portfolio Overview

This section details the processes involved with the transfer of metering arrangements from one Meter Asset Manager (MAM) to another, which is often coincident with a Change of Supplier. Regulated meters are managed by National Grid Metering Limited on behalf of National Grid and the Provision and Maintenance Contract details the terms and conditions under which regulated meters are available to rent.

The processes included in this section are:

- Request a Quotation (Metering Prices)
- Appointment Request
- De-appointment Request
- Provide Asset Details

Although National Grid publishes details of its prices, there will be occasions, especially for larger meters, where a quotation is required.

Where a Supplier takes over the responsibility for a regulated meter, an appointment request is required. Requests must be received by 20:00 on the day before the appointment effective date.

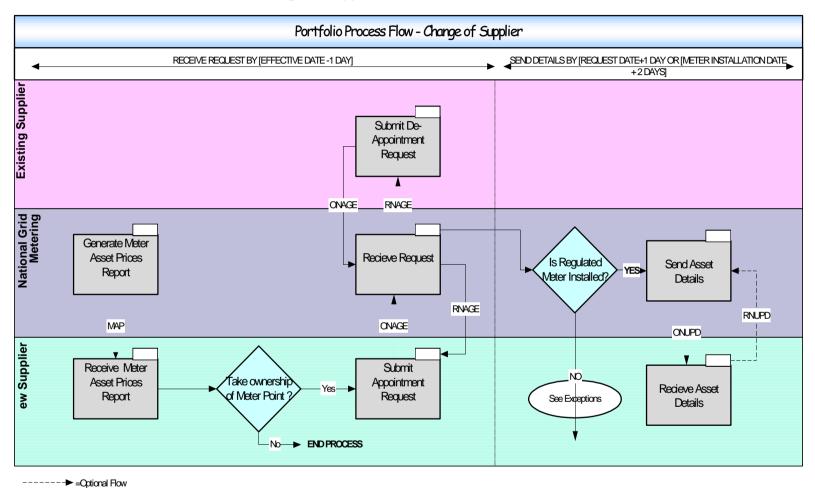
A standard response file will then be sent (Section 44 Standard Response FileStandard Response File) and if the request is accepted, a file containing asset details will be sent. The exception to this process is where the meter has not yet been installed. In this scenario, asset details will be sent following completion of the work.

Where there is a change of supplier, the incumbent supplier should submit a deappointment request by 20:00 on the day before the de-appointment effective date. In a change of supplier scenario, where there is generally no break in gas supply, the incoming and outgoing Suppliers are expected to provide consecutive deappointment and appointment dates however, National Grid will manage any exceptions as appropriate Formatted: Font: Bold

Formatted: Font: Arial, Bold, Font

color: Black

2.2 Portfolio Process Flow – Change of Supplier



2.3 Meter Asset Prices (MAP) Report

The MAP file is a report which is provided to registered Suppliers on a monthly basis. This report enables suppliers to confirm metering rental charges at MPRN level, for meters with a capacity greater than 11m3hr(scmh).

The report is sent by National Grid Metering via CD ROM

At Industry Cut Over (ICO) a standard MAP report will contain around 450,000 records and the report will be split into a number of separate files.

Naming Convention

The MAP report will use the following naming convention:

MAP.DDMMYYYY.File01.csv

(Type.date.file.number.format)

Structure

- Each File will contain a header and Trailer
- Headers and Trailers will be generic, as the same files will be sent to all Suppliers

The first and intermediate trailers will contain:

- Number of MPRNs in the file cumulative
- MPRNs up to and including that file

The trailer in the last file will contain:

- Number of MPRNs in the file cumulative
- MPRNs up to and including that file

Total number of files

N.B Headers will follow the standard header format as shown in section 15 <u>Headers and Trailers</u> Headers and <u>Trailers</u>.

Formatted: Font: Arial

2.4 Meter Asset Prices Report Data Heirarchy (MAP)

2.5 Meter Asset Prices Report File Format (MAP)

1 Meter	Point	1 to man file)	y (per	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		MTPNT	MDD
A0178	X	5	Char	Data Update Code			
A0072	M	10	Integer	Meter Point			
				Reference Number			
A0076	X	1	Char	Meter Link Code			
A0077	Χ	2	Char	Meter Point Status			
A0059	Χ	2	Char	Location Code			
A0157	Χ	100	Char	Meter Point			
				Location Notes			
A0075	X	210	Char	Access Instructions			
A0074	X	9,6	Number	Conversion Factor			
A0073	Χ	8	Date	Last Inspection			
				Date			
A0164	Χ	9,3	Number	Metering Pressure			

1.1 Add	ress	1 per Me	ter Point	Mandatory Record,	all red	corded details will be provi	ded
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or TDD
Number	Mandatory	Length 5	Format Char	Record Identifier		ADDRS	MDD
A0177	M						
A0102	M	5	Char	Address Type Code		Value: MTRPT – Meter Point Address	MDD
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number	*	At least one of this or the next two fields should be provided.	
A0006	0	40	Char	Building Name_Number			
A0007	0	40	Char	Dependent Thoroughfare			
A0008	0	40	Char	Thoroughfare	*	At least this or the field above should be provided.	
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town	*	This should be provided.	
A0012	X	40	Char	County			
A0013	M	10	Char	Post Code	*	This should be provided.	
A0015	Χ	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	X	7	Integer	Grid Co-ord Z			
A0018	Х	12	Char	Unique Property – Reference Number			

1.2 Ass	et	1 to man Meter Po	, ··	Mandatory Record			
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	М	5	Char	Record Identifier		ASSET	MDD
A0178	X	5	Char	Data Update Code			MDD
A0144	Χ	5	Char	Transaction Type			MDD

				Code		
A0024	M	5	Char	Asset Class Code	Values: CONVR - Converter, DTLGR - Datalogger, METER - Meter (where Measuring Capacity > 11 scmh)	MDD
A0109	0	10	Char	Product Id		MDD
A0163	0	5	Char	Payment Method code	Values: CR (credit), PP (Prepayment)	MDD
A0083	С	10	Char	Model Code	Mandated for Measuring Assets	MDD
A0060	С	3	Char	Manufacturer Code	Mandated for Measuring Assets	MDD
A0021	С	4	Integer	Year of Manufacture	Mandated for Measuring Assets	
A0022	С	14	Char	Serial Number	Mandated for Measuring Assets	
A0059	X	2	Char	Location Code		MDD
A0158	Х	100	Char	Asset Location Notes		
A0037	X	2	Char	Asset Status Code		MDD

1.2.1 Price		1 to ma point)	ny (per meter	(per meter Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		PRICE	
A0201	M	1	Char	Price Type	*	Values: I - (Installation), M - (Maintenance), P - (Provision)	
A0203	М	3	Char	Price Unit Code	*	Values: PPD (pence per day)	
A0205	X	5	Char	Price Band Code		Price band within price type	
A0207	М	15,2	Number	Price	*	Value will be shown, even if this is zero	

1.3 Price		0 to 1 (p point)	er meter	Optional Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		PRICE	
A0201	M	1	Char	Price Type	*	Values: T – Total summed amount	
A0203	M	3	Char	Price Unit Code	*	Values: PPD (pence per day)	
A0205	Х	5	Char	Price Band Code		Price band within price type	
A0207	M	15,2	Number	Price	*	Value: Will be shown, even if this is zero	

Quotation for Metering Prices Summary (ORQUO/ONQUO)

NOT CURRENTLY SUPPORTED, BUT REMAINS IN THE RAINBOW MANUAL TO RETAIN VISIBILITY

This facility enables any Rainbow customer with the ability to generate a batch file (ORQUO) to request a quotation for the metering related costs at a specific Meter Point Reference (MPR). Since all meters with a capacity of less than 11m³ are subject to a standard price, quotations should only be required for larger meters.

The Originator can request the details for any regulated meter, i.e. where the GT is the Gas Act Owner. If the meter is not on the National Grid Metering portfolio, then the response message will advise accordingly. Additionally, the request will be rejected where there is no regulated asset on site, e.g. the meter has been removed.

Prices by meter size can be obtained by checking the published prices within the National Grid Metering Charges publication (see the Web site for details). The mandatory information to obtain a metering price is:

Record	Information
Transaction	Record Identifier (TRANS)
	Transaction Reference
	Effective From Date (must be the same date in
	one transaction)
Meter Point	Record Identifier (RESPN)
	Meter Point Reference

The information is available via the Web (reference to the National Grid Metering Charges publication), through the batch file, by fax, email, or a telephone request to National Grid Metering. For manual requests, the mandatory information must be completed, else the originator will be asked to complete this information prior to the notification being provided.

A Standard Response file will be sent and, providing the request is accepted, a notification (ONQUO) will be sent to the originator. Exceptions will be dealt with manually.

Notifications

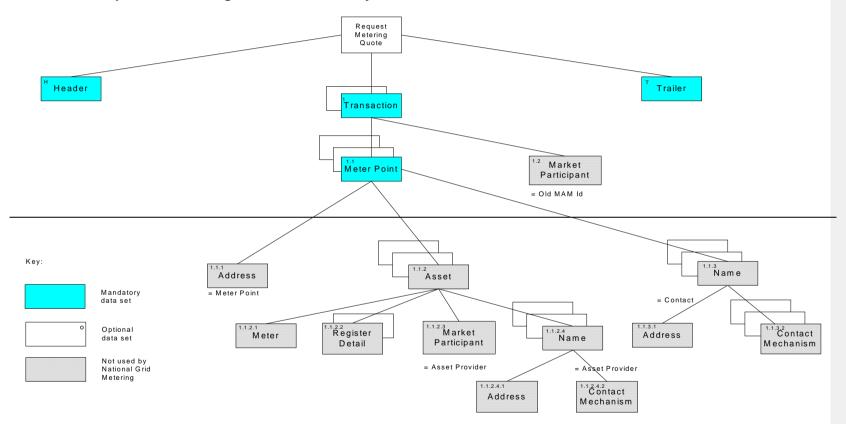
For requests received by batch, the relevant information relating to the MPR, including details of all the chargeable assets on site, is provided by batch transfer in the notification file ONQUO:

Record	Information
Response Transaction	Record Identifier (RESPN)
	Transaction reference
	Market Sector Code
	Start Date
Meter Point	Record Identifier (MTPNT)
	Meter Point Reference Number

Address	Record Identifier (ADDRS)		
	Address Type Code		
	Post Code		
Asset	Record Identifier (ASSET)		
	Asset Class Code		
Price	Record Identifier (PRICE)		
	Price Type (e.g. Provision)		
	Price Unit (e.g. pence per day)		
	Price		

Exceptions will be manually resolved via telephone/fax.

2.6 Request for Metering Price Data Hierarchy - ORQUO



2.7 Request Metering Price File Format: ORQUO

1 Transaction		1 to many (per		Mandatory Record			
		File)	, (I	, , , , , , ,			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or
A0177	M	5	Char	Record Identifier		TRANS	MDD
A0055	M	15	Char	Transaction	*	All requests within a	
				Reference		transaction must have the same effective date	
A0056	X	210	Char	Transaction Comment			
A0053	X	25	Char	Contract Reference			
A0144	×	5	Char	Transaction Type			MDD
A0167	X	5	Char	Transaction Type Reason Code			MDD
A0058	X	15	Char	Cross-Ref Other Internal Job Reference			
A0122	θ	15	Char	Cross-Ref Other External Job Reference	*	Can be used for Requestor's own reference	
A0142	X	5	Char	Transaction Status Code			MDD
A0057	X	5	Char	Transaction Status Change Reason Code			
A0161	θ	1	Char	Market Sector Code	*	May be appropriate if charging methodology changes but currently ignored. D (Domestic as defined by the Utility Act), I (Industrial as defined by the Utility Act).	MDD
A0166	X	8	Date	Date of Notice		,	
A0068	×	5	Char	Registration Body			MDD
A0069	×	20	Char	Registration Reference			
A0081	M	8	Date	Effective From Date	<u>*</u>	Start date for service for the purpose of the quote. Can be no more than 3 calendar months in the future	
A0082	X	8	Date	Effective To Date			

1.1 Meter Point		1 to many (per Transaction)		Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		MTPNT	MDD
A0178	X	5	Char	Data Update Code			MDD
A0072	M	10	Integer	Meter Point Reference Number			
A0076	θ	1	Char	Meter Link Code	*	Values: F (Freestanding)	MDD
A0077	X	2	Char	Meter Point Status			MDD
A0059	X	2	Char	Location Code			MDD
A0157	×	100	Char	Meter Point Location Notes			
A0075	X	210	Char	Access Instructions			
A0074	×	9,6	Number	Conversion Factor		Values: 0.000001 to 999.999999	
A0073	×	8	Date	Last Inspection Date			
A0164	X	9,3	Number	Metering Pressure			

1.1.1 Address		0 to 1 (per Meter		Record not required & will be ignored if provided.				
		Point)		3				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	M	5	Char	Address Type Code				
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number	*			
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare	*			
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town	*			
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code	*			
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property Reference Number				

1.1.2 As	set	0 to many (per Meter Point)		Record not required & will be ignored if provided.				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ASSET	MDD	
A0178	X	5	Char	Data Update Code				
A0144	×	5	Char	Transaction Type -Code				
A0024	M	5	Char	Asset Class Code				
A0109	X	10	Char	Product Id				
A0163	X	5	Char	Payment Method code				
A0083	Φ	10	Char	Model Code				
A0060	Φ	3	Char	Manufacturer Code				
A0021	Ф	4	Integer	Year of Manufacture				
A0022	Ф	14	Char	Serial Number				
A0059	X	2	Char	Location Code				
A0158	X	100	Char	Asset Location Notes				
A0037	X	2	Char	Asset Status Code				

1.1.2.1 I	Vieter	0 to 1 (pe	er Asset)	Record not required & will be ignored if provided.				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		METER	MDD	
A0178	X	5	Char	Data Update Code				
A0025	0	5	Char	Meter Type Code				
A0085	X	5	Char	Meter Mechanism code				
A0112	0	10,4	Number	Measuring Capacity		<u>Values:</u> 0 to 999999.999		
A0079	X	4	Char	Meter Usage Code				
A0044	X	5	Char	Collar Status Code				
A0149	×	8	Date	OAMI Inspection Date				
A0126	M	5	Char	Role Code				
A0160	X	8	Date	Last Refurbished Date				
A0194	X	7,2	Number	Pulse Value				

1.1.2.2 F	Register	0 to 2 (pc	er	Record not required	Record not required & will be ignored if provided.				
Details registering Ass			ng Asset)						
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	M	5	Char	Record Identifier		REGST	MDD		
A0178	X	5	Char	Data Update Code					
A0124	M	5	Char	Register Type Code					
A0121	X	2	Integer	Number of Dials or Digits					
A0123	X	5	Char	Units of Measure					
A0120	X	6,3	Number	Multiplication factor					

1.1.2.3 Market 0 to 1 (per Asset)		Record not required and will be ignored if provided.					
Participant							
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format		-		TDD
A0177	tames to the second of the sec		Record Identifier		MKPRT	MDD	

A0126	M	5	Char	Role Code			
A0064	M	3	Char	Market Participant			
				Abbreviated Name			
1.1.2.4 I	Name	0 to man	y (per	Record not required	and	will be ignored if provided.	
		Asset)					
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code	*	Identifies this is for an	MDD
					_	Asset Provider.	
A0088	0	6	Char	Title			
A0089	0	4	Char	Initials			
A0090	0	30	Char	Surname			
A0100	X	100	Char	Person Notes			
A0101	X	30	Char	Access Password			

1.1.2.4.1	Address	0 to 1 (por related to asset)		Record not required and will be ignored if provided				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	M	5	Char	Address Type Code	*	Identifies this is for an Asset Provider.	MDD	
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property – Reference Number				

	1.1.2.4.2 Contact O to many (per Name per		Record not required and will be ignored if provided				
		Transaction)					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		CONTM	MDD
A0049	M	5	Char	Contact Mechanism Code			
A0106	M	100	Char	Contact Mechanism Value			

1.1.3 Na	1.1.3 Name		er Meter	Record not required and will be ignored if provided			
Attribute Number	Optional or Mandatory	Point) Field Length	Field Format	Description	Key	Rules	MDD or
A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code	*		
A0088	0	6	Char	Title			
A0089	0	4	Char	Initials			
A0090	0	30	Char	Surname			
A0100	X	100	Char	Person Notes			
A0101	X	30	Char	Access Password			

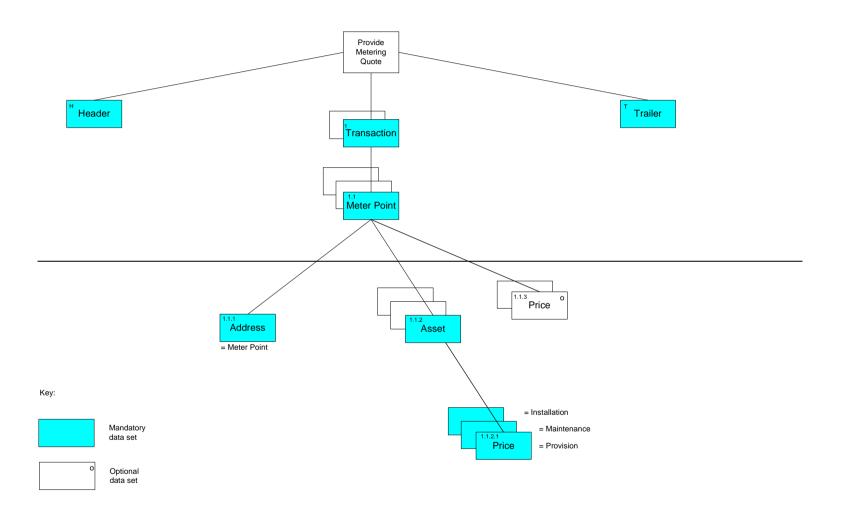
1.1.3.1	Address	0 to 1 (for each name for a transaction)		Record not required and will be ignored if provided.					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	M	5	Char	Record Identifier		ADDRS	MDD		
A0102	M	5	Char	Address Type Code					
A0003	0	210	Char	Address Text					
A0004	0	40	Char	Sub Building Name_Number					
A0006	0	40	Char	Building Name_Number					
A0007	0	40	Char	Dependent Thoroughfare					
A0008	0	40	Char	Thoroughfare					
A0009	0	40	Char	Double Dependent Locality					
A0010	0	40	Char	Dependent Locality					
A0011	0	40	Char	Post Town					
A0012	0	40	Char	County					
A0013	M	10	Char	Post Code					
A0015	×	7	Integer	Grid Co-ord X					
A0016	×	7	Integer	Grid Co-ord Y					
A0017	X	7	Integer	Grid Co-ord Z					
A0018	X	12	Char	Unique Property Reference No.					

1.1.3.2 Mechan		each	any (for Name a Meter	Record not required and will be ignored if provided			
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		CONTM	MDD
A0049	M	5	Char	Contact			
				Mechanism Code			
A0106	M	100	Char	Contact			
				Mechanism Value			

1.2 Market 0 to 1 (per		Record not required and will be ignored if provided.					
Participant Transa		Transact	ion)				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format		-		TDD
A0177	M	5	Char	Record Identifier		MKPRT	MDD

A0126	M	5	Char	Role Code	<u>*</u>	
A0064	M	3	Char	Market Participant		MDD
				Abbreviated Name		

2.8 Notification of Metering Price Data Hierarchy (ONQUO)



Page 41 of 167

2.9 Notification of Metering Price File Forat: ONQUO

1 Trans	action	1 to m	any (per	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		TRANS	MDD
A0055	M	15	Char	Transaction Reference	<u>*</u>	As per ORQUO	
A0056	X	210	Char	Transaction Comment			
A0053	X	25	Char	Contract Reference			
A0144	X	5	Char	Transaction Type Code			MDD
A0167	×	5	Char	Transaction Type Reason Code			MDD
A0058	X	15	Char	Cross-Ref Other Internal Job Reference			
A0122	θ	15	Char	Cross-Ref Other External Job Reference	*	Returned if provided on "ORQUO"	
A0142	×	5	Char	Transaction Status Code			MDD
A0057	X	5	Char	Transaction Status Change Reason Code Code			
A0161	M	4	Char	Market Sector Code	*	Values: D (Domestic as defined by the Utility Act), I (Industrial as defined by the Utility Act).	MDD
A0166	X	8	Date	Date of Notice			
A0068	X	5	Char	Registration Body			
A0069	X	20	Char	Registration Reference			MDD
A0081	M	8	Date	Effective From Date	*	Start date for service for the purpose of the quote.	
A0082	×	8	Date	Effective To Date			

1.1 Mete	er Point	1 to man Transact	, · · ·	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		MTPNT	MDD
A0178	X	5	Char	Data Update Code			MDD
A0072	M	10	Integer	Meter Point Reference Number			
A0076	X	4	Char	Meter Link Code			MDD
A0077	X	2	Char	Meter Point Status Code			MDD
A0059	X	2	Char	Location Code			MDD
A0157	×	100	Char	Meter Point Location Notes			
A0075	X	210	Char	Access Instructions			
A0074	X	9,6	Number	Conversion Factor		Values: 0.000001 to 999.999999	
A0073	X	8	Date	Last Inspection Date			
A0164	X	9,3	Number	Metering Pressure			

1.1.1 A	ddress	1 (per	Meter	Mandatory Record.			
		Point)		All recorded details	will k	e provided.	
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format	5			TDD
A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	M	5	Char	Address Type	*	Value: MTRPT - Meter	MDD
				Code		Point Address	
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building	*	This or the next field	
				Name_Number		should be populated	
A0006	θ	40	Char	Building			
				Name_Number			
A0007	0	40	Char	Dependent			
				Thoroughfare			
A0008	θ	40	Char	Thoroughfare	*	At least this or the field	
				J	—	above should be	
						populated.	
A0009	Đ	40	Char	Double Dependent			
				Locality			
A0010	θ	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town	*	This should be populated.	
	_			_	_		
A0012	0	40	Char	County			
A0013	M	10	Char	Post Code	*	This must be populated.	
A0015	X	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	X	7	Integer	Grid Co-ord Z			
A0018	X	12	Char	Unique Property -			
				Reference Number			

440 4	4	4 4	1	Manufatan Barant			
1.1.2 As	iset	1 to man Meter Po	, · · ·	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ASSET	MDD
A0178	X	5	Char	Data Update Code			MDD
A0144	X	5	Char	Transaction Type Code			MDD
A0024	M	5	Char	Asset Class Code	*	Values: BOX (Box e.g. Meter Box) BYPAS (Bypass), CONVR (Converter), DTLGR (Datalogger),	MDD
A0109	X	10	Char	Product Id			MDD
A0163	0	5	Char	Payment Method code	*	Values: CR (credit), PP (Prepayment)	MDD
A0083	0	10	Char	Model Code			MDD
A0060	0	3	Char	Manufacturer Code			MDD
A0021	0	4	Integer	Year of Manufacture			
A0022	0	14	Char	Serial Number			
A0059	0	2	Char	Location Code			MDD
A0158	0	100	Char	Asset Location Notes			
A0037	0	2	Char	Asset Status Code			MDD

1.1.2.1 Price		1 to mar	ny (per meter	Mandatory Reco	ord		
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		PRICE	
A0201	M	1	Char	Price Type	*	Values: I - (Installation), M - (Maintenance), P - (Provision)	
A0203	M	3	Char	Price Unit Code	*	Values: ppd (pence per day)	
A0205	θ	5	Char	Price Band Code		Code to indicate the price band for the service. Values: INSTL – Installation, MAINT – Maintenance, PROV – Provisional, TOTAL – Total summed amount	
A0207	M	15,2	Number	Price	*	Value will be shown, even if this is zero	

1.1.3 Price			ny (per pint)	Optional Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		PRICE	
A0201	M	4	Char	Price Type	*	Values: I - (Installation), M - (Maintenance), P (Provision)	
A0203	M	3	Char	Price Unit Code	*	Values: ppd (pence per day)	
A0205	0	5	Char	Price Band Code		Code to indicate the price band for the service. Values: INSTL — Installation, MAINT — Maintenance, PROV — Provisional, TOTAL — Total summed amount	
A0207	M	15,2	Number	Price	*	Value will be shown, even if this is zero	

2.10 Portfolio Appointment Request (ONAGE)

An appointment request must be sent if a Supplier wishes to rent a regulated meter. (Gas Act Owner = GT). The request can be sent at any time, but must be sent by 20:00 on the day before the appointment effective date. Appointment requests can be sent 180 days prior to the intended appointment date. Retrospective appointment requests will fail validation, including requests on D.

Appointment requests should not contain bypass details. If an appointment request contains a bypass asset record, the transaction will be rejected in respect of that MPRN.

Provision, maintenance and installation charges, where applicable, will commence on the appointment effective date and charges will be levied through the Metering Asset Invoice (see Section 2 Queries & Invoicing Volume).

Note: In this instance installation charges would be applicable for meters installed prior to Pricing Disaggregation, i.e.

1 October 2000 for domestic meters and 1 April 2001 for I&C meters (Utilities Act definition)

Batch file appointment requests must include the following information as a minimum:

Record	Information
Transaction	Record Identifier (TRANS) Transaction Reference Contract Reference Transaction Type Code (e.g. APPNT) Transaction Type Reason Code (e.g. COS) Market Sector Code Effective From Date
Meter Point	Record Identifier (MTPNT) MPR

Where an asset is not recorded on National Grid's portfolio, e.g. a meter installation has been requested but has not yet been completed,, the meter point address, and asset type must also be provided and the Transaction Type Reason Code should be "FIX".

The various scenarios and the correct Transaction Type Reason Code and Status Code to be used are detailed in the table below.

Scenario	Transaction Type Reason Code (A0167)
New meter requested, but not installed at the time of the appointment request	FIX
Meter exchange requested (from competitive to regulated) but not installed at the time of the appointment request	FIX
New meter installed, but MPRN not previously subject to an appointment request (e.g. installation organised through meter works contract and pre-appointment liquidated damages applied)	NEWCN
Existing regulated meter installed, MPRN gained through the Change of Supplier process	COS
New MPRN created for Found Meter N.B If asset creation fails due to data mismatch it will be flagged for internal enquiry and ONUPD will not be sent until the query is resolved.	FNDAS
Existing non regulated meter installed, National Grid meter installation required but not installed at the time of the appointment request.	CA

The request is validated and a standard response file is sent, rejecting or accepting the request (see section 4). If the request is accepted, then National Grid returns a batch file containing all the asset details (ONUPD).

Asset details are provided the day after receipt and acceptance of the portfolio request, except where a meter installation has not yet been completed, in which case asset details are sent within [2] calendar days of the meter being fitted. However, the work notification will still be sent on completion of work and will always precede the asset details (ONUPD). The appointment request will not be processed if the work request is never received.

The file (ONUPD) includes details of all the assets recorded for that MPRN on National Grid's database, and the associated meter point address. Where an appointment request has been accepted, but has generated an exception, the exception must be resolved before the submission of the ONUPD file. Suppliers will be contacted by Customer Services in order to resolve the exception prior to effective date. This communication will be made by email/telephone to a supplier nominated contact.

National Grid will overwrite its existing meter point address details where the supplier provides an address. The exception to this is for transaction type reason code "FNDAS", where address data provided will be used to create an address.

Asset Data Mismatch

If a Supplier wishes to optionally provide asset information, some of the information supplied will be cross-referenced with the information on National Grid's database. The attributes that are used for Asset Data Mismatch are defined within the file formats. If a supplier does not provide any data for these attributes, they will not be subject to mismatch validation. For further details of the process see 0 2.20 Asset Data Mismatch Process Flow 2.20 Asset Data Mismatch Process Flow Any data mismatches (meter serial numbers are subject to fuzzy matching) are subject to an internal investigation to establish the correct details. This investigation does not impact the handling of the portfolio request unless additional information requested from the Supplier has not been provided (cross ref 2.16 Provide Metering details)

Where there is a data mismatch between the information provided on the request and that held by National Grid, then the message "asset data mismatch" will be sent

Formatted: Font: Arial

within attribute A0056 – (Transaction Comment) within the ONUPD file. This will notify the Supplier that National Grid Metering has instigated an investigation. If the data held on National Grid's database is amended, then a further asset details file (ONUPD) will be sent with a transaction type code (A0144) of UPDTE. If no changes to Rainbow data are necessary following investigation, the second ONUPD will have a transaction type code (A0144) of REPRT (see Section 3.3, Miscellaneous Data Amendments).

Meter serial numbers are subject to fuzzy matching. The system rules governing this validation are now captured within National Grid's Rainbow System Validation document.

Pending Appointment Requests

If at a point in time a Supplier has appointed National Grid Metering to an MPRN and they submit a de-Appointment request with an acceptable effective date in the future, the request will be accepted. However, if the Supplier also submits another appointment request (e.g. in connection with a dis-aggregation / aggregation of supply points) the appointment will be rejected as the Supplier is already LIVE on Rainbow.

E.g.

If a supplier has previously appointed National Grid at a meter point and then sends a de-Appointment request (e.g. say for an effective date of 4/11/04) as long as they give the required notice period, the de-appointment would be accepted.

If the Supplier, prior to the 4/11/04, then sends an appointment request for effective date of 4/11/04, the appointment would be rejected as the Supplier is currently LIVE on Rainbow

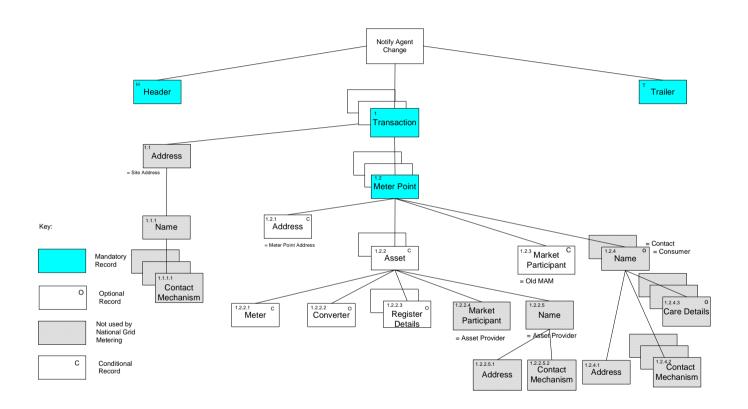
Cancelling an Appointment Request

Where a Customer wished to cancel an appointment request, this can only be done prior to the appointment effective date. To cancel an appointment request a Customer must send the opposite transaction, i.e. The Customer must submit a deappointment request with the transaction status code of "CANCL", the same transaction type reason code from the original request and an effective from date (A0081) which matches that of the original appointment request. For the avoidance of doubt, once an appointment has reached its effective date, it can only be cancelled by submitting an ONAGE de-appointment request with suitable notice periods.

In this circumstance the transaction is not validated.

Scenario	Transaction Type Reason Code (A0167)	Transaction Status Code (A0142)
Cancel a appointment submitted in error	Repeat the Transaction Type	CANCL
	Reason Code quoted on the	
	appointment request	

2.11 Appointment Request Data Hierarchy (ONAGE)



2.12 Portfolio Appointment File Format: ONAGE

1 Trans	action	1 to Mar File)	ny (per	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		TRANS	MDD
A0055	M	15	Char	Transaction Reference		A unique reference within participant. Where asset works is being carried out in parallel this does not need to be the same reference as in the work request.	
A0056	Х	210	Char	Transaction Comment		·	
A0053	М	25	Char	Contract Reference		Provision and Maintenance Contract Reference.	
A0144	М	5	Char	Transaction Type Code	*	Value: APPNT – Appointment	MDD
A0167	М	5	Char	Transaction Type Reason Code	*	Values: CA - Change of Agent, COS - Change of Supplier, FIX – New Meter Fitted (Siteworks), NEWCN – New Connection FNDAS - New MPRN created for Found Meter	MDD
A0058	X	15	Char	Cross-Ref Other Internal Job Reference			
A0122	Х	15	Char	Cross-Ref Other External Job Reference			
A0142	0	5	Char	Transaction Status Code		CANCL – Requestor Cancels (Only used for canceling a de appointment request)	MDD
A0057	Х	5	Char	Transaction Status Change Reason Code			
A0161	M	1	Char	Market Sector Code		Values: D (Domestic as defined by the Utility Act), I (Industrial & Commercial as defined by the Utility Act). If ONAGE value differs from Rainbow values, ONAGE value is used to update details held on Rainbow	MDD
A0166	Χ	8	Date	Date of Notice			
A0068	X	5	Char	Registration Body			MDD
A0069	X	20	Char	Registration Reference			
A0081	M	8	Date	Effective From		Date the appointment is	

				Date	to be effective.	
A0082	Х	8	Date	Effective To Date		

1.1 Add	ress	0 to 1 (pe		Record Not Require	ed		
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	X	5	Char	Address Type Code			
A0003	M	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number			
A0006	0	40	Char	Building Name_Number			
A0007	0	40	Char	Dependent Thoroughfare			
A0008	0	40	Char	Thoroughfare			
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town			
A0012	0	40	Char	County			
A0013	M	10	Char	Post Code			
A0015	X	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	X	7	Integer	Grid Co-ord Z			
A0018	X	12	Char	Unique Property – Reference No.			

1.1.1 Na	1.1.1 Name		er related	Record Not Required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code	*			
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	X	100	Char	Person Notes				
A0101	X	30	Char	Access Password				

1.1.1.1 Contact Mechanism		0 to many (per related Name)		Record Not Require	Record Not Required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	M	5	Char	Record Identifier		CONTM	MDD		
A0049	М	5	Char	Contact Mechanism Code			MDD		
A0106	М	100	Char	Contact Mechanism Value					

1.2 Meter Point		1 to man Transact	<i>y</i> (1	Mandatory Record			
Attribute Optional or Field Field		Field	Description	Key	Rules	MDD or	

Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		MTPNT	MDD
A0178	X	5	Char	Data Update Code			MDD
A0072	M	10	Integer	Meter Point			
				Reference Number			
A0076	М	1	Char	Meter Link Code	*	F (Freestanding)	MDD
A0077	X	2	Char	Meter Point Status			MDD
A0059	X	2	Char	Location Code			MDD
A0157	Х	100	Char	Meter Point			
				Location Notes			
A0075	Х	210	Char	Access Instructions			
A0074	Х	9,6	Number	Conversion Factor			
A0073	Х	8	Date	Last Inspection			
				Date			
A0164	X	9,3	Number	Metering Pressure			

1.2.1 Ac		0 to 1 (per Meter Point)			Conditional Record, mandated where A0167 = "CA", "FIX" or "FNDAS". Where supplied, only provided information will be overwritten.					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD			
A0177	М	5	Char	Record Identifier		ADDRS	MDD			
A0102	M	5	Char	Address Type Code	*	Value: MTRPT – Meter Point Address	MDD			
A0003	0	210	Char	Address Text						
A0004	0	40	Char	Sub Building Name_Number	*	This or the next field should be populated				
A0006	0	40	Char	Building Name_Number	*	This or the previous field should be populated				
A0007	0	40	Char	Dependent Thoroughfare	*	This or the next field should be populated				
A0008	0	40	Char	Thoroughfare	*	At least this or the field above should be populated.				
A0009	0	40	Char	Double Dependent Locality						
A0010	0	40	Char	Dependent Locality						
A0011	0	40	Char	Post Town	*	This should be populated.				
A0012	Χ	40	Char	County						
A0013	М	10	Char	Post Code	*	This must be populated.				
A0015	X	7	Integer	Grid Co-ord X						
A0016	Χ	7	Integer	Grid Co-ord Y						
A0017	Χ	7	Integer	Grid Co-ord Z						
A0018	X	12	Char	Unique Property – Reference Number						

1.2.2 As	sset	0 to m	any (per oint)	Record is condition	nal, ma	andated where A0167 = "FN	IDAS"
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ASSET	MDD
A0178	X	5	Char	Data Update Code			MDD
A0144	М	5	Char	Transaction Type Code	*	Values: APPNT - Appointment	MDD
A0024	M	5	Char	Asset Class Code	*	Values: CONVR (Converter), METER (Meter)	MDD
A0109	Х	10	Char	Product Id			MDD
A0163	C	5	Char	Payment Method code	*	Mandated where A0024= "METER" or A0167 = "FNDAS" Values: CR- Credit, PP- Prepayment. Where provided, this attribute is used for Asset Data Mismatch	MDD
A0083	С	10	Char	Model Code	*	Mandated where A0167 = "FNDAS". Should be provided, where known. Where provided, this attribute is used for Asset Data Mismatch	MDD
A0060	С	3	Char	Manufacturer Code	*	Mandated where A0167 = "FNDAS". Should be provided, where known. Where provided, this attribute is used for Asset Data Mismatch	MDD
A0021	С	4	Integer	Year of Manufacture	*	Mandated where A0167 = "FNDAS". Should be provided, where known. Where provided, this attribute is used for Asset Data Mismatch	
A0022	С	14	Char	Serial Number	*	Mandated where A0167 = "FNDAS" or where A0024 = "METER" or "CONVR". Where TTRC is "FIX" in ONAGE, the serial number will not be required Where provided, this attribute is used for Asset Data Mismatch	
A0059	0	2	Char	Location Code	*	Required if available. Where provided, this attribute is used for Asset Data Mismatch	MDD
A0158	С	100	Char	Asset Location Notes	*	Mandatory if Location Code = Other (98)	

A0037	0	2	Char	Asset Status Code	*	Values:	MDD
						AC- Active,	
						CA- Capped,	
						CD- Closed (Bypass),	
						CL- Clamped,	
						DM- Damaged,	
						FA- Faulty,	
						IN- Inactive,	
						LI- Live,	
						OP- Open (Bypass),	
						PD- Phone Line Down,	
						RE- Removed,	
						UN- Unknown	
						(Unchecked Bypass).	

1.2.2.1 Met	er	0 to 1 (p	er Asset)			ere A0167 = "FNDAS", ainst data held in Rainbo	
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		METER	MDD
A0178	X	5	Char	Data Update Code			MDD
A0025	M	5	Char	Meter Type Code	*	Values: D – Diaphragm of unknown material, L – Leather diaphragm, R – Rotary, S – Synthetic diaphragm, T – Turbine, U – Ultrasonic, Z – Unknown Where provided, this attribute is used for Asset Data Mismatch	MDD
A0085	M	5	Char	Meter Mechanism code	*	Values: CM – Coin meter, CR – Credit, ET – Electronic token meter, MT – Mechanical token meter, TH – Thrift, U – Unknown, PP – Prepayment.	MDD
A0112	С	10,4	Number	Measuring Capacity		Mandated where A0167 = "FNDAS" <u>Values:</u> <u>0 to 999999.999</u>	
A0079	X	1	Char	Meter Usage Code			
A0044	0	5	Char	Collar Status Code		Values: B (Broken), I (Intact),	MDD
A0149	X	8	Date	OAMI Inspection Date			
A0126	X	5	Char	Role Code			MDD

A0160	X	8	Date	Last Refurbished		
				Date		
A0194	X	7,2	Number	Pulse Value		

1.2.2.2	Converter	0 to 1 (pe	er Asset)	Optional Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		CONVE	MDD
A0178	X	5	Char	Data Update Code			MDD
A0036	0	5	Char	Conversion basis Code	*	Values:- T - Temperature PT - Pressure & Temperature CPT - Compressibility, Pressure & Temperature	MDD
A0027	0	9,6	Numbe r	Converter Conversion factor			

1.2.2.3 Registe	r Details	0 to 2 (per Registering Asset)		Optional Record					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	М	5	Char	Record Identifier		REGST	MDD		
A0178	X	5	Char	Data Update Code			MDD		
A0124	M	5	Char	Register Type Code		Values: CORR – Corrected Converter Register, METER – Meter Register, UNCOR – Uncorrected Converter Register	MDD		
A0121	M	2	Integer	Number of Dials or Digits					
A0123	M	5	Char	Units of Measure			MDD		
A0120	М	6,3	Number	Multiplication factor		<u>Values</u> : .001 to 999 .999			

1.2.2.4 I	1.2.2.4 Market		er Asset)	Record not Required					
Participa	Participant								
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	М	5	Char	Record Identifier		MKPRT	MDD		
A0126	M	5	Char	Role Code					
A0064	M	3	Char	Market Participant					
				Abbreviated Name					

1.2.2.5 Name 0 to 1		0 to 1 (pe	er Asset)	et) Record not Required			
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code			
A0088	0	6	Char	Title			
A0089	0	4	Char	Initials			
A0090	M	30	Char	Surname			
A0100	0	100	Char	Person Notes			
A0101	0	30	Char	Access Password			

	Address	0 to 1 (for name rel the Asse	ated to t)	Record not Required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	М	5	Char	Address Type Code			MDD	
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z	,			
A0018	X	12	Char	Unique Property – Reference Number				

1.2.2.5.2 Contact Mechanism		0 to many (per Name per Transaction)		Record not Required				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		CONTM	MDD	
A0049	M	5	Char	Contact	*			
				Mechanism Code				
A0106	M	100	Char	Contact				
				Mechanism Value				

1.2.3 Ma	1.2.3 Market		er Meter	Record is mandatory where A0167 = CoS or CA.				
Participa	Participant							
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		MKPRT	MDD	
A0126	M	5	Char	Role Code	*	Values: MAM – Meter Asset Manager	MDD	
A0064	M	3	Char	Market Participant Abbreviated Name	*	Name of existing MAM. For full list of values, see section 5.1	MDD	

1.2.4 Name		0 to ma Asset)	any (per	Record not Required			
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code	*		
A0088	0	6	Char	Title	*		

A0089	0	4	Char	Initials		
A0090	M	30	Char	Surname		
A0100	0	100	Char	Person Notes		
A0101	0	30	Char	Access Password		

1.2.4.1	1.2.4.1 Address 0 to 1 (per Name per Meter Point)			Record not Required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	М	5	Char	Address Type Code	*			
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	Х	12	Char	Unique Property – Reference No.				

1.2.4.2 Contact Mechanism		0 to many (per name, per Transaction)		Record not Required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		CONTM	MDD	
A0049	М	5	Char	Contact Mechanism Code	*			
A0106	М	100 Char		Contact Mechanism Value				

		0 to 1 (pe				ed		
Attribute Number	Optional or Mandatory	Field Length	Field Format	The state of the s		Key	Rules	MDD or TDD
A0177	M	5	Char	Record Id	dentifier		CARE	MDD
A0039	M	2	Char	Care Code	Category			

Portfolio De-appointment Request

A de-appointment request must be sent if a Supplier wishes to cease renting a regulated meter(Gas Act Owner = GT). The request can be sent at any time, but must be received at least by 20:00 on the day before the de-appointment effective date. A de-appointment request can be sent up to 180 days prior to the intended de-appointment date. Retrospective de-appointment requests for change of supplier will fail validation, including requests on D.

Retrospective de-appointment requests are only acceptable if the property has been demolished and the specific Transaction Type Reason Code is used to identify this scenario.

In a Change of Supplier scenario, provision, maintenance and installation charges, where applicable, will be charged up to and including the de-appointment effective date or the meter removal date in the case of demolition. National Grid will manage any exceptions as appropriate if the transaction is attempting to cancel an appointment this can only be done prior to the effective date on that appointment. Once the effective date has been reached then a de-appointment transaction must be submitted. Retrospective de-appointment requests will fail validation, including requests on D.

Example of a Change of Supplier event:

Supplier "A" submits a de-appointment flow with a de-appointment effective date of 01/05/07. Supplier "A" continues to take a metering service on this date and is therefore charged rental up to and including 01/05/07.

Supplier "B" submits an appointment flow with an appointment effective date 02/05/07. Supplier "B" would start to take a metering service from this date and would therefore be charged rental from 2/05/07.

Batch file de-appointment requests must include the following information as a minimum:

Record	Information
Transaction	Record identifier (TRANS) Transaction Reference Transaction Type Code (e.g. DEAPP) Transaction Type Reason Code (e.g. COS) Effective To Date
Meter Point	Record Identifier (MTPNT) MPR

Change of MAM (MAM to MAM communications)

Where National Grid Metering is de-appointed using a transaction type reason code of "CA" (Change of Agent) the new MAM is responsible for notifying National Grid Metering of the asset removal and the location from where the asset can be collected. The format of the MAM to MAM communications is to be agreed before industry cutover.

Sale of Installation Kit

Where a Supplier has elected to retain National Grid Metering'ss installation kit when de-appointing National Grid Metering as its MAM, National Grid Metering will, on a monthly basis, manually invoice the consumer for the number of installation kits retained. This is done by totalling the number of de-appointments during the month with the Transaction Type reason code of "CA".

Where the reason for the de-appointment is the result of the consumer having removed the meter, the Supplier may inform National Grid Metering by using the Transaction Type reason code of "CM". This will ensure that the Supplier is not charged for the corresponding installation kit. The return of the installation kit is the subject of discussions between National Grid Metering and the End Consumer.

The various scenarios and the correct Transaction Type Reason Code and Status Code to be used are detailed in the table below.

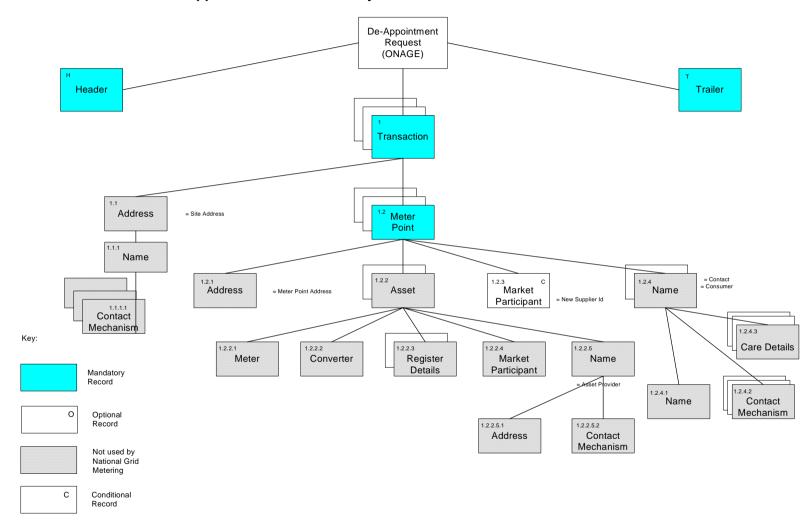
Scenario	Transaction Type Reason Code (A0167)
Meter disconnected/removed	DE
MPRN lost through the Change of Supplier process	COS
Responsibility for the meter has changed to a new Meter Asset Manager (exchange from regulated to competitive)	CA
Responsibility for the meter has changed to a new Meter Asset Manager (exchange from regulated to consumer owned meter)	СМ
Supplier Contract ceased due to change of tenancy	COT
Premises have been or are scheduled to be demolished. NB this is the only scenario that a retrospective transaction will be accepted	DEMO
End of Tenancy - to be used where there is no incoming tenant and therefore no incoming Supplier	EOT
Duplicate MPRN(query must be raised regarding charges)	DPL
National Grid Metering would expect that the supplier will have instigated a query prior to the de-appointment submission. Cross Ref REP query in section 1 Queries & Invoicing Volume.	

Cancelling a De-appointment Request

Where a Supplier wished to cancel a de-appointment request, this can only be done prior to the de-appointment effective date. To cancel a de-appointment request a supplier must send the opposite transaction, i.e. The supplier must submit an appointment request with the transaction status code of "CANCL", a the same transaction type reason code from the original request and a effective to date(A0082) which matches that of the original de-appointment request.

Scenario	Transaction Type Reason Code (A0167)	Transaction Status Code (A0142)
Cancel a de-appointment submitted in error	Repeat the Transaction Type Reason Code quoted on the de- appointment request	CANCL

2.13 Portfolio De-Appointment Data Hierarchy



2.14 De-Appointment Flow File Format (ONAGE)

2.14	De-			low File Format (C	INAG)E)	
1 Trans		1 to mai File)	• "	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		TRANS	MDD
A0055	М	15	Char	Transaction Reference		A unique reference	
A0056	X	210	Char	Transaction Comment			
A0053	X	25	Char	Contract Reference		Not required for de- appointment	
A0144	M	5	Char	Transaction Type Code	*	Value: DEAPP – De- appointment	MDD
A0167	M	5	Char	Transaction Type Reason Code	*	Values: CA - Change of Agent, DE - Disconnection, DEMO - Demolition, COS - Change of Supplier, COT - Change of Tenancy, DPL - Duplicate, EOT - End of Tenancy CM - Customer Removed Meter	MDD
A0058	X	15	Char	Cross-Ref Other Internal Job Reference			
A0122	X	15	Char	Cross-Ref Other External Job Reference			
A0142	0	5	Char	Transaction Status Code		CANCL – Requestor Cancels (Only used to cancel an appointment request)	MDD
A0057	X	5	Char	Transaction Status Change Reason Code			
A0161	Х	1	Char	Market Sector Code			MDD
A0166	X	8	Date	Date of Notice			
A0068	X	5	Char	Registration Body			
A0069	Х	20	Char	Registration Reference			MDD
A0081	Х	8	Date	Effective From Date			
A0082	М	8	Date	Effective To Date		The effective date of the de-appointment.	

1.1 Add		0 to 1 (po	on)	•	Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	M	5	Char	Record Identifier		ADDRS	MDD		
A0102	X	5	Char	Address Type Code	*				
A0003	М	210	Char	Address Text					
A0004	0	40	Char	Sub Building Name_Number					
A0006	0	40	Char	Building Name_Number					
A0007	0	40	Char	Dependent Thoroughfare					
A0008	0	40	Char	Thoroughfare					
A0009	0	40	Char	Double Dependent Locality					
A0010	0	40	Char	Dependent Locality					
A0011	0	40	Char	Post Town					
A0012	0	40	Char	County					
A0013	M	10	Char	Post Code					
A0015	X	7	Integer	Grid Co-ord X					
A0016	X	7	Integer	Grid Co-ord Y					
A0017	X	7	Integer	Grid Co-ord Z					
A0018	0	12	Char	Unique Property – Reference No.					

1.1.1 Name		0 to 1 (per related Asset)		Record not required	Record not required			
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	Χ	100	Char	Person Notes				
A0101	X	30	Char	Access Password				

	1.1.1.1 Contact		y (per	Record not required				
Mechani	sm	related Name)						
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		CONTM	MDD	
A0049	M	5	Char	Contact				
				Mechanism Code				
A0106	M	100	Char	Contact				
				Mechanism Value				

1.2 Mete	er Point	1	(per	Mandatory Record	Mandatory Record				
		Transact	ion)						
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	M	5	Char	Record Identifier		MTPNT	MDD		
A0178	Χ	5	Char	Data Update Code			MDD		
A0072	М	10	Integer	Meter Point Reference Number					
A0076	0	1	Char	Meter Link Code	*	F (Freestanding)	MDD		
A0077	Х	2	Char	Meter Point Status	*		MDD		
A0059	Χ	2	Char	Location Code			MDD		
A0157	X	100	Char	Meter Point Location Notes					
A0075	Χ	210	Char	Access Instructions					
A0074	Χ	9,6	Number	Conversion Factor					
A0073	Х	8	Date	Last Inspection Date					
A0164	Х	9,3	Number	Metering Pressure					

1.2.1 Ac	ddress	0 to 1 (per Meter Point)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	М	5	Char	Record Identifier		ADDRS	MDD	
A0102	M	5	Char	Address Type Code	*			
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	Х	12	Char	Unique Property – Reference Number				

1.2.2 As	set	1	(per	Record not required				
		Transact	ion)					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ASSET	MDD	
A0178	X	5	Char	Data Update Code				
A0144	M	5	Char	Transaction Type Code				
A0024	M	5	Char	Asset Class Code				
A0109	0	10	Char	Product Id				
A0163	0	5	Char	Payment Method code				
A0083	0	10	Char	Model Code				
A0060	0	3	Char	Manufacturer Code				
A0021	0	4	Integer	Year of Manufacture				
A0022	0	14	Char	Serial Number				
A0059	0	2	Char	Location Code				
A0158	0	100	Char	Asset Location Notes	_			
A0037	0	2	Char	Asset Status Code				

1.2.2.1 I	Meter	0 to 1 (pe	er Asset)	Record not required	d		
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		METER	MDD
A0178	X	5	Char	Data Update Code			
A0025	0	5	Char	Meter Type Code			
A0085	0	5	Char	Meter Mechanism			
				code			
A0112	0	10,4	Number	Measuring			
				Capacity			
A0079	Χ	1	Char	Meter Usage Code			
A0044	0	5	Char	Collar Status Code			
A0149	X	8	Date	OAMI Inspection			
				Date			
A0126	0	5	Char	Role Code			
A0160	Χ	8	Date	Last Refurbished			
				Date			
A0194	X	7,2	Number	Pulse Value			

1.2.2.2 (Converter	0 to 1 (per Asset)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		CONVE	MDD	
A0178	X	5	Char	Data Update Code				
A0036	0	5	Char	Conversion basis Code				
A0027	0	9,6	Numbe	Converter				
			r	Conversion factor				

1.2.2.3 F Details	1.2.2.3 Register Details		er ng Asset)	Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		REGST	MDD	
A0178	Χ	5	Char	Data Update Code				
A0124	М	5	Char	Register Type Code				
A0121	0	2	Integer	Number of Dials or Digits				
A0123	0	5	Char	Units of Measure				
A0120	0	6,3	Number	Multiplication factor				

1.2.2.4 I	1.2.2.4 Market		er Asset)	Record not required					
Participant									
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or		
Number	Mandatory	Length	Format				TDD		
A0177	M	5	Char	Record Identifier		MKPRT	MDD		
A0126	M	5	Char	Role Code					
A0064	M	3	Char	Market Participant					
				Abbreviated Name					

1.2.2.5 I	Name	0 to 1 (per Asset)		Record not required				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	X	100	Char	Person Notes				
A0101	Χ	30	Char	Access Password				

1.2.2.5.1	Address	0 to 1 (for each name related to the Asset)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	М	5	Char	Record Identifier		ADDRS	MDD	
A0102	M	5	Char	Address Type Code				
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	Χ	7	Integer	Grid Co-ord X				
A0016	Χ	7	Integer	Grid Co-ord Y				

A0017	X	7	Integer	Grid Co-ord Z		
A0018	X	12	Char	Unique Property –		
				Reference Number		

1.2.2.5.2 Contact Mechanism		0 to many (per Name per Transaction)		Record not required					
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or		
Number	Mandatory	Length	Format				TDD		
A0177	M	5	Char	Record Identifier		CONTM	MDD		
A0049	M	5	Char	Contact			MDD		
				Mechanism Code					
A0106	M	100	Char	Contact					
				Mechanism Value					

1.2.3 Market Participant		0 to 1 (per Meter Point)		Record is mandatory where COS – the new Supplier must be provided				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		MKPRT	MDD	
A0126	М	5	Char	Role Code	*	Value: SUP(New Supplier)	MDD	
A0064	M	3	Char	Market Participant Abbreviated Name		For full list of values, see section 5.1	MDD	

1.2.4 Name		0 to many (per Meter Point)		Record not required				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	0	100	Char	Person Notes				
A0101	0	30	Char	Access Password				

1.2.4.1	Address	per Mete	er Name r Point)	Record not required			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	М	5	Char	Address Type Code			
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number			
A0006	0	40	Char	Building Name_Number			
A0007	0	40	Char	Dependent Thoroughfare			
A0008	0	40	Char	Thoroughfare			
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town			
A0012	0	40	Char	County			
A0013	M	10	Char	Post Code			
A0015	X	7	Integer	Grid Co-ord X			

A0016	Χ	7	Integer	Grid Co-ord Y		
A0017	Χ	7	Integer	Grid Co-ord Z		
A0018	X	12	Char	Unique Property – Reference No.		

1.2.4.2 Contact Mechanism		0 to many (per name, per Meter Point)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		CONTM	MDD	
A0049	M	5	Char	Contact Mechanism Code			MDD	
A0106	M	100	Char	Contact				
				Mechanism Value				

1.2.4.3 Care Details		0 to 1 (for each Name associated to a Meter Point)		Record not required					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description		Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Id	dentifier		CARE	MDD	
A0039	М	2	Char	Care Code	Category			MDD	

2.15 Provide Metering Details

Once an appointment request has been accepted, metering details are provided via ONUPD. This file will normally be sent the day following acceptance of the appointment request, so the earlier the appointment request is submitted, the earlier ONUPD will be received.

Exceptions occur when:

- A new meter has been requested (A0167 = Fix)
- The MPRN is already "owned" by two or more Suppliers (potential triple appointment) Appointment request accepted where further clarification required prior to Appointment date (in the case where A0167 = FINDAS, further clarification may be necessary)

New Meter

In this scenario, the appointment request has been sent on or around the same time as the submission of a request for meter installation. The Transaction Reason Code is specified as FIX, which automatically suppresses the ONUPD file until the meter has been installed. Once the installation has been carried out, National Grid will send a Works Notification (See Section 2 Asset Works & Works Notifications Volume - ONJOB) and this will trigger the transmission of ONUPD within [2] days of the installation being completed.

Dual Appointees

Where two Suppliers have submitted appointment requests and neither has deappointed, both Suppliers are invoiced. A report is sent weekly to both Suppliers notifying them that dual billing is occurring. The format of this report is as follows:

Meter Point Reference	Asset	Supplier 1 (1 st appointed Supplier)	Supplier 2 (2nd appointed Supplier)	Date Causing Dual Billing	Date Ending Dual Billing
<mprn></mprn>	<serial no=""></serial>	<appointee 1=""></appointee>	<appointee 2=""></appointee>	DD/MM/YYYY	DD/MM/YYYY

The dual billing report will be sent out to suppliers on a weekly basis, manually by Customer Services via Email.

In the scenario where more than 2 Suppliers submits an appointment request there will be a delay before ONUPD can be submitted. National Grid Metering will notify all affected Suppliers in order for them to liaise with each other to establish who should be appointed. Where the delay means that ONUPD cannot be issued in time for the new Supplier to organise meter-reading activities, then National Grid will ensure that the relevant information is supplied, albeit that this may be a manual process.

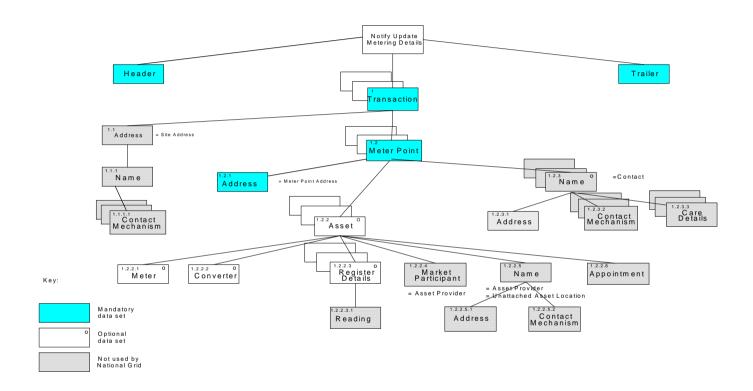
Appointment request accepted where further clarification required prior to D.

Where an appointment request has been accepted, but has generated an exception, the exception must be resolved before the submission of the ONUPD file. Suppliers will be contacted by Customer Services in order to resolve the exception prior to D.

Data mismatch identified - highlighted in ONUPD - appointment processed

If the Supplier has been advised that there is a mismatch between the data supplied in ONAGE and the data held on the Rainbow System, then ONUPD will contain the data held on the Rainbow System with the comments" asset data mismatch" which will be held in A0056 Transaction Comment . Any subsequent changes will be notified by submitting a further ONUPD. This second ONUPD will be sent as soon as reasonably practical following the day of appointment.

2.16 Notify Metering Details Post Appointment – ONUPD



2.19 Notify Metering Details Post Appointment File Format (ONUPD)

The following ONUPD file format has been amended to reflect Rainbow Functionality and proposed Rainbow System enhancements as from 26th September 2005

1 Trans	action	1 to many File)	e)			File)			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	М	5	Char	Record Identifier		TRANS	MDD		
A0055	M	15	Char	Transaction		Appointment transaction			
				Reference		reference			
A0056	С	210	Char	Transaction Comment	*	Mandated where a data mismatch occurs, notifies with the text "Asset Data Mismatch"			
A0053	M	25	Char	Contract Reference		Provision and Maintenance Contract			
A0144	М	5	Char	Transaction Type Code	*	Values: APPNT - Appointment	MDD		
A0167	M	5	Char	Transaction Type Reason Code		Values: CA – Change of Agent COS – Change of Supplier, FIX – New fix meter, FNDAS – Found asset, NEWCN – New connection	MDD		
A0058	X	15	Char	Cross-Ref Other Internal Job Reference					
A0122	X	15	Char	Cross-Ref Other External Job Reference					
A0142	Х	5	Char	Transaction Status Code			MDD		
A0057	Х	5	Char	Transaction Status Change Reason Code					
A0161	М	1	Char	Market Sector Code	*	D (Domestic as defined by the Utility Act), I (Industrial as defined by the Utility Act).	MDD		
A0166	X	8	Date	Date of Notice					
A0068	X	5	Char	Registration Body					
A0069	X	20	Char	Registration Reference			MDD		
A0081	M	8	Date	Effective From Date		Confirmation of effective date, taken from Appointment Request (ONAGE)			
A0082	X	8	Date	Effective To Date					

1.1 Address		0 to 1 (per Transaction)		Record Not Sent					
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or		
Number	Mandatory	Length	Format		-		TDD		

A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	M	5	Char	Address Type Code	*	Indicates that it is a site address. Value: 'Site'.	MDD
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number			
A0006	0	40	Char	Building Name_Number			
A0007	0	40	Char	Dependent Thoroughfare			
A0008	0	40	Char	Thoroughfare			
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town			
A0012	0	40	Char	County			
A0013	M	10	Char	Post Code			
A0015	Χ	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	X	7	Integer	Grid Co-ord Z			
A0018	X	12	Char	Unique Property – Reference No.			

1.1.1 Name		0 to 1 (per Transaction)		Record Not Sent				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	0	100	Char	Person Notes				
A0101	0	30	Char	Access Password				

1.1.1.1 Contact Mechanism		0 to many (per Name per Transaction)		Record Not Sent				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		CONTM	MDD	
A0049	M	5	Char	Contact				
				Mechanism Code				
A0106	M	100	Char	Contact				
				Mechanism Value				

1.2 Meter Point		1 to many (per Transaction)		Mandatory Record N.B. All available information will be provided				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		MTPNT	MDD	
A0178	X	5	Char	Data Update Code			MDD	
A0072	М	10	Integer	Meter Point Reference Number				
A0076	0	1	Char	Meter Link Code	*	F (Freestanding)	MDD	
A0077	0	2	Char	Meter Point Status	*	Defaulted to "LI" - Live	MDD	

A0059	X	2	Char	Location Code	
A0157	Χ	100	Char	Meter Point	
				Location Notes	
A0075	X	210	Char	Access Instructions	
A0074	M	9,6	Number	Conversion Factor	Values:
					0.000001 to 999.999999
A0073	X	8	Date	Last Inspection	
				Date	
A0164	X	9,3	Number	Metering Pressure	

1.2.1 Ac	ldress	1 to 1 (fo Meter Po		Mandatory Record, provided	All infoi	rmation held by Rainbow	will be
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier		ADDRS	MDD
A0102	М	5	Char	Address Type Code	*	Value: MTRPT. Identifies this as a 'Meter Point Address'.	MDD
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number	*	This or the next field should be populated.	
A0006	0	40	Char	Building Name_Number	*	This or the previous field should be populated.	
A0007	0	40	Char	Dependent Thoroughfare	*	This or the next field should be populated.	
A0008	0	40	Char	Thoroughfare	*	This or the previous field should be populated.	
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town	*	This should be provided.	
A0012	Χ	40	Char	County			
A0013	М	10	Char	Post Code	*	This must be provided.	
A0015	X	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	Χ	7	Integer	Grid Co-ord Z			
A0018	X	12	Char	Unique Property – Reference No.			

1.2.2 A	sset	0 to mar Meter P	, · · ·	All available inform	All available information will be provided					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD			
A0177	M	5	Char	Record Identifier		ASSET	MDD			
A0178	0	5	Char	Data Update Code		When incoming serial number is better than serial number held in rainbow then "UPDTE" will be used. For full details of "Better than" validation, see validation document.	MDD			
A0144	M	5	Char	Transaction Type Code	*	Value: APPNT - Appointment	MDD			
A0024	M	5	Char	Asset Class Code	*	Values: CONVR (Converter).	MDD			

						DTLGR (Datalogger), METER (Meter),	
A0109	X	10	Char	Product Id			MDD
A0163	0	5	Char	Payment Method code	*	Values: CR - Credit, PP - Prepayment.	MDD
A0083	0	10	Char	Model Code			MDD
A0060	0	3	Char	Manufacturer Code			MDD
A0021	0	4	Integer	Year of Manufacture			
A0022	С	14	Char	Serial Number	*	Mandatory	
A0059	0	2	Char	Location Code		Will always be provided where available	MDD
A0158	С	100	Char	Asset Location Notes		Mandated whereA0059 = Other	
A0037	0	2	Char	Asset Status Code	*	Will always be provided where available	

1.2.2.1 Meter	r	0 to 1 (p	er Asset)	Optional, but all a	vailab	le information will be pro	ovided
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		METER	MDD
A0178	X	5	Char	Data Update Code			
A0025	0	5	Char	Meter Type Code	*	Values: D - Diaphragm of Unknown material, L - Leather Diaphragm, R - Rotary, S - Synthetic Diaphragm, T - Turbine, U - Ultrasonic, Z - Unknown.	MDD
A0085	0	5	Char	Meter Mechanism code	*	Will always be provided where available	
A0112	0	10,4	Number	Measuring Capacity		Values: 0 to 999999.999	
A0079	Х	1	Char	Meter Usage Code	*		
A0044	0	5	Char	Collar Status Code		Will always be provided where available	
A0149	0	8	Date	OAMI Inspection Date		Will always be provided where available	
A0126	0	5	Char	Role Code		Will be defaulted to T	
A0160	Х	8	Date	Last Refurbished Date			
A0194	Χ	7,2	Number	Pulse Value			

		0 to 1 (per Asset)		Optional Record -	· will	always b	e sent	where	conver	ter
Converte	er			present						
Attribute	Optional or	Field	Field	Description	Key	Rules			MDD	or

Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		CONVE	MDD
A0178	0	5	Char	Data Update Code	*	Must indicate there are changes.	
A0036	0	5	Char	Conversion Basis Code		Will always be provided where available	
A0027	0	9,6	Numbe r	Converter Conversion factor		Will always be provided where available	

Details	Register	0 to 2 (po Register Asset)	ing	Optional Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		REGST	MDD
A0178	X	5	Char	Data Update Code			
A0124	M	5	Char	Register Type Code	*	Values: CORR – Corrected Converter Register, METER – Meter Register, UNCOR – Uncorrected Converter Register	MDD
A0121	0	2	Integer	Number of Dials or Digits		Will always be provided where available	
A0123	0	5	Char	Units of Measure	*	Values: SCFH (Standard cubic Feet per Hour), SCMH (Standard cubic Meters per Hour).	MDD
A0120	0	6,3	Number	Multiplication factor		The multiplication factor to apply to the resultant index advance indicated by the current reading. Examples 0.1, 1, 10,100,1000	

1.2.2.3.1		0 to 1 (pe	er	Record Not Sent			
Reading		Register Details)					
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		READG	MDD
A0031	0	8	Date	Reading Date			
A0034	0	2	Integer	Round the Clock			
A0033	M	12	Char	Reading Index			

1.2.2.4 Market		0 to 1 (per Asset)		Record Not Sent			
Participant							
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		MKPRT	MDD
A0126	M	5	Char	Role Code			MDD
A0064	M	3	Char	Market Participant Abbreviated Name			MDD

1.2.2.5	0 to 1 (per Asset)	Record Not Sent
Name		

Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code			
A0088	0	6	Char	Title			
A0089	0	4	Char	Initials			
A0090	0	30	Char	Surname			
A0100	X	100	Char	Person Notes			
A0101	Χ	30	Char	Access Password			

1.2.2.5.1	Address	0 to 1 (per each Name related to the Asset)		Record Not Sent				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	М	5	Char	Address Type Code				
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
8000A	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	Χ	7	Integer	Grid Co-ord X				
A0016	Χ	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property – Reference Number				

1.2.2.5.2 Contact Mechanism		0 to many (per Name per Transaction)		Record Not Sent					
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or		
Number	Mandatory	Length	Format				TDD		
A0177	M	5	Char	Record Identifier		CONTM	MDD		
A0049	M	5	Char	Contact			MDD		
				Mechanism Code					
A0106	M	100	Char	Contact					
				Mechanism Value					

1.2.2.6 Appointment		0 to 1 (for each Asset)		Record Not Sent				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		APPNT	MDD	
A0019	0	5	Char	Appointment Qualifier Code			MDD	
A0138	M	8	Date	Appointment Date From				

A0139	0	8	Date	Appointment Date		
				То		
A0019	0	5	Char	Appointment		MDD
				Qualifier Code		
A0140	0	6	Char	Appointment Time		
				From		
A0141	0	6	Char	Appointment Time		
				То		

1.2.3 Name		0 to many (per Asset)		Record Not Sent				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	0	100	Char	Person Notes				
A0101	0	30	Char	Access Password				

1.2.3.1 Address	i	0 to 1 (for each name for a transaction)		Record not sent				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	М	5	Char	Address Type Code			MDD	
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	Χ	7	Integer	Grid Co-ord X				
A0016	Χ	7	Integer	Grid Co-ord Y				
A0017	Χ	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property – Reference No.				

1.2.3.2 Contact Mechanism		0 to many (for each Name associated to a Meter Point)		Record Not Sent			
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		CONTM	MDD
A0049	M	5	Char	Contact	*		MDD
				Mechanism Code			

A0106	M	100	Char	Contact		
				Mechanism Value		

1.2.3.3 Care Details		0 to many (for each Name associated to a Meter Point)		Record Not Sent				
Attribute	Optional or	Field	Field	Description		Key	Rules	MDD or
Number	Mandatory	Length	Format					TDD
A0177	M	5	Char	Record lo	dentifier		CARE	MDD
A0039	М	2	Char	Care Code	Category			MDD

2.19.1 Provide Asset Details File Format - ONUPD

1 Trans	action	1 to many (per File)		Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier		TRANS	MDD
A0055	M	15	Char	Transaction Reference		If the ONUPD is being sent as result of a data updates then this will be the original data update reference number, otherwise a unique reference number will be used	
A0056	0	210	Char	Transaction Comment			
A0053	М	25	Char	Contract Reference		Provision and Maintenenace Contract Ref	
A0144	М	5	Char	Transaction Type Code	*	Values: UPDTE – Update REPRT - Report	MDD
A0167	X	5	Char	Transaction Type Reason Code			TDD
A0058	Х	15	Char	Cross-Ref Other Internal Job Reference			
A0122	X	15	Char	Cross-Ref Other External Job Reference			
A0142	X	5	Char	Transaction Status Code			MDD
A0057	X	5	Char	Transaction Status Change Reason Code			
A0161	M	1	Char	Market Sector Code	*	Values: D (Domestic), I (Industrial & Commercial) as defined by the Utility Act.	MDD
A0166	X	8	Date	Date of Notice			
A0068	X	5	Char	Registration Body			
A0069	X	20	Char	Registration Reference			
A0081	М	8	Date	Effective From Date		Will contain the date of the asset update where no invoice adjustment is required. Where an invoice adjustment is required this will be the Appointment Effective Date.	
A0082	X	8	Date	Effective To Date			

1.1 Address	0 to 1 (per	Record not required
	transaction)	

Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or
A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	М	5	Char	Address Type Code	*		
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number			
A0006	0	40	Char	Building Name_Number			
A0007	0	40	Char	Dependent Thoroughfare			
A0008	0	40	Char	Thoroughfare			
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town			
A0012	0	40	Char	County			
A0013	M	10	Char	Post Code			
A0015	X	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	X	7	Integer	Grid Co-ord Z			
A0018	X	12	Char	Unique Property – Reference No.			

1.1.1 Na	1.1.1 Name		er ion)	Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	0	100	Char	Person Notes				
A0101	0	30	Char	Access Password				

1.1.1.1 Contact Mechanism		0 to many (per Name per Transaction)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		CONTM	MDD	
A0049	М	5	Char	Contact Mechanism Code			MDD	
A0106	М	100	Char	Contact Mechanism Value				

1.2 Met	er Point	1 (per transaction)		Mandatory Record				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		MTPNT	MDD	
A0178	С	5	Char	Data Update Code		Mandated where the meter point dataset is updated Values: UPDTE (Updates contained within)	MDD	
A0072	М	10	Integer	Meter Point Reference Number				
A0076	X	1	Char	Meter Link Code		F (Freestanding)	MDD	
A0077	X	2	Char	Meter Point Status				
A0059	X	2	Char	Location Code			MDD	
A0157	Х	100	Char	Meter Point Location Notes				
A0075	X	210	Char	Access Instructions				
A0074	X	9,6	Number	Conversion Factor				
A0073	Х	8	Date	Last Inspection Date				
A0164	Х	9,3	Number	Metering Pressure				

1.2.1 A	ddress	Point) "	er Meter	Optional Record – Will always be sent					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	М	5	Char	Record Identifier		ADDRS	MDD		
A0102	М	5	Char	Address Type Code	*	Value: MTRPT. Indicates that it is the 'Meter Point Address'.	MDD		
A0003	0	210	Char	Address Text					
A0004	0	40	Char	Sub Building Name_Number	*	At least one of the next two fields should be provided.			
A0006	0	40	Char	Building Name_Number	*				
A0007	0	40	Char	Dependent Thoroughfare	*				
A0008	0	40	Char	Thoroughfare	*	At least this or the field above should be provided.			
A0009	0	40	Char	Double Dependent Locality					
A0010	0	40	Char	Dependent Locality					
A0011	0	40	Char	Post Town	*	This should be provided.			
A0012	X	40	Char	County					
A0013	М	10	Char	Post Code	*	This must be provided.			
A0015	Х	7	Integer	Grid Co-ord X					
A0016	Χ	7	Integer	Grid Co-ord Y					
A0017	Х	7	Integer	Grid Co-ord Z					
A0018	Х	12	Char	Unique Property – Reference No.					

1.2.2 As	esat	0 to man	v (ner	Optional Record - V	Nill al	ways he sent	
1.2.2	3301	Meter Po		Optional Necola 1	viii ai	ways be sem	
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ASSET	MDD
A0178	С	5	Char	Data Update Code	*	Mandated where the dataset is updated Value: UPDTE(Updated contained within)	MDD
A0144	М	5	Char	Transaction Type Code	*	Value: UPDTE – Update REPRT – Report (If report then all other child datasets will also be reported information)	MDD
A0024	M	5	Char	Asset Class Code	*	Values: BYPAS (Bypass), CONVR (Converter), DTLGR (D9atalogger), METER (Meter)	MDD
A0109	Х	10	Char	Product Id			MDD
A0163	0	5	Char	Payment Method code	*	Values: CR - Credit, PP - Prepayment.	MDD
A0083	0	10	Char	Model Code			MDD
A0060	0	3	Char	Manufacturer Code			MDD
A0021	0	4	Integer	Year of Manufacture			
A0022	0	14	Char	Serial Number			
A0059	0	2	Char	Location Code		Will always be provided where available	MDD
A0158	С	100	Char	Asset Location Notes		Mandated where A0059= Other	
A0037	0	2	Char	Asset Status Code		Will always be provided where available	

1.2.2.1	Meter	0 to 1 (n	er Asset)	Optional Record –	Will al	ways he sent	_
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format	Doddiption	, toy	Traios	TDD
A0177	M	5	Char	Record Identifier		METER	MDD
A0178	С	5	Char	Data Update Code	*	Mandated where the dataset is updated Values: UPDTE - Update	
A0025	0	5	Char	Meter Type Code	*	Values: D - Diaphragm of Unknown material, L - Leather Diaphragm, R - Rotary, S - Synthetic Diaphragm, T - Turbine, U - Ultrasonic, Z - Unknown.	MDD
A0085	0	5	Char	Meter Mechanism code		Will always be provided where available	
A0112	0	10,4	Number	Measuring Capacity		Values: 0 to 999999.999	
A0079	X	1	Char	Meter Usage Code			
A0044	0	5	Char	Collar Status Code	*	Values: B (Broken), I (Intact), Will always be provided where available	MDD
A0149	0	8	Date	OAMI Inspection Date		Will always be provided where available	
A0126	0	5	Char	Role Code		Will be defaulted to T	
A0160	Х	8	Date	Last Refurbished Date			
A0194	X	7,2	Number	Pulse Value			

1.2.2.2 Converter		0 to 1 (per Asset)		Optional Record – Will present		always be sent where c	onverter
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		CONVE	MDD
A0178	X	5	Char	Data Update Code			
A0036	0	5	Char	Conversion basis Code		Will always be provided where available	
A0027	0	9,6	Numbe r	Converter Conversion factor		Will always be provided where available	

1.2.2.3 Register Details		0 to 2 (per Registering Asset)		Optional Record – Will always be sent				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		REGST	MDD	
A0178	С	5	Char	Data Update Code	*	Mandated where the dataset is updated Values: UPDTE - Update.		
A0124	М	5	Char	Register Type Code	*	Values: CORR – Corrected Converter Register,	MDD	

						METER – Meter Register, UNCOR – Uncorrected Converter Register	
A0121	0	2	Integer	Number of Dials or Digits		Will always be provided where available	
A0123	0	5	Char	Units of Measure	*	Values: SCFH (Standard cubic Feet per Hour), SCMH (Standard cubic Meters per Hour).	MDD
A0120	0	6,3	Number	Multiplication factor		The multiplication factor to apply to the resultant index advance indicated by the current reading. Allowable values; 0.001999	

1.2.2.3.1 Reading 0 to 1 (per Register Details)				Conditional, dataset will be provided where read has been taken				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		READG	MDD	
A0031	М	8	Date	Reading Date				
A0034	X	2	Integer	Round the Clock				
A0033	M	12	Char	Reading Index				

1.2.2.4	1.2.2.4		er Asset)	Record not required				
Market Participant								
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		MKPRT	MDD	
A0126	M	5	Char	Role Code				
A0064	М	3	Char	Market Participant Abbreviated Name				

1.2.2.5	1.2.2.5 Name		r each	Record not required				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	X	100	Char	Person Notes				
A0101	X	30	Char	Access Password				

1.2.2.5.1	Address	0 to 1 (pe	er name)	Record not require	d		
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	M	5	Char	Address Type Code			
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number			
A0006	0	40	Char	Building Name_Number			
A0007	0	40	Char	Dependent Thoroughfare			
A0008	0	40	Char	Thoroughfare			
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town			
A0012	0	40	Char	County			
A0013	M	10	Char	Post Code			
A0015	X	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	Χ	7	Integer	Grid Co-ord Z			
A0018	X	12	Char	Unique Property – Reference Number			

Mechanism Name Trans		0 to man Name pe Transact	r	Record not required	1		
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		CONTM	MDD
A0049	M	5	Char	Contact			
				Mechanism Code			
A0106	M	100	Char	Contact			
				Mechanism Value			

1.2.2.6		0 to 1 (fo	r each	Record not required	d		
Appoint	ment	Asset)					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		APPNT	MDD
A0019	0	5	Char	Appointment Qualifier Code			
A0138	М	8	Date	Appointment Date From			
A0139	0	8	Date	Appointment Date To			
A0019	0	5	Char	Appointment Qualifier Code			
A0140	0	6	Char	Appointment Time From			
A0141	0	6	Char	Appointment Time To			

1.2.3 Name		0 to man	· '.	Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	

A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code	*	Identifies this is for a Consumer. Values: CONS (Consumer)	MDD
A0088	0	6	Char	Title			
A0089	0	4	Char	Initials			
A0090	0	30	Char	Surname			
A0100	0	100	Char	Person Notes			
A0101	0	30	Char	Access Password			

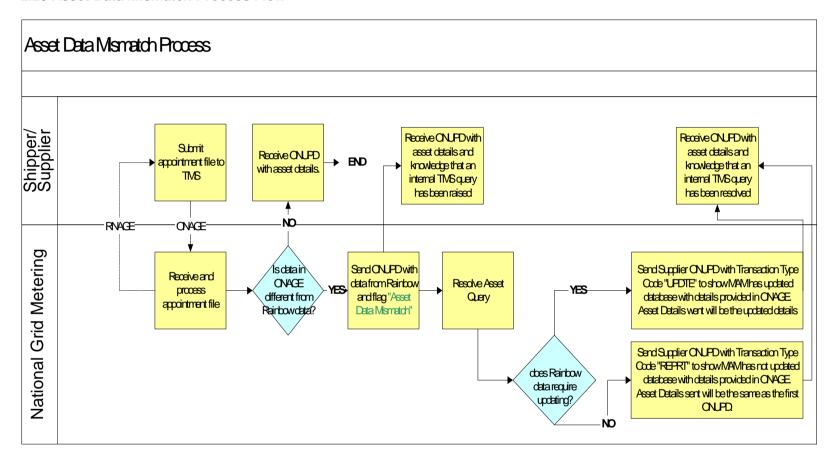
1.2.3.1 Address 0 to 1 (for each name related to the Asset)				Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	М	5	Char	Address Type Code				
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property – Reference No.				

1.2.3.2 Contact Mechanism		0 to m each associate	any (for name ed to a	Record not required					
Wechanism		Meter Po							
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or		
Number	Mandatory	Length	Format				TDD		
A0177	M	5	Char	Record Identifier		CONTM	MDD		
A0049	M	5	Char	Contact			MDD		
				Mechanism Code					
A0106	M	100	Char	Contact					
				Mechanism Value					

1.2.3.3 Care Details		0 to many (for each name associated to a Meter Point)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	М	5 Char		Record Identifier		CARE	MDD	

A0039	M	2	Char	Care	Category		MDD
				Code			

2.20 Asset Data Mismatch Process Flow



Where the meter point is dual billed, the ONUPD which is sent as the resolution for Asset Data Mismatch, will be sent to both Appointed Suppliers

2.21 Portfolio Batch File Validation (ONAGE)

- Any mandatory data missing in a transaction would lead to the entire
 appointment being rejected and no further validations will be performed at the
 individual data item level, Validation will be undertaken to the lowest possible
 level and all information available will be required. The following table refers
 to MANDATORY DATA ONLY, which is the basis for acceptance or rejection
 within a transaction.
 - NEW = MPRN not on National Grid Metering's database e.g. "green field" or where a regulated meter is replacing a competitive meter.
 - EXISTING = MPRN is on the National Grid Metering database, i.e. there is a regulated meter in situ.

	Attribute Number	Appointment (New)	Appointment (Existing)	De- appointment
Transaction				
Record Identifier	A0177	Y	Y	Y
Transaction Reference	A0055	Y	Y	Y
Contract Reference	A0053	Y	Y	
Transaction Type Code	A0144	Y	Y	Y
Transaction Type Reason Code	A0167	Y	Y	Y
Market Sector Code	A0161	Y	Y	
Effective From Date	A0081	Y	Υ	
Effective To Date	A0082			Y
Meter Point				
Record identifier	A0177	Y	Y	Y
Meter Point Reference Number	A0072	Y	Y	Y
Address				
Record Identifier	A0177	Y		
Address Type Code	A0102	Y		
Post Code	A0013	Υ	Y	
Asset				
Record Identifier	A0177	Y		
Transaction Type Code	A0144	Y		
Asset Class Code	A0024	Y		

• Certain validations are hierarchically structured, i.e., are dependent on a higher-level validation being successful. For example, if the customer ID is

invalid, validations relating to contracts cannot be carried out. For full details of Contract ref validation see section 5.5.

Validation Level	Data item	RGMA Reference	RGMA Record	Condition Required to Pass Validation
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number is provided
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number is valid
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number provided is valid for the customer
Customer and Contract Validation	Contract validity	Originator ID Contract Ref Appointment Date	Transaction Appointment	Contract is valid on the "appointment from" date
Transaction Validation	Transaction Reference Number	Transaction Reference	Transaction	Transaction reference number is not a duplicate
Transaction Validation	Customer Status	Appointment Status	Transaction	Customer is not already appointed/de-appointed
MPRN Validations	MPRN	Meter Point Reference Number	Meter Point	Meter Point Reference Number exists (except for Appointment of new MPR)
MPRN Validation	MPRN	Meter Point Reference Number	Meter Point	Meter Point Reference Number is valid (passes check digit validation)
Asset Data Validation	Model Code	Model Code	Asset	Model Code is a valid value
Asset Data Validation	Manufacturer Code	Manufacturer code	Asset	Manufacturer Code is a valid value
Asset Data Validation	Location Code	Location Code	Asset	Component Location Code is a valid value
Date Validation	Start Date	Appointment/De- appointment Date	Transaction	Effective From date is in the future
Date Validation	Start Date	Appointment/De- appointment Date	Transaction	Effective To date is in the future
Date Validation	Start Date	Appointment/De- appointment Effective Date	Transaction	Sufficient lead time provided

2.22 Work In Progress

Most portfolio appointment and de-appointment requests result in either an acceptance or a rejection, based upon the validation undertaken at file and transaction level.

There are however, a number of exceptions where the appointment request will trigger a manual intervention, even though the request will continue to be processed in the normal way. i.e. a standard acceptance response will still be sent (See section 44 Standard Response FileStandard Response File).

Requests which are subject to manual intervention are transferred to WIP (Work in Progress) for investigation by a Customer Services representative.

Appointment request accepted where further clarification required prior to D.

Where an appointment request has been accepted, but has generated an exception, the exception must be resolved before the submission of the ONUPD file. Suppliers will be contacted by Customer Services in order to resolve the exception prior to D.

Data mismatch

This will depend on whether a MPRN record exists.

Internal investigation will take place if asset data is provided which does not match that on the National Grid Metering database in respect of the following attributes:

- Meter Manufacturer
- Meter Model
- Meter Year of Manufacture
- Meter Serial Number (subject to fuzzy matching)
- Payment Method Code
- Meter Type Code
- Asset Location Code

Customer Services will use all available data to determine the correct details, including asset history, consumer information and meter model tables. Where it is not possible to verify data, it may be necessary to instigate a site visit. In this scenario a second ONUPD will be sent to confirm the findings of the investigation.

Data mismatch identified - highlighted in ONUPD - appointment processed

If the Supplier has been advised that there is a mismatch between the data supplied in ONAGE and the data held on the Rainbow System, then ONUPD will contain the data held on the Rainbow System with the comments" asset data mismatch" which will be held in A0056 Transaction Comment . Any subsequent changes will be notified by submitting a further ONUPD.

More than two live appointments

Rainbow has been designed to manage two Suppliers appointed to the same MPR. However, if a 3rd appointment request is received, manual intervention will be required to enable the 3rd transaction to be processed. In this scenario, Customer Services will contact the Suppliers involved in order for them to reduce the number of

Formatted: Font: Bold

Formatted: Font: Arial, Bold

live appointed Suppliers. This will enable the 3rd Supplier's portfolio appointment request to be processed.

ONUPD will not be generated until the portfolio appointment request is processed, however, if this information is required, then Customer Services will provide the details by email on request.

Meter not fitted

A portfolio appointment request can be submitted where there is no meter installed, however, the Transaction Type Reason Code "FIX" must be used to identify these cases. Where "FIX" is used, then ONUPD will be suppressed pending installation of a regulated meter. The asset details will be sent within [2] days of the meter installation; in this scenario the Supplier receives both ONJOB and ONUPD.

If there is no meter installed and a Transaction Type Reason Code other than "FIX" is used, then the request will be rejected.

3 Miscellaneous Data Updates

3.1 National Grid Metering Data Updates

There are a number of scenarios where Metering may identify that an update is required to the details held:

- Query Resolution both internal or external
- Appointment Request data mismatch
- Meter Worker Information update to system
- Consumer Contact update to system

Query Resolution

It may be necessary to update the asset details held e.g. it is established following an invoice query that the meter is a credit, rather than a prepayment. In this scenario, an update would be required to correct the payment method code. If a query results in no update to Rainbow then the ONUPD will contain reported information to show that no change was necessary.

Appointment Request

If there is a mismatch between the asset data supplied by the Customer and the details recorded on the Rainbow System, then an internal query will be raised. It may subsequently be necessary to update the details held on the Rainbow System, e.g. the year of manufacturer may require correction.

Meter Worker Information

The Meter Worker may return information, which contradicts existing data, e.g. the serial number may need updating. Whilst information from the Meter Worker would normally be provided via the ONJOB file, there may be occasions where information is collected as a result of internal investigations.

Consumer Contact

The consumer may provide information to prompt a data update when contacting National Grid Metering to request a visit.

In all of the above scenarios an ONUPD will be sent to either provide details of an update or confirm the details held in Rainbow.

Where the reason for sending the ONUPD is to report information, the entire file (i.e. all datasets) will contain a dump of the asset data held in Rainbow as confirmation that NGM has made no updates to the asset portfolio database.

e.g. The **Transaction Type Code**(A0144) within the transaction dataset will be "**REPRT**". The **Data Update Code** (A0178) within each dataset will be blank.

Where the reason for sending the file is an update, one or more of the datasets within the transaction may contain an update. Where an update has been made in a dataset the **Data Update Code** (A0178) within that dataset will flag "**UPDTE**". Where no update has been made to a dataset the **Data Update Code** (A0178) within that dataset will remain blank, but all information held on Rainbow will still be sent.

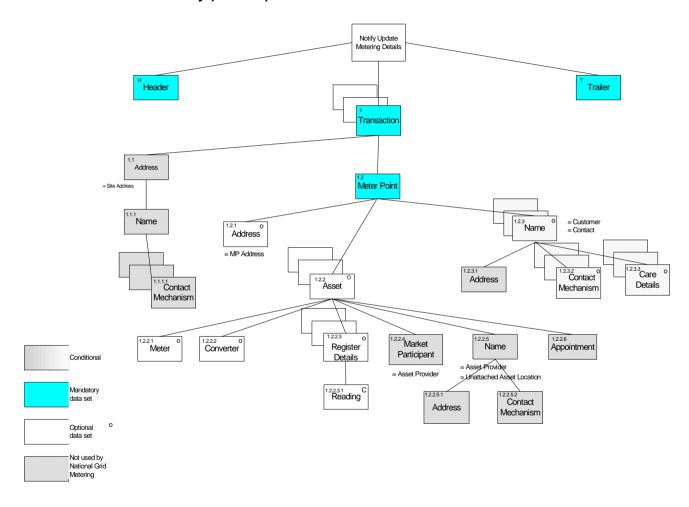
Where there is more than one asset at a meter point, but only one asset requires updating, the **Transaction Type Code** (A0144) within the transaction data set will still say **UPDTE**, but information relating to other assets will still be sent.

The address dataset does not contain a **Data Update Code** (A0178) but the dataset will be provided each time an update is sent.

Where attributes are optional within the file formats, and Rainbow holds a value, the value will always be provided regardless of whether the value has changed

.

3.2 Provide Asset Details Hierarchy (ONUPD)



3.3 Provide Asset Details File Format - ONUPD

1 Trans	action	1 to man File)	y (per	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		TRANS	MDD
A0055	М	15	Char	Transaction Reference		If the ONUPD is being sent as result of a data updates then this will be the original data update reference number, otherwise a unique reference number will be used	
A0056	0	210	Char	Transaction Comment			
A0053	M	25	Char	Contract Reference		Provision and Maintenenace Contract Ref	
A0144	M	5	Char	Transaction Type Code	*	Values: UPDTE – Update REPRT - Report	MDD
A0167	X	5	Char	Transaction Type Reason Code			TDD
A0058	X	15	Char	Cross-Ref Other Internal Job Reference			
A0122	X	15	Char	Cross-Ref Other External Job Reference			
A0142	X	5	Char	Transaction Status Code			MDD
A0057	X	5	Char	Transaction Status Change Reason Code			
A0161	M	1	Char	Market Sector Code	*	Values: D (Domestic), I (Industrial & Commercial) as defined by the Utility Act.	MDD
A0166	Χ	8	Date	Date of Notice			
A0068	Χ	5	Char	Registration Body			
A0069	X	20	Char	Registration Reference			
A0081	М	8	Date	Effective From Date		Will contain the date of the asset update where no invoice adjustment is required. Where an invoice adjustment is required this will be the Appointment Effective Date.	
A0082	X	8	Date	Effective To Date			

1.1 Address 0 to 1 (per	Record not required
--------------------------------	---------------------

		transacti	on)				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	M	5	Char	Address Type	*		
				Code			
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building			
				Name_Number			
A0006	0	40	Char	Building			
				Name_Number			
A0007	0	40	Char	Dependent			
				Thoroughfare			
A0008	0	40	Char	Thoroughfare			
A0009	0	40	Char	Double Dependent			
				Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town			
A0012	0	40	Char	County			
A0013	M	10	Char	Post Code			
A0015	Χ	7	Integer	Grid Co-ord X			
A0016	Χ	7	Integer	Grid Co-ord Y			
A0017	Χ	7	Integer	Grid Co-ord Z			
A0018	X	12	Char	Unique Property –			
				Reference No.			

1.1.1 Name		0 to 1 (per Transaction)		Record not required				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	0	100	Char	Person Notes				
A0101	0	30	Char	Access Password				

1.1.1.1			y (per	Record not required	Record not required				
Contact	Contact Na		er						
Mechanism		Transaction)							
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	M	5	Char	Record Identifier		CONTM	MDD		
A0049	M	5	Char	Contact			MDD		
				Mechanism Code					
A0106	M	100	Char	Contact					
				Mechanism Value					

1.2 Mete	er Point	1 (per transaction)		Mandatory Record				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		MTPNT	MDD	
A0178	С	5	Char	Data Update Code		Mandated where the meter point dataset is updated Values: UPDTE (Updates contained within)	MDD	
A0072	М	10	Integer	Meter Point Reference Number				
A0076	Χ	1	Char	Meter Link Code		F (Freestanding)	MDD	
A0077	Χ	2	Char	Meter Point Status				
A0059	0	2	Char	Location Code			MDD	
A0157	X	100	Char	Meter Point Location Notes				
A0075	0	210	Char	Access Instructions				
A0074	Χ	9,6	Number	Conversion Factor				
A0073	Х	8	Date	Last Inspection Date				
A0164	Х	9,3	Number	Metering Pressure				

1.2.1 Ac		0 to 1 (per Meter Point)		Optional Record – Will always be sent				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	M	5	Char	Address Type Code	*	Value: MTRPT. Indicates that it is the 'Meter Point Address'.	MDD	
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number	*	At least one of the next two fields should be provided.		
A0006	0	40	Char	Building Name_Number	*			
A0007	0	40	Char	Dependent Thoroughfare	*			
A0008	0	40	Char	Thoroughfare	*	At least this or the field above should be provided.		
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town	*	This should be provided.		
A0012	Χ	40	Char	County				
A0013	М	10	Char	Post Code	*	This must be provided.		
A0015	X	7	Integer	Grid Co-ord X				
A0016	Χ	7	Integer	Grid Co-ord Y				
A0017	Χ	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property – Reference No.				

1.2.2 As	set	0 to man	y (per	Optional Record - I	Nill al	ways be sent	
		Meter Po	oint)	•		•	
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ASSET	MDD
A0178	С	5	Char	Data Update Code	*	Mandated where the dataset is updated Value: UPDTE(Updated contained within)	MDD
A0144	М	5	Char	Transaction Type Code	*	Value: UPDTE – Update REPRT – Report (If report then all other child datasets will also be reported information)	MDD
A0024	M	5	Char	Asset Class Code	*	Values: BYPAS (Bypass), CONVR (Converter), DTLGR (D9atalogger), METER (Meter)	MDD
A0109	X	10	Char	Product Id			MDD
A0163	0	5	Char	Payment Method code	*	Values: CR - Credit, PP - Prepayment.	MDD
A0083	0	10	Char	Model Code			MDD
A0060	0	3	Char	Manufacturer Code			MDD
A0021	0	4	Integer	Year of Manufacture			
A0022	0	14	Char	Serial Number			
A0059	0	2	Char	Location Code			MDD
A0158	0	100	Char	Asset Location Notes			
A0037	X	2	Char	Asset Status Code			

1.2.2.1	Meter	0 to 1 (pe	er Asset)	Optional Record -	Will al	ways be sent	
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		METER	MDD
A0178	С	5	Char	Data Update Code	*	Mandated where the dataset is updated Values: UPDTE - Update	
A0025	0	5	Char	Meter Type Code	*	Values: D - Diaphragm of Unknown material, L - Leather Diaphragm, R - Rotary, S - Synthetic Diaphragm, T - Turbine, U - Ultrasonic, Z - Unknown.	MDD
A0085	Х	5	Char	Meter Mechanism code			
A0112	0	10,4	Number	Measuring Capacity		<u>Values:</u> 0 to 999999.999	
A0079	X	1	Char	Meter Usage Code			
A0044	0	5	Char	Collar Status Code	*	Values: B (Broken), I (Intact),	MDD
A0149	Х	8	Date	OAMI Inspection Date			
A0126	X	5	Char	Role Code			
A0160	X	8	Date	Last Refurbished Date			
A0194	X	7,2	Number	Pulse Value			

1.2.2.2 Converter 0 to 1		0 to 1 (pe	er Asset) Optional Record – Will always be		ways be sent	e sent		
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD TDD	or
A0177	M	5	Char	Record Identifier		CONVE	MDD	
A0178	X	5	Char	Data Update Code				
A0036	X	5	Char	Conversion basis Code				
A0027	X	9,6	Numbe	Converter				
			r	Conversion factor				

1.2.2.3		0 to 2 (per		Optional Record - 1	Optional Record – Will always be sent					
Register	Register Details		ng							
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD			
A0177	М	5	Char	Record Identifier		REGST	MDD			
A0178	С	5	Char	Data Update Code	*	Mandated where the dataset is updated Values: UPDTE - Update.				
A0124	M	5	Char	Register Type Code	*	Values: CORR – Corrected Converter Register, METER – Meter	MDD			

A0121	0	2	Integer	Number of Dials or		Register, UNCOR – Uncorrected Converter Register Never provided for	
A0123	0	5	Char	Digits Units of Measure	*	Convertor Never provided for Convertor Values: SCFH (Standard cubic Feet per Hour), SCMH (Standard cubic Meters per Hour).	MDD
A0120	0	6,3	Number	Multiplication factor		Never provided for Convertor The multiplication factor to apply to the resultant index advance indicated by the current reading. Allowable values; 0.001999	

1.2.2.3.1 Reading 0 to 1 (per Register Details)			Conditional, dataset will be provided where read has been taken				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		READG	MDD
A0031	М	8	Date	Reading Date			
A0034	Χ	2	Integer	Round the Clock			
A0033	M	12	Char	Reading Index			

1.2.2.4			er Asset)	Record not required					
Market I	Participant								
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or		
Number	Mandatory	Length	Format		-		TDD		
A0177	M	5	Char	Record Identifier		MKPRT	MDD		
A0126	M	5	Char	Role Code					
A0064	M	3	Char	Market Participant					
				Abbreviated Name					

1.2.2.5 I	1.2.2.5 Name		r each	Record not required				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		NAME	MDD	
A0107	M	5	Char	Person Type Code				
A0088	0	6	Char	Title				
A0089	0	4	Char	Initials				
A0090	0	30	Char	Surname				
A0100	Χ	100	Char	Person Notes				
A0101	Χ	30	Char	Access Password				

1.2.2.5.1	Address	0 to 1 (pe	er name)	Record not required	d		
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	M	5	Char	Address Type Code			
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number			
A0006	0	40	Char	Building Name_Number			
A0007	0	40	Char	Dependent Thoroughfare			
A0008	0	40	Char	Thoroughfare			
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town			
A0012	0	40	Char	County			
A0013	M	10	Char	Post Code			
A0015	Χ	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	Х	7	Integer	Grid Co-ord Z		_	
A0018	X	12	Char	Unique Property – Reference Number			

1.2.2.5.2 Mechani		0 to many (per Name per Transaction)		Record not required				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format				TDD	
A0177	M	5	Char	Record Identifier		CONTM	MDD	
A0049	M	5	Char	Contact				
				Mechanism Code				
A0106	M	100	Char	Contact				
				Mechanism Value				

1.2.2.6		0 to 1 (fc	r each	Record not required	d		
Appoint	ment	Asset)					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		APPNT	MDD
A0019	0	5	Char	Appointment Qualifier Code			
A0138	М	8	Date	Appointment Date From			
A0139	0	8	Date	Appointment Date To			
A0019	0	5	Char	Appointment Qualifier Code			
A0140	0	6	Char	Appointment Time From			
A0141	0	6	Char	Appointment Time To			

1.2.3 Na	me	0 to many (for each Asset)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	

A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code	*	Identifies this is for a Consumer. Values: CONS (Consumer)	MDD
A0088	0	6	Char	Title			
A0089	0	4	Char	Initials			
A0090	0	30	Char	Surname			
A0100	0	100	Char	Person Notes			
A0101	0	30	Char	Access Password			

	Address	0 to 1 (for each name related to the Asset)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	М	5	Char	Address Type Code				
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	0	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property – Reference No.				

	1.2.3.2 Contact Mechanism Attribute Optional or		any (for name ed to a pint)	Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		CONTM	MDD	
A0049	М	5	Char	Contact Mechanism Code			MDD	
A0106	М	100	Char	Contact Mechanism Value				

1.2.3.3 Care De	Care Details Attribute Optional or		any (for name ed to a int)	Record not required			
		Field	Field	Description	Key	Rules	MDD or TDD
	Number Mandatory Length Format						
A0177 M 5 Char		Record Identifier		CARE	MDD		

A0039	M	2	Char	Care	Category		MDD	
				Code				

3.4 Miscellaneous Data Updates For Data Amendments Resulting from Found and Removed Assets

Occasionally, National Grid Metering may identify a found asset, or that an asset has been removed where one was anticipated. Where appropriate, National Grid Metering will communicate this information to a Supplier via an ONJOB file, with the transaction status code of "ABORT". However, it is generally anticipated that for found assets, Suppliers will use the established query route or provide a relevant appointment file.

Where the aborted ONJOB contains data updates, the Supplier would need to convert the file into an update file, before onward transmission to National Grid GT.

The aborted ONJOB will not create any abortive call charges for the Supplier

Where information is available and is provided, this will be a valid MDD allowable value

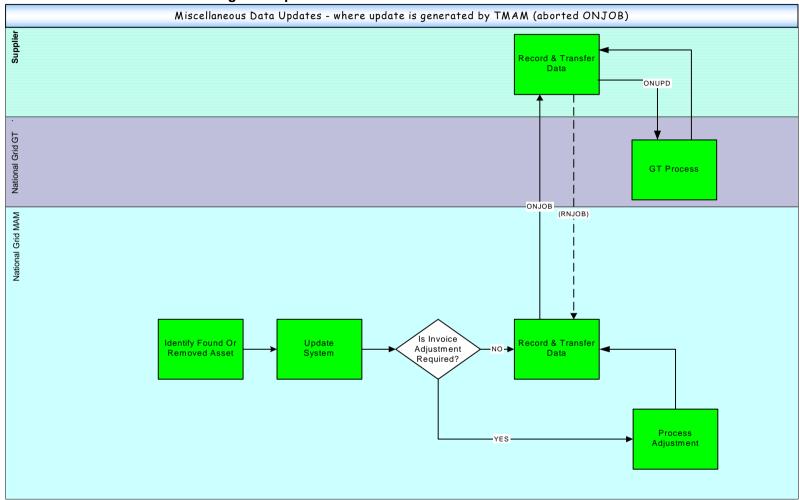
Where information is not available then the appropriate field will be left blank

For further examples of how to map this information into an ONUPD file see section 5.6

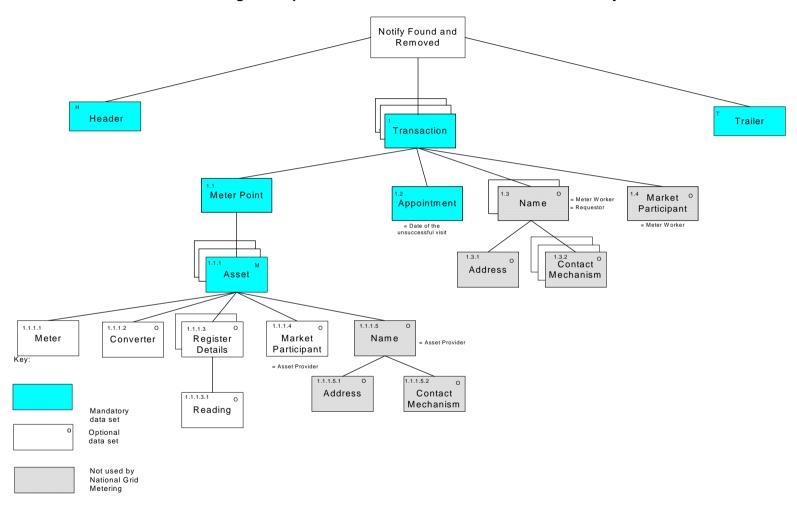
Meter Reads:

In the event that National Grid Metering has instigated a data update resulting in an asset being removed from Rainbow, it will contact the Supplier by email or telephone to agree a meter reading to be used in the aborted ONJOB notification file. Alternatively, if the Supplier has initiated a query, a reading can be provided as part of the query submission. In either case, an aborted ONJOB cannot be sent without the presence of a meter reading.

3.5 National Grid Metering Data Updates for Found and Removed Assets



3.6 National Grid Metering Data Updates for Found and Removed Assets Hierarchy



3.7 National Grid Metering Data Updates for Found and Removed Assets File Formats

1 Transaction		1 to many (per File)		Mandatory Record				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length 5	Format	Record Identifier		TDANC	TDD	
A0177	M	15	Char			TRANS	MDD	
A0055	M	15	Char	Transaction		A unique reference		
40050	0	210	01	Reference		number prefixed by UPD		
A0056	0	210	Char	Transaction		May provided details of		
40050	N 4	05	Ohan	Comment		the reason for the update.		
A0053	M	25 5	Char	Contract Reference	*	Below 7 barg contract	MDD	
A0144	M	5	Char	Transaction Type	_	Values:	MDD	
				Code		INSTL – Install,		
10107		-	01	T	*	REMVE – Remove	MDD	
A0167	С	5	Char	Transaction Type	_	For Install will be	MDD	
				Reason Code		NEWCN		
						For Remove, will be		
						null		
A0058	X	15	Char	Cross-Ref Other				
				Internal Job				
	_			Reference				
	0	15	Char	Cross-Ref Other	*	If the update is as a result		
A0122				External Job		of a query, the query		
				Reference		reference will be		
		<u> </u>			*	supplied.		
A0142	M	5	Char	Transaction Status	_ ~	<u>Values:</u>	MDD	
				Code		ABORT – Aborted Job		
A0057	X	5	Char	Transaction Status				
				Change Reason				
10101		1	01	Code	*		1400	
A0161	M	1	Char	Market Sector	_ ~	Is defaulted to I, even for	MDD	
10100			_	Code		Domestic meters		
A0166	X	8	Date	Date of Notice				
A0068	X	5	Char	Registration Body				
A0069	X	20	Char	Registration				
		1	1	Reference				
A0081	X	8	Date	Effective From				
		<u> </u>	<u> </u>	Date				
A0082	X	8	Date	Effective To Date				

1.1 Meter Point		1 (per Transaction)		Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		MTPNT	MDD
A0178	X	5	Char	Data Update Code			
A0072	M	10	Integer	Meter Point Reference Number			
A0076	X	1	Char	Meter Link Code			MDD
A0077	X	2	Char	Meter Point Status			MDD
A0059	0	2	Char	Location Code			MDD
A0157	С	100	Char	Meter Point Location Notes	*	Must be entered if the Location Code is 'Other'.	
A0075	0	210	Char	Access Instructions			
A0074	М	9,6	Number	Conversion Factor			
A0073	0	8	Date	Last Inspection Date			
A0164	X	9,3	Number	Metering Pressure			

		14.	/ 14 /				
1.1.1 A	sset	1 to many Point)	(per Meter	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ASSET	MDD
A0178	M	5	Char	Data Update Code		FOUND – Found Asset RMOVD –Removed Asset	MDD
A0144	М	5	Char	Transaction Type Code		INSTL - Install REMVE - Remove	MDD
A0024	M	5	Char	Asset Class Code		METER - Meter CONVR - Convertor BYPAS - Bypass	MDD
A0109	X	10	Char	Product Id			
A0163	0	5	Char	Payment Method code		CR - Credit, PP – Pre Payment	MDD
A0083	0	10	Char	Model Code		Will be provided where available	MDD
A0060	0	3	Char	Manufacturer Code		Will be provided where available	MDD
A0021	0	4	Integer	Year of Manufacture		Will be provided where available	
A0022	0	14	Char	Serial Number		Will be provided where available	
A0059	0	2	Char	Location Code		Will be provided where available NGM will not use 98 – "other"	MDD
A0158	0	100	Char	Asset Location Notes		Will be provided where available	
A0037	0	2	Char	Asset Status Code		Will be provided where available	MDD

1.1.1.1	Meter	0 to 1 (pe	r Asset)	Optional Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier		METER	MDD
A0178	М	5	Char	Data Update Code		FOUND – Found Asset RMOVD –Removed Asset	
A0025	0	5	Char	Meter Type Code		Will be provided where available	
A0085	0	5	Char	Meter Mechanism code		Will be provided where available	
A0112	0	10,4	Number	Measuring Capacity		Will be provided where available	
A0079	Х	1	Char	Meter Usage Code			
A0044	0	5	Char	Collar Status Code		Will be provided where available	
A0149	0	8	Date	OAMI Inspection Date		Will be provided where available	
A0126	0	5	Char	Role Code		Defaulted to T - GAO = GT	
A0160	Х	8	Date	Last Refurbished Date			
A0194	Χ	7,2	Number	Pulse Value			

1.1.1.2	1.1.1.2		Asset)	Optional Record				
Converter								
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		CONVE	MDD	
A0178	M	5	Char	Data Update Code		FOUND – Found Asset RMOVD –Removed Asset		
A0036	М	5	Char	Conversion basis Code				
A0027	M	9,6	Numbe r	Converter Conversion factor				

1.1.1.3 Register Details		0 to 2 (per Asset)		Optional Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		REGST	MDD
A0178	X	5	Char	Data Update Code			
A0124	М	5	Char	Register Type Code			
A0121	0	2	Integer	Number of Dials or Digits		Will be provided where available	
A0123	0	5	Char	Units of Measure		Will be provided where available	
A0120	0	6,3	Number	Multiplication factor		Will be provided where available	

1.1.1.3.1 Reading		0 to 1 (per Register Details)		Mandatory Record				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		READG	MDD	
		-				READG	טטועו	
A0031	C	8	Date	Reading Date				
A0034	Χ	2	Integer	Round the Clock				
A0033	M	12	Char	Reading Index				

1.1.1.4 Market		0 to 1 (per Asset)		Optional Record			
Participant							
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		MKPRT	MDD
A0126	M	5	Char	Role Code			MDD
A0064	М	3	Char	Market Participant Abbreviated Name			MDD

1.1.1.5 Name		0 to many (per Asset)		Record not Required			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code			
A0088	0	6	Char	Title			
A0089	0	4	Char	Initials			
A0090	0	30	Char	Surname			
A0100	X	100	Char	Person Notes			
A0101	X	30	Char	Access Password			

1.1.1.5.1 Address		0 to 1 (per	Name)	Record not Required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	М	5	Char	Record Identifier		ADDRS	MDD	
A0102	М	5	Char	Address Type Code				
A0003	0	210	Char	Address Text				
A0004	0	40	Char	Sub Building Name_Number				
A0006	0	40	Char	Building Name_Number				
A0007	0	40	Char	Dependent Thoroughfare				
A0008	0	40	Char	Thoroughfare				
A0009	0	40	Char	Double Dependent Locality				
A0010	0	40	Char	Dependent Locality				
A0011	0	40	Char	Post Town				
A0012	X	40	Char	County				
A0013	M	10	Char	Post Code				
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property – Reference Number				

1.1.1.5.2 Contact Mechanism		0 to 1 (per Name per Transaction)		Record not Required			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		CONTM	MDD
A0049	М	5	Char	Contact Mechanism Code			MDD
A0106	М	100	Char	Contact Mechanism Value			

1.2 Appointment		0 to 1 (for each Transaction)		Mandatory Recor	Mandatory Record				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD		
A0177	M	5	Char	Record Identifier		APPNT	MDD		
A0019	X	5	Char	Appointment Qualifier Code					
A0138	М	8	Date	Appointment Date From	*	Date of the visit or date input into Rainbow.			
A0139	Х	8	Date	Appointment Date To					
A0019	Х	5	Char	Appointment Qualifier Code					
A0140	М	6	Char	Appointment Time From	*	Time of the visit or input into Rainbow.			
A0141	Х	6	Char	Appointment Time To					

1.3 Name 0 to 2 (per	Record not Required	ı
----------------------	---------------------	---

		Transaction	٦)				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		NAME	MDD
A0107	M	5	Char	Person Type Code			
A0088	0	6	Char	Title			
A0089	0	4	Char	Initials			
A0090	0	30	Char	Surname			
A0100	Χ	100	Char	Person Notes			
A0101	Χ	30	Char	Access Password			

1.3.1 A	ddress		0 to 1 (per name, per Transaction)				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ADDRS	MDD
A0102	М	5	Char	Address Type Code			
A0003	0	210	Char	Address Text			
A0004	0	40	Char	Sub Building Name_Number			
A0006	0	40	Char	Building Name_Number			
A0007	0	40	Char	Dependent Thoroughfare			
A0008	0	40	Char	Thoroughfare			
A0009	0	40	Char	Double Dependent Locality			
A0010	0	40	Char	Dependent Locality			
A0011	0	40	Char	Post Town			
A0012	X	40	Char	County			
A0013	M	10	Char	Post Code			
A0015	X	7	Integer	Grid Co-ord X			
A0016	X	7	Integer	Grid Co-ord Y			
A0017	X	7	Integer	Grid Co-ord Z			
A0018	X	12	Char	Unique Property – Reference Number			

1.3.2 Contact Mechanism		0 to many oper Transa		Record not Required			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		CONTM	MDD
A0049	М	5	Char	Contact			MDD
				Mechanism Code			
A0106	M	100	Char	Contact			
				Mechanism Value			

1.4 Market Participant		0 to 1 (per Transaction	٦)	Record not Required			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		MKPRT	MDD
A0126	M	5	Char	Role Code			
A0064	M	3	Char	Market Participant Abbreviated Name			

3.8 Customer Data Updates

Suppliers may wish to amend or add information to their portfolio by providing a data update. The format of this file is the same as that used to submit queries.

It is possible to update some data items via OSUPD, however, some of these changes will require minimum supporting information to enable validation, for example change to asset details. Other changes or additions, such as status updates, only require the change to be provided.

Functionality will also be provided via the Web.

In the case where more than one supplier is appointed at a meter point the non requesting supplier will receive an ONUPD to keep both sets of data in synch.

The minimum Information required to submit an update is:

Record	Information
Transaction	Record Identifier (TRANS) Transaction Reference Number Transaction Type Code (UPDTE) Transaction Type Reason Code
Meter Point	Record Identifier (MTPNT) Meter Point Reference Number

The table below shows the mandatory information required to update each data item. Each update requires a Transaction Type Reason Code (TTR Code) and there are 4 options:

- Address (ADD)
- Asset (ASS)
- Meter Point (MPT)
- Status (STA)

Please note that separate updates must be sent for each asset. This is because the existing serial number (T0512) attribute in 1.4 Query Details dataset is used to validate prior to updating.

Transaction Type Reason Code (A0167)	Supporting Data Items (Supporting information required to allow the update to the Data Item)	Data Item (Updateable Attributes)
MPT		Market Sector Code
MPT		Asset Location Code
ASS	Existing Serial Number Asset Class Code Manufacturer Code Year of Manufacture	Meter/Converter Serial Number
STA	N.B. For bypass only	Asset Status Code
STA		Collar Status Code

	All and described	
ADD	All available address fields must be provided, as the details submitted overwrite the address on record. As a minimum, 4 address lines should be given (house number/name; street; town; post code) To remove a single line of address details without altering other address data, Suppliers should overwrite the data contained in that line with an asterix	Meter Point Address

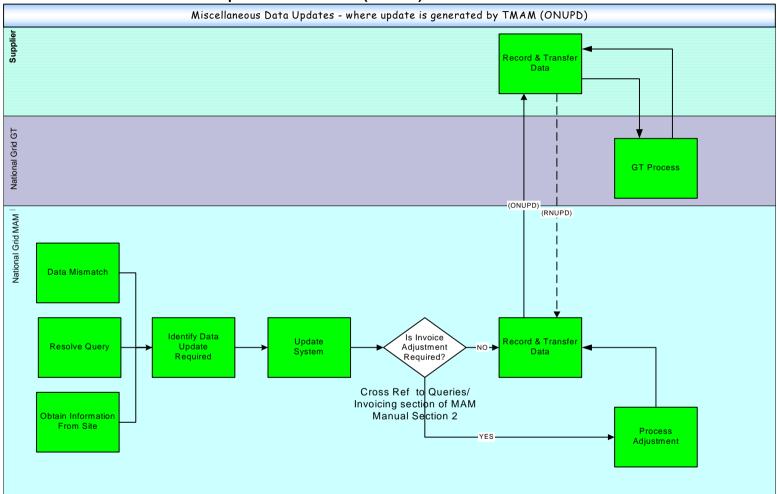
When updating serial number, pattern matching validation is performed on the new serial number to check the pattern provided against the pattern specified for that meter model held in rainbow. e.g.

 Pattern:
 GWU6++++++++YY++

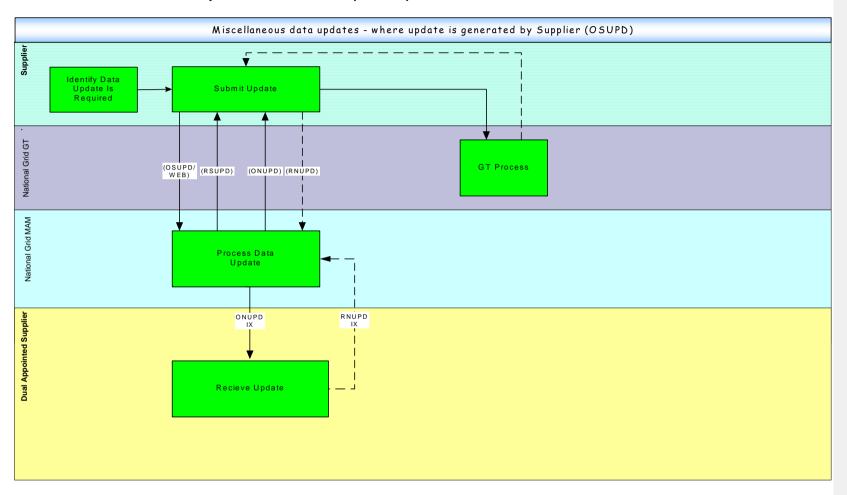
 Serial Number:
 GWU61231234YY02

A Standard Response (RSUPD) will be sent for each Customer Data Update to the requesting Supplier to confirm whether the update will be made, or if the update is rejected. In the case of dual billing the second supplier will receive ONUPD to inform them of the updates made by the update requestor.

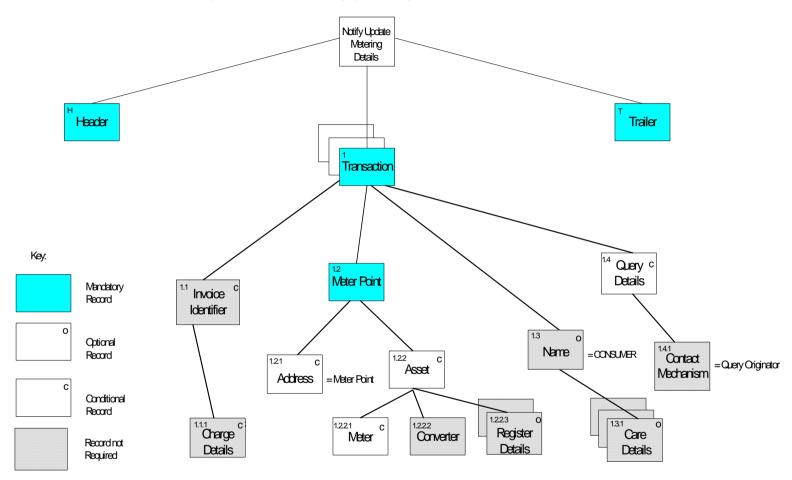
3.9 Miscellaneous Data Update Process Flow (ONUPD)



3.10 Customer Data Updates Process Flow (OSUPD)



3.11 Customer Data Update Data Hierarchy (OSUPD)



3.12 Customer Data Update File Format (OSUPD)

Attributes which are bold are updateable attributes.

1 Trans	action	1 to man File)	y (per	Mandatory Record			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		TRANS	MDD
A0055	М	15	Char	Transaction Reference			
A0056	X	210	Char	Transaction Comment			
A0053	X	25	Char	Contract Reference			
A0144	M	5	Char	Transaction Type Code	*	Value: UPDTE - Update	MDD
A0167	M	5	Char	Transaction Type Reason Code	*	If a Supplier wishes to carry out multiple updates to more than one area, a separate Transaction is required. Values: ADD (Address Update), ASS (Asset Update), MPT (Meter Point Details Update), STA (Status)	TDD
A0058	X	15	Char	Cross-Ref Other Internal Job Reference			
A0122	Х	15	Char	Cross-Ref Other External Job Reference			
A0142	Х	5	Char	Transaction Status Code			MDD
A0057	Х	5	Char	Transaction Status Change Reason Code			
A0161	<u>C</u>	1	Char	Market Sector Code	*	Mandated when A0167 = MPT Values: D (Domestic as defined by the Utility Act), I (Industrial & Commercial as defined by the Utility Act).	MDD
A0166	Χ	8	Date	Date of Notice			
A0068	X	5	Char	Registration Body			
A0069	X	20	Char	Registration Reference			
A0081	X	8	Date	Effective From Date			
A0082	Χ	8	Date	Effective To Date			

1.1 Invoice	1.1 Invoice Identifier		er tion)	Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	М	5	Char	Record Identifier		INVOI	TDD	
T0530	М	10	Char	Original Area invoice number				
T0531	М	6	Number	Original Parent generation number				
T0532	М	6	Number	Original Line item number				
T0533	X	12	Char	MAM job/quote reference				
T0534	С	35	Char	Supplier job/quote reference				
T0535	X	10	Char	Adjustment Invoice Number				
T0536	X	6	Number	Adjustment Parent Generation Number				
T0537	Х	6	Number	Adjustment Line Item Number				
T0538	X	15,2	Number	Adjustment Amount				

1.1.1 Charge Details		1 (per Invoice Identifier)		Record not required				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		CHRGE	TDD	
T0540	0	15,2	Number	Charge item amount in dispute				
T0541	М	15,2	Number	Original Charge item withheld amount				
T0542	X	15,2	Number	Current Charge item withheld amount				

1.2 Meter Po	oint	1 (per Transact	ion)	Mandatory Record				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD	
A0177	M	5	Char	Record Identifier		MTPNT	MDD	
A0178	Χ	5	Char	Data Update Code			MDD	
A0072	M	10	Integer	Meter Point				
			=	Reference Number				
A0076	Χ	1	Char	Meter Link Code			MDD	
A0077	Χ	2	Char	Meter Point Status			MDD	
A0059	<u>C</u>	<u>2</u>	Char	Location Code		Mandatory where A0167 = "MPT"	MDD	
A0157	X	100	Char	Meter Point Location Notes				
A0075	Χ	210	Char	Access Instructions				
A0074	Χ	9,6	Number	Conversion Factor				
A0073	X	8	Date	Last Inspection Date				
A0164	X	9,3	Number	Metering Pressure				

1.2.1 Address		0 to 1 (po	er Meter	Record Mandatory where A0167=ADD. ¹				
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or	
Number	Mandatory	Length	Format	Description	Key	Rules	TDD	
A0177	M	5	Char	Record Identifier		ADDRS	MDD	
A0102	X	5	Char	Address Type	*	Value:	MDD	
				Code		MTRPT – Meter Point		
						Address		
A0003	Χ	210	Char	Address Text				
A0004	0	40	Char	Sub Building	*	This or the next field		
	_			Name_Number		should be populated		
A0006	0	<u>40</u>	Char	Building	*	This or the previous		
		· <u></u> -		Name_Number		field should be		
						populated		
A0007	<u>0</u>	<u>40</u>	<u>Char</u>	Dependent	*	This or the next field		
				<u>Thoroughfare</u>		should be populated		
A0008	<u>o</u>	<u>40</u>	<u>Char</u>	Thoroughfare	*	This or the previous		
						field should be		
						populated		
A0009	<u>o</u>	<u>40</u>	<u>Char</u>	<u>Double</u>				
				Dependent				
				<u>Locality</u>				
A0010	<u>o</u>	<u>40</u>	<u>Char</u>	<u>Dependent</u>				
				<u>Locality</u>				
A0011	<u>o</u>	<u>40</u>	<u>Char</u>	Post Town	*	This field should be		
						populated		
A0012	X	40	Char	County				
A0013	<u>M</u>	<u>10</u>	<u>Char</u>	Post Code		This field must be		
					*	populated		
A0015	X	7	Integer	Grid Co-ord X				
A0016	X	7	Integer	Grid Co-ord Y				
A0017	X	7	Integer	Grid Co-ord Z				
A0018	X	12	Char	Unique Property –				
				Reference Number				

1.2.2 Asset		0 to 1 (pe Point)	er Meter	Record Mandatory if A0167=ASS)			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		ASSET	MDD
A0178	X	5	Char	Data Update Code			MDD
A0144	X	5	Char	Transaction Type Code			MDD
A0024	M	5	Char	Asset Class Code	*	Values: BYPAS (Bypass), CONVR (Converter), METER (Meter),	MDD
A0109	Χ	10	Char	Product Id			MDD
A0163	0	5	Char	Payment Method code	*	Values: CR (Credit), PP (Prepayment).	MDD
A0083	0	10	Char	Model Code	*		MDD
A0060	С	3	Char	Manufacturer Code	*	Mandatory if A0167 = ASS	MDD

_

¹ When providing the Address dataset all information will be overwritten and therefore where an update to an attribute is required, all attributes should be provided even where they are a repeat of data already held in Rainbow.

A0021	С	4	Integer	Year of	*	Mandatory if A0167 =	
				Manufacture		ASS	
A0022	<u>C</u>	<u>14</u>	Char	Serial Number	*	Mandatory if A0167 =	
	_					ASS	
A0059	X	2	Char	Location Code			MDD
A0158	X	100	Char	Asset Location			
				Notes			
A0037	<u>C</u>	2	Char	Asset Status	*	Mandatory if A0024 =	MDD
				Code		BYPAS	
						Values: CD (Closed),	
						OP (Open)	

1.2.2.1 Meter		0 to 1 (p	er Asset)	Record Mandatory = METER	if A0	167=ASS and Asset Clas	s Code
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		METER	MDD
A0178	Х	5	Char	Data Update Code			
A0025	0	5	Char	Meter Type Code	*	Values: D (Diaphragm of unknown material), L (Leather Diaphragm), R (Rotary), S (Synthetic Diaphragm), T (Turbine), U (Ultrasonic), Z (Unknown)	MDD
A0085	X	5	Char	Meter Mechanism code			MDD
A0112	X	10,4	Number	Measuring Capacity			
A0079	Х	1	Char	Meter Usage Code			MDD
<u>A0044</u>	C	5	Char	Collar Status Code	*	Mandated where A0167 = "STA" and A0024 = "METER" Values: B (Broken), I (Intact),	MDD
A0149	Х	8	Date	OAMI Inspection Date			
A0126	X	5	Char	Role Code			MDD
A0160	Х	8	Date	Last Refurbished Date			
A0194	X	7,2	Number	Pulse Value			

1.2.2.2 0 to 1 (per Asset) Converter		Record not required					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier		CONVE	MDD
A0178	X	5	Char	Data Update Code			
A0036	<u>O</u>	<u>5</u>	<u>Char</u>	Conversion Basis Code			
A0027	0	9,6	Number	Converter			

		Conversion factor		

1.2.2.3 Register	Details	0 to 2 (pe Registeri Asset)		Record not required	1.		
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier		REGST	MDD
A0178	Χ	5	Char	Data Update Code			
A0124	X	5	Char	Register Type Code			
A0121	0	2	Integer	Number of Dials or Digits			
A0123	0	5	Char	Units of Measure			
A0120	0	6,3	Number	Multiplication factor			

1.3 Name		0 to 1 (pe		Record Not Require	ed				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules			MDD or TDD
A0177	M	5	Char	Record Identifier		NAME Name	=	Consumer	MDD
A0107	X	5	Char	Person Type Code					
A0088	0	6	Char	Title					
A0089	0	4	Char	Initials					
A0090	M	30	Char	Surname					
A0100	0	100	Char	Person Notes	*				
A0101	0	30	Char	Access Password					

1.3.1 Care De	tails	0 to 33 (Name pe Transact	er	Record Not Require		d		
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	ı	Key	Rules	MDD or TDD
A0177	M	5	Char	Record lo	dentifier		CARE	MDD
A0039	M	2	Char	Care Code	Category			

1.4		0 to 1 (pe	er	Record Mandated	if A0167	7=ASS & A0024 = ME	TER or
Query D	etails	Transact	ion)	CONVR			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		QUERY	MDD
T0510	X	1	Char	Top Priority			
T0511	X	35	Char	Reference Number			
T0512	С	14	Char	Existing serial number	*	Mandatory if A0167 = ASS. N.B. If Rainbow cannot match after fuzzy matching the update will be rejected.	
T0513	X	1000	Char	Explanation			
T0514	X	1	Char	Additional information supplied			
T0515	Χ	3	Char	Justified			
T0516	X	8	Date	Date Logged			
T0517	X	8	Date	Date Resolved			

T0502	Х	35	Char	Contact First Name		
T0503	X	35	Char	Contact Second		
				Name		

1.4.1 Contact Mechan	tact Details)		er Query	Record not required			
Attribute	Optional or	Field	Field	Description	Key	Rules	MDD or
Number	Mandatory	Length	Format				TDD
A0177	M	5	Char	Record Identifier		CONTM	MDD
A0049	M	5	Char	Contact			
				Mechanism Code			
A0106	M	100	Char	Contact			
				Mechanism Value			

4 Standard Response File

4.1 Standard Response Overview

The Standard Response File is sent in response to the following Request files:

- Work Request (ORJOB)
- · Portfolio Appointment Request (ONAGE)
- Portfolio De-appointment Request (ONAGE)
- Quotation (Metering Price) Request (ORQUO)²
- Customer Asset Update (OSUPD)
- OSENQ will be responded to via RSENQ (for RSENQ format see section 1.7 of Queries & Invoicing Volume)

When a request file is received, file level validation is undertaken and the Response Transaction identifies whether these high level checks were successful. File level failures are identified by "REJFL" in the Record Identifier (A0177) field and details of the rejected file are provided in the 3 subsequent fields (A0184/A0185/A0186), with the reason being specified in the Reason Record (1.1).

The file goes through the entire file validation process to ensure that all errors that can be identified are returned to the originator. Files that are rejected at file validation level do not progress through transaction level validation.

The Record Identifier (A0177) for accepted files is "RESPN" and accepted files then pass through transaction level validation. A response is provided in Transaction Outcome (1.2) via the Outcome Code (A0193), which is either "ACCPT" or "REJCT". There is a one to one relationship between transactions submitted and the number of Transaction Outcome records in the response. The reason for any rejected transactions are provided in the Reason Record (1.2.1).

Each transaction goes through the entire transaction validation process to capture all errors, for provision to the originator.

The standard response files that are sent are:

- Response to Work Request (RRJOB)
- Response to Appointment Request (RNAGE)
- Response to De-appointment Request (RNAGE)
- Response to (Metering Price) Quotation (RRQUO)²
- Response to Miscellaneous Data Update (RSUPD)
- Response to Query File(RSENQ) (see section 1.7 of Queries & Invoicing Volume)

Mandatory Information for a file level validation rejection:

Record	Transaction
Response Transaction	Record Identifier (REJFL) File Identifier Created Date Created Time

² Not currently supported

^

Reason	Record Identifier (REJRS) Response Code
--------	--

Mandatory Information for a file, which passed through file level validation, but all transactions failed **transaction level** validation:

Record	Transaction
Response Transaction	Record Identifier (RESPN)
Transaction Outcome	Record Identifier (TROUT) Response Type Code Outcome Code (REJCT)Meter Point Reference Number Transaction Reference
Reason	Record Identifier (REJRS) Response Code

Mandatory Information for a file which passed through both **file** and **transaction** level validation and all the transactions were accepted:

Record	Transaction
Response Transaction	Record Identifier (RESPN)
Transaction Outcome	Record Identifier (TROUT) Response Type Code Outcome Code (ACCPT) Meter Point Reference Number Transaction Reference

Where some transactions were accepted and some were rejected, then the Response Transaction, Transaction Outcome and Reason records will be provided. In this scenario, the Transaction outcome records will include both ACCPT and REJCT outcome codes (A0193).

All files received will receive a response, and normally, all responses to a file will be sent in one response file. The exception to this is responses to portfolio appointment and deappointment requests (ONAGE). These are separated upon receipt for processing purposes, and responses are sent in separate files. The total number of transaction outcome records does, however, match the total number of meter points submitted in an appointment/deappointment request. If a transaction is investigated the remaining transactions will not be rejected.

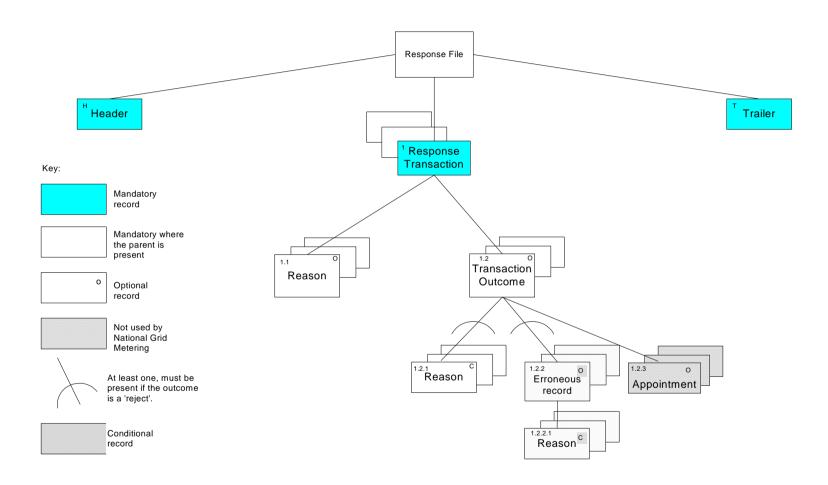
In summary, there are 3 levels of validation:

File level validation: if the file passes this level of validation, then transaction level validation will be undertaken.

Transaction level validation: if a mandatory record is missing, then the whole transaction will be rejected.

Record level validation : the attribute number identifies the invalid values provided, the response notes will identify the specific data problem.	
Page 126 of 167	

4.2 Standard Response Data Hierarchy (RRJOB, RNAGE, RSUPD, RNJOB, RNUPD)



4.3 Standard Response File Format

1 Respon Transac		1 to many (per file)		This is provided in response to all transactions whe the file level checks were successful			where
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier	*	REJFL if the file has been rejected, otherwise RESPN.	MDD
A0186	М	8	Char	File Identifier	*	Mandatory if the file is being rejected.	
A0184	М	8	Date	Created Date	*	Mandatory if the file is being rejected.	
A0185	М	6	Char	Created Time	*	Mandatory if the file is being rejected.	

			This must be provided where the Response Transaction Record Identifier is REJFL.				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier	*	REJRS	MDD
A0173	0	5	Char	Attribute Number			
A0190	М	5	Char	Response Code	*	See Appendix Section 5.1	MDD
A0192	0	210	Char	Response Notes			

1.2 Transac Outcom	ie	0 to many (per Response Transaction)					
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier	*	TROUT	MDD
A0197	M	5	Char	Response Type Code		Values: RNAGE, RRJOB, RSUPD Supplier Values: RNJOB, RNUPD,	MDD
A0193	М	5	Char	Outcome Code	*	Values: ACCPT (Accepted), REJCT (Rejected).	MDD
A0072	С	10	Integer	Meter Point Reference Number	*	If provided by Supplier. If Supplier does not submit MPRN, file will be rejected and MPRN cannot be returned.	
A0055	С	15	Char	Transaction Reference		Mandated where provided by Supplier & will be returned where provided.	
A0144	С	5	Char	Transaction Type Code		Mandated where provided by Supplier.	
A0142	0	5	Char	Transaction Status Code			

1.2.1. F	Reason	0 to many (per Transaction ou		Conditional Recor	ndated for rejected trans	saction	
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	М	5	Char	Record Identifier	*	REJRS	MDD
A0173	0	5	Char	Attribute Number		This may be included where a data item can be identified as part of the source of the exception.	
A0190	М	5	Char	Response Code		See Appendix Section 0	MDD
A0192	0	210	Char	Response Notes			

1.2.2 0 to many (per Transaction Response)		Optional Record					
Record							
Attribute	Optional or	Field Length	Field	Description	Key	Rules	MDD or
Number	Mandatory	-	Format	•	-		TDD
This con	tains the rec	ord in error.					

1.2.2.1 Reason 0 to many (per Erroneous Record)			Conditional Record, Mandated where 1.2.2 is present				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier	*	REJRS	MDD
A0173	M	5	Char	Attribute Number		If the attribute cannot be identified, the rejection will be reported at the record level (1.2.1).	
A0190	M	5	Char	Response Code			MDD
A0192	0	210	Char	Response Notes			

1.2.3		0 to man	y (for	Record not sent			
Appoint	ment	each					
		Transact	ion)				
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Key	Rules	MDD or TDD
A0177	M	5	Char	Record Identifier		APPNT	MDD
A0019	0	5	Char	Appointment Qualifier Code			
A0138	М	8	Date	Appointment Date From			
A0139	0	8	Date	Appointment Date To			
A0019	0	5	Char	Appointment Qualifier Code			
A0140	0	6	Char	Appointment Time From			
A0141	0	6	Char	Appointment Time To			

4.4 Examples

The following examples have been identified during external testing and are aimed to further clarify to Suppliers, the format of response files described in the MAM Manual.

N.B. Files have been spaced out for reading purpose and text in red is for information

Example 1

The example below shows an accepted works request for one transaction.

```
"HEADR", "RESPN", "GTM", "MAM", "XXX", "SUP", 20040415, "120139", "TN000999", "T ST01", 2,1 Header Record
```

```
"RESPN","TN000123",20040415,"105745" Response Transaction Record "TROUT","RRJOB","ACCPT",12345678910,"REF01","","" Transaction Outcome Record indicating accepted
```

"TRAIL" Trailer Record

Example 2

The example below shows a rejected works request for one transaction.

```
"HEADR", "RESPN", "GTM", "MAM", "XXX", "SUP", 20040414, "150148", "TN000999", "T ST01", 5,1 Header Record
```

```
"RESPN","TN000003",20040414,"135921" Response Transaction Record "TROUT","RRJOB","REJCT",12345678910,"REF01","","" Transaction Outcome Record indicating rejected transaction "REJRS","A0138","02109","Sameday request received by batch file 20040414" Rejection Reason and text "APPNT","",20040414,20040420,"","","" Erroneous Record "REJRS","A0138","02109","Sameday request received by batch file 20040414" Rejection Reason and text repeated as mandated for erroneous record "TRAIL"
```

Example 2

The example below shows a rejected works request for two transactions.

```
"HEADR","RESPN","GTM","MAM","XXX","SUP",20040406,"090133","TN000123","T ST01",11,2 Header Record
"RESPN","TN050421",20040330,"114422" Response Transaction Record for Transaction 1
"TROUT","RRJOB","REJCT",,"TRANS 0","","" Transaction Outcome Record indicating rejection for transaction 1
"REJRS","","03101","TRANSACTION FORMAT IS INVALID :TRANSACTION FAILED" Rejection Record for Transaction 1(No Erroneous as entire transaction rejected)
"RESPN","TN050421",20040330,"114422" Response Transaction Record for Transaction 2
"TROUT","RRJOB","REJCT",12345678910,"REF01","","" Transaction Outcome Record indicating rejection for transaction 2
"REJRS","A0138","02104","Appointment date is in the past 20040405" Rejection Record for 1st rejection reason in Transaction 2
```

"REJRS","A0072","03104","MPRN Invalid/Check Digit Validation Failed 123456788910" Rejection Record for 2nd rejection reason in Transaction 2 "MTPNT","",12345678910,"F","LI","32","","",1.02264,, Erroneous Record for 1st rejection reason "REJRS","A0072","03104","MPRN Invalid/Check Digit Validation Failed 12345678910" Rejection Record for 1st rejection reason in Transaction 2 repeated as mandated for erroneous record "APPNT","",20040405,20040405,"","","" Erroneous Record for 2nd rejection reason "REJRS","A0138","02104","Appointment date is in the past 20040405" Rejection Record for 2nd rejection reason in Transaction 2 repeated as mandated for erroneous record "TRAIL"

4.5 Supplier Response Files

Suppliers may optionally produce the following response files to notification files;

- RNJOB
- RNUPD
- RNENQ

Where a Supplier rejects a file due to errors in the file format National Grid Metering will manually handle any rejections contained within the response file and will attempt to resolve on a reasonable endeavours basis.

Where the Supplier rejects a file due to a challenge to asset details National Grid Metering will not progress the rejection. Under these circumstances the Supplier is requested to raise as asset query in the normal way. (See section 1.1 of Queries & Invoicing Volume).

The file format will follow the same format as the Standard Response provided by National Grid Metering as shown in section 4.2 to 4.3 except that the file will flow from the Supplier to National Grid Metering.

5 Appendix

5.1 MDD / TDD Values

Contained below is a comprehensive list of the MDD / TDD values which will be used by Rainbow. Where a * appears this item will be TDD.

Data Item	Data Item Name	Values	Description
Reference		Code	
A0102	Address Type Code		
A0103	Address Type Description		
		CONS	Customer/Consumer
		MTRPT	Meter Point
		SITE	Site

The address can be for different locations, this field indicates which location it refers to.

Data Item Reference	Data Item Name	Values Code	Description
A0019 A0020	Appointment Qualifier Code Appointment Qualifier Description		

Catered for in A0140 Slot times therefore the codes as specified by RGMA will not be used in Rainbow.

Data Item Data Item Reference	Name Values Code	Description
A0024 Asset Class (A0152 Asset Class I		Box e.g. Meter box Bypass Converter Data logger Meter

The asset record can refer to different asset types, this data item provides the type of asset.

Data Item Reference	Data Item Name	Values Code	Description
A0037 A0038	Asset Status Code Asset Status Description	AC CA CD CL DM FA IN LI OP	Active Capped Closed Clamped Damaged Faulty InActive Live Open
		PD RE	Phone Line Down Removed

UN Unknown

This data item provides information as to the status of the asset.

Data Item Reference	Data Item Name	Values Code	Description
A0039 A0040	Care Category Code Care Category Description		
7.00.0	care category 2 complicit	03	SEUC Unclassified
		04	Aged 60+
		05	Blind
		06	Braille User
		07	Poor Sight
		80	Deaf
		09	Poor Hearing
		10	Poor Speech
		11	Poor Sense of Smell
		12	Arthritic Hands
		13	Arthritic All
		14	Poor Walking
		15	Wheelchair
		16	Bedridden
		17	Mental Handicap
		18	Confused
		19	Serious Illness
		20	Other
		21	Heart Condition
		22	Breathing Difficulty

This record provides customer care information which is passed to the meter worker.

Data Item Reference	Data Item Name	Values Code	Description
A0044	Collar Status Code		
A0045	Collar Status Description	В	Broken
		1	Intact

This data item provides collar status.

Data Item Reference	Data Item Name	Values Code	Description
A0049 A0050	Contact Mechanism Code Contact Mechanism Description	EMAIL FAX MOBIL PAG POST TEL TEX	E-Mail Facsimile Mobile Phone Pager Letter sent land/sea/airmail Telephone Telex
		VISIT	Visit

This data item is used to indicate the contact mechanism, the field A0106 contains the detail e.g. if the contact mechanism code is EMAIL, A0106 would contain the e-mail address.

Data Item	Data Item Name	Values	Description	
-----------	----------------	--------	-------------	--

Reference		Code	
A0036	Conversion Basis Code	T	Temperature
		PT	Pressure & Temperature
		CPT	Compressibility, Pressure & Temperature

Indicates the variables the Converter compensates for.

Data Item Reference	Data Item Name	Values Code	Description
A0178	Data Update Code		
A0014	Data Update Code Description		
		FOUND	Found
		UPDTE	Updates contained within
		RMOVD	Removed or Missing

Indicates the reason for the data update.

Data Item	Data Item Name	Values	Description	
Reference		Code		
A0187	File Usage Code			
A0169	File Usage Description			
		PRDCT	Production	
		TST01	Test 01	
		TST02	Test 02	
		TST03	Test 03	

Used in the file header to indicate whether the contents are actual production files or test files.

Data Item Reference	Data Item Name	Values Code	Description
A0179 A0196	File Type Code File Type Description		
710100	The Type Bosonphon	ORJOB ONJOB	Request Job Notify Metering Job
		RNJOB ORQUO ONQUO	Response to Work Completion Request Metering Quote Notify Metering Quote
		RNQUO ONAGE	Response to Quotation Notify Change of Agent
		ONUPD RNUPD	Notify Update Metering Details Reponses to Notify Update Metering Details
		*OSENQ	Query Submission File
		*ONENQ *RNENQ	Query Notification File Response to Query Notification File
		*OSUPD	Customer Data Updates
		MAP *AWH/IWH	Meter Asset Prices Report Asset Works Ad-Hoc Adjustment Invoice
		*AWI/IWI *MAH/IAH	Asset Works Invoice Metering Asset Ad Hoc
		*MAJ/IAJ	Adjustment Invoice Metering Asset Standard

*MAV/IAV	Adjustment Invoice Metering Asset Invoice
*MDA/GDA	Invoice Asset Detail File - Adjustments
*MDC/GDC	Invoice Asset Daily Count File
*MDN/GDN RESPN	Invoice Asset Detail File Responses
*MFV/IFV	Pre Appointment Liquidated Damages (PALD) Invoice
*MFN/GFN	PALD Invoice Asset Detail File
*MFC/GFC	PALD Asset Daily Count File

Used in the file header to indicate the contents of the associated records. Files RNJOB, RNQUO, RNUPD, RNENQ are all Supplier response files. These are optional files which the Supplier can use if they choose to reject a file. ORQUO, ONQUO, RRQUO and RNQUO are all out of scope for Separation.

Data Item	Data Item Name	Values	Description
Reference		Code	
A0059	Location Code		
A0150	Location description		
		00	Unknown
		01	Cellar
		02	Under Stairs
		03	Hall
		04	Kitchen
		05	Bathroom
		06	Garage
		07	Canteen
		08	Cloakroom
		09	Cupboard
		10	Domestic Science
		11	Front Door
		12	Hall Cupboard
		13	Kitchen Cupboard
		14	Kitchen under sink
		15	Landing
		16	Office
		17	Office Cupboard
		18	Outside WC
		19	Pantry
		20	Porch
		21	Public Bar
		22	Rear of Shop
		23	Saloon Bar
		24	Shed
		25	Shop Front
		26	Shop Window
		27	Staff Room
		28	Store Room
		29	Toilet
		30	Under Counter
		31	Waiting Room
		32	Meter box Outside
		98	Other
		99	Outside

Indicates the location of the Meter Point or Asset.

Data Item	Data Item Name	Values	Description	
-----------	----------------	--------	-------------	--

Reference		Code		
A0060	Manufacturer Code			
A0061	Manufacturer Description			
		AM	Alder & MacKay	
		AS	Adcock & Shipley	
		BGW	Begwaco	
		BGL	British Gas Light Ind	
		BRA	Braddock	
		BW	Bradley & West	
		CHE	Cheltenham Meters	
		DEL	Delta	
		DR	Dresser	
		EMI	Thorn EMI	
		EUR	Eurometers	
		GG	George Glover	
		GL	Glynwed	
		GMC	Gas Meter Co Ltd	
		GW	George Wilson	
		HIL	Holmes-In-Line	
		HOC	Holmes Connersville	
		IGA	IGA	
		IGT	IGA Turbines	
		IMA	IMAC	
		INS	Instromet	
		INV	Invensys	
		JEA	Jeavons/ Krom/Schroder	
		JR	J Robinson & Co	
		KRO	Krom/Schroder	
		LG	Landis and Gyr	
		MAG	Magnol Computers	
		MET	Metropolitan Gas Meters Ltd	
		MM	Milnes Meters	
		MTL	Meters Ltd	
		NFC	Nottigham Flows Ltd	
		NP	Nuovo Pignone	
		ORM	George Orme	
		OT	Other – not codified	
		PC	Parkinson Cowan	
		PCC	PC Computers	
		PE	Peebles & Co Ltd	
		RCK	Rockwell	
		RMG	RMG	
		ROM	Roment	
		ROO	Roots Ltd	
		0011	Schlumberger Industries	
		SCH SGR	Singer	
		SIE	Siemens	
		SM	Smith Meters	
		SP	Sawer & Purves	
		TB	T Braddock	
		TG	T Glover	
		UGI	UGI	
		UNK	Unknown	
		VAL	Valor	
		VAN	Vanda Meters Ltd	
		WBC	W B Cowan	
		WCH	W.C. Holmes & Co	
		WLK	Wilkinsons	
		WLN WLY	Wilson Willey	

List of meter manufacturer codes

N.B The following list of Market Participants will be updated prior to Cutover once RGMA has been updated.

			been upda	ted.	
Data Item Reference	Data It	em Name		Values Code	Description
A0064	Market	Participant	Abbreviated		
	Name				
A0065	Market Name	Participant	Abbreviated	418	Scottish and Southern Energy
				ACC	Accord
				AEG	Atlantic Electric & Gas Ltd
				AGA	Total FinaElf Gas & Power Ltd
				AGI	AGIP UK Ltd
				AGM	Midlands Gas Ltd
				AGS	TXU Europe AH Online Ltd
				AMD AME	TXU Europe AHGD Ltd
				AIVIE	Amerada Gas Supply Service Ltd
				ANG	Enron Direct
				BGR	Belgrave Gas Ltd
				BPG	BP Gas Ltd
				BUS	British Gas Trading
				CNG CUS	Contract Natural Gas Ltd Customer
				CWF	Countrywide Energy
				EAS	Ownlabel Energy Ltd
				ELT	Elf Trading Sa
				EME	Powergen Energy Plc
				EMI	East Midlands Ind Shipper Ltd
				ENP	Enron Capital&Trade Ltd
				ENG	Eastern Natural Gas RTL Ltd
				FLO	Flogas Uk Plc
				GDI GUK	Gas-Direct Ltd Npower Northern Ltd
				GLC	Fortum Energy Plus Ltd
				GTM	National Grid Metering
				IEU	Independent Energy UK Ltd
					Npower Business Services
				KER	Kerr-McGee Gas UK Ltd
				KIN	Powergen Gas Ltd
				LED	EDF Trading Ltd
				LEP	London Electricity Plc
				MFE MFW	Meterfit North East Meterfit North West
				MID	Midland Sales Ltd
				MGS	Morgan Stanley & Co Int Ltd.
				MOB	Mobile Gas Ltd
				MeterPlus	MeterPlus
				MUL	Monal Utilities Ltd
				NES	Fortum Gas Ltd
				NGD	Npower Commercial Gas Ltd
				NGS	Npower Business Accounts
				NGS NOR	Natural Gas Shipping Services International Power Ltd
				NPO	Powergen UK Plc
				NPW	Innogy
				NSG	North Dea Gas Ltd
				OFG	Ofgas
				POW	Powergen UK Plc

QED	Quantum Gs Management Plc
QGM	Quantum Energy Distribution Ltd
QUA	Shell Gas Direct Ltd
RAG	Rhurgas A.K.Tienge Sellschaft
REE	Reepham Ltd
REW	Gaz de France Marketing Ltd
RGG	Regent Gas
SCP	Scottish Power Energy Trading
	Ltd
SEM	Sema Energy Europe Ltd
SGL	Sterling Gas Ltd
SMS	Siemens Metering
SOG	Beacon Gas Ltd
STA	Statoil UK Gas Ltd
STE	TXU Europe AHST Ltd
STT	Statoil UK GasLtd
SWE	Western Gas Ltd
TCG	Npower Gas Ltd
TEX	Shell Gas Direct 2
TOT	Total Gas Marketing Ltd
TRA	National Grid
UMS	Utility Metering Service
UNI	TXU Europe AET Ltd
UTG	Union Texas Gas Ltd
UUL	United Utilities Plc
VEC	Vector Gas Ltd
VOL	Gaz de France solutions Ltd
YKE	Yorkshire Energy Ltd

List of market participants

Data Item Reference	Data Item Name	Values Code	Description
A0161	Market Sector Code		
A0162	Market Sector Description		
		D	Domestic as defined by the
			Utility Act
		I	Industrial & Commercial as
			defined by the Utility Act

Used in the transaction record to indicate whether the consumer is domestic or I & C.

Data Item Reference	Data Item Name	Values Code	Description
A0076	Meter Link Code		(Freestanding, Prime, Sub)
		F	Free Standing

Primes and Subs work requests will not be rejected, requests will be dropped into WIP.

Data Item Reference	Data Item Name	Values Code	Description
A0085	Meter Mechanism Code		
A0086	Meter Mechanism Description		
		CM	Coin Meter
		CR	Credit
		ET	Electronic Token Meter
		MT	Mechanical Token Meter
		PP	Prepayment
		TH	Thrift
		U	Unknown

Data item is used to indicate the payment method of the meter.

Data Item Reference	Data Item Name	Values Code	Description
A0077	Meter Point Status Code		
A0078	Meter Point Status Description		
	·	CA	Capped
		DE	Dead
		LI	Live
		OT	Other
		PL	Planned
		SP	Spin Capped

Data item is used to provide information on the status of the meter point.

Data Item Reference	Data Item Name	Values Code	Description	
A0079	Meter Usage Code			
A0080	Meter Usage Code Description			

Not used by

Data Item Reference	Data Item Name	Values Code	Description
A0025 A0026	Meter Type Code Meter Description		
	·	D	Diaphragm of unknown material
		L	Leather diaphragm
		R	Rotary
		S	Synthetic Diaphragm
		T	Turbine
		U	Ultrasonic
		Z	Unknown

Data item indicates the meter measurement mechanism

Data Item Reference	Data Item Name	Values Code	Description
A0083	Model Code		
A0084	Model Description		
	·	As per RGMA	

Data Item Reference	Data Item Name	Values Code	Description
A0193	Outcome Code		
		ACCPT	Accepted
		REJCT	Rejected

Used in the response file to indicate whether the file was accepted or rejected

Data Item Reference	Data Item Name	Values Code	Description	
A0163	Payment Method Code			
A0168	Payment Method Description			
		CR	Credit	
		PP	Pre-payment	

Data item is used to indicate payment method.

Data Item Reference	Data Item Name	Values Code	Description
A0107	Person Type Code		
A0108	Person Type Description		
		ASSPR	Asset Provider
		CCMP	Connection Company
		CKEY	Contact for Key
		CLAND	Contact land lord
		CONS	Consumer/Customer
		CONT	Contact
		CREP	Contact to report to
		CSITE	Site Contact
		CTENT	Contact Tenant
		GAO	Gas Act Owner
		KEYH	Key Holder
		MAM	Meter Asset Manager
		MTWK	Meter Worker
		REQ	Requestor of job or query
		TIOWN	Title Owner
		UNCON	Unconnected asset address

This information is used in the **Name** dataset for works and is not passed to the meter worker. Only the Surname and other details in the dataset are sent to meter worker.

Data Item Reference	Data Item Name	Values Code	Description
A0201	Price Type Code		
A0202	Price Type Description		
		1	Installation
		M	Maintenance
		Р	Provisional
		T	Total summed amount

Data item used to provide indication of what the price information relates to.

Data Item Reference	Data Item Name	Values Code	Description	
A0203	Price Unit Code			
A0204	Price Unit Description			
	·	PPD	Pence per day	

Data item provides details of the pricing unit in the Price records.

Data Item Reference	Data Item Name	Values Code	Description
A0177	Record Identifier		
A0165	Record Identifier Description		
		ACTON	Action
		ADDRS	Address
		APPNT	Appointment
		ASSET	Asset
		CARE	Care Detail
		CONTM	Contact Mechanism
		CONVE	Converter
		HEADR	Header
		METER	Meter
		MKPRT	Market Participant
		MTPNT	Meter Point
		NAME	Name

PRDCT	Product
PRICE	Price (Quote)
READG	Reading
REGST	Register Detail
REJFL	Reject File
REJRS	Reason – Rejected Records
RESPN	Response
TRAIL	Trailer
TRANS	Transaction
TROUT	Transaction Outcome
*CHRGE	Charge Details
*CONTM	Requestor's Details
*BNKAC	Bank Account
*INSUM	Invoice Summary
*INVAT	VAT Rate Summary
*INGSM	Geographic Area Summary
*INJVS	Job Type/VAT Rate Summary
*INBSM	Charge Band Invoice Summary
*INBAS	Charge Band Standard
	Adjustment Summary
*INBHS	Charge Band Ad Hoc
	Adjustment Summary
*INRAD	Invoice Remittance Advice
*INJBD	Work Invoice Job Detail
*INJHA	Work Invoice Ad Hoc
	Adjustment Summary
*INRID	Invoice Remittance Advice Item
	Detail
*INVOI	Invoice Identifier
*JOBIN	Job
*QUERY	Query Details
*INIVS	Charge Item / VAT Rate
	Summary

This data item is used to indicate the type of record

Data Item Reference	Data Item Name	Values Code	Description
A0124	Register Type Code		
A0125	Register Type Description		
		CORR	Corrected Converter Register
		METER	Meter Register
		UNCOR	Uncorrected Converter Register

This data item is used to indicate which register the reading relates to.

Data Item Reference	Data Item Name	Values Code	Descrip	tion	
A0068	Registration Body	OAMI	Ofgem Installer	Authorised	meter
		CORGI	motanoi		

Data Item Reference	Data Item Name	Values Code	Description	
A0190	Response Code			
A0191	Response Description			

Response Codes

Data Item Reference	Data Item Name	Values Code	Description
A0197 A0198	Response Type Code Response Type Description		
	. ,,	RRJOB	Response Request Job
		RRQUO	Response Request Metering Quote
		RNAGE	Response Notify Change of Agent
		RNUPD	Reponses to Notify Update
			Metering Details
		RNJOB	Response to Work Notification
		RNENQ	Response to Query Notification

Data item is used in response files to indicate the response transaction type.

Data Item Reference	Data Item Name	Values Code	Description
A0126	Role Code		
A0127	Role Description		
	•	ASSPR	Asset Provider
		С	Gas Act Owner – Consumer
		MAM	Meter Asset Manager
		S	Gas Act Owner – Supplier
		SUP	Supplier
		Т	Gas Act Owner – GT

Data item is used to indicate the owner of the meter or the market participant dependent upon the record type.

Data Item Reference	Data Item Name	Values Code	Description
A0142	Transaction Status Code		
A0143	Transaction Status Description		
		ABORT	Agent aborts
		CANCL	Requestor Cancels
		COMLT	Completed ³
		PCOML	Partially Completed
		REQST	Request
		REVRQ	Revised Request
		SCHED	Agent Schedules
		*REMND	Query 5 Day REMINDER
		*CLOSE	Query 10 Day Auto CLOSURE
		*RESLV	Query RESOLUTION
		*COMPL	Query COMPLETION

Data Item Reference	Data Item Name	Values Code	Description
A0057	Transaction Status Change Reason Code		
A0062	Transaction Status Change Reason Description	APATS CONRP CRATS JFTBD MTFOS NOACC	Animal prevents access Consumer Instigated Replan Refused Access Job already done Meter tamper No Access

NTTVJ OAEMR OBSAC OTHER PUNOC RESCD	No time to visit job Other equipment required Obstructed Access Other reason where the reason is entered in A0056 Transaction Comment. Property Unoccupied Agent instigated rescheduling
UADOR	Unsafe access / safety grounds
UTTEV	Unable to turn Emergency Valve.

Data item used to indicate reason for rescheduling or cancelling of job.

Data Item Reference	Data Item Name	Values Code	Description
A0144 A0145	Transaction Type Code Transaction Type Description		
	21	APPNT	Appointment
		DEAPP	De-appointment
		EXCHG	Exchange
		INSTL	Install
		OTVST	Other Visit
		REMVE	Remove
		REPSN	Reposition
		REPRT	Report
		UPDTE	Update
		*AST	Asset
		*INVAJ	Invoice Meter Work
		*INVAM	Invoice Meter Rental
		*WRK	Work Query
		*MAV/IAV	Metering Asset Invoice
		*MAJ/IAJ	Metering Asset Standard
			Adjustment Invoice
		*MAH/IAH	Metering AssetAd Hoc
			Adjustment Invoice
		*AWI/IWI	Asset Works Invoice
		*AWH/IWH	Asset Works Ad Hoc Adjustment
			Invoice
		*MFV/IFV	Pre Appointment Liquidated
			Damages (PALD) Invoice

Data item used to indicate type of job.

Data Item Reference	Data Item Name	Values Code	Description
A0167	Transaction Type Reason Code	9	
A0160	Transaction Type Reas	son	
	Description		
		APPNT	Appointment
		BAT	OTV – Battery change
		CA	Change of Agent
		CARDC	Gas card-related problem – consumer issue
		CARDM	Gas card-related problem – meter fault
		CHKAS	Check asset details
		CLAMP	Clamped
		COS	Change of Supplier
		COT	Change of Tenancy

DE	Disconnection
DECOM	Decommission
DEMO	Demolition
DMGMT	Damaged Meter
DPL	Duplicate Removal
EMERG	Following Emergency visit
EOT	End of Tenancy
EXT	EXC – Ofgem Test
FIX	OTV – Fix Meter
FNDAS	Found Asset
FTCOL	Fit Collar only
	Faulty
FULTY	•
LEAKY	Leaking
LC	Loss of contract to another supplier (CoS)
LOC	OTV – Lock Meter
MAINT	Maintenance Work
MISAS	Missing Asset
NEWCN	New Connection
OB	Objection (raised and/or upheld)
OFINS	OAMI Inspection
POLIC	Policy Exchange
RECOM	Recommission
RECON	Reconnect
TAMPC	Reset PPM – Consumer issue
TAMPM	Reset PPM – meter fault
TSE	OTV – Hire National Grid
, 02	Service Engineer
UNCLP	Unclamp
UNL	OTV – Unlock Meter
UPGRAD	Upgrade substandard meter
	installation
*ADD	Address Details Update
*ADJ	Adjustment Query
*ADQ	Asset Details Query
*ASS	Asset Details Update
*CAA	Consumer/Address Amendment
*CAL	Invoice Calculation Query
*COM	Compensation Query
*CON	Consumer Details Update
*CRO	Crossed Meter
*DBT	Duplicated Billing
*FEQ	Faulty Equipment Query
*FOU	Found Meter Query
*GSB	Guaranteed Standard Broken
*ISR	Supplier Reference Query -
-	Meter Works Invoice
*MPT	Meter Point Details Update
*OWN	Ownership/Portfolio Dispute
*REP	Replicate MPRN
*STA	Status Update
*SMS	Supply Meter Installation Query
*WNR	Meter Work Query

Data item used in conjunction with A0144

Data Item Reference	Data Item Name	Values Code	Description
A0123	Units of Measure		
		SCFH	Standard Cubic Feet per hour

Dataset used to indicate the units of measure of the reading.

National Grid Metering Specific Attributes with National Grid Domain Data

Data Item Reference	Data Item Name	Values Code	Description
T0510*	Top Priority Flag	Χ	Yes
		ʻblank'	No entry represents No

Data Item Reference	Data Item Name	Values Code	Description
T0514*	Additional Information Supplied	Х	Yes
		'blank'	No entry represents No

Data Item Reference	Data Item Name	Values Code	Description
T0515*	Justified	Υ	Yes
		N	No
		'blank'	Not applicable

Data Item Reference	Data Item Name	Values Code	Description
T0338*	Charge Item	Р	Provision
			Installation
		M	Maintenance
		Χ	Other

Data Item Reference	Data Item Name	Values Code	Description
T0401*	Job Type	INSTL	Install
		REMVE	Remove
		RESPN	Reposition
		EXCHG	Exchange
		OTVST	Other Site Visit

Data Item Reference	Data Item Name	Values Code	Description
T0427*	Standard or Non-Standard Indicator	S	Standard
		N	Non-Standard

Data Item Reference	Data Item Name	Values Code	Description
A0140*	Appointment Time From	AM	Before 13:00
		PM	After 12:00
		AT	Any Time of the Day
		08:00	Between 08:00 & 10:00
		10:00	Between 10:00 & 12:00
		12:00	Between 12:00 & 14:00
		14:00	Between 14:00 & 16:00
		16:00	Between 16:00 & 18:00

Data Item Reference	Data Item Name	Values Code	Description
A0055*	Transaction Reference	ADDIT	Additional Work
		CONSU	Consumer Initiated Work
		EMERG	Meter Exchange by GT
			following Emergency
		MAINT	Maintenance Work
		POLIC	Policy Meter Exchange

Used in Unsolicited Flows

5.2 **CSV Examples**

Confirmation of how values should be provided in CSV format

In comma separated value (CSV) file format.

Data Type	Optional	Mandated
Char	If the value is present it is	Value must be present and
	included in double quotes e.g.	included in double quotes e.g.
	,"METER",. If it is not present it	,"METER",
	is ,"",	
Date	If the value is present it is not	Value must be present and not
	included in double quotes e.g.	included in double quotes e.g.
	,20030615, ,20050214,	,20030615,
	,20041225,. If it is not present it	,20050214,
	is ," ",	,20041225,
Integer	If the value is present it is not	Value must be present and not
	included in double quotes e.g.	included in double quotes e.g.
	10 . If it is not present it is ,,	10
Number	If the value is present it is not	Value must be present and not
	included in double quotes e.g.	included in double quotes e.g.
	,00123, ,00456, ,00789,. If it is	,00123,.
	not present it is	,00456,
	3) (f	,00789,

Example 1

Key

X = Field not used by Rainbow O = Optional Field C = Conditional

M = Mandated

1.1.1 Asset		0 to many (per Meter Point)			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Values
A0177	М	5	Char	Record Identifier	ASSET
A0178	0	5	Char	Data Update Code	
A0144	М	5	Char	Transaction Type Code	INSTL
A0024	M	5	Char	Asset Class	METER

				Code	
A0109	X	8	Integer	Product Id	
A0163	0	5	Char	Payment Method code	CR
A0083	С	10	Char	Model Code	D1.5
A0060	С	3	Char	Manufacturer Code	SCH
A0021	С	4	Integer	Year of Manufacture	2001
A0022	С	14	Char	Serial Number	E6123401001
A0059	С	2	Char	Location Code	
A0158	С	100	Char	Asset Location Notes	
A0037	С	2	Char	Asset Status Code	LI

If the above dataset were to be represented in csv format, it would look like this "ASSET","","INSTL","METER",,"CR","D1.5","SCH",2001,"E61234010001","","","","LI"

Example 2

1.1.1 Asset		0 to many (per Meter Point)			
Attribute Number	Optional or Mandatory	Field Length	Field Format	Description	Values
A0177	М	5	Char	Record Identifier	ASSET
A0178	0	5	Char	Data Update Code	
A0144	М	5	Char	Transaction Type Code	INSTL
A0024	М	5	Char	Asset Class Code	METER
A0109	Χ	8	Integer	Product Id	
A0163	0	5	Char	Payment Method code	
A0083	С	10	Char	Model Code	
A0060	С	3	Char	Manufacturer Code	
A0021	С	4	Integer	Year of Manufacture	
A0022	С	14	Char	Serial Number	
A0059	С	2	Char	Location Code	
A0158	С	100	Char	Asset Location Notes	
A0037	С	2	Char	Asset Status Code	

If the above dataset were to be represented in csv format, it would look like this

"ASS	SET","","INSTL","METER",,"","","","			
5.3	Calculation of Meter Poin	nt Conversion Factor		
			NATIONAL GRID ON	ILY
			Date Received:	
			Date Received.	
			Ref:	
Pleas	e provide as much relevant information as	possible		
Supplier Information				
Supplier name or Short Co	ode:	Supplier Ref no:		
Enquiry Originator (name	of person):	Date of submission:		
		Transaction Type Code:		
Phone No:		Reason for calculation (e.g. AQ re	view)	
Consumer Details		Daytime Contact Number:		
Name:		Evening Contact Number:		
Access Instructions (in ca	co cito visit required	Evening Contact Number.		
Access instructions (in ca	se site visit required)			
lob Address]		
Job Address	T	MPRN(s)		
Property No: Property Name:			-	
Street Name:		-		
District:		 	-	
Postal Town:				
Postcode:				
		_		
Other Comments:				
	<u>L</u>			

Signed: Print Name:

NATIONAL GRID ONLY Date Received: Ref:

Query Fax Template 5.4

Supplier Informa	tion						
Supplier name or				Supplier Ref:			
Enquiry Originator(Name of person):			Date of subm	ission:			
				Transaction T	vne Code:		
				Transaction	ype code.		
Phone No:				Fi 0			
Phone No:				Enquiry Code	i:		
0 0 "				D :: 0 :	(A) 1		
Consumer Detail	S			Daytime Cont			
Name:				Evening Cont	act Number:		
Access Instruction	S:						
0 115 111							
Special End User	category Information:						
Enquiry Detail							
	for CRO or REP Queries):			Priority:			
Job Address				Explanation D	Details:		
Property No:							
Property Name:							
Street Name:							
District:							
Postal Town:							
Postcode:							
Invoice Detail							
				A.C	la constitución		
Invoice Number:				-	Adjustment Number:		
Line Item Number:				Amount in Dispute:			
Parent Generation Number:			Withheld Amo	Withheld Amount:			
Work Detail							
NGM Quote/Job R	tef:			Supplier Quot	te/Job Ref:		
	Optional Information						
MPRN	Meter Serial No.	Meter	Meter	Meter	Meter	Year of Manufacture	
		Туре	Model	Mechanism	Manufacturer		
					ivianulacturer		

	Optional Information					
MPRN	Meter Serial No.	Meter Type	Meter Model	Meter Mechanism	Meter Manufacturer	Year of Manufacture

Other Comments:				
Signed:	 	 	Print	
Name:	 	 		

5.5 Contract Reference

This document section represents the treatment of Contracts between Supplier and National Grid Metering in respect of Rainbow Functionality.

Asset Works (Not Replan/ Cancel)

The validation performed on Contract Reference for Asset Works is as follows:

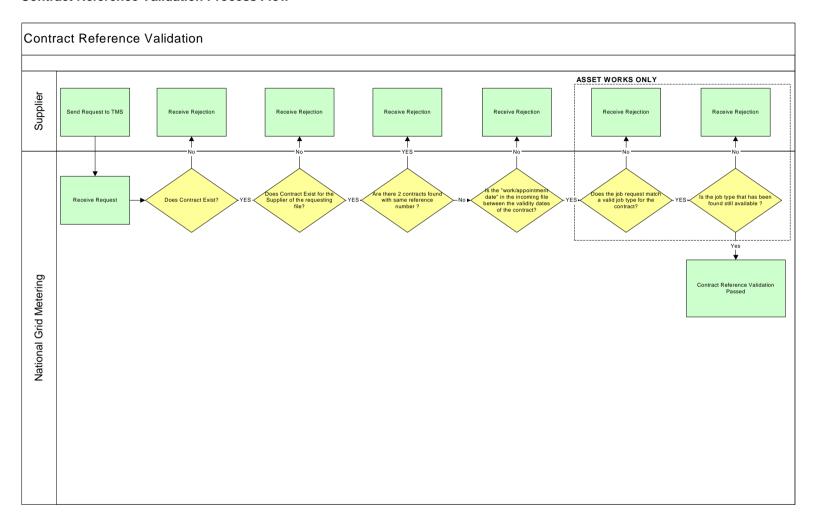
Validation Level	Data item	RGMA Reference	RGMA Record	Condition Required to Pass Validation
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number is provided in transaction
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number provided is valid
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number provided is valid for the Customer
Customer and Contract Validation	Contract Line item	Originator ID Contract Ref Job Type Code Payment Mechanism	Transaction Meter	Requested activity is a part of the contract
Customer and Contract Validation	Contract validity	Originator ID Contract Ref Appointment Date	Transaction Appointment	Contract is valid on the "appointment from" date
Customer and Contract Validation	Contract Line item validity	Originator ID Contract Ref Job Type Code Appointment Date Payment Mechanism	Transaction Appointment Asset Meter	Requested activity is valid on the "appointment from" date
Requested Activity Validation	Contract line Item (Material)	Job type Code Job Type Reason Code Payment Mechanism	Transaction Asset Meter	Requested activity has not been discontinued
Requested Activity Validation	Contract line Item (Material)	Contract Ref Job type Code Job Type Reason Code Payment Mechanism	Transaction Asset Meter	Requested activity has not been discontinued

Portfolio (Appointment only)

The validation performed on Contract Reference for Portfolio files is as follows:

Validation Level	Data item	RGMA Reference	RGMA Record	Condition Required to Pass Validation
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number is provided
				Contract Exists for P & M
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number is valid
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number provided is valid for the customer
Customer and Contract Validation	Contract validity	Originator ID Contract Ref Appointment Date	Transaction Appointment	Contract is valid on the "appointment from" date

Contract Reference Validation Process Flow



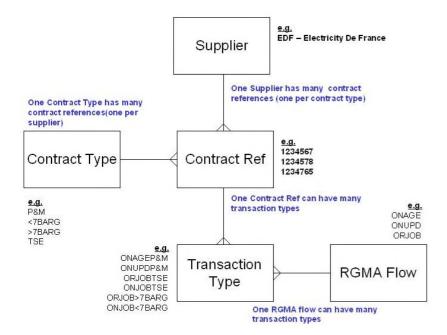
The following table shows, by file type, the contract reference number required from Suppliers or provided by National Grid Metering for all electronic flows.

File Name	File Type	Contract	Inbound (I) Outbound (O)
ONAGE	Appointment File	Provision & Maintenance	1
ONAGE	De-Appointment File	Provision & Maintenance	1
ONUPD	Provide Asset Details (Post Appointment and Misc. Updates)	Provision & Maintenance	0
ORJOB	Request Asset Works for below 7 barg	Below 7 barg Meter Works	I
ORJOB	Request Asset Works for above 7 barg	Above 7 barg Meter Works	I
ORJOB	Request Adversarial Meter Works	Adversarial Meters Works	I
ONJOB	Work Notification Works for above 7 barg	Above 7 barg Meter Works	0
ONJOB	Work Notification for below 7 barg	Below 7 barg Meter Works	0
ONJOB	Work Notification for Adversarial Meter Works	Adversarial Meters Works	0
OSUPD	Customer Data Update	Contract Reference Not Required	I
OSENQ	Query Submission	Contract Reference Not Required	1
ONENQ	Query Notification	Contract Reference Not Sent	0
MAV/IAV	Metering Asset invoice	Contract Reference Not Sent	0
MAJ/IAJ	Metering Asset Standard Adjustment Invoice	Contract Reference Not Sent	0
MAH/IAH	Metering Asset Ad-Hoc Invoice	Contract Reference Not Sent	0
AWI/IWI	Metering Asset Works Invoice	Contract Reference Not Sent	0
AWH/IWH	Metering Asset Works Ad Hoc Invoice	Contract Reference Not Sent	0
MAP	Meter Asset Prices Report	Report, No Transaction Dataset Sent	0

Proposed Format

The format for contract references will not be structured in a way where the reference is built up by attributes of data, this will avoid any validation of contract ref against data held in Suppliers systems (e.g. If market participant abbreviated name was part of the contract ref, this could be validated against who was sending or receiving a file)

The model, which will be adopted for the set up of the contract references, is as follows:



Key Principles

- One reference will exist for each Supplier Contract
- If one legal entity is responsible for many suppliers then each supplier will have their own set of contract references, one reference for each contract type
- Within Supplier each contract ref will be sequential, by one, for each contract type
- Between Suppliers there will be a significant jump between contract reference numbers

5.6 ONJOB to ONUPD Mapping Document

The following matrix illustrates how Supplier can create ONUPD update files from ONJOB files received from NGM.



5.7 Response Codes used by Suppliers for transaction/file rejections:

This document sets out how National Grid Metering will manage Supplier rejection responses.

The responses received from a Supplier will be captured into one of the following four categories:

Response Category	Description
1	Rejections which will not be actioned
2	Rejections due to invalid MDD values
3	Rejections due to invalid file formats
4	Rejections due to data mismatches resulting from Work Scenarios

The following table represents the full list of RGMA response codes.

For codes falling into category 1, rejections will not be actioned, either because:

- the response code is not relevant to National Grid Metering (i.e. code 04101 relates to GT)
- the response code is too generic and/or a more appropriate code is already in use (i.e. code 09100, mandatory item missing, is better than using code 1100, missing data item)
- the response code could not result from a file generated by National Grid Metering (i.e. 08100, invalid request).
- the Supplier is expected to raise a query if challenging other data (i.e. code 05100 inconsistent metering data).

For codes falling into categories 2 & 3, National Grid Metering will action, correct and, where appropriate, resend the transaction/file.

For codes falling into category 4, National Grid Metering will count and report the number of rejections received, as required by Ofgem, in respect of data mismatches resulting from asset works, but will take no further action. A new TDD item of 99999 has introduced for this purpose.

Response Code	Description	Category
01100	Missing Data Item	1
02100	Invalid MDD Value	2
02101	The number of Transactions in the file does not match the number specified in the Header	3
02102	The number of records in the file does not match the number specified in the Header - excluding the header and trailer.	3
02103	Unrecognised Record/Record Id found e.g. HDEAR instead of HEADR.	3
02104	Date value in the past, includes; A requested appointment cannot be in the past.	1
02105	Date value in the future, includes; The Installation/Removal/Job Completion date/time cannot be in the future, The OAMI date cannot be in the future.	3
02107	Filename Invalid	3

02108	Value not Recognised	1		
02109	Same-Day request received via batch file	1		
02110	Activity requested by customer is not recognised The job cross reference number is not valid or is meaningless			
02111	The job cross reference number is not valid or is meaningless	1		
02112	Day, Month or Year not valid in a Date	3		
02113	Hours, Minutes, Seconds not valid time, and not AM or PM	3		
03100	Invalid Format	3		
03101	Record Format Invalid – Incorrect (probably too many) data items within record.	3		
03102	Alpha within a Numeric field.	3		
	Transaction contains invalid Records (Response Note will contain Transaction			
03103	Reference Number)	3		
03104	MPRN Invalid	3		
03105	Invalid File Format	3		
03106	Data Value Exceeds defined Length	3		
03107	Invalid File Structure	3		
03108	Data item does not conform to domain rules	3		
04100	Duplicate Received	3		
04101	Duplicate file i.e. File Identifier is not unique for a Shipper (use 04100)	1		
04102	Duplicate Transaction already received within this file	3		
05100	Inconsistent Metering Data	2		
06100	Inconsistent Date Data	1		
06101	To Date before From Date	3		
06102	Effective date is not in the future	1		
06103	Later Reading on GT systems (Not required by NGM)	1		
07100	Inconsistent Data	1		
07101	File Type code in Header does not match that in File Name	3		
07102	Sender's Organisation id and / or Role not valid for file type	3		
07103	Recipient's Organisation Id and / or Role not valid for file type	3		
07104	The role is not relevant for this job	1		
07106	Supplied customer reference number is not valid for customer	1		
07107	Contract order does not cover geographic area of request			
07108	Contract order does not cover requested activity and timeslot SLA	1		
07109	Customer has no live contract orders	1		
07110	Supplied W/R Id and customer reference number are not consistent	1		
07111	Supplied W/R Id is not valid for customer	1		
07112	The requested service has been discontinued	1		
07113	MTPNT address type expected, not received	3		
07114	Site address type expected, not received	1		
07115	Organisation Id on the header does not match senders Id	3		
07116	File Name and IX Name are not consistent	3		
07117	Meter Point Reference is not in Stakeholders Ownership	1		
07118	Invalid File Identifier in header does not match that in file name (To be deleted)	3		
08100	Invalid Request	1		
08101	Job has been previously completed	1		
08102	Job has been previously cancelled	1		
09100	Mandatory Items Missing	3		
09101	Mandatory data item missing	3		
09102	Number of mandatory data errors exceeds predefined threshold	1		

10100	Other Valid Reason	1
10101	Invalid Transaction	
10102	Invalid Record	1
11100	Unable to open or read file	3
12100	Insufficient Data	1
12101	Address data insufficient	1
12102	Empty file received	3
13100	Missing Records	3
13101	Mandatory Record within the transaction type is not present (could be the record ld of the missing record is entered in the Response notes in the Reason record against the Transaction outcome).	
	against the Harisaction Catcome).	3
14100	Invalid Sequence	1
14101	A file before this one has not been received (a file is missing).	1
14102	Sequence inconsistency – Records out of sequence in transaction (could be 14000 in the Reason record against the Transaction Outcome).	1
99999	Data mismatches resulting from Work Scenarios	4

5.8 Contract Reference

This document section represents the treatment of Contracts between Supplier and National Grid Metering in respect of Rainbow Functionality.

Asset Works (Not Replan/ Cancel)

The validation performed on Contract Reference for Asset Works is as follows:

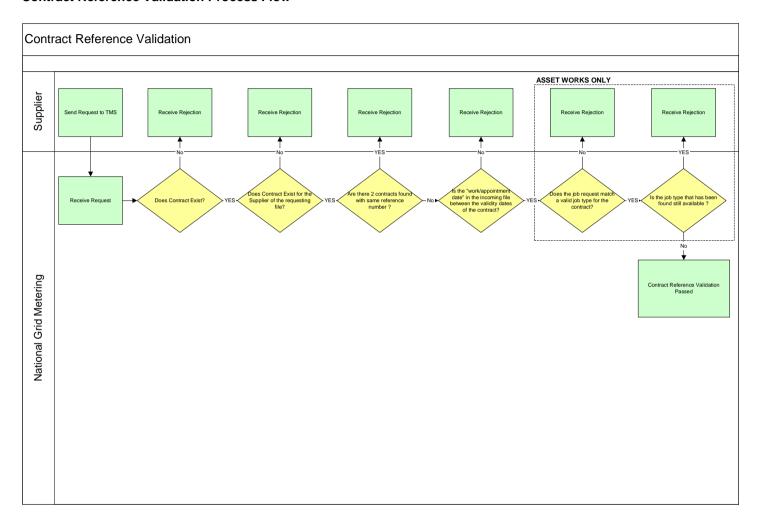
Validation Level	Data item	RGMA Reference	RGMA Record	Condition Required to Pass Validation
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number is provided in transaction
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number provided is valid
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number provided is valid for the Customer
Customer and Contract Validation	Contract Line item	Originator ID Contract Ref Job Type Code Payment Mechanism	Transaction Meter	Requested activity is a part of the contract
Customer and Contract Validation	Contract validity	Originator ID Contract Ref Appointment Date	Transaction Appointment	Contract is valid on the "appointment from" date
Customer and Contract Validation	Contract Line item validity	Originator ID Contract Ref Job Type Code Appointment Date Payment Mechanism	Transaction Appointment Asset Meter	Requested activity is valid on the "appointment from" date
Requested Activity Validation	Contract line Item (Material)	Job type Code Job Type Reason Code Payment Mechanism	Transaction Asset Meter	Requested activity has not been discontinued
Requested Activity Validation	Contract line Item (Material)	Contract Ref Job type Code Job Type Reason Code Payment Mechanism	Transaction Asset Meter	Requested activity has not been discontinued

Portfolio (Appointment only)

The validation performed on Contract Reference for Portfolio files is as follows:

Validation Level	Data item	RGMA Reference	RGMA Record	Condition Required to Pass Validation
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number is provided
				Contract Exists for P & M
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number is valid
Customer and Contract Validation	Contract	Contract Reference	Transaction	Contract Number provided is valid for the customer
Customer and Contract Validation	Contract validity	Originator ID Contract Ref Appointment Date	Transaction Appointment	Contract is valid on the "appointment from" date

Contract Reference Validation Process Flow



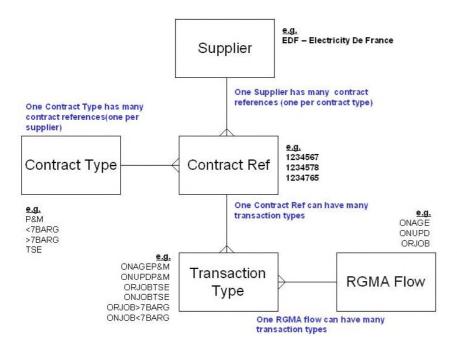
The following table shows, by file type, the contract reference number required from Suppliers or provided by National Grid Metering for all electronic flows.

File Name	File Type	Contract	Inbound (I) Outbound (O)
ONAGE	Appointment File	Provision & Maintenance	I
ONAGE	De-Appointment File	Provision & Maintenance	I
ONUPD	Provide Asset Details (Post Appointment and Misc. Updates)	Provision & Maintenance	0
ORJOB	Request Asset Works for below 7 barg	Below 7 barg Meter Works	I
ORJOB	Request Asset Works for above 7 barg	Above 7 barg Meter Works	I
ORJOB	Request Adversarial Meter Works	Adversarial Meters Works	1
ONJOB	Work Notification Works for above 7 barg	Above 7 barg Meter Works	0
ONJOB	Work Notification for below 7 barg	Below 7 barg Meter Works	0
ONJOB	Work Notification for Adversarial Meter Works	Adversarial Meters Works	0
OSUPD	Customer Data Update	Contract Reference Not Required	I
OSENQ	Query Submission	Contract Reference Not Required	I
ONENQ	Query Notification	Contract Reference Not Sent	0
MAV/IAV	Metering Asset invoice	Contract Reference Not Sent	0
MAJ/IAJ	Metering Asset Standard Adjustment Invoice	Contract Reference Not Sent	0
MAH/IAH	Metering Asset Ad-Hoc Invoice	Contract Reference Not Sent	0
AWI/IWI	Metering Asset Works Invoice	Contract Reference Not Sent	0
AWH/IWH	Metering Asset Works Ad Hoc Invoice	Contract Reference Not Sent	0
MAP	Meter Asset Prices Report	Report, No Transaction Dataset Sent	0

Proposed Format

The format for contract references will not be structured in a way where the reference is built up by attributes of data, this will avoid any validation of contract ref against data held in Suppliers systems (e.g. If market participant abbreviated name was part of the contract ref, this could be validated against who was sending or receiving a file)

The model, which will be adopted for the set up of the contract references, is as follows:



Key Principles

- One reference will exist for each Supplier Contract
- If one legal entity is responsible for many suppliers then each supplier will have their own set of contract references, one reference for each contract type
- Within Supplier each contract ref will be sequential, by one, for each contract type
- Between Suppliers there will be a significant jump between contract reference numbers

5.9 5.9 Modification 54 – I&C SAP System changes (September 2014)

This Modification demonstrates the system changes required based on the introduction of the enhanced I&C SAP system.

An appendix will indicate the specific changes/additions, which are as follows:

Following the introduction of a new SAP system for National Grid Metering's Industrial and Commercial business ("I&C SAP System"):

- a reference to the Rainbow System in the MAM Manual will also, where applicable, be construed and read as a reference to the I&C SAP System; and
- a reference to a Rainbow file in the MAM Manual will also, where applicable, be construed and read as a reference to the equivalent I&C SAP System file as set out below.

1. RENTAL INVOICES						
1a. Rental File Extensions						
2di Nemari ne Extensions	Rainbow	I&C				
Standard Rental Invoice	XXX01.PN999999. MAV	_	1999999.IAV			
Faux Rental Invoice	XXX01.PN999999.MFV		1999999.IFV			
Adjustment Invoice	XXX01.PN999999.MAJ		1999999.IAJ			
Ad-Hoc Adjustment Invoice	XXX01.PN999999.MAH		1999999.IAH			
1b. Field Contents						
Record Type	Record Type Code	Attribute	Description	Validation Rules	Rainbow	I&C
Header	HEADR	A0179	File Type Code	Mandatory ,5 Chars, Text	MAV, MFV, MAJ, MAH	AV, IFV, IAJ, IAH
Transaction	TRANS	A0144	Transaction Type Code	Mandatory ,5 Chars, Text	MAV, MFV, MAJ, MAH	AV, IFV, IAJ, IAH
2. WORKS INVOICES						
2a. Works File Extensions						
	Rainbow	I&C				
Works Invoice	XXX01.PN999999.AWI	XXX01.PN	1999999.IWI			
Works Adjustment/Ad-Hoc Invoice	XXX01.PN999999.AWH	XXX01.PN	1999999.IWH			
•						
2b. Field Contents						
Record Type	Record Type Code	Attribute	Description	Validation Rules	Rainbow	I&C
Header	HEADR	A0179	File Type Code	Mandatory ,5 Chars, Text	AWI, AWH	WI, IWH
Transaction	TRANS	A0144	Transaction Type Code	Mandatory ,5 Chars, Text	AWI, AWH	WI, IWH
3. RENTAL SUPPORTING FILES						
3a. Supporting Files Extensions						
	Rainbow	1&C				
Standard Invoice Supporting File	XXX01.PN999999. MDN	XXX01.PN	1999999.GDN			
Standard Daily Count File	XXX01.PN999999. MDC					
Faux Rental Invoice Supporting File	XXX01.PN999999. MFN					
Faux Rental Daily Count File	XXX01.PN999999.MFC					
Ajustment Invoice Supporting File	XXX01.PN999999.MDA	9999.MDA XXX01.PN999999.GDA				
3b. Field Contents						
Record Type	Record Type Code		Description	Validation Rules	Rainbow	&C
Standard Header	A00		FILE TYPE	Mandatory ,3 Chars, Text	ADM AADC AATM AATC AADA	
			FILE_ITPE	ivialidatory ,5 Chars, Text	MDN, MDC, MFN, MFC, MDA	GDN, GDC, GFN, GFC, GDA